

DIGITAL WORKSTATION



Reference Manual





Contents

1	Voices - Playing the Keyboard -	4
	Voice Characteristics	4
	Selecting GM/XG or Other Voices from the Panel	
	Effect-Related Settings	
	Editing Voices (Voice Set)	
	Editing Organ Flutes Parameters	
	Creating Custom Voices (Voice Creator)	
2	Styles - Playing Rhythm and Accompaniment -	30
	Selecting the Chord Fingering Type	
	Style Playback Related Settings	
	Split Point Settings	
	Memorizing the Original One Touch Setting	
3	Songs – Recording Your Performances and Creating Songs –	49
	Editing Music Notation Settings Editing Lyrics Display Settings	
	Song Playback Related Parameters (Repeat settings, Channel settings, Guide Function)	
	Creating/Editing Songs (Song Creator)	
4	Multi Pads – Adding Musical Phrases to Your Performance –	70
	Multi Pad Creating (Multi Pad Creator)	70
_	Multi Pad Editing	
<u>5</u>	Music Finder – Calling Up Ideal Setups for Your Music –	73
	Creating a Set of Favorite Records	
	Editing Records	
	Saving the Record as a Single File	
6	Registration Memory – Saving and Recalling Custom Panel Setups –	77
	Disabling Recall of Specific Items (Freeze)	
	Calling Up Registration Memory Numbers in Order (Registration Sequence)	
7		
	Recording Audio with the Hard Disk Recorder	80
	Importing an Audio File Editing the Recorded Data	
	Re-recording	
	Setting the Start/End Points of the Audio	
	Playlist Mode	
8	Mixing Console – Editing the Volume and Tonal Balance –	90
	Editing VOL/VOICE Parameters	
	Editing FILTER Parameters	
	Editing TUNE Parameters	
	Editing EFFECT Parameters Editing EQ Parameters	
	Line Out Settings	
9	Internet Direct Connection - Connecting the Tyros3 Directly to the Internet -	99
	Registering Bookmarks of Your Favorite Pages	
	106 100 100 100 1 100 1 100 1 100 1 100 1 100	

10 Connections – Using Tyros3 with Other Devices –	102
Microphone Settings	102
Footswitch/Foot Controller Settings	109
MIDI Settings	112
11 Utility - Making Global Settings -	120
CONFIG1	
CONFIG2	122
MEDIA	
OWNER	
SYSTEM RESET	125
Index	127

Using the PDF manual

- To quickly jump to items and topics of interest, click on the desired items in the "Bookmarks" index to the left of the main display window. (Click the "Bookmarks" tab to open the index if it is not displayed.)
- Click the page numbers that appear in this manual to go directly to the corresponding page.
- Select "Find" or "Search" from the Adobe Reader "Edit" menu and enter a keyword to locate related information anywhere in the document.

∠ NOTE

The names and positions of menu items may vary according to the version of Adobe Reader being used.

- The illustrations and LCD screens as shown in this manual are for instructional purposes only, and may appear somewhat different from those on your instrument. Note that all display examples shown in this manual are in English.
- The company names and product names in this manual are the trademarks or registered trademarks of their respective companies.

Voices

- Playing the Keyboard -

Contents

Voice Characteristics		
Selecting GM/XG or Other Voices from the Panel 5		
Effect-Related Settings		
• Setting the Touch Sensitivity of the Keyboard6		
• Selecting the Harmony/Echo type7		
Pitch-Related Settings9		
• Fine-tuning the Pitch of the Entire Instrument		
• Scale Tuning		
• Changing the Part Assignment of the TRANSPOSE Buttons 10		
Editing Voices (Voice Set)		
• Editable Parameters in the VOICE SET Displays		
• Disabling Automatic Selection of Voice Sets (Effects, etc.)		
Editing Organ Flutes Parameters		
Creating Custom Voices (Voice Creator)17		
• Creating Normal Voices (Custom Voice)		
• Creating Drum Voices (Custom Drum Voice)		
• Editing an Expansion Voice Bank—Library Edit		
• Saving your Custom Voices to a Library—Library Save		
 Loading a single Additional Voice to the Tyros3—Individual Load.27 		
 Loading an Expansion Voice Bank (Library) to the Tyros3—Library 		
Load		
• Editing a Custom Voice on your computer—Voice Editor 29		

Voice Characteristics

The Voice type and its defining characteristics are indicated above the Voice name in the Voice Selection display.

These acoustic instrument sounds were sampled in stereo, to produce a truly authentic, rich sound—full of atmosphere and ambience.
These Voices capture the dynamic textures and subtle nuances of electric instruments—thanks to a huge amount of memory and some very sophisticated programming.
These acoustic instrument sounds also benefit from Yamaha's sophisticated technology—and feature a sound so finely detailed and natural, you'll swear you're playing the real thing!
Various drum and percussion sounds are assigned to individual keys, letting you play the sounds from the keyboard.
Various special effect sounds are assigned to individual keys, letting you play the sounds from the keyboard.
This authentic organ Voice lets you use the Voice Set to adjust the various footages and craft your own original organ sounds. See page 16 for details.
See the Owner's Manual.
See the Owner's Manual.
See the Owner's Manual.

Live!Drums	These are high-quality drum sounds taking full advantage of Stereo Sampling and Dynamic Sampling.
Live!SFX	These are high-quality Latin percussion sounds taking full advantage of Stereo Sampling and Dynamic sampling. They give you a broader and more versatile range of Latin percussion than the normal drum Voices.
Custom!	Custom Voices (including Custom Drum Voices) which you have created by using the Custom Voice function.
CustomWA!	Custom Voices (including Custom Drum Voices) which contain Wave data.

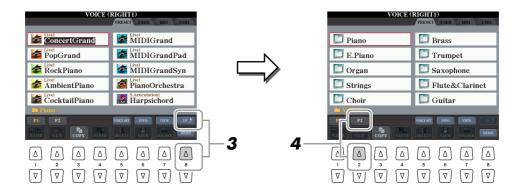
Selecting GM/XG or Other Voices from the Panel

The GM/XG Voices and Voices for other instruments (such as Tyros, Tyros2, etc.) cannot be directly called up from the VOICE category selection buttons. However, they can be called up via panel operation by following the procedure below.

- Press one of the PART SELECT button to which you want to call up the desired Voice.
- **2** Press one of the VOICE buttons to call up the Voice Selection display.
- **3** Press the [8 ▲] (UP) button to call up the Voice categories.



You can find the "Legacy" folder in this display. This folder contains previous Yamaha keyboards' Voices (such as Tyros2, Tyros, etc.) for data compatibility with other models.



- 4 Press the [2 ▲] (P2) button to display Page 2.
- Press the desired [A]-[J] button to call up the Voice Selection display of GM/XG Voices, GM2 Voices, etc.
- Select the desired Voice.

Effect-Related Settings

Setting the Touch Sensitivity of the Keyboard

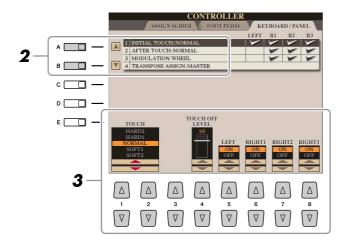
You can adjust the touch response of the instrument (how the sound responds to the way you play the keys). The touch sensitivity type becomes the common setting for all Voices.

Call up the operation display.
[FUNCTION] → [D] CONTROLLER → TAB [◄][▶] KEYBOARD/PANEL

2 Use the [A]/[B] buttons to select the desired parameter: INITIAL TOUCH or AFTER TOUCH.



Some Voices are purposely designed without touch sensitivity, in order to emulate the true characteristics of the actual instrument (for example, conventional organs, which have no touch response).



3 Use the [1 ▲▼]–[8 ▲▼] buttons to specify the touch response.

• 1 INITIAL TOUCH

[1 ▲▼]/ [2 ▲▼]	TOUCH	Determines the Initial Touch sensitivity setting.
		HARD 2: Requires strong playing to produce high volume. Best for players with a heavy touch.
		HARD 1: Requires moderately strong playing for higher volume. NORMAL: Standard touch response.
		SOFT 1: Produces high volume with moderate playing strength. SOFT 2: Produces relatively high volume even with light playing strength. Best for players with a light touch.
[4 ▲▼]	TOUCH OFF LEVEL	Determines the fixed volume level when Touch is set to "OFF."
[5 ▲▼]- [8 ▲▼]	LEFT-RIGHT3	Turns Initial Touch on or off for each keyboard part.

• 2 AFTER TOUCH

[1 ▲▼]/ [2 ▲▼]	TOUCH	Determines the Aftertouch sensitivity setting.
. ,		HARD: Relatively strong aftertouch pressure is needed to produce changes. NORMAL: Produces a fairly standard aftertouch response. SOFT: Allows you to produce relatively large changes with very light aftertouch pressure.
[5 ▲▼]- [8 ▲▼]	LEFT-RIGHT3	Turns Aftertouch on or off for each keyboard part.

An NOTE

properly.

When the [MONO] button is turned to

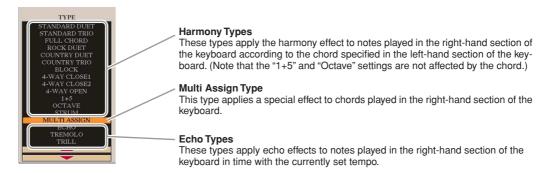
on or you use the SA/SA2 Voices, the Harmony/Echo effect may not work

Selecting the Harmony/Echo type

You can select the desired Harmony/Echo effect from a variety of types.

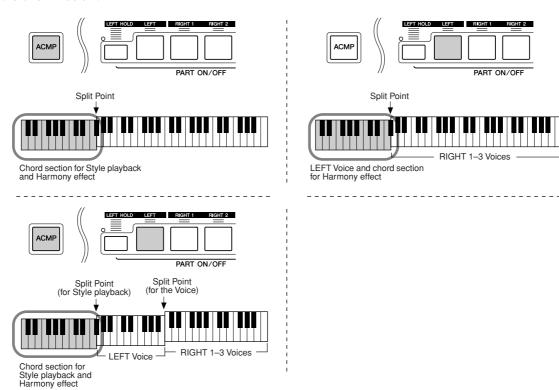
- Turn the [HARMONY/ECHO] button on.
- 2 Call up the operation display. [FUNCTION] → [F] HARMONY/ECHO
- **3** Use the [1 ▲▼]–[3 ▲▼] buttons to select the Harmony/Echo type.

The Harmony/Echo types are divided into the following groups, depending on the particular effect applied.



Harmony Types

When one of the Harmony Types is selected, the Harmony effect is applied to the note played in the right-hand section of the keyboard according to the type selected above and the chord specified in the chord section of the keyboard shown below.



Multi Assign Type

The Multi Assign effect automatically assigns notes played simultaneously on the right-hand section of the keyboard to separate parts (Voices). For example, if you play three consecutive notes, the first is played by the RIGHT 1 Voice, the second by the RIGHT 2 Voice, and the third by the RIGHT 3 Voice. The Multi Assign effect is not affected by the [ACMP] and LEFT part on/off status.



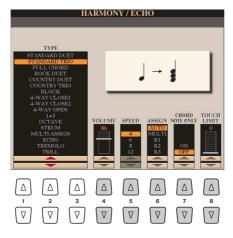


Echo Types

When one of the Echo Types is selected, the corresponding effect (echo, tremolo, trill) is applied to the note played in the right-hand section of the keyboard in time with the currently set tempo, regardless of the [ACMP] and the LEFT part on/off status. Keep in mind that Trill works when you hold down two notes on the keyboard simultaneously (last two notes if more than two notes are held), and it plays those notes alternately.

4 Use the [4 ▲▼]–[8 ▲▼] buttons to select various Harmony/Echo settings.

The available settings differ depending on the Harmony/Echo type.



[4 ▲▼]	VOLUME	This parameter is available for all types with the exception of "Multi Assign." It determines the level of the harmony/echo notes generated by the Harmony/ Echo effect.
[5 ▲▼]	SPEED	This parameter is only available when Echo, Tremolo, or Trill is selected in Type above. It determines the speed of the Echo, Tremolo, and Trill effects.
[6 ▲▼]	ASSIGN	This parameter is available for all types with the exception of "Multi Assign." This lets you determine the keyboard part via which the harmony/echo notes will be sounded.
[7 ▲▼]	CHORD NOTE ONLY	This parameter is available when one of the Harmony Types is selected. When this is set to "ON," the Harmony effect is applied only to the note (played in the right-hand section of the keyboard) that belongs to a chord played in the chord section of the keyboard.
[8 ▲▼]	TOUCH LIMIT	This parameter is available for all types with the exception of "Multi Assign." It determines the lowest velocity value at which the harmony note will sound. This allows you to selectively apply the harmony by your playing strength, letting you create harmony accents in the melody. The harmony effect is applied when you play the key strongly (above the set value).

Pitch-Related Settings

Fine-tuning the Pitch of the Entire Instrument

You can fine-tune the pitch of the entire instrument—useful when you play the Tyros3 along with other instruments or CD music. Please note that the Tune function does not affect the Drum Kit or SFX Kit Voices.

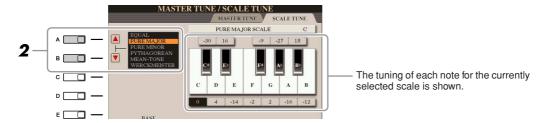
- **Call up the operation display.** [FUNCTION] → [A] MASTER TUNE/SCALE TUNE → TAB [\blacktriangleleft][\blacktriangleright] MASTER TUNE
- 2 Use the [4 ▲▼]/[5 ▲▼] buttons to set the tuning, from 414.8–466.8 Hz.

 Press the both 4 or 5's [▲] and [▼] buttons simultaneously to reset the value to the factory setting of 440.0 Hz.

Scale Tuning

You can select various scales for playing in custom tunings for specific historical periods or music genres.

- Call up the operation display. [FUNCTION] \rightarrow [A] MASTER TUNE/SCALE TUNE \rightarrow TAB [\blacktriangleleft][\blacktriangleright] SCALE TUNE
- 2 Use the [A]/[B] buttons to select the desired scale.



Preset Scale types

EQUAL	The pitch range of each octave is divided equally into twelve parts, with each half-step evenly spaced in pitch. This is the most commonly used tuning in music today.
PURE MAJOR, PURE MINOR	These tunings preserve the pure mathematical intervals of each scale, especially for triad chords (root, third, fifth). You can hear this best in actual vocal harmonies—such as choirs and a cappella singing.
PYTHAGOREAN	This scale was devised by the famous Greek philosopher and is created from a series of perfect fifths, which are collapsed into a single octave. The 3rd in this tuning are slightly unstable, but the 4th and 5th are beautiful and suitable for some leads.
MEAN-TONE	This scale was created as an improvement on the Pythagorean scale, by making the major third interval more "in tune." It was especially popular from the 16th century to the 18th century. Handel, among others, used this scale.
WERCKMEISTER, KIRN- BERGER	This composite scale combines the Werckmeister and Kirnberger systems, which were themselves improvements on the mean-tone and Pythagorean scales. The main feature of this scale is that each key has its own unique character. The scale was used extensively during the time of Bach and Beethoven, and even now it is often used when performing period music on the harpsichord.
ARABIC1, ARABIC2	Use these tunings when playing Arabic music.



3 Change the following settings as necessary.





To register the Scale Tune settings to the Registration Memory, be sure to checkmark the SCALE item in the REGISTRATION MEMORY CONTENTS display.

[2 ▲▼]	BASE NOTE	Determines the base note for each scale. When the base note is changed, the pitch of the keyboard is transposed, yet maintains the original pitch relationship between the notes.
[3 ▲▼]- [5 ▲▼]	TUNE	Select the desired note to be tuned by using the $[3 \blacktriangle \blacktriangledown]$ button and tune it in cents by using the $[4 \blacktriangle \blacktriangledown]/[5 \blacktriangle \blacktriangledown]$ buttons.
[6 ▲▼]/ [7 ▲▼]	PART SELECT	Select the part to which the Scale Tune setting is applied by using the [6 ▲▼]/[7 ▲▼] buttons. Then press the [8 ▲] button to add a checkmark or press the [8 ▼] button to remove the checkmark.
[8 ▲▼]	MARK ON/OFF	

Changing the Part Assignment of the TRANSPOSE Buttons

You can determine to which parts the TRANSPOSE [-]/[+] buttons are applied.

- Call up the operation display.
 [FUNCTION] → [D] CONTROLLER → TAB [◄][▶] KEYBOARD/PANEL
- **2** Use the [A]/[B] buttons to select "4. TRANSPOSE ASSIGN."
- **3** Press the $[4 \blacktriangle \blacktriangledown]/[5 \blacktriangle \blacktriangledown]$ buttons to select the desired transpose type.

KEYBOARD	When this is selected, the TRANSPOSE [-]/[+] buttons affect the pitch of keyboard played Voices, Style playback (controlled by the performance in the chord section of the keyboard), and Multi Pad playback (when Chord Match is on, and left-hand chords are indicated)—but they do not affect Song playback.
SONG	When this is selected, the TRANSPOSE [-]/[+] buttons affect only the pitch of Song playback.
MASTER	When this is selected, the TRANSPOSE [-]/[+] buttons affect the overall pitch of the instrument.

You can confirm the setting here by viewing the pop-up window called up via the TRANSPOSE [-]/[+] buttons.

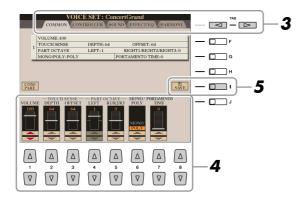
Editing Voices (Voice Set)

The Tyros3 has a Voice Set feature that allows you to create your own Voices by editing some parameters of the existing Voices. Once you've created a Voice, you can save it as a User Voice to the USER drive or external devices for future recall.

- Select the desired Voice (other than an Organ Flutes Voice).

 The editing method is different for the ORGAN FLUTES Voices compared to other Voices. For instructions on editing the ORGAN FLUTES Voices, see page 16.
- **2** Press the [5 ▲] (VOICE SET) button to call up the VOICE SET display.
- 3 Use the TAB [◀][▶] buttons to call up the relevant setting display.

 For information on the available parameters in each display, see the "Editable Parameters in the VOICE SET Displays" on page 12.



4 As necessary, use the [A]/[B] buttons to select the item (parameter) to be edited and edit the Voice by using the [1 ▲▼]–[8 ▲▼] buttons or sliders.

By pressing the [D] (COMPARE) button, you can compare the sound of the edited Voice with the original (unedited) Voice

5 Press the [I] (SAVE) button to save your edited Voice as a User Voice.



The settings will be lost if you select another Voice or turn the power to the instrument off without executing the Save operation.

Editable Parameters in the VOICE SET Displays

The Voice Set parameters are organized into five different displays. The parameters in each display are described separately, below.

∠ NOTE

The available parameters differ depending on the Voice.

■ COMMON Page

[1 ▲▼]	VOLUME	Adjusts the volume of the current edited Voice.
[2 ▲▼]/ [3 ▲▼]	TOUCH SENSE	Adjusts the touch sensitivity (velocity sensitivity), or how greatly the volume responds to your playing strength. TOUCH SENSE DEPTH Changes to velocity curve according to VelDepth (with Offset set to 64) Actual Velocity for tone generator Depth=127 (twice) Depth=32 (half) Depth=32 (half) Depth=32 (half) Depth=32 (half) Depth=32 (half) Depends on offset Depends on offset Offset=96 (+64) Offset=32 (-64) Depends on offset Offset=0 (-127)
[2 ▲▼]	DEPTH	Determines the velocity sensitivity, or how much the level of the Voice changes in response to your playing strength (velocity).
[3 ▲▼]	OFFSET	Determines the amount by which received velocities are adjusted for the actual velocity effect.
[4 ▲▼]/ [5 ▲▼]	PART OCTAVE	Shifts the octave range of the edited Voice up or down in octaves. When the edited Voice is used as any of the RIGHT 1–3 parts, the R1/R2/R3 parameter is available; when the edited Voice is used as the LEFT part, the LEFT parameter is available.
[6 ▲▼]	MONO/POLY	Determines whether the edited Voice is played monophonically or polyphonically. This setting can also be made from the VOICE EFFECT [MONO] button on the panel.
[7 ▲▼]	PORTAMENTO TIME	Sets the portamento time (pitch transition time) when the edited Voice is set to "MONO" above.

■ CONTROLLER Page

• 1 MODULATION

The MODULATION wheel can be used to modulate the parameters below as well as the pitch (vibrato). Here, you can set the degree to which the MODULATION wheel modulates each of the following parameters.

[2 ▲▼]	FILTER	Determines the degree to which the MODULATION wheel modulates the Filter Cutoff Frequency. For details about the filter, see page 13.
[3 ▲▼]	AMPLITUDE	Determines the degree to which the MODULATION wheel modulates the amplitude (volume).
[5 ▲▼]	LFO PMOD	Determines the degree to which the MODULATION wheel modulates the pitch, or the vibrato effect.
[6 ▲▼]	LFO FMOD	Determines the degree to which the MODULATION wheel modulates the Filter modulation, or the wah effect.
[7 ▲▼]	LFO AMOD	Determines the degree to which the MODULATION wheel modulates the amplitude, or the tremolo effect.

• 2 AFTERTOUCH

Aftertouch can be used to modulate the parameters below. Here, you can set the degree to which Aftertouch modulates each of the following parameters.

[2 ▲▼]	FILTER	Determines the degree to which Aftertouch modulates the Filter Cutoff Frequency. See below for details about Filter.
[3 ▲▼]	AMPLITUDE	Determines the degree to which Aftertouch modulates the amplitude (volume).
[5 ▲▼]	LFO PMOD	Determines the degree to which Aftertouch modulates the pitch, or the vibrato effect.
[6 ▲▼]	LFO FMOD	Determines the degree to which Aftertouch modulates the Filter modulation, or the wah effect.
[7 ▲▼]	LFO AMOD	Determines the degree to which Aftertouch modulates the amplitude, or the tremolo effect.

■ SOUND Page

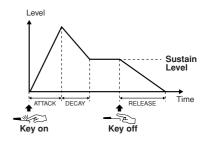
• FILTER

Filter is a processor that changes the timbre or tone of a sound by either blocking or passing a specific frequency range. The parameters below determine the overall timbre of the sound by boosting or cutting a certain frequency range. In addition to making the sound either brighter or mellower, Filter can be used to produce electronic, synthesizer-like effects.

[1 ▲▼]	BRIGHTNESS	Determines the cutoff frequency or effective frequency range of the filter (see diagram). Higher values result in a brighter sound.	Volume Cutoff Frequency
[2 ▲▼]	HARMONIC	Determines the emphasis given to	These frequencies are Cutoff range Frequency (pitch) Volume
	CONTENT	the cutoff frequency (resonance), set in BRIGHTNESS above (see diagram). Higher values result in a more pronounced effect.	Resonance
			Frequency (pitch)

• EG

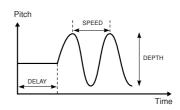
The EG (Envelope Generator) settings determine how the level of the sound changes in time. This lets you reproduce many sound characteristics of natural acoustic instruments—such as the quick attack and decay of percussion sounds, or the long release of a sustained piano tone.



[3 ▲▼]	ATTACK	Determines how quickly the sound reaches its maximum level after the key is played. The lower the value, the quicker the attack.
[4 ▲▼]	DECAY	Determines how quickly the sound reaches its sustain level (a slightly lower level than maximum). The lower the value, the quicker the decay.
[5 ▲▼]	RELEASE	Determines how quickly the sound decays to silence after the key is released. The lower the value, the quicker the decay.

VIBRATO

Vibrato is a quavering, vibrating sound effect that is produced by regularly modulating the pitch of the Voice.



[6 ▲▼]	DEPTH	Determines the intensity of the Vibrato effect. Higher settings result in a more pronounced Vibrato.
[7 ▲▼]	SPEED	Determines the speed of the Vibrato effect.
[8 ▲▼]	DELAY	Determines the amount of time that elapses between the playing of a key and the start of the Vibrato effect. Higher settings increase the delay of the Vibrato onset.

■ EFFECT/EQ Page

● 1 REVERB DEPTH/CHORUS DEPTH/DSP DEPTH

[1 ▲▼]/ [2 ▲▼]	REVERB DEPTH	Adjusts the reverb (page 94) depth.
[3 ▲▼]/ [4 ▲▼]	CHORUS DEPTH	Adjusts the chorus (page 94) depth.
[5 ▲▼]	DSP ON/OFF	Determines whether the DSP is on or off. This setting can also be made from the VOICE EFFECT [DSP] button on the panel.
[6 ▲▼]	DSP DEPTH	Adjusts the DSP (page 94) depth. If you want to re-select the DSP type, you can do so in the "2 DSP" menu explained below.
[7 ▲▼]	PANEL SUSTAIN	Determines the sustain level applied to the edited Voice when the VOICE EFFECT [SUSTAIN] button on the panel is turned on.

2 DSP

[1 ▲▼]- [4 ▲▼]	DSP TYPE	Selects the DSP effect category and type. Select a type after selecting a category.
[5 ▲▼]- [8 ▲▼]	VARIATION	Two variations are provided for each DSP type. Here, you can edit the VARIA-TION on/off status and variation's parameter value setting.
[5 ▲▼]	ON/OFF	Turns the DSP Variation on or off for the selected Voice. This setting can also be made from the VOICE EFFECT [VARIATION] button on the panel. (This button is effective only when the [DSP] button is on.)
	PARAMETER	Displays the variation parameter. (This differs depending on the effect type and cannot be changed.)
[6 ▲▼] -[8 ▲▼]	VALUE	Adjusts the value of the DSP variation parameter.

● 3 EQ

Determines the Frequency and Gain of the Low and High EQ bands. For information about EQ, refer to page 96.

■ HARMONY Page

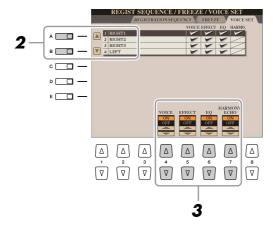
Same as in the [FUNCTION] \rightarrow [F] HARMONY/ECHO display. See "Selecting the Harmony/Echo type" on page 7.

Disabling Automatic Selection of Voice Sets (Effects, etc.)

Each Voice is linked to its default VOICE SET parameter settings. Usually these settings are automatically called up when a Voice is selected. However, you can also disable this feature by the operation in the relevant display as explained below.

For example, if you want to change the Voice yet keep the same Harmony effect, set the HARMONY/ECHO parameter to OFF (in the display explained below).

- **1** Call up the operation display. [FUNCTION] → [E] REGIST SEQUENCE/FREEZE/VOICE SET → TAB [\blacktriangleleft][\blacktriangleright] VOICE SET
- **2** Use the [A]/[B] buttons to select a keyboard part.



3 Use the [4 ▲▼]–[7 ▲▼] buttons to enable/disable automatic calling up of the settings (ON or OFF) independently for each parameter group.

Editing Organ Flutes Parameters

The Organ Flute Voices selected from the [ORGAN FLUTES] button can be edited by adjusting the footage levers, adding the attack sound, applying effect and equalizer, etc.

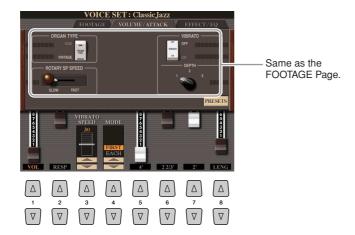
■ FOOTAGE Page

Refer to the Owner's Manual.

■ VOLUME/ATTACK Page



After editing, go to the Voice Selection display by pressing the [I] (PRESETS) button and save the setting. The settings will be lost if you select another Voice or turn the power to the instrument off without executing the Save operation.



[1 ▲▼]	VOL (Volume)	Adjusts the overall volume of the Organ Flutes. The longer the graphic bar, the greater the volume.
[2 ▲▼]	RESP (Response)	Affects both the attack and release (page 13) portion of the sound, increasing or decreasing the response time of the initial swell and release, based on the FOOTAGE controls. The higher the value, the slower the swell and release.
[3 ▲▼]	VIBRATO SPEED	Determines the speed of the vibrato effect controlled by the Vibrato On/Off ([F]/[G] buttons) and Vibrato Depth ([H] button).
[4 ▲▼]	MODE	The MODE control selects between two modes: FIRST and EACH. In the FIRST mode, attack (percussive sound) is applied only to the first notes played and held simultaneously; while the first notes are held, any subsequently played notes have no attack applied. In the EACH mode, attack is applied equally to all notes.
[5 ▲▼]- [7 ▲▼]	4', 2 2/3', 2'	These determine the attack sound volume of the ORGAN FLUTE Voice. The 4', 2-2/3' and 2' controls increase or reduce the volume of attack sound at the corresponding footages. The longer the graphic bar, the greater the attack sound volume.
[8 ▲▼]	LENG (Length)	Affects the attack portion of the sound producing a longer or shorter decay immediately after the initial attack. The longer the graphic bar, the longer the decay.

■ EFFECT/EQ Page

Same parameters as in the VOICE SET "EFFECT/EQ" Page explained on page 14.

Creating Custom Voices (Voice Creator)

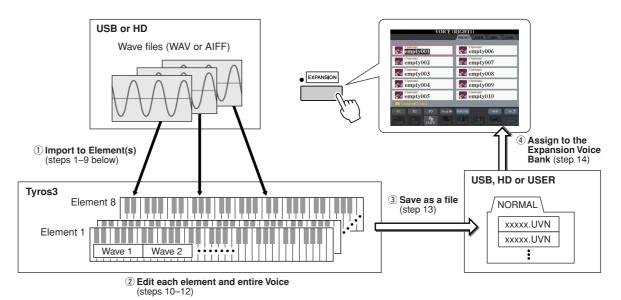
The powerful Voice Creator features of the Tyros3 give you the tools to create your own original Voices. Voice Creator allows you to import your own "Wave" (audio samples in WAV or AIFF format), and assign them to the keys—building completely new Voices with completely new sounds.

Two types of Voices can be created: Normal Voice (see below) and Drum Voice (page 22). The creating procedure differs depending on the Voice type.

Creating Normal Voices (Custom Voice)

By importing Wave files, you can create your original Voices—not only create from scratch, but also add Waves to the existing Voices. A Voice consists of eight elements and you need to assign Wave files to each element (more than two Waves can be assigned to one element).

The resulting Voice is called a Custom Voice and can be selected and played in the same way as all other Tyros3 Voices.



Prepare the audio data you'll be using for the new Voice.

Only WAV or AIFF format data can be used for the Voice Creator. Store the files in a USB storage device or hard disk drive.

In take full a

To take full advantage of the Voice Creator function, we recommend that you install optional DIMMs.

Notes for Available Audio Files

- This instrument cannot recognize the extension .aiff. When you use an AIFF file, change the extension to .aif.
- Only use uncompressed files.
- Audio data used for the Voice Creator can be of any sample rate or bit resolution. However, all audio data of a resolution other than 16-bit is automatically converted to 16-bit resolution after being loaded.
- Only use Wave data having the following frequencies: 96000 Hz, 88000 Hz, 48000 Hz, 44100 Hz, 32000 Hz, 22050 Hz or 11025 Hz. Otherwise, the data may not play back at the correct pitch.
- Voice Creator supports and recognizes loops in the audio data, letting you use up to one loop in each audio file. (Some sample libraries have loops already programmed into the data; you can also use audio editing software to program loops yourself. Keep in mind however, that multiple loops are not supported.)
- Audio files recorded with the Hard Disk Recorder cannot be used as is with the Voice Creator. If you want to use a Hard Disk Recorder file, export the file in .wav data format.



2 Turn the PART SELECT [RIGHT 1] button to on, then select a Voice.

When you are creating a Custom Voice from scratch, select an "empty" Voice from the [EXPANSION] button. If you are creating a Voice by adding Wave files to an existing Voice, press the desired VOICE button and select the desired Voice.

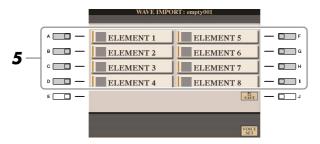


If you have selected the [PERC./SFX KIT] category, make sure NOT to select Drum Voice ("Drums" is displayed above the Voice name).

3 Press the [VOICE CREATOR] button to call up the Voice Creator.



4 Press the [G] (WAVE IMPORT) button to call up the WAVE IMPORT menu.



5 Use the [A]-[D] and [F]-[I] buttons to select the desired Element to which Wave file(s) will be imported.

The Key Mapping display of the selected Element will appear.



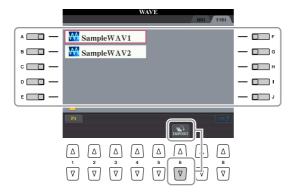
You cannot import Waves to preset Elements (instrument icon is shown).

6 Select the desired Wave to be imported by following the procedure below.

- **6-1** Press the [F] (ADD WAVE) button to call up the ADD WAVE display.
- **6-2** Press the [F] (FILE IMPORT) button. All available .wav and .aif files will be shown.
- **6-3** Select the desired audio file by using the [A] –[J] buttons, then press the [6 ▼] (IMPORT) button.

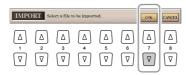


Double-clicking on the corresponding [A]–[J] button here selects the file for import, allowing you to skip steps 6-4 and 6-5 below.





6-4 Press the [7 ▼] (OK) button. The file properties for the audio data are shown for confirmation purposes.

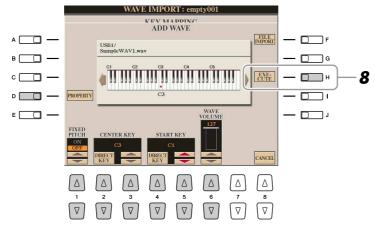


6-5 At the prompt, press the [F] (YES) button. To cancel, press the [G] (NO) button.



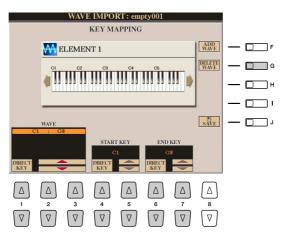
7 Set the parameters for the imported Wave in the ADD WAVE display.

From this display, you can set a number of parameters related to how the sound will be mapped to the keyboard.



[D]	PROPERTY	Shows the Property display (page 25).
[1 ▲▼]	FIXED PITCH	When this is set to ON, all keys will play the Wave sound at the same pitch. When set to OFF, the pitch of the Wave sound changes according to the key played, based around the original pitch (set at Center Key below).
[2 ▲▼]/ [3 ▲▼]	CENTER KEY	This determines the key to which the original pitch of the sound is assigned. When Fixed Pitch (above) is set to OFF, keys below the Center Key play the sound progressively lower in pitch, while keys above play the sound progressively higher. Normally, you'll want to make sure that this is the same as the original sound; for example, if the original pitch of the audio was at C3, set Center Key to C3 for best results. When Fixed Pitch (above) is set to ON, this has no effect. You can specify this setting directly from the keyboard by simultaneously holding down the $[2 \blacktriangle V]$ (DIRECT KEY) button and pressing the desired key on the keyboard.
[4 ▲▼]/ [5 ▲▼]	START KEY	This determines the lowest key at which the Wave will sound. Use this with End Key (see step 10 on page 20) to set the key range for the Wave. You can specify this setting directly from the keyboard by simultaneously holding down the [4 AV] (DIRECT KEY) button and pressing the desired key on the keyboard.
[6 ▲▼]	WAVE VOLUME	This determines the playback volume for the specific Wave. Normally, this should be set to the maximum (127); however, you can use it to adjust the level balance among multiple sounds in the Element.

- **8** Execute importing by pressing the [H] (EXECUTE) button. To cancel importing, press the [8 ▲▼] (CANCEL) button.
- 9 If you want to import another Wave to this Element, repeat steps 6-8.
- 10 Set the parameters for the currently selected Element in the KEY MAPPING display.





If you want to save the Voice at this point, press the [J] (SAVE) button. The SAVE & ASSIGN display will appear. Refer to steps 13–14 below about the SAVE & ASSIGN display. Each time you make some change (e.g., add a Wave to the Element or add an Element to the Voice), you should save the Voice.

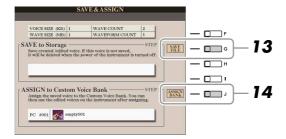
[G]	DELETE WAVE	Deletes the Wave selected with the [1 ▲▼]–[3 ▲▼] (WAVE) buttons below.
[1 ▲▼]- [3 ▲▼]	WAVE	When more than one Wave has been imported, select the desired one for editing.
[4 ▲▼]/ [5 ▲▼]	START KEY	This determines the lowest key at which the Wave will sound. Use this with End Key (below) to set the key range for the Wave. You can specify this setting directly from the keyboard by simultaneously holding down the [4 ▲▼] (DIRECT KEY) button and pressing the desired key on the keyboard.
[6 ▲▼]/ [7 ▲▼]	END KEY	This determines the highest key at which the Wave will sound. Use this with Start Key (above) to set the key range for the Wave. You can specify this setting directly from the keyboard by simultaneously holding down the [6 ▲▼] (DIRECT KEY) button and pressing the desired key on the keyboard.

- 11 Press the [EXIT] button to return to the WAVE IMPORT display.
 - If you want to edit another Element, repeat steps 5–10.
- 12 Press the [8 ▲▼] (VOICE SET) button and edit the Voice Set parameters (page 12).

After you finish editing the Voice Set parameters, press the [EXIT] button to show the WAVE IMPORT display again.

13 Save the created Voice as a file.

Press the [J] (SAVE) button to call up the SAVE & ASSIGN display, then press the [G] (SAVE FILE) button to save the Voice.



A CAUTION

The created Voice will be lost if you change to another Voice or you turn the power off without executing the Save operation.

Make sure to execute the Save operation.



Saving the Voice to the USER drive is not recommended since the USER drive does not have much memory space—only about 3 MB. It is better to save to the HD or USB drive.



Do not use any special characters (umlaut, accent, etc.) in the Voice name.



14 Assign the file (saved on step 13) to an Expansion Voice bank.

This step assigns the saved Voice to the Expansion Voice bank, letting you select it from the [EXPANSION] button on the panel. In this step, the link between the Expansion Voice bank and the saved Voice file is actually stored.

- **14-1** Press the [J] (ASSIGN BANK) button.
- **14-2** Select the desired location in the bank by using the [A]–[J] buttons.
- **14-3** Press the [6 ▼] (ASSIGN) button.

 The same Voice name that you entered in the Save operation (step 13) is selected automatically. Normally, you should keep this name.
- **14-4** Press the [8 ▲] (OK) button.

The Voices which have been saved and assigned are automatically loaded to the internal memory when the power of the instrument turned on. If the Voice is contained in a USB storage device, automatic loading may not be possible because of the time needed to recognize the device. If this happens, copy the Voice to another device and try it again.

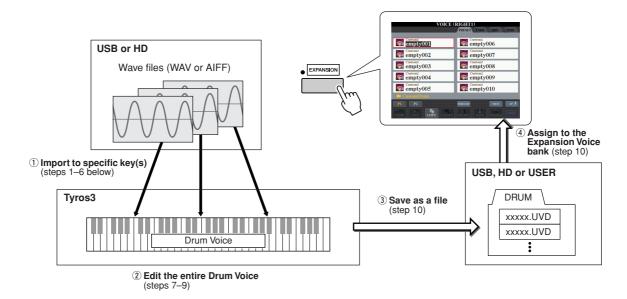
15 Press the [EXIT] button.

If you want, you can continue adding waves. Repeat steps 5–14.

Creating Drum Voices (Custom Drum Voice)

By assigning Wave files to each key, you can create your original Drum Voices—not only by creating the Voice from scratch, but also by replacing specific sounds (keys) within an existing Drum Voice with Wave files and by editing selected parameters of each key.

The resulting Voice is called a Custom Drum Voice and can be selected and played in the same way as all other Tyros3 Voices.



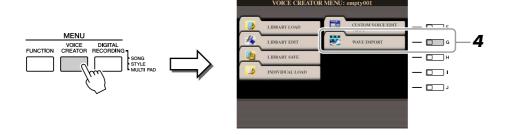
Prepare the audio data you'll be using for the new Voice.

Only the WAV or AIFF format data can be used for the Voice Creator. Store the files in a USB storage device or hard disk drive. For details on compatible audio files, refer to page 17.

2 Turn the PART SELECT [RIGHT 1] button to on, then select a Drum Voice.

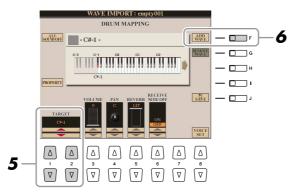
When you are creating a Custom Drum from scratch, select an "empty" drum Voice by pressing the [EXPANSION] button, then pressing the [8 ▲] (UP) button and selecting the "CustomDrum" category. If you are creating a Drum Voice by adding Wave files to an existing Drum Voice, press the [PERC./DRUM KIT] button and select the desired drum Voice.

3 Press the [VOICE CREATOR] button to call up the Voice Creator.





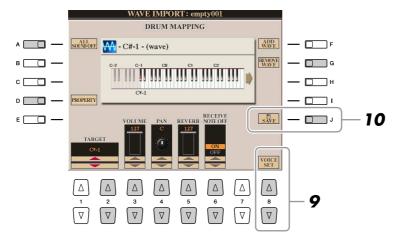
4 Press the [G] (WAVE IMPORT) button to call up the DRUM MAPPING display.



- 5 Specify the key to be edited or which Wave file is to be imported. Press the desired key on the keyboard or use the [1 ▲▼]/[2 ▲▼] (TARGET) buttons.
- 6 If you want to import the Wave to the selected key, press the [F] (ADD WAVE) button.

For details on the import procedure, refer to step 6 on page 18.

7 Set the parameters for the selected key in the DRUM MAPPING display.



[A]	ALL SOUND OFF	Stops all sounds.
[D]	PROPERTY	Shows the Property display (page 25).
[G]	REMOVE WAVE	Deletes the imported Wave. If you have started Voice creating based on an existing Drum Voice, the key will return to the original sound.
[1 ▲▼]/ [2 ▲▼]	TARGET	Selects a key to be edited.
[3 ▲▼]	VOLUME	Adjusts the volume.
[4 ▲▼]	PAN	Sets the stereo pan position: 0 (Random), 1 (Left)–64 (Center)–127 (Right). When the [DSP] button is on, a setting of "0" here results in no panning.
[5 ▲▼]	REVERB	Adjusts the applied reverb effect.
[6 ▲▼]	RECEIVE NOTE OFF	Determines whether the key receives Note Off events or not. When this parameter is set to ON, Note Off events will be received. When this is set to OFF, Note Off events will not be received.



- 8 Repeat steps 5–7 to edit each key.
- Press the [8 ▲▼] (VOICE SET) button and edit the Voice Set parameters (page 12).

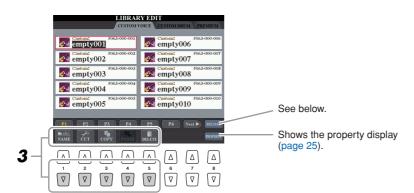
After you finish editing the Voice Set parameters, press the [EXIT] button to show the DRUM MAPPING display again.

Press the [J] (SAVE) button to call up the SAVE & ASSIGN display Save the created Drum Voice as a file, then assign it to the Expansion Voice Bank. For details, refer to steps 13–14 on page 20.

Editing an Expansion Voice Bank—Library Edit

This function lets you organize the Voices in the Expansion Voice bank, renaming them, changing their location within in the bank, or even deleting them if desired.

- Call up the operation display.
 [VOICE CREATOR] → [B] LIBRARY EDIT
- **2** Use the TAB [◀][▶] buttons to select the desired tab page: Custom Voice, Custom Drum or Premium.
- 3 Select the desired Voice in the display and use the [1 ▼]–[5 ▼] buttons to edit the selected Voice.





The Premium page is reserved for Voices obtained from the Internet website. The Voices in the Premium page cannot be edited but only deleted.



When you reorganize Voices in this display, you are simply organizing the paths of the Voices, not copying or moving the Voices themselves.

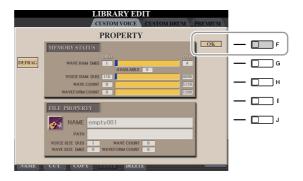
Reloading an Expansion Voice Bank

The [8 ▲] (RELOAD) button is used when the links of the Voices are broken (an exclamation mark "!" is shown on the Voice icon). For example, when you open this display without connecting the USB storage device which contains the assigned Custom Voice, a "Not Found!" message appears along with the Voice name. If this happens, connect the appropriate USB storage device and reload the Expansion Voice bank. While reloading, press the [VOICE CREATOR] or [EXPANSION] button calls up the progress display.

4 When you've finished editing, press the [EXIT] button.

Property display

When the available memory space has been taken up with large amounts of audio data, you may want to delete large Custom Voices to create space, yet not know which Voices are large and taking up much space. In the Property display, you can check the Memory Status (below), as well as the File Property (name, location, size and Wave count) of the currently selected Expansion Voice.



Memory Status

- **WAVE RAM:** Memory size of the optionally installed DIMMs. After installing the DIMMs, the preinstalled memory (4 MB) is invalid and cannot be accessed. By optimizing the DIMMs, you may be able to increase the memory capacity (depending on how fragmented the audio files are). Press the [B] (DEFRAG) button to optimize the DIMMs.
- **VOICE RAM:** Size of the internal memory for the Expansion Voices. This memory cannot be expanded. A maximum of 4,096 KB is available.
- WAVE COUNT: Total number of the wave files. A maximum of 5,120 mono files or 2,560 stereo files is available.
- **WAVEFORM COUNT:** Total number of Waveforms. The term Waveform refers to a set of wave assignment information. A maximum of 1,280 waveforms is available.

To close the Property display, press the [F] (OK) button.

Saving your Custom Voices to a Library—Library Save

Once you've created some Custom Voices (including Custom Drum Voices), you'll want to keep them together in a Library file. Library Save lets you create a Library file for storing your Custom Voices and keeping them organized for future use.

Call up the operation display. [VOICE CREATOR] \rightarrow [C] LIBRARY SAVE

- Use the TAB [◀][▶] buttons to select the desired tab page: CUSTOM **VOICE or CUSTOM DRUM.**
- **3** By using the [A]–[J] buttons and [1 ▲]–[8 ▲] buttons, select the desired Voices.

You can continue to select additional Voices here, as many as desired—even a mixture of Normal and Drum Voices. To select all Voices in all tab pages, press the [6 ▼] (ALL) button.

- **4** Press the [7 ▼] (OK) button.
- **5** By using the TAB [◀][▶] buttons, select the destination for saving the

If necessary, create a folder by pressing the [7 ▼] (FOLDER) button.

- Press the [6 ▼] (SAVE) button.
- **7** Enter the desired name for the Library file and press the [8 ▲] (OK) button.

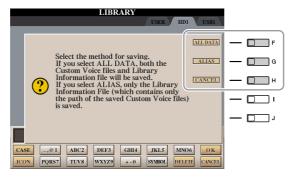
A message appears prompting you to select the method for saving.

Press the [F] (ALL DATA) or [G] (ALIAS) button to save the Library file.

To cancel, press the [H] (CANCEL) button.

ALL DATA

[F]





The Library file contains the path of the Custom Voices. Therefore, if you move or delete the Voices after creating the Library file, the Voices cannot be recalled from the Library file.

∠ NOTE

Even though the User drive can be selected here, there is not enough memory space in the drive for storing Voice Creator data. Make sure to use one of the other destinations.



You can check the available memory space of the selected storage location/ device by pressing the [8 ▼] (PROP-ERTY) button here.

Saves all of the selected data to the specified location. In this operation, two kinds of data are saved—that of Library files and the selected Custom Voices/ Custom Drum Voices. These two kinds of files are saved to the same drive but are shown in different displays. To show the Library file, select [VOICE CRE-ATOR] \rightarrow [A] LIBRARY LOAD; To show the Custom Voices, select [VOICE CRE-ATOR] \rightarrow [D] INDIVIDUAL LOAD. 🖄 NOTE

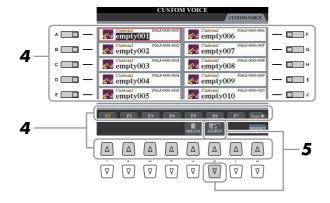
When you save the Library file using ALL DATA, you should make a new folder to save the Library because the Custom Voices are mixed with the existing Voices in the destination drive.

[G]	ALIAS	Saves only Alias markers (shortcuts) of the selected data to the specified location. This lets you save multiple Libraries of your Voice data and make multiple folders containing different collections of your Voices, without taking up additional memory space on the drive. As long as the Voice data exists in one location on the drive, you can save an Alias that will recall that data.
		When you save a Voice to some Libraries by using ALIAS and edit the Voice, the edit you perform affects all Libraries which include the edited Voice.

Loading a single Additional Voice to the Tyros3—Individual Load

This operation allows you to load a single additional Voice (including from Custom Voices, Custom Drum Voices and downloaded Premium Voices) to the Expansion Voice bank in the instrument for playing or editing.

- Call up the operation display. [VOICE CREATOR] \rightarrow [D] INDIVIDUAL LOAD
- 2 Use the TAB [◄][▶] buttons to select the location or device containing the desired Voice.
- 3 Select the desired Voice in the display.
 If you select a Custom Voice/Custom Drum Voice, the Expansion Voice bank appears.



If you select a Voice which has been downloaded from the website, loading will automatically start and steps 4–7 are omitted.

- **4** By using the [A]–[J] buttons and [1 ▲]–[8 ▲] buttons, select the destination for the Voice.
- **5** Press the [6 ▲] (ASSIGN) button.
- 6 If desired, enter a name for the Voice.

 If a Voice with the same name already exists in the bank, you'll need to enter a new name for the Voice.
- Press the [8 ▲] (OK) button to start loading.
 To cancel, press the [8 ▼] (CANCEL) button.

After the loading is finished, you can select the Voice from the [EXPANSION] button.



File loading may take as little as a couple of seconds or as long as a few minutes, depending on how much data is contained in the Voice.

Loading an Expansion Voice Bank (Library) to the Tyros3—Library Load

This operation lets you recall the Custom Voices you've saved to a Library file (in Library Save on page 26), and load them to the Tyros3.

- **1** Call up the operation display.

 [VOICE CREATOR] → [A] LIBRARY LOAD
- 2 Use the TAB [◄][▶] buttons to select the location or device containing the desired Library file.
- **3** By using the [A]–[J] buttons, select the desired Library file. If the instrument does not contain Library files, the selected file is automatically loaded. If the instrument contains Library files, a message appears prompting you to overwrite existing Voices.





File loading may take several minutes, depending on how many Voices are in the Library and how much data they contain. Do not turn off the power or disconnect any devices during this operation.



While loading, pressing the [VOICE CREATOR] or [EXPANSION] button calls up the progress display.

YES	The current Custom Voice displayed in the prompt is replaced with the one in the Library file.
YES ALL	Current Custom Voices are replaced with all of the Voices in the Library file. You can use this after replacing some selected Voices one by one by using "YES" and replace all the rest.
NO	The displayed Voice in the prompt will not be replaced.
CANCEL	Cancels loading the Library file.

After the loading is finished, you can select the newly loaded Voices from the [EXPANSION] button.

Editing a Custom Voice on your computer—Voice Editor

Once you've created a Custom Voice (including Custom Drum Voice) with the Voice Creator features, you can transfer that Voice to a computer and use the comprehensive Voice Editor software (included on the CD-ROM) to edit all the parameters from your computer. The Voices you create can be saved to the PRESET tab page on the Tyros3 as Custom Voices, and can be called up any time by pressing the [EXPANSION] button. After installing the software, edit Voices by following the steps below.

- Make sure the Tyros3 is properly connected to the computer with a USB cable.
- 2 Turn the computer's power on, then turn the Tyros3's power on.
- 3 Start Voice Editor on the computer.

The Custom Voice Edit Mode display is shown in the instrument. The Voice Editor can only be used when this display is shown.



If this display does not appear, call up this display by selecting [VOICE CREATOR] \rightarrow [F] CUSTOM VOICE EDIT via PC.

4 Edit the Voice parameters on the computer to create your original Voice.

For details, refer to the Owner's Manual of the Voice Editor on the included CD-ROM.

- **5** When you've finished editing, select the [SAVE & ASSIGN] menu on the Voice Editor to save and assign the edited Voice on the Tyros3.
- **6** Exit the Voice Editor.
- **7** Select the edited Voice from the [EXPANSION] button and play it.

Styles

- Playing Rhythm and Accompaniment -

Contents

Selecting the Chord Fingering Type
Style Playback Related Settings
Split Point Settings
Memorizing the Original One Touch Setting
Creating/Editing Styles (Style Creator)
• Realtime Recording37
• Step Recording
• Style Assembly
• Editing the Rhythmic Feel42
• Editing Data for Each Channel
Making Style File Format Settings45

Selecting the Chord Fingering Type

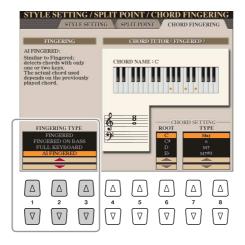
Style playback can be controlled by the chords you play in the chord section of the keyboard. There are seven types of fingering.

1 Call up the operation display.

[FUNCTION] \to [C] STYLE SETTING/SPLIT POINT/CHORD FINGERING \to TAB [\blacktriangleleft][\blacktriangleright] CHORD FINGERING

2 Press the [1 ▲▼]–[3 ▲▼] buttons to select a fingering.

For information on each fingering type, see page 31.



Chord Tutor

If you know the name of a chord but don't know how to play, you can have the instrument show you the notes to play. This is the Chord Tutor function. On the CHORD FINGERING display, specify the Chord Root and Chord Type by using the $[6 \, \blacktriangle \blacktriangledown]$ – $[8 \, \blacktriangle \blacktriangledown]$ button. The notes you need to play are shown in the display.

🔑 NOTE

Depending on the chord, some notes may be omitted.

● Chord Fingering Types

Chord Fingering 1	y pes
SINGLE FINGER	Makes it simple to produce orchestrated accompaniment using major, seventh, minor and minor-seventh chords by pressing a minimum number of keys on the Chord section of the keyboard. This type is available only for Style playback. The abbreviated chord fingerings described at right are used: C For a major chord, press the root key and a white key to its left. Cm For a minor chord, simultaneously press the root key and a black key to its left. Cm For a minor chord, simultaneously press the root key and both a white and black key to its left.
MULTI FINGER	Automatically detects Single Finger or Fingered chord fingerings, so you can use either type of fingering without having to switch fingering types.
FINGERED	Lets you finger your own chords on the chord section of the keyboard, while the instrument supplies appropriately orchestrated rhythm, bass, and chord accompaniment in the selected Style. The Fingered type recognizes the various chord types which are listed on the Data List available at the Yamaha website and can be looked up using the Chord Tutor function on page 30.
FINGERED ON BASS	Accepts the same fingerings as Fingered, but the lowest note played in the Chord section of the keyboard is used as the bass note, allowing you to play "on bass" chords. (In the Fingered more, the root of the chord is always used as the bass note.)
FULL KEYBOARD	Detects chords in the entire key range. Chords are detected in a way similar to Fingered, even if you split the notes between your left and right hands—for example, playing a bass note with your left hand and a chord with your right, or by playing a chord with your left hand and a melody note with your right.
AI FINGERED	Basically the same as Fingered, with the exception that less than three notes can be played to indicate the chords (based on the previously played chord, etc.).
AI FULL KEYBOARD	When this advanced fingering type is engaged, the instrument will automatically create appropriate accompaniment while you play just about anything, anywhere on the keyboard using both hands. You don't have to worry about specifying the Style chords. Although the Al Full Keyboard type is designed to work with many songs, some arrangements may not be suitable for use with this feature. This type is similar to Full Keyboard, with the exception that less than three notes can be played to indicate the chords (based on the previously played chord, etc.). 9th, 11th and 13th chords cannot be played. This type is available only for Style playback. NOTE NO

Style Playback Related Settings

The Tyros3 has a variety of Style playback functions which can be accessed in the display below.

1 Call up the operation display.

[FUNCTION] \rightarrow [C] STYLE SETTING/SPLIT POINT/CHORD FINGERING \rightarrow TAB [\blacktriangleleft][\blacktriangleright] STYLE SETTING

2 Use the [1 ▲▼]–[8 ▲▼] buttons for each setting.

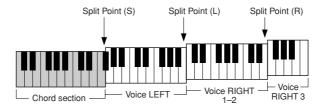


[1 **▲▼**] STOP ACMP When [ACMP] is turned on and [SYNC START] is off, you can play chords in the chord section of the keyboard with the Style stopped, and still hear the accompaniment chord. In this condition—called "Stop Accompaniment" any valid chord fingerings are recognized and the chord root/type are shown in the display. Here, you can determine whether the chord played in the chord section will sound or not in the Stop Accompaniment status. **OFF:** The chord played in the chord section will not sound. **STYLE:** The chord played in the chord section will sound via the Voices for the Pad part and the Bass channel of the selected Style. **FIXED:** The chord played in the chord section will sound via the specified Voice, regardless of the selected Style. When the selected Style contains MegaVoices, unexpected sounds may result when this is set to "STYLE." When you record a song, the chord detected by playing the Stop Accompaniment can be recorded regardless of the setting here. Please note that both the Voice that is sounded and the chord data will be recorded when set to "STYLE," and only the chord data will be recorded when set to "OFF" or "FIXED." [2 **▲▼**] **OTS LINK TIMING** This applies to the OTS Link function. This parameter determines the timing in which the One Touch Settings change with the MAIN VARIATION [A]–[D] change. (The [OTS LINK] button must be on.) **Real Time:** One Touch Setting is immediately called up when you press a MAIN VARIATION button. **Next Bar:** One Touch Setting is called up at the next measure, after you press a MAIN VARIATION button. [3 **AV**] SYNCHRO STOP This determines how long you can hold a chord before the Synchro Stop **WINDOW** function is automatically cancelled. When the [SYNC STOP] button is turned on and this is set to a value other than "OFF," this is automatically cancels the Synchro Stop function if you hold a chord for longer than the time set here. This conveniently resets Style playback control to normal, letting you release the keys and still have the Style play. In other words, if you release the keys sooner than the time set here, the Synchro Stop function works.

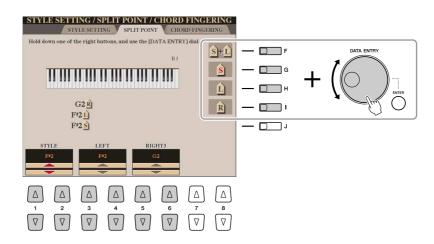
[4 ▲▼]	STYLE TOUCH	Turns touch response for the Style playback on/off. When this is set to "ON," the Style volume changes in response to your playing strength in the chord section of the keyboard.
[5 ▲▼]/ [6 ▲▼]	SECTION SET	Determines the default section that is automatically called up when selecting different Styles (when Style playback is stopped). When set to "OFF" and Style playback is stopped, the active section is maintained even if the different Style is selected. When any of the MAIN A–D sections is not included in the Style data, the nearest section is automatically selected. For example, when MAIN D is not contained in the selected Style, MAIN C will be called up.
[7 ▲▼]	TEMPO	This determines whether the tempo changes or not when you change Styles during Style playback. HOLD: The tempo setting of the previous Style is maintained. RESET: The tempo changes to that of the initial default tempo for the selected Style.
[8 ▲▼]	PART ON/OFF	This determines whether the Style Channel On/Off status changes or not when you change Styles. HOLD: The Style Channel On/Off status of the previous Style is maintained. RESET: All Style Channels are set to On.

Split Point Settings

These are the settings (there are three Split Points) that separate the different sections of the keyboard: the Chord section, the LEFT part section, the RIGHT 1–2 section and RIGHT 3 section. The three Split Point settings (below) are specified as note names.



- 1 Call up the operation display.
 - [FUNCTION] \to [C] STYLE SETTING/SPLIT POINT/CHORD FINGERING \to TAB [\blacktriangleleft][\blacktriangleright] SPLIT POINT
- 2 Set the Split Point.

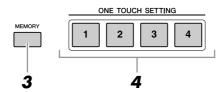


[F]	Split Point (S+L)	Sets the Split Point (S) and Split Point (L) to the same note. Press the [F] button and rotate the [DATA ENTRY] dial. You can also specify the Split Point directly from the keyboard by pressing the desired key on the keyboard while holding the [F] button.
		Split Point (S+L) Chord section + Voice RIGHT 1-3
[G]	Split Point (S)	Sets the each Split Point. Press one of the desired buttons and rotate the [DATA ENTRY] dial. You can also specify the Split Point directly from the keyboard by pressing the desired key on the keyboard while holding one of the [G]–[I] buttons. NOTE
[H]	Split Point (L)	
[1]	Split Point (R)	
[1 ▲▼]/ [2 ▲▼]	STYLE	You can specify each Split Point by note name. "STYLE" indicates Split Point (S), "LEFT" indicates Split Point (L) and "RIGHT3" indicates Split Point (R).
[3 ▲▼]/ [4 ▲▼]	LEFT	
[5 ▲▼]/ [6 ▲▼]	RIGHT3	

Memorizing the Original One Touch Setting

You can create your own One Touch Setting setups.

- Select the desired Style to memorize your One Touch Setting.
- Set up the panel controls (such as Voice, effects, and so on) as desired.
- Press the [MEMORY] button.

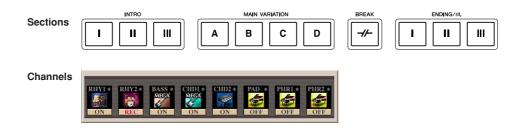


- **4** Press one of the ONE TOUCH SETTING [1]–[4] buttons. A message appears in the display prompting you to save the panel settings.
- **5** Press [F] (YES) button to call up the Style Selection display and save the panel settings as a Style file.



The panel settings memorized to each OTS button will be lost if you change the Style or turn the power off without executing the Save operation.

Creating/Editing Styles (Style Creator)

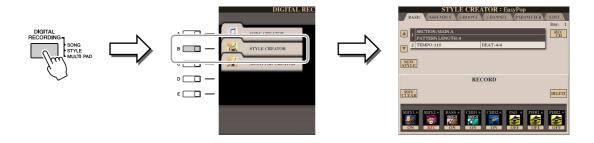


Styles are made up of fifteen different sections and each section has eight separate channels. With the Style Creator feature, you can create a Style by separately recording the channels, or by importing pattern data from other existing Styles. You can use one of the three different methods described below to create a Style. The created Style can also be edited.

- **Realtime Recording:** This method lets you record the Style by simply playing the keyboard. See page 37.
- **Step Recording:** This method lets you to enter each note individually. See page 40.
- **Style Assembly:** This method lets you create a composite Style by combining various patterns from the internal preset Styles or Styles you have already created. See page 40.

Call up the operation display.

[DIGITAL RECORDING] \rightarrow [B] STYLE CREATOR



There are six Pages (tabs) in the Style Creator display.

• BASIC	Creates the basic settings of the Style. You can also record your performance in realtime to create a new Style (Realtime Recording). See page 37.
• ASSEMBLY	Mixes the various parts (channels) from preset Styles or
	already created Style to create a new Style. See page 40.
• GROOVE	Changes the rhythmic feel of your created Style. See
	page 42.
• CHANNEL	Edits data for each channel—quantizing, changing
	velocity, etc. See page 44.
• PARAMETER	Changes the settings related for Style File Format. See
	page 45.
• EDIT	Lets you enter notes one by one to create your Style
	(Step Recording). See page 40.



The Style files created on the Tyros3 can only be played back on instruments which are compatible with SFF GE.

Realtime Recording

In the BASIC Page, you can create a single Style by recording the individual channels one-by-one, using realtime recording.

Realtime Recording Characteristics—Loop Recording and Overdub Recording

Loop Recording

Style playback repeats the rhythm patterns of several measures in a "loop," and Style recording is also done using loops. For example, if you start recording with a two-measure MAIN section, the two measures are repeatedly recorded. Notes that you record will play back from the next repetition (loop), letting you record while hearing previously recorded material.

Overdub Recording

This method records new material to a channel already containing recorded data, without deleting the original data. In Style recording, the recorded data is not deleted, except when using functions such as Rhythm Clear and Delete (page 38). For example, if you start recording with a two-measure MAIN section, the two measures are repeated many times. Notes that you record will play back from the next repetition, letting you overdub new material to the loop while hearing previously recorded material.

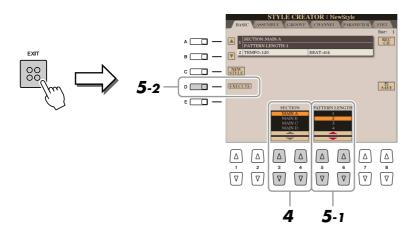
When creating a Style based on an existing internal Style, overdub recording is applied only to the rhythm channels. For all other channels (except rhythm), you need to delete the original data before recording.

- When you want to create a Style based on an existing Style, select the desired Style to serve as the basis for recording/editing before call up the Style Creator display.
- 2 Call up the operation display.

[DIGITAL RECORDING] \rightarrow [B] STYLE CREATOR The BASIC Page is shown.

- If you want to create a new Style from scratch, press the [C] (NEW STYLE) button to delete all channel's data.
- **4** Select the desired section (Intro, Main, Ending, etc.) for your new

First close the RECORD display by pressing the [EXIT] button. Then use the [3 $\blacktriangle \triangledown]/[4 \blacktriangle \triangledown]$ buttons to select the section to be recorded.





You can specify the sections to be recorded by using the Section buttons on the panel. Refer to step 3 on page 40.

M NOTE

You cannot select INTRO 4 and ENDING 4 sections directly via the panel opera-

🖄 NOTE

To call up the RECORD display again, press the [F] (REC CH) button.

Use the [5 ▲▼]/[6 ▲▼] buttons to determine the length (number of measures) of the selected section, then press the [D] (EXECUTE) button to actually enter the specified length.



Specify the channel to be recorded by simultaneously holding down the [F] (REC CH) button and pressing the appropriate numbered button, [1 ▼]–[8 ▼].

To cancel the selection, press the corresponding [1 ▼]–[8 ▼] button again.



Call up the Voice Selection display by using the [1 ▲]–[8 ▲] buttons and select the desired Voice for the corresponding recording channels.

Press the [EXIT] button to close the Voice Selection display.

Recordable Voices

- **RHY1 channel:** Any except your original Organ Flute, SA and SA2 Voices are recordable.
- RHY2 channel: Only drum/SFX kits are recordable.
- BASS-PHR2 channels: Any except your original Organ Flute, drum/SFX kits, SA and SA2 Voices are recordable.

∠ NOTE

Preset Organ Flute Voice can be recorded to the RHY1 and BASS—PHR2 channels.

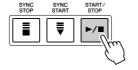
If necessary, delete a channel by simultaneously holding down the [J] (DELETE) button and pressing the appropriate numbered button, [1 ▲]-[8 ▲].

You can cancel the deletion by pressing the same numbered button again before releasing your finger from the [J] button.

🙇 NOTE

When recording channels BASS–PHR2 based on the existing Style, you have to delete the original data before recording.

9 Start recording by pressing the STYLE CONTROL [START/STOP] button.







Playback of the specified section starts. Since the accompaniment pattern plays back repeatedly in a loop, you can record individual sounds one by one, listening to the previous sounds as they play. For information on recording to channels other than the rhythm channels (RHY1, 2), refer to the section "Rules when recording non-rhythm channels" (page 39).

Deleting recorded notes in the rhythm channel

When you are recording the rhythm channel (RHY1 or RHY2), you can delete a specific instrument sound by simultaneously holding down the [E] (RHY CLEAR) button and pressing the appropriate key on the keyboard.

Muting specific channels

You can turn off the desired channels by pressing the corresponding [1 ∇]–[8 ∇] buttons.



- 10 To continue recording with another channel, repeat steps 6 –9.
- Stop recording by pressing the STYLE CONTROL [START/STOP] button.
- Press the [EXIT] button to close the RECORD display.
- Press the [I] (SAVE) button to execute the Save operation.

Rules when recording non-rhythm channels

- Use only the CM7 scale tones when recording the BASS and PHRASE channels (i.e., C, D, E, G, A, and B).
- Use only the chord tones when recording the CHORD and PAD channels (i.e., C, E, G, and B).



C = Chord note C, R = Recommended note

Using the data recorded here, the auto accompaniment (Style playback) is appropriately converted depending on the chord changes you make during your performance. The chord which forms the basis for this note conversion is called the Source Chord, and is set by default to CM7 (as in the example illustration above).

You can change the Source Chord (its root and type) from the PARAMETER display on page 45. Keep in mind that when you change the Source Chord from the default CM7 to another chord, the chord notes and recommended notes will also change. For details on chord notes and recommended notes, see page 46.



For the INTRO and ENDING sections, any appropriate chord or chord progression can be used.



If you want to record the pattern with a Source Chord other than CM7, set the PLAY ROOT and PLAY CHORD parameters on the PARAMETER Page (page 46) before recording.

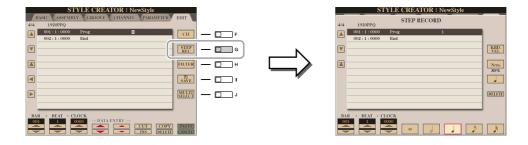
A CAUTION

The edited Style will be lost if you change to another Style or turn the power to the instrument off without executing the Save opera-

Step Recording

In the EDIT Page, you can record notes with absolutely precise timing. This Step Recording procedure is essentially the same as that for Song Recording (page 56) with the exception of the points listed below:

- In the Song Creator, the End Mark position can be changed freely; in the Style Creator, it cannot be changed. This is because the length of the Style is automatically fixed, depending on the selected section. For example, if you create a Style based on a section of four measures length, the End Mark position is automatically set to the end of the fourth measure, and cannot be changed in the Step Recording display.
- Recording channels can be changed in the Song Creator 1-16 tab display; however, they cannot be changed in the Style Creator. Select the recording channel in the BASIC tab display.
- In the Style Creator, the channel data can be entered and System Exclusive data can be edited (delete, copy, or move). You can switch between the two by pressing the [F] button. However, Chord, Lyrics, and System Exclusive data cannot be entered.



For instructions on Step Recording, refer to pages 56–59. For information on the EDIT display (Event List display), refer to page 66.

Style Assembly

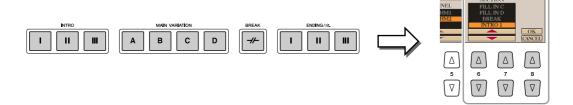
Style Assembly allows you to create a single Style by mixing the various patterns (channels) from existing internal Styles.

- Select the desired Style to serve as the basis for recording/editing before calling up the Style Creator display.
- 2 Call up the operation display.

 [DIGITAL RECORDING] → [B] STYLE CREATOR → TAB [◄][▶] ASSEMBLY
- **3** Select the desired section (Intro, Main, Ending, etc.) for your new Style.

First call up the SECTION Selection display by pressing one of the Section buttons (INTRO, MAIN, ENDING, etc.) on the panel. Then change the section as desired by using the $\begin{bmatrix} 6 & \blacktriangledown \end{bmatrix}/\begin{bmatrix} 7 & \blacktriangledown \end{bmatrix}$ buttons and actually enter the selection by pressing the $\begin{bmatrix} 8 & \blacktriangle \end{bmatrix}$ (OK) button.

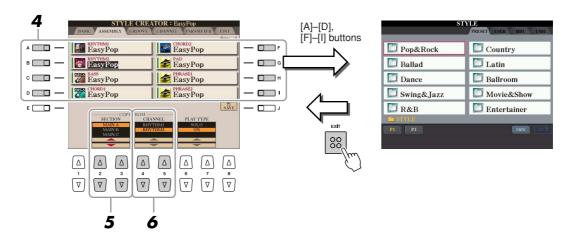






4 Select the channel for which you wish to replace the pattern by using the [A]-[D] and [F]-[I] buttons. Call up the Style Selection display by pressing the same button again. Select the Style containing the pattern you want to replace in the Style Selection display.

To return to the previous screen, press the [EXIT] button after selecting the Style.



- Select the desired section of the newly imported Style (chosen in step 3) by using the [2 ▲▼]/[3 ▲▼] (SECTION) buttons.
- **6** Select the desired channel for the section (chosen in step 5) by using the $[4 \blacktriangle \blacktriangledown]/[5 \blacktriangle \blacktriangledown]$ (CHANNEL) buttons.

Repeat steps 3–6 above to replace the patterns of other channels.

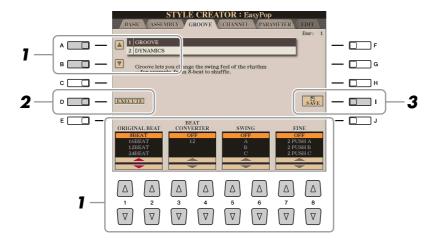
Playing the Style During Style Assembly

While you are assembling a Style, you can play back the Style and select the method of playback. Use the $[6 \blacktriangle \blacktriangledown]/[7 \blacktriangle \blacktriangledown]$ (PLAY TYPE) buttons in the Style Assembly display to select the playback method.

- **SOLO:** Mutes all but the selected channel in the ASSEMBLY Page. Any channels set to ON in the RECORD display on the BASIC Page are played back simultaneously.
- **ON:** Plays back the selected channel in the ASSEMBLY Page. Any channels set to other than OFF in the RECORD display on the BASIC Page are played back simultaneously.
- **OFF:** Mutes the selected channel in the ASSEMBLY Page.
- Press the [J] (SAVE) button to execute the Save operation.



The edited Style will be lost if you change to another Style or turn the power to the instrument off without executing the Save opera-



In the GROOVE Page, use the [A]/[B] buttons to select the edit menu, then edit the data by using the [1 ▲▼]–[8 ▲▼] buttons.

• 1 GROOVE

This lets you add swing to the music or change the "feel" of the beat by making subtle shifts in the timing (clock) of the Style. The Groove settings are applied to all channels of the selected Style.

[1 ▲▼]/ [2 ▲▼]	ORIGINAL BEAT	Specifies the beats to which Groove timing is to be applied. In other words, if "8 Beat" is selected, Groove timing is applied to the 8th notes; if "12 Beat" is selected, Groove timing is applied to 8th-note triplets.
[3 ▲▼]/ [4 ▲▼]	BEAT CONVERTER	Actually changes the timing of the beats (specified in the ORIGINAL BEAT parameter above) to the selected value. For example, when ORIGINAL BEAT is set to "8 Beat" and BEAT CONVERTER is set to "12," all 8th notes in the section are shifted to 8th-note triplet timing. The "16A" and "16B" Beat Converter which appear when ORIGINAL BEAT is set to "12 Beat" are variations on a basic 16th-note setting.
[5 ▲▼]/ [6 ▲▼]	SWING	Produces a "swing" feel by shifting the timing of the back beats, depending on the ORIGINAL BEAT parameter above. For example, if the specified ORIGINAL BEAT value is "8 Beat", the Swing parameter will selectively delay the 2nd, 4th, 6th, and 8th beats of each measure to create a swing feel. The settings "A" through "E" produce different degrees of swing, with "A" being the most subtle and "E" being the most pronounced.
[7 ▲▼]/ [8 ▲▼]	FINE	Selects a variety of Groove "templates" to be applied to the selected section. The "PUSH" settings cause certain beats to be played early, while "HEAVY" settings delay the timing of certain beats. The numbered settings (2, 3, 4, 5) determine which beats are to be affected. All beats up to the specified beat—but not including the first beat—will be played early or delayed (for example, the 2nd and 3rd beats, if "3" is selected). In all cases, "A" types produce minimum effect, "B" types produce medium effect, and "C" types produce maximum effect.



2 DYNAMICS

This changes the velocity/volume (or accent) of certain notes in the Style play-back. The Dynamics settings are applied to each channel or all channels of the selected Style.

[1 ▲▼]/ [2 ▲▼]	CHANNEL	Selects the desired channel (part) to which Dynamics is to be applied.
[3 ▲▼]/ [4 ▲▼]	ACCENT TYPE	Determines the type of accent applied—in other words, which notes in the part(s) are emphasized with the Dynamics settings.
[6 ▲▼]	STRENGTH	Determines how strongly the selected Accent Type (above) will be applied. The higher the value, the stronger the effect.
[7 ▲▼]	EXPAND/COMP.	Expands or compresses the range of velocity values. Values higher than 100% expand the dynamic range, while values lower than 100% compress it.
[8 ▲▼]	BOOST/CUT	Boosts or cuts all velocity values in the selected section/channel. Values above 100% boost the overall velocity, while values below 100% reduce it.

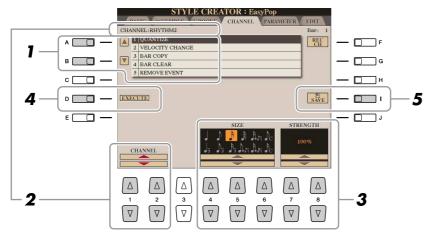
2 Press the [D] (EXECUTE) button to actually enter the edits for each display.

After the operation is completed, this button changes to "UNDO," letting you restore the original data if you are not satisfied with the Groove or Dynamics results. The Undo function only has one level; only the previous operation can be undone.

3 Press the [I] (SAVE) button to execute the Save operation.



The edited Style will be lost if you change to another Style or turn the power to the instrument off without executing the Save operation.



In the CHANNEL Page, use the [A]/[B] buttons to select the edit menu.

• 1 QUANTIZE

Same as in the Song Creator (page 64), with the exception of the two additional available parameters below.

 $booole_{\mathbf{C}}$ Eighth notes with swing Sixteenth notes with swing

2 VELOCITY CHANGE

Boosts or cuts the velocity of all notes in the specified channel, according to the percentage specified here.

• 3 BAR COPY

This function allows data to be copied from one measure or group of measures to another location within the specified channel.

[4 ▲▼]	TOP	Specifies the first (TOP) and last (LAST) measures in the region to be copied.
[5 ▲▼]	LAST	
[6 ▲▼]	DEST	Specifies the first measure of the destination location, to which the data is to be copied.

• 4 BAR CLEAR

This function clears all data from the specified range of measures within the selected channel.

• 5 REMOVE EVENT

This function lets you remove specific events from the selected channel.

2 Use the [1 ▲▼]/[2 ▲▼] (CHANNEL) buttons to select the channel to be edited.

The selected channel is shown at the upper left of the display.

- **3** Use the [4 ▲▼]–[8 ▲▼] buttons to edit the data.
- 4 Press the [D] (EXECUTE) button to actually enter the edits for each display.

After the operation is completed, this button changes to "UNDO," letting you restore the original data if you are not satisfied with the results of the edit. The Undo function only has one level; only the previous operation can be undone.

5 Press the [I] (SAVE) button to execute the Save operation.



The edited Style will be lost if you change to another Style or turn the power to the instrument off without executing the Save operation.

Making Style File Format Settings

The Style File Format (SFF) combines all of Yamaha's auto accompaniment (Style playback) know-how into a single unified format. By using the Style Creator, you can take advantage of the power of the SFF format and freely create your own Styles.

The chart shown below indicates the process by which the Style is played back. (This does not apply to the rhythm track.) These parameters can be set via the Style Creator feature, in the PARAMETER Page.

Source Pattern settings—SOURCE (PLAY) ROOT/CHORD (page 46)

There are a variety of possibilities for Style playback notes, depending on the particular root note and chord type that are selected. The Style data is appropriately converted depending on the chord changes you make during your performance. This basic Style data that you create with the Style Creator is referred to as the "Source Pattern."

Note Transposition settings—NTR and NTT (page 46)

This parameter group features two parameters that determine how the notes of the Source Pattern are to be converted in response to chord changes.



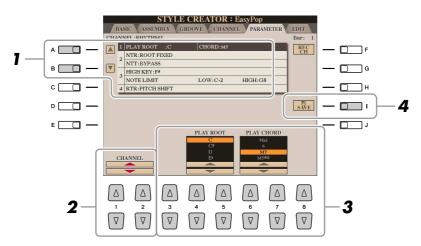
Other settings—HIGH KEY, NOTE LIMIT and RTR (page 48)

Using the parameters of this group, you can fine-tune how Style playback responds to the chords you play. For example, the Note Limit parameter allows you to have the Voices of the Style sound as realistic as possible by shifting the pitch to an authentic range—ensuring that no notes sound outside the natural range of the actual instrument (e.g., high bass sounds or low piccolo sounds).

The Tyros3's Styles are compatible with SFF GE—an enhanced format of the original SFF with especially rich, expressive guitar parts.

In the PARAMETER Page, use the [A]/[B] buttons to select the edit menu.

For details of the edit menu, see page 46.



2 Use the [1 ▲▼]/[2 ▲▼] (CHANNEL) buttons to select the channel to be edited.

The selected channel is shown at the upper left of the display.

- **3** Use the [3 ▲▼]–[8 ▲▼] buttons to edit the data. For details on editable parameters, see pages 46–48.
- 4 Press the [I] (SAVE) button to execute the Save operation.



The edited Style will be lost if you change to another Style or turn the power to the instrument off without executing the Save operation.



The Style files created on the Tyros3 can only be played back on instruments which are compatible with SFF GE.

● 1 SOURCE (PLAY) ROOT/CHORD

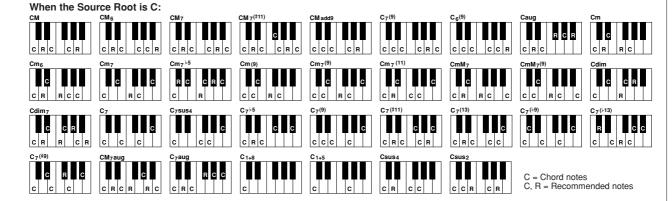
These settings determine the original key of the source pattern (i.e., the key used when recording the pattern). The default setting of CM7 (with a Source Root of "C" and a Chord Type of "M7"), is automatically selected whenever the preset data is deleted prior to recording a new Style, regardless of the Source Root and Chord included in the preset data. When you change Source Root/Chord from the default CM7 to another chord, the chord notes and recommended notes will also change, depending on the newly selected chord type.



When NTR is set to "Root Fixed" and NTT is set to "Bypass," the "Source Root" and "Source Chord" parameters are changed to "Play Root" and "Play Chord," respectively. In this case, you can change chords and hear the resulting sound for all channels.



This is not applied when the NTR is set to GUITAR.



• 2 NTR/NTT

[3 ▲▼]/	NTR (Note Trans-	Determines the relative position of the root note in the chord, when con-
[4 ▲▼]	position Rule)	verted from the Source Pattern in response to chord changes.

ROOT TRANS (Root Transpose)	When the root note is transposed, the pitch relationship between notes is maintained. For example, the notes C3, E3 and G3 in the key of C become F3, A3 and C4 when they are transposed to F. Use this setting for channels that contain melody lines.	When playing a C major chord.	When playing an F major chord.
ROOT FIXED	The note is kept as close as possible to the previous note range. For example, the notes C3, E3 and G3 in the key of C become C3, F3 and A3 when they are transposed to F. Use this setting for channels that contain chord parts.	When playing a C major chord.	When playing an F major chord.
GUITAR	This is exclusively for transposing guitar ac transposed to approximate the chords play gering.		

[5 ▲▼]– [7 ▲▼]	NTT (Note Trans- position Table)	Sets the note transposition table for the source pattern. Refer to the list on page 47.
[8 ▲▼]	NTT BASS ON/ OFF	The channel for which this is set to ON will be played back by the bass root note, when the on-bass chord is recognized by the instrument. When the NTR is set to GUITAR and this parameter is set to ON, only the note which is assigned to bass will be played back by the bass root note.

NTT (Note Transposition Table)
When the NTR is set to ROOT TRANS or ROOT FIXED

	110.11.13 01 11.00 01 11.11.25
BYPASS	When NTR is set to ROOT FIXED, the transposition table used does not do any note conversion. When NTR is set to ROOT TRANS, the table used only converts the notes by maintaining the pitch relationship between notes.
MELODY	Suitable for melody line transposition. Use this for melody channels such as Phrase 1 and Phrase 2.
CHORD	Suitable for chordal parts transposition. Use this for the Chord 1 and Chord 2 channels, especially when they contain piano or guitar-like chordal parts.
MELODIC MINOR	When the played chord changes from a major to a minor chord, this table lowers the third interval in the scale by a semitone. When the chord changes from a minor to a major chord, the minor third interval is raised by a semitone. Other notes are not changed. Use this for melody channels of Sections which respond only to major/minor chords, such as Intros and Endings
MELODIC MINOR 5th	In addition to the Melodic Minor transposition above, augmented and diminished chords affect the 5th note of the Source Pattern.
HARMONIC MINOR	When the played chord changes from a major to a minor chord, this table lowers the third and sixth intervals in the scale by a semitone. When the chord changes from a minor to a major chord, the minor third and flatted sixth intervals are raised by a semitone. Other notes are not changed. Use this for chord channels of Sections which respond only to major/minor chords, such as Intros and Endings.
HARMONIC MINOR 5th	In addition to the Harmonic Minor transposition above, augmented and diminished chords affect the 5th note of the Source pattern.
NATURAL MINOR	When the played chord changes from a major to a minor chord, this table lowers the third, sixth and seventh intervals in the scale by a semitone. When the chord changes from a minor to a major chord, the minor third, flatted sixth and flatted seventh intervals are raised by a semitone. Other notes are not changed. Use this for chord channels of Sections which respond only to a Major/minor chord such as Intros and Endings.
NATURAL MINOR 5th	In addition to the Natural Minor transposition above, augmented and diminished chords affect the 5th note of the Source pattern.
DORIAN	When the played chord changes from a major to a minor chord, this table lowers the third and seventh intervals in the scale by a semitone. When the chord changes from a minor to a major chord, the minor third and flatted seventh intervals are raised by a semitone. Other notes are not changed. Use this for chord channels of Sections which respond only to a Major/minor chord such as Intros and Endings.
DORIAN 5th	In addition to the Dorian transposition above, augmented and diminished chords affect the 5th note of the Source pattern.

When the NTR is set to GUITAR

ALL-PURPOSE	This table covers both strummed- and arpeggio-played sound.
STROKE	Suitable for stroke-played sound of the guitar. Some notes may sound as if it is muted—this is normal condition when the chord is played on guitar by stroke.
ARPEGGIO	Suitable for arpeggio-played sound of the guitar. Using this table, four notes arpeggio sounds most beautiful.

• 3 HIGH KEY / NOTE LIMIT

[4 ▲▼]/ [5 ▲▼]	HIGH KEY	This sets the highest key (upper octave limit) of the note transposition for the chord root change. Any notes calculated to be higher than the highest key are transposed down to the next lowest octave. This setting is available only when the NTR parameter (page 46) is set to "Root Trans."				
		Example—When the highest key is F. Root changes → CM C#M · · · FM F#M · · · Notes played → C3-E3-G3 C#3-E#3-G#3 F3-A3-C4 F#2-A#2-C#3				
[6 ▲▼]	NOTE LIMIT LOW	These set the note range (highest and lowest notes) for Voices recorded to the				
[7 ▲▼]	NOTE LIMIT HIGH	Style channels. By judicious setting of this range, you can ensure that the Voices sound as realistic as possible—in other words, that no notes outside the natural range are sounded (e.g., high bass sounds or low piccolo sounds). Example—When the lowest note is C3 and the highest is D4. Root changes CM C#M · · FM · · · Notes played E3-G3-C4 E#3-G#3-C#4 F3-A3-C4 Which is played CM C#M · · · · · · · · · · · · · · · · · · ·				

• 4 RTR (Retrigger Rule)

These settings determine whether notes stop sounding or not and how they change pitch in response to chord changes.

STOP	The notes stop sounding.
PITCH SHIFT	The pitch of the note will bend without a new attack to match the type of the new chord.
PITCH SHIFT TO ROOT	The pitch of the note will bend without a new attack to match the root of the new chord.
RETRIGGER	The note is retriggered with a new attack at a new pitch corresponding to the next chord.
RETRIGGER TO ROOT	The note is retriggered with a new attack at the root note of the next chord. However, the octave of the new note remains the same.

Songs

- Recording Your Performances and Creating Songs -

(റ	n	T	e	n	T	•

Editing Music Notation Settings
Song Playback Related Parameters (Repeat settings, Channel
settings, Guide Function)
• Keyboard and Vocal Practice Using the Guide Function
 Playing Backing Parts with the Performance Assistant Technology 55
Creating/Editing Songs (Song Creator)
Recording Melodies (Step Recording)
• Recording Chords (Step Recording)
• Re-Recording a Specific Section—Punch In/Out
• Editing Channel Events
• Editing Chord Events, Notes, System Exclusive Events and Lyrics .66
• Editing Song Position Markers

Editing Music Notation Settings

To view the music notation of the selected Song, press the [SCORE] button. You can change the notation display as desired to suit your personal preferences. After you change the setting here, you can save the setting as a part of a Song by accessing [DIGITAL RECORDING] \rightarrow [A] SONG CREATOR \rightarrow TAB [\blacktriangleleft][\blacktriangleright] CHANNEL \rightarrow [A]/[B] SETUP. See page 65.



[1 ▲▼]	LEFT CH	Enables/disables display of the left-hand key range. Depending on other settings, this parameter may be unavailable and may appear grayed out. If this is the case, go to the detailed setting display (on page 50) and set the LEFT CH. parameter to any channel except "AUTO." Or, go to the [FUNCTION] → [B] SONG SETTING and set the LEFT CH parameter to any channel except "OFF" (page 52). RIGHT (next parameter) and LEFT cannot be turned off at the same time.
[2 ▲▼]	RIGHT CH	Enables/disables display of the right-hand key range. RIGHT and LEFT (above) cannot be turned off at the same time.
[3 ▲▼]	CHORD ON/OFF	Enables/disables display of the chords. If the selected Song does not contain chord data, chords are not displayed.

[4 ▲▼]	LYRICS ON/OFF	Enables/disables display of the lyrics. If the selected Song does not contain lyric data, lyrics are not displayed. When the Song contains Pedal events, pressing these buttons can display the Pedal events, instead of displaying Lyrics.
[5 ▲▼]	NOTE ON/OFF	Enables/disables display of the note name (pitch). The note name is indicated at the left of the note. When the space between the notes is too small, the indication may be moved to the top left of the note. When the Song contains Fingering events, pressing these buttons can display the fingering, instead of displaying note names.
[6 ▲▼]	COLOR ON/OFF	When this is set to ON, the notes in the display appear in color (C: red, D: yellow, E: green, F: orange, G: blue, A: purple, and B: gray).
[7 ▲▼]	SIZE	Determines the display resolution (or zoom level) of the notation.
[8▲▼]	SET UP	See below.

Pressing the [8 $\blacktriangle \blacktriangledown$] (SET UP) button calls up the detailed setting display. You can set the view type by using the [1 $\blacktriangle \blacktriangledown$]–[6 $\blacktriangle \blacktriangledown$] buttons, then press the [8 \blacktriangle] (OK) button.



[1 ▲▼]	LEFT CH	Determines which MIDI channel in the Song data is used for the left-hand/right-h
[2 ▲▼]	RIGHT CH	part. This setting returns to AUTO when a different Song is selected.
		 AUTO: The MIDI channels in the Song data for the right- and left-hand parts are assigned automatically—setting the parts to the same channel as the channel which is specified in the [FUNCTION] → [B] SONG SETTING (page 52). 1–16: Assigns the specified MIDI channel (1–16) to each of the left- and right-hand parts. OFF (LEFT CH only): No channel assignment. This disables display of the left-hand key range.
[3 ▲▼]/ [4 ▲▼]	KEY SIGNATURE	This lets you enter key signature changes in the middle of a Song, at the stopped position. This menu is useful when the selected Song contains no key signature settings for displaying notation.
[5 ▲▼]	QUANTIZE	This gives you control over the note resolution in the notation, letting you shift or correct the timing of all displayed notes so that they line up to a particular note value. Make sure to select the smallest note value used in the Song.
[6 ▲▼]	NOTE NAME	Selects the type of the note name indicated at the left of the note in the notation from among the following three types. The settings here are available when the NOTE ON/OFF parameter above is set to ON.
		 A, B, C: Note names are indicated as letters (C, D, E, F, G, A, B). FIXED DO: Note names are indicated in solfeggio and differ depending on the selected language. MOVABLE DO: Note names are indicated in solfeggio according to the scale intervals, and as such are relative to the key. The root note is indicated as Do. For example, in the key of G major the root note of "Sol" would be indicated as "Do." As with "Fixed Do," the indication differs depending on the selected language.

Editing Lyrics Display Settings

To view the lyrics of the selected Song, press the [LYRICS/TEXT] button. If the selected Song contains lyric data, you can have the lyrics shown in the display. Even if the Song does not contain lyrics data, you can input and show the lyrics, or you can show a text file (created on a computer, .txt file less than 60KB) in the display.

Lyrics display







Text display



Press the $[5 \blacktriangle \blacktriangledown]/[6 \blacktriangle \blacktriangledown]$ button to actually call up desired text file.

When the lyrics are garbled or unreadable, you may need to change the Lyrics Language setting from the [FUNCTION] \rightarrow [B] SONG SETTING.

∠ NOTE

Line feed (or "carriage return") is not automatically done in the instrument. If a sentence is not displayed in its entirety because of limitations in the screen space, execute the line feed on your computer.

M NOTE

When the background picture is specified in the Song data, the BACK-GROUND setting cannot be changed.

[1 ▲▼]	TEXT/LYRICS	Switches the screen between the Lyrics display (lyrics data in the Song is shown) and the Text display (a text file created on a computer is shown).
[2 ▲▼]	CLEAR (Text dis- play only)	Clears the text from the screen (the text data itself is not erased).
[3 ▲▼]/ [4 ▲▼]	FIXED 16-PRO- PORTIONAL 28 (Text display only)	Determines the text type (fixed or proportional) and font size. Fixed is suitable for displaying lyrics with chord names, since the positions of chord names are "fixed" to the corresponding lyrics. Proportional is suitable for displaying lyrics without chord names or explanatory notes. The numbers 16–28 indicate font sizes. This menu appears only when a text file is selected.
[5 ▲▼]/ [6 ▲▼]	TEXT FILE	Calls up the text File Selection display. After selecting, press the [EXIT] button to return back to the Lyrics/Text display.
[7 ▲▼]/ [8 ▲▼]	BACK GROUND	Allows changing of the background picture of the Lyrics/Text display. After making the setting, press the [EXIT] button to return back to the Lyrics/Text display. NOTE

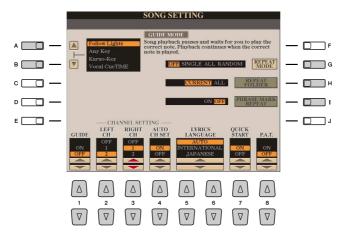
Song Playback Related Parameters (Repeat settings, Channel settings, Guide Function)

The Tyros3 has a variety of Song playback functions:

- Listen to (or practice along with) your favorite Song repeatedly—with Repeat Playback.
- Play back all of the Songs in a particular folder—repeatedly or at random—for your listening pleasure.
- Play back all of the Songs in all of the folders. Each of the SONG [I]–[IV] buttons has wealth of Songs—put them all together and you've got a lot of music you can play repeatedly or at random.

Call up the operation display.

 $[FUNCTION] \rightarrow [B]$ SONG SETTING



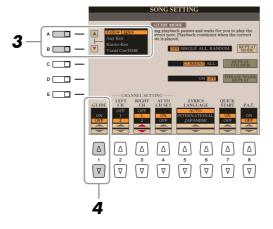
[A]/[B]	GUIDE MODE	See page 53.
[1 ▲▼]	GUIDE ON/OFF	
[G]	REPEAT MODE	OFF: Plays through the selected Song, then stops. SINGLE: Plays through the selected Song repeatedly. ALL: Continues playback through all the Songs in the specified folder repeatedly. RANDOM: Continues playback at random through all the Songs in the specified folder repeatedly.
[H]	REPEAT FOLDER	Determines the directory in which the Songs are played in sequence when the REPEAT MODE is set to "ALL" or "RANDOM." Here, the directory refers to the path memorized to each of the SONG [I]–[IV] buttons. CURRENT: Sequentially plays all Songs in the directory containing the currently selected Song, starting with the currently selected Song. ALL: Sequentially plays all Songs in all directories (memorized to the SONG [I]–[IV] buttons). Playback starts with the currently selected Song, then the remainder of the Songs in the current directory, followed by the Songs in the other directories.
[1]	PHRASE MARK REPEAT	Phrase Mark is a pre-programmed part of some Song data, which specifies a certain location (set of measures) in the Song. When this is on, the section corresponding to the specified Phrase Mark number is repeatedly played back.
[2 ▲▼]	LEFT CH	These parameters determine which MIDI channel in the Song data is assigned
[3 ▲▼]	RIGHT CH	to the Left- or Right-hand part of the Guide function and the Song Score function.
[4 ▲▼]	AUTO CH SET	When set to "ON," this automatically sets the proper MIDI channels for the Right- and Left hand parts pre-programmed in the commercially available Song data. Normally, this should be set to "ON."

[5 ▲▼]/ [6 ▲▼]	LYRICS LAN- GUAGE	Determines the language of the displayed lyrics.
		AUTO: When the language is specified in the Song data, the lyrics are displayed accordingly. When the language is not specified in the Song data, the lyrics language is regarded as INTERNATIONAL below. INTERNATIONAL: Handles the displayed lyrics as a western language. JAPANESE: Handles the displayed lyrics as Japanese.
[7 ▲▼]	QUICK START	On some commercially available Song data, certain settings related to the Song (such as Voice selection, volume, etc.) are recorded to the first measure, before the actual note data. When Quick Start is set to "ON," the Tyros3 reads all initial non-note data of the Song at the highest possible speed, then automatically slows down to the appropriate tempo at the first note. This allows you to start playback as quickly as possible, with a minimum pause for reading of data.
[8 ▲▼]	P.A.T. (Perfor- mance Assistant)	See page 55.

Keyboard and Vocal Practice Using the Guide Function

The Guide functions provide convenient learning and practicing tools to help you master the instrument. By pressing the [SCORE] button, you can have the notation of the Song displayed, showing the notes you should play and when you should play them, for ease in learning. The Tyros3 also features convenient vocal practice tools that automatically adjust the timing of Song playback to match your vocal performance (when singing into a connected microphone.)

- Select the desired Song for practicing the keyboard or singing.
- Call up the setting display. $[FUNCTION] \rightarrow [B]$ SONG SETTING
- Use the [A]/[B] button to select the desired Guide function type.





There are four Guide function type: two are for keyboard practice and two are for singing.

Guide menu for keyboard practice

- **Follow Lights:** When this is selected, Song playback pauses, waiting for you to play the notes correctly. When you play the correct notes, Song playback continues. Follow Lights was developed for the Yamaha Clavinova series. This function is used for practicing purposes, with built-in lamps on the keyboard indicating the notes to be played. Even though the Tyros3 does not have these lamps, you can use the same function by following the indications in the displayed notation with the Song Score function.
- **Any Key:** With this function, you can play the melody of a Song just by pressing a single key (any key is OK) in time with the rhythm. Song playback pauses and waits for you to play any key. Simply play a key on the keyboard in time with the music and Song playback continues.

Guide menu for singing

- **Karao-Key:** This function lets you control the Song playback timing with just one finger, while you sing along. This is useful for singing to your own performance. Song playback pauses, waiting for you to sing. Simply play a key on the keyboard (any key is fine) and Song playback continues.
- **Vocal Cue Time:** This function lets you practice singing with the proper pitch. Song playback pauses, waiting for you to sing. When you sing with proper pitch, Song playback continues.
- **4** Use the [1 ▲▼] button to turn the Guide function ON.
- **5** Call up the Score display by pressing the [SCORE] button.
- **6** Press the SONG [PLAY/PAUSE] button to start playback.

 Practice playing the keyboard or singing, along with the Guide type selected in step 3.
- 7 Press the [STOP] button to stop playback.

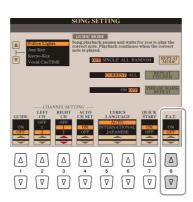


You can save the Guide settings as a part of the Song data (page 65). For Songs to which the Guide settings have been saved, the Guide function will be automatically turned on and the related settings will be recalled when the Song is selected.

Playing Backing Parts with the Performance Assistant Technology

This feature makes it exceptionally easy to play the backing parts along with Song playback.

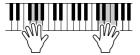
- 1 Select a Song.
- **2** Call up the operation display. $[FUNCTION] \rightarrow [B]$ SONG SETTING
- 3 Press the [8 ▲▼] button to turn the [P.A.T.] (performance assistant technology) on.



- 4 Press the [PLAY/PAUSE] button to start playback.
- **5** Play the keyboard.

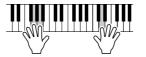
The instrument automatically matches your performance on the keyboard to the Song playback and chords, no matter what keys you play. It even changes the sound according to the way you play. Try playing in the three different ways below.

 Playing the left and right hand together (method 1).



Play three notes at the same time with your right hand.

 Playing the left and right hand together (method 2).



Play several notes one after the other with different fingers of your right hand.

 Playing the left hand and right hand alternately.

M NOTE

To use the performance assistant technology, the Song must contain chord

data. If the Song contains this data, the current chord name will be displayed in the Main display during Song playback,

letting you easily check whether the Song contains chord data or not.



Play three notes at the same time with your right hand.

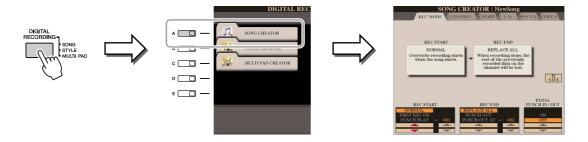
- 6 Press the [STOP] button to stop playback.
- **7** Press the [8 ▲▼] button to turn the [P.A.T.] off.

Creating/Editing Songs (Song Creator)

To create a Song, you can compose your performance by entering it one event at a time (called "Step Recording"), as well as recording your performance in real time (described in the Owner's Manual). This section explains operations of Step Recording and re-recording or editing existing Song data.

Call up the operation display.

[DIGITAL RECORDING] \rightarrow [A] SONG CREATOR



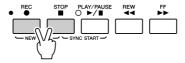
There are six Pages (tabs) in the Song Creator display.

- **REC MODE** Re-records the Song. See page 61.
- **CHANNEL**..... Edits the Channel events. See page 63.
- **CHORD**......Records the Chords and Sections with timing (page 59)
 - or edits them (page 67).
- 1-16...... Records the melodies (Step Recording; see below) or edits the recorded melodies (page 67).
- **SYS/EX.**.... Edits the System Exclusive events. See page 67.
- **LYRICS**.....Inputs/edits the lyrics. See page 68.

Recording Melodies (Step Recording)

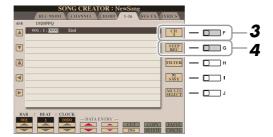
Press the SONG [REC] and SONG [STOP] buttons simultaneously.

A blank Song ("New Song") is called up for recording.



2 Call up the operation display.

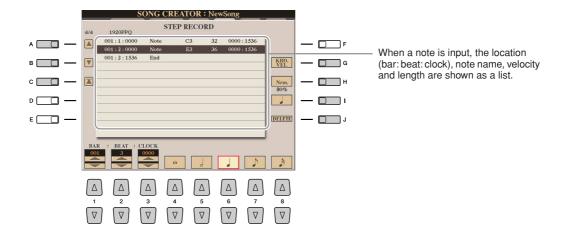
[DIGITAL RECORDING] \rightarrow [A] SONG CREATOR \rightarrow TAB [\blacktriangleleft][\blacktriangleright] 1-16



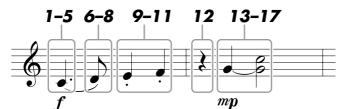
- 3 Press the [F] button to select the channel for recording.
- 4 Press the [G] (STEP REC) button to call up the STEP RECORD display.



Start Step Recording.



[A]/[B]/ [C]		Moves the cursor in the list.
[G]		Determines the velocity (loudness) of the note to be entered. The velocity value can be specified within a range from 1 to 127. The higher the velocity value, the louder the sound becomes.
		KBD.VEL: Actual resulting velocity fff: 127 ff: 111 f: 95 mf: 79 mp: 63 p: 47 pp: 31 ppp: 15
[H]		Determines the gate time (note length) of the note to be entered. Normal: 80% Tenuto: 99% Staccato: 40% Staccatissimo: 20% Manual: The gate time can be set to any desired percentage by using the [DATA ENTRY] dial.
[1]		Determines the note type to be entered: normal, dotted or triplet.
[]]	DELETE	Deletes the selected data.
[1 ▲▼]	BAR	Sets the position of the note to be entered.
[2 ▲▼]	BEAT	
[3 ▲▼]	CLOCK	
[4 ▲▼]- [8 ▲▼]		Determines the note length to be entered: whole-note, half-note, quarter-note, eighth-note or sixteenth-note.



The numbers shown in the illustration correspond to the following operation step numbers.

In this example, keep in mind that one of the steps involves holding down a key on the keyboard while executing the operation.

Select the Voice for recording after calling up the Step Recording display.

- Press the [G] button to select "f."
- **2** Press the [H] button to select "Tenuto."
- 3 Press the [I] button to select the "dotted" note type.
- **4** Press the [6 ▲▼] button to select the quarter-note length.
- **5** Play the C3 key.

The first note is entered.

- **6** Press the [I] button to select the "normal" note type.
- **7** Press the [7 ▲▼] button to select the eight-note length.
- 8 Play the D3 key.

The second note is entered.

- **9** Press the [H] button to select "Staccato."
- **10** Press the [6 ▲▼] button to select the quarter-note length.
- 11 Play the keys E3 and F3 in order.

The first measure has been completed.

12 Press the [6 ▲▼] button again to enter a quarter-note rest.

To enter the rest, use the $[4 \blacktriangle \blacktriangledown]$ – $[8 \blacktriangle \blacktriangledown]$ buttons. (Press the button once to select the rest value, and once again to actually enter it.) A rest having the specified note length will be entered.

- **13** Press the [G] button to select "mp."
- **14** Press the [H] button to select "Normal."
- **15** While holding G3 key on the keyboard, press the [6 ▲▼] button.

Do not release the G3 key yet. Keep holding it while executing the following steps.

16 While holding the G3 key, press the C4 key.

Do not release the G3 and C4 keys yet. Keep holding the notes while executing the following step.

17 While holding the keys G3 and C4, press the [5 ▲▼] button.



- Press the [STOP] button (or press the [C] button) to return to the top of the Song, then hear the newly entered Song by pressing the [PLAY/ PAUSE] button.
- 19 Press the [EXIT] button to exit from the Step Recording display.
- 20 Press the [I] (SAVE) button to execute the Save operation.

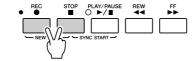


The recorded Song data will be lost if you select another Song or turn the power to the instrument off without executing the Save operation.

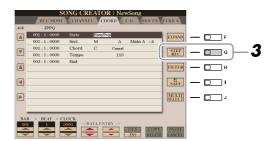
Recording Chords (Step Recording)

You can record Chords and Sections (Intro, Main, Ending, and so on) one at a time with precise timing. These instructions show how to record chord changes using the Step Record function.

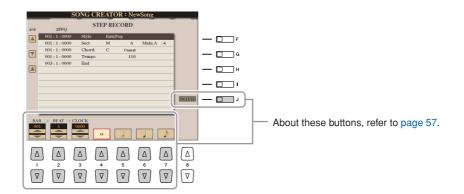
Press the SONG [REC] and SONG [STOP] buttons simultaneously. A blank Song ("New Song") is called up for recording.



2 Call up the operation display. $[\mathsf{DIGITAL}\ \mathsf{RECORDING}] \to [\mathsf{A}]\ \mathsf{SONG}\ \mathsf{CREATOR} \to \mathsf{TAB}\ [\blacktriangleleft][\blacktriangleright]\ \mathsf{CHORD}$

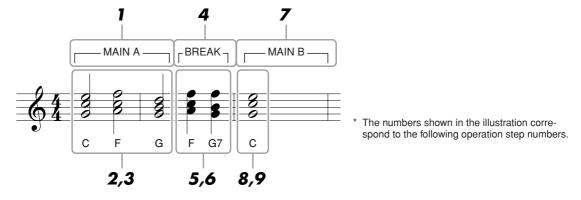


Press the [G] (STEP REC) button to call up the STEP RECORD display.



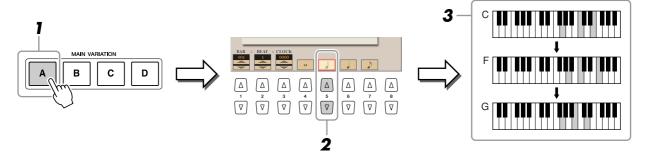
Start Step Recording.

Example of Step Recording—Chords

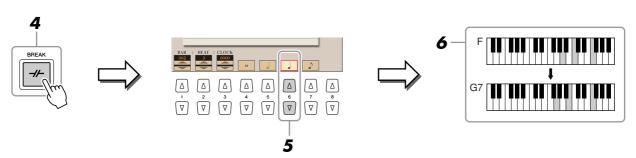


Before starting, make sure the [AUTO FILL IN] button is set to off.

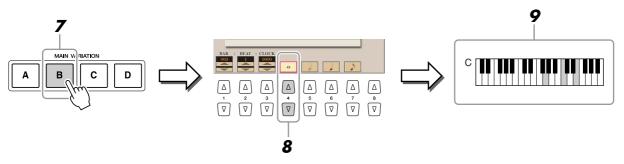
Press the STYLE CONTROL [MAIN A] button.



- 2 Press the [5 ▲▼] button to select the half-note length.
- 3 Play the chord C, F and G in the chord section of the keyboard.
- 4 Press the STYLE CONTROL [BREAK] button.



- **5** Press the [6 ▲▼] button to select the quarter-note length.
- 6 Play the chords F, and G7 in the chord section of the keyboard.
- **7** Press the STYLE CONTROL [MAIN B] button.



- 8 Press the [4 ▲▼] button to select the whole-note length.
- Play the chord C in the chord section of the keyboard.
- Press the [STOP] button (or press the [C] button) to return to the top of the Song, then hear the newly entered Song by pressing the [PLAY/PAUSE] button.
- 11 Press the [EXIT] button to exit from the Step Recording display.
- 12 Press the [F] (EXPAND) button to convert the input chord change data into the Song data.
- 13 Press the [I] (SAVE) button to execute the Save operation.



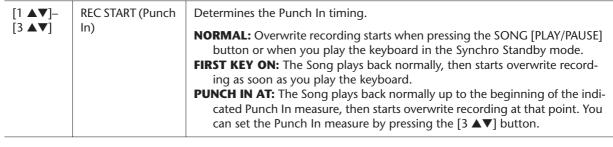
The recorded Song data will be lost if you select another Song or turn the power to the instrument off without executing the Save operation.

Re-Recording a Specific Section—Punch In/Out

When re-recording a specific section of an already-recorded Song, use the Punch IN/OUT function. In this method, only the data between the Punch In point and the Punch Out point is overwritten with the newly recorded data. Keep in mind that the notes before and after the Punch In/Out points are not recorded over, although you will hear them play back normally to guide you in the Punch In/Out timing.

- **Call up the operation display.** [DIGITAL RECORDING] → [A] SONG CREATOR → TAB [\blacktriangleleft][\blacktriangleright] REC MODE
- 2 Determine the settings for recording.







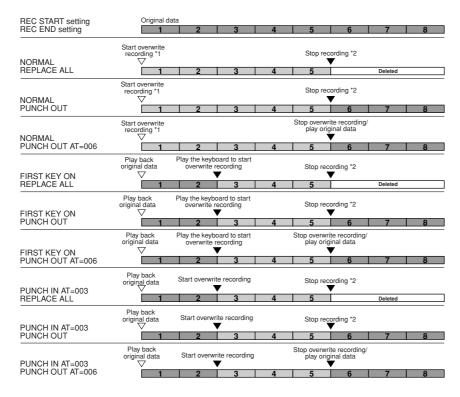
[4 ▲▼]- [6 ▲▼]	REC END (Punch Out)	 REPLACE ALL: This deletes all data after the point at which recording is stopped. PUNCH OUT: The Song position at which recording is stopped is regarded as the Punch Out point. This setting maintains all data after the point at which recording is stopped. PUNCH OUT AT: Actual overwrite recording continues until the beginning of the specified Punch Out measure (set with the corresponding display button), at which point recording stops and normal playback continues. This setting maintains all data after the point at which recording is stopped. You can set the Punch Out measure by pressing the [6 ▲▼] buttons.
[7 ▲▼]/ [8 ▲▼]	PEDAL PUNCH IN/OUT	When this is set to ON, you can use Foot Pedal 2 to control the Punch In and Punch Out points. While a Song is playing back, pressing (and holding) Foot Pedal 2 instantly enables Punch In recording, while releasing the pedal stops recording (Punch Out). You can press and release Foot Pedal 2 as often as you want during playback to punch in/out of overwrite recording. Note that the current function assignment of the Foot Pedal 2 is cancelled when the Pedal Punch In/Out function is set to ON. NOTE Pedal Punch In/Out operation may be reversed depending on the particular pedal you've connected to the instrument. If necessary, change the pedal polarity to reverse the control (page 109).

- While holding the SONG [REC] button, select the desired track by using the [1 ▲▼]–[8 ▲▼] buttons and [C]/[D] buttons.
- **4** Press the SONG [PLAY/PAUSE] button to start Punch In/Out recording.

Play the keyboard at the Punch In point and stop recording at the Punch Out point.

- **5** Press the [I] (SAVE) button to execute the Save operation.
 - Examples of re-recording with various Punch In/Out settings The Tyros3 features several different ways you use the Punch In/Out function.

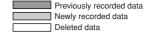
The Tyros3 features several different ways you use the Punch In/Out function. The illustrations below indicate a variety of situations in which selected measures in an eight-measure phrase are re-recorded.

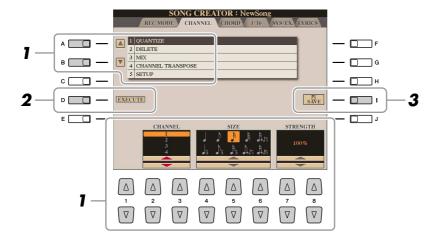


A CAUTION

The recorded Song data will be lost if you select another Song or turn the power to the instrument off without executing the Save operation.

- *1 To avoid overwriting measures 1–2, start recording from measure 3.
- *2 To stop recording, press the [REC] button at the end of measure 5.





In the CHANNEL Page, use the [A]/[B] buttons to select the edit menu, then edit the data by using the [1 ▲▼]–[8 ▲▼] buttons.

For details of the edit menu and available settings, see page 64.

Press the [D] (EXECUTE) button to execute the operation for the current display.

After the operation (with the exception of the SETUP menu) is completed, this button changes to "UNDO," letting you restore the original data if you are not satisfied with the operation results. The Undo function only has one level; only the previous operation can be undone.

Press the [I] (SAVE) button to execute the Save operation.



The recorded Song data will be lost if you select another Song or turn the power to the instrument off without executing the Save operation.

• 1 QUANTIZE

The Quantize function allows you to align the timing of all the notes in a channel. For example, if you record the musical phrase shown at right, you may not play it with absolute precision, and your performance may have been slightly ahead of or behind the precise timing. Quantize is a convenient way of correcting for this.



[2 ▲▼]/ [3 ▲▼]	CHANNEL	Determines which MIDI channel in the Song data is to be quantized.
[4 ▲▼]- [6 ▲▼]	SIZE	Selects the quantize size (resolution). For optimum results, you should set the Quantize size to the shortest note value in the channel. For example, if eighth notes are the shortest in the channel, you should use eighth note as the Quantize size.
		After 1/8 note quantization
		Settings:
		1/4 note
		3 1/4 note
		The three Quantize settings marked with asterisks (*) are exceptionally convenient, since they allow you to quantize two different note values at the same time. For example, when the straight eighth notes and eighth notes triplet are contained in the same channel, if you quantize by the straight eighth notes, all notes in the channel are quantized to straight eighth notes—completely eliminating any triplet feel. However, if you use the eighth note + eighth note triplet setting, both the straight and triplet notes will be quantized correctly.
[7 ▲▼]/ [8 ▲▼]	STRENGTH	Determines how strongly the notes will be quantized. A setting of 100% produces exact timing. If a value less than 100% is selected, notes will be moved toward the specified quantization beats according to the specified percentage. Applying less than 100% quantization lets you preserve some of the "human" feel in the recording.
		Quarter-note length
		Original data (assuming 4/4 meter)
		Quantizing strength =100
		Quantizing strength =50

• 2 DELETE

You can delete the data of the specified channel in the Song. Select the channel whose data to be deleted by using the $[1 \blacktriangle \blacktriangledown]$ – $[8 \blacktriangle \blacktriangledown]$ buttons, then press the [D] (EXECUTE) button to execute the operation.

3 MIX

This function lets you mix the data of two channels and place the results in a different channel. It also lets you copy the data from one channel to another.

[2 ▲▼]/ [3 ▲▼]	SOURCE 1	Determines the MIDI channel (1–16) to be mixed. All MIDI events of the channel specified here are copied to the destination channel.
[4 ▲▼]/ [5 ▲▼]	SOURCE 2	Determines the MIDI channel (1–16) to be mixed. Only note events of the channel specified here are copied to the destination channel. Besides the values 1–16, there is a "COPY" setting that allows you to copy the data from Source 1 to the destination channel.
[6 ▲▼]/ [7 ▲▼]	DESTINATION	Determines the channel into which the mix or copy results will be placed.

• 4 CHANNEL TRANSPOSE

This allows you to transpose the recorded data of individual channels up or down by a maximum of two octaves in semitone increments.

[F]	CH 1–8/CH 9–16	Toggles between the two channel displays: Channels 1–8, and Channels 9–16.
[G]	ALL CH	To simultaneously set all channels to the same value, adjust the Channel Transpose for one of the channels while holding down this button.

• 5 SETUP

The current settings of the Mixing Console display and other panel settings can be recorded to the top position of the Song as the Setup data. The Mixing Console and panel settings recorded here are automatically recalled when the Song starts.

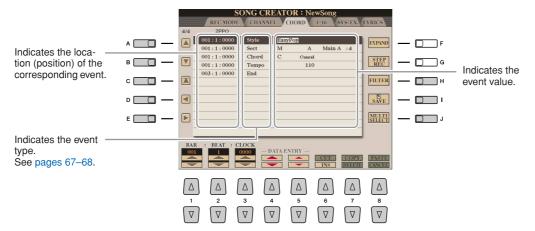


[1 ▲▼]- [7 ▲▼]	SELECT	Determines which playback features and functions will be automatically called up along with the selected Song. The items selected here can be recorded only to the top position of the Song, except for the KEYBOARD VOICE. SONG: Records the tempo setting and all settings made from the Mixing Console. KEYBOARD VOICE: Records the panel settings, including the Voice selection of the keyboard parts (RIGHT 1, 2, 3, and LEFT) and their on/off status. Panel settings recorded here are same as the ones memorized to the One Touch Setting. This can be recorded at any point in a Song. SCORE SETTING: Records the settings in the Score display. GUIDE SETTING: Records the settings of the Guide functions including the Guide ON/OFF setting. LYRICS SETTING: Records the settings in the Lyrics display. MIC SETTING: Records the microphone and the Vocal Harmony settings in the Mixing Console display.
[8 🛦]	MARK ON	Add or remove a checkmark to the selected item. Checked items are recorded
[8 ▼]	MARK OFF	to the Song.

Editing Chord Events, Notes, System Exclusive Events and Lyrics

You can edit the chord events, note events, system exclusive events and lyrics in the same manner on the corresponding display: CHORD, 1-16, SYS/EX and LYRICS. These displays are called "Event List display" because some events are shown in a list view.

Event List display



[A]/[B]		Moves the cursor up/down and select the desired event.
[C]		Moves the cursor to the top (beginning of the Song).
[D]/[E]		Moves the cursor left/right and select the desired parameter of the high-lighted event.
[H]	FILTER	Calls up the Filter display (page 68), letting you select only the events you wish to be shown in the event list.
[1]	SAVE	Press to save the edited Song.
[J]	MULTI SELECT	Holding this button while using the [A]/[B] buttons lets you select multiple events.
[1 ▲▼]	BAR	Determines the position (bar/beat/clock) of the data. One clock is equal to 1/1920th of a quarter note.
[2 ▲▼]	BEAT	
[3 ▲▼]	CLOCK	
[4 ▲▼]/ [5 ▲▼]	DATA ENTRY	Adjusts the event value. For coarse adjustment, use the $[4 \blacktriangle \blacktriangledown]$ buttons. For fine adjustment, use the $[5 \blacktriangle \blacktriangledown]$ buttons or [DATA ENTRY] dial.
[6 🛦]	CUT	Executes cut/copy/delete/paste operation.
[7 📤]	СОРУ	
[7 ▼]	DELETE	
[8 🛦]	PASTE	
[6 ▼]	INS (INSERT)	Adds a new event.
[8 ▼]	CANCEL	Cancels editing and restores the original value.

● Chord Events (CHORD Page)

Style	Style
Tempo	Tempo
Chord	Chord root, Chord type, On Bass Chord
Sect	Style Section (Intro, Main, Fill In, Break, Ending)
OnOff	On/off status for each part (channel) of the Accompaniment Style
CH.Vol	Volume for each part (channel) of the Accompaniment Style
S.Vol	Overall volume of the Accompaniment Style

● Note Events (1-16 Page)

Note	The individual note of a Song. Includes the note number which corresponds to the key which was played, plus a velocity value based on how hard the key is played, and the gate time value (the length of a note).
Ctrl (Control Change)	Settings to control the Voice, such as volume, pan, filter and effect depth (edited via the Mixing Console described on page 93), etc.
Prog (Program Change)	MIDI program change number for selecting a Voice.
P.Bnd (Pitch Bend)	Data for changing the pitch of a Voice continuously. This event is generated by controlling the PITCH BEND wheel.
A.T. (Aftertouch)	This event is generated when pressure is applied to a key after the note is played.

● System Exclusive Events (SYS/EX. Page)

ScBar (Score Start Bar)	Determines the top measure of a Song.
Tempo	Determines the tempo value.
Time (Time signature)	Determines the time signature.
Key (Key signature)	Determines the key signature, as well as the major/minor setting, for the music score shown on the display.
XGPrm (XG parameters)	Allows you to make various detailed changes to the XG parameters. Refer to the "MIDI Data Format" in the Data List for details. The Data List is available at the Yamaha website.
SYS/EX. (System Exclusive)	Displays the System Exclusive data in the Song. Keep in mind that you cannot create new data or change the contents of the data here; however, you can delete, cut, copy, and paste the data.
Meta (Meta event)	Displays the SMF meta events in the Song. Keep in mind that you cannot create new data or change the contents of the data here; however, you can delete, cut, copy, and paste the data.
Marker (Song Position Marker)	Displays the Song Position Marker (SPJ-01–04) in the Song. Keep in mind that you cannot create new data or change the contents of the data here; however, you can delete, cut, copy, and paste the data.
HDR (HDR play control)	This controls Audio Song playback via Song data. This event is used to playback a MIDI Song and Audio Song in succession; the Audio Song cannot be synchronized to the MIDI Song playback.

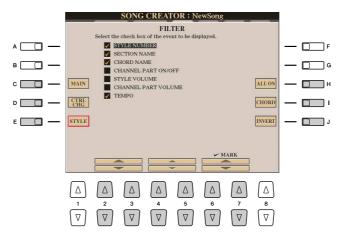
● Lyrics Events (LYRICS Page)

Name	Allows you to enter the Song name.
Lyrics	Allows you to enter lyrics.
Codes	CR: Enters a line break in the lyrics text. LF: Deletes the currently displayed lyrics and displays the next set of lyrics.

Displaying Specific Types of Events

In the Event List displays, various types of events are shown. It may sometimes be difficult to pinpoint the ones you want to edit. This is where the Filter function comes in handy. It lets you determine which event types will be shown in the Event List displays.

- 1 Press the [H] (FILTER) button in the CHORD, 1-16, SYS/EX. or LYRICS displays.
- **2** Checkmark the desired item to be displayed.



[C]	MAIN	Displays all main types of events.
[D]	CTRL CHG	Displays all specific Control Change message events.
[E]	STYLE	Displays all types of Style playback related events.
[H]	ALL ON	Checkmarks all event types.
[1]	NOTE/CHORD	Selects only NOTE/CHORD data.
[J]	INVERT	Reverses the checkmark settings for all boxes. In other words, this enters checkmarks to all boxes that were previously unchecked and vice versa.
[2 ▲▼]- [5 ▲▼]		Select and event type to be checked or unchecked.
[6 ▲]/ [7 ▲]	MARK ON	Enters/removes the checkmark for the selected event type. The checked event types can be shown on the CHORD, 1-16, SYS/EX or LYRICS Page.
[6 ▼]/ [7 ▼]	MARK OFF	

3 Press the [EXIT] button to execute the settings.

Editing Song Position Markers

This section covers two additional Marker-related features and details. For basic information on using the Markers for jump playback and loop playback, refer to the Owner's Manual.

Jump Markers

The Markers explained in the Owner's Manual are also called "Jump Markers." In the Event List display, they are indicated as "SPJ-01"—"SPJ-04" (page 67). In the Event List, they can be moved freely to other positions and can even copied to create identical Marker numbers at other positions. When the same Marker number is contained at different locations in the Song, the latest occurring one is used as a "Loop End Marker" (below).

Loop End Marker

Loop End Markers can be used for putting additional Markers in Song data, providing even greater versatility. Creating a Loop End Marker is done within the Event List (and not with the [SP 1]–[SP 4] buttons on the panel), by simply copying one "SPJ" Jump Marker event to another position in the Song.

For basic information on loop playback between successive Jump Markers, refer to the Owner's Manual.

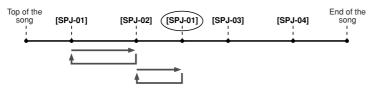
The examples below show how Loop End Markers can be used in Song playback.

Example 1



- If the Song is playing back between the two SPJ-01 points, turning on [LOOP] will result in a playback loop between those points.
- If the Song is playing back between the second SPJ-01 and SPJ-02 and [LOOP] is turned on, playback jumps back to the first SPJ-01 and loops between two SPJ-01 points.

Example 2



- If the Song is playing back between SPJ-02 and the second SPJ-01, turning on [LOOP] will result in a playback loop between those points.
- If the [LOOP] button is turned on while the Song is playing back between the top of the Song and SPJ-02, playback will loop between SPJ-01 and SPJ-02.
- If the Song is playing back between the second SPJ-01 and SPJ-03 and [LOOP] is turned on, playback jumps back to SPJ-02 and loops between SPJ-02 and the second SPJ-01 (Loop End Marker).

In the examples above, the actual data of the Loop End Marker is identical to the event it was copied from—only the location of the copied Marker provides it with this different function.

In Song playback, the markers formatted as "SPJ-xxxxx" (xxxxx: any character except 01–04 and any number of letters is OK) are handled as Loop End Markers. Since the Event List in the Song Creator function does not let you freely name Markers, the instructions above are recommended for creating new Markers. However, with sequence software on a computer, you can create new Markers and assign appropriate names to them. By naming Markers in this way, you can easily distinguish between Loop End Markers and Jump Markers in the Event List.

🕰 NOTE

Loop playback problems may occur if successive Markers are too close to one another.

M NOTE

When the effect settings of the jump destination (the position you're jumping to) differ from those at the jump source, glitches or drop-outs in the sound may result. This is because of limitations in the effect processors of the Tyros3.



When using the Guide function (page 53) with jump playback, keep in mind that the Guide indication may not be able to stay in time with the jumps.

Multi Pads

- Adding Musical Phrases to Your Performance -

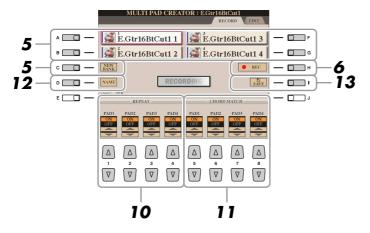
ContentsMulti Pad Creating (Multi Pad Creator).70• Multi Pad Realtime Recording.70• Multi Pad Step Recording (EDIT).71Multi Pad Editing.72

Multi Pad Creating (Multi Pad Creator)

This feature let you create your original Multi Pad phrases, and also allows you to edit existing Multi Pad phrases to create your own.

Multi Pad Realtime Recording

- Select a Multi Pad Bank to be edited or created from the display called up when you press the MULTI PAD CONTROL [SELECT] button.
- 2 Press the [DIGITAL RECORDING] button.
- 3 Press the [C] button to call up the Multi Pad Creator display.



4 If necessary, select the desired Voice from VOICE category selection buttons.

After selection, press the [EXIT] button to return to the previous display.

- 5 Select a particular Multi Pad for recording by pressing any of the [A], [B], [F] and [G] buttons. If you want to create the Multi Pad data from scratch, press the [C] (NEW BANK) button to call up an empty bank.
- Press the [H] (REC) button to enter the recording standby status for the Multi Pad selected in step 5.



7 Start recording.

Recording begins automatically as soon as you play on the keyboard. You can also start recording by pressing the STYLE CONTROL [START/STOP] button. This lets you record as much silence as you want before the start of the Multi Pad phrase.

If Chord Match is set to on for the Multi Pad to be recorded, you should record using the notes of the C major seventh scale (C, D, E, G, A and B).



C = Chord note
C. R = Recommended note

🖄 NOTE

The SA, SA2 and Organ Flute Voices cannot be recorded. If one of these Voices is set for RIGHT1 part, it will be replaced with a Piano Voice.

8 Stop recording.

Press the [H] (STOP) button or the panel MULTI PAD CONTROL [STOP] button or the STYLE CONTROL [START/STOP] button to stop recording when you've finished playing the phrase.

- **9** Listen back to your newly recorded phrase, by pressing the appropriate MULTI PAD button, [1]–[4]. To re-record the phrase, repeat steps 6–8.
- **10** Turn Repeat of each pad On or Off by using the [1 ▲▼]–[4 ▲▼] buttons.

If the Repeat parameter is on for the selected pad, playback of the corresponding pad will continue until the MULTI PAD [STOP] button is pressed. When you press the Multi Pads for which Repeat is turned on during Song or Style playback, playback will start and repeat in sync with the beat.

If the Repeat parameter is off for the selected pad, playback will end automati-

cally as soon as the end of the phrase is reached.

Turn Chord Match of each pad On or Off by using the [5 ▲▼]–[8 ▲▼] buttons.

If the Chord Match parameter is on for the selected pad, the corresponding pad is played back according to the chord specified in the chord section of the keyboard generated by turning [ACMP] on, or specified in the LEFT Voice section of the keyboard generated by turning [LEFT] on (when turning the [ACMP] off).

- 12 Press the [D] (NAME) button, then enter a name for each Multi Pad, as desired.
- 13 Press the [I] (SAVE) button, then save the Multi Pad data as a Bank containing a set of four Pads.



Multi Pads indicated with the following icon (hand on fretboard) are created with Guitar NTT (page 46) to produce the natural chord voicing of the guitar. Because of this, if the Chord Match setting is set to off, the Multi Pads may not sound appropriately.



Multi Pad Step Recording (EDIT)

Step Recording can be executed in the EDIT page. After selecting a Multi Pad in step 5 on page 70, press the TAB [▶] button to select the EDIT Page.

The EDIT page indicates the Event list, which lets you record notes with absolutely precise timing. This Step Recording procedure is essentially the same as that for Song Recording (pages 56–59), with the exception of the points listed below:

- There is no LCD button for switching channels, since Multi Pads contain data for only a single channel.
- In the Multi Pad Creator, only the channel events and System Exclusive messages can be entered. Chord and Lyrics events are not available. You can switch between the two types of Event Lists by pressing the [F] button.

Multi Pad Editing

From the MULTI PAD EDIT display, you can rename, copy or delete a Multi Pad.

- Press the MULTI PAD CONTROL [SELECT] button to call up the Multi Pad Bank Selection display, then select a Bank to be edited.
- 2 Press the [8 ▼] (EDIT) button to call up the MULTI PAD EDIT display.
- **3** Select a particular Multi Pad to be edited by pressing any of the [A], [B], [F] and [G] buttons.
- 4 Edit the selected Pad as desired.



[1 ▼]	NAME	Changes the name of each Multi Pad.
[3 ▼]	СОРҮ	Copies the Multi Pad(s). See below.
[5 ▼]	DELETE	Deletes the selected Multi Pads.

For details on the naming and deleting procedures, refer to the Basic Operation section in the Owner's Manual.

Copying the Multi Pad

- Press the [3 ▼] button in step 4 above.
- 2 Select the Multi Pads to be copied by using the [A], [B], [F] and [G] buttons, then press the [7 ▼] (OK) button.

 The selected Multi Pad(s) is copied to the clipboard.
- 3 Select the destination location by using the [A], [B], [F] and [G] buttons. If you want to copy the selected Pad(s) to another bank, press the [8 ▲] (UP) button to call up the Multi Pad Bank Selection display, select the desired bank, press the [8 ▼] (EDIT) button, then select the destination.
- **4** Press the [4 ▼] (PASTE) button to execute the Copy operation.

Music Finder

- Calling Up Ideal Setups for Your Music -

Contents

Creating a Set of Favorite Records
Editing Records
Saving the Record as a Single File
• Calling Up Music Finder Records Saved to USER/HD/USB75
Viewing Record Information on the Internet76

Creating a Set of Favorite Records

As convenient as the Search function is in exploring the depths of the Music Finder records, you may want to create a "folder" of favorite records—so you can quickly call up those styles and settings you use most often in your performance.

- 1 Select the desired record from the MUSIC FINDER display.
- Press the [H] (ADD TO FAVORITE) button to add the selected record to the FAVORITE page, then press the [G] (YES) button to actually add the record.



∠ NOTE

You can sort the records by using the [F] (SORT BY) button or search for desired records by using the [6 \blacktriangle \blacktriangledown] (SEARCH 1/2) buttons. For details, refer to the Owner's Manual.

3 Call up the FAVORITE page by using the TAB [◀][▶] buttons, and check to see if the record has been added.

Deleting Records from the FAVORITE Display

- **1** Select the record you want to delete from the FAVORITE page.
- **2** Press the [H] (DELETE FROM FAVORITE) button.

Editing Records

You can create a new record by editing the currently selected record. Up to 2500 records (including internal records) can be recorded.

- Select the desired record to be edited in the MUSIC FINDER display.
- Press the [8 ▲▼] (RECORD EDIT) button to call up the EDIT display.
- 3 Edit the record as desired.



[A]	MUSIC	Edits the song name/keyword. Pressing one of these buttons calls up the pop-
[B]	KEYWORD	up window to enter the song name/keyword. To clear the entered Music/Keyword, press the [F]/[G] (CLEAR) button.
[C]	STYLE	Changes the Style. Pressing this button calls up the Style Selection display. After selecting the desired Style, press the [EXIT] button to return back to the Edit display. To clear the entered Style, press the [H] (CLEAR) button.
[D]	BEAT	Changes the beat (time signature) of the record for search purposes. NOTE
[E]	FAVORITE	Selects whether the edited record is entered to the FAVORITE display or not.
[1 ▲▼]	ТЕМРО	Changes the Tempo.
[2 ▲▼]	SECTIONS	Selects the section that will automatically be called up set when the record is
[4 ▲▼]		selected. This is useful, for example, when you want to have a selected Style automatically be set up to start with an Intro section.
[5 ▲▼]/ [6 ▲▼]	GENRE	Selects the desired genre.
[7 ▼]	GENRE NAME	Creates a new genre.
[1]	DELETE RECORD	Deletes the currently selected record.

4 Enter the edits you've made to the record.

If you want to add the currently edited record to Music Finder as a new record, press the [J] (NEW RECORD) button. If you want to overwrite the existing program, press the [8 \blacktriangle] (OK) button. The record is added to the ALL display. To cancel and quit the Edit operation, press the [8 \blacktriangledown] (CANCEL) button.

Saving the Record as a Single File

The Music Finder feature handles all the Records including the presets and additionally created records as a single file. Keep in mind that individual records (panel setups) cannot be handled as separate files.

- Call up the Save display.
 [MUSIC FINDER] → [7 ▲▼] FILES
- Press the TAB [◀][▶] buttons to select the location for saving (USER/HD/USB).
- **3** Press the [6 ▼] (SAVE) button to save the file.

Calling Up Music Finder Records Saved to USER/HD/USB

To call up the Music Finder records you've saved to USER/HD/USB, follow the instructions below.

- Call up the File Selection display.
 [MUSIC FINDER] → [7 ▲▼] FILES
- **2** Use the TAB [◀][▶] buttons to select USER/HD/USB.
- **3** Press the [A]–[J] buttons to select the desired Music Finder file. When the file is selected, a message is displayed according to the content of the file. Press the desired button.

[F]	REPLACE	All Music Finder records currently in the instrument are deleted and replaced with the records of the selected file. All Music Finder records currently in the instrument are deleted and replaced with the records of the selected file. CAUTION
[G]	APPEND	The records called up are added to the record currently in the instrument.
[H]	CANCEL	Selecting this button aborts the operation.

Viewing Record Information on the Internet

This service provides information on Music Finder records that you may be interested in. It also provides song downloads for your particular instrument as well as downloadable Music Finder records you can load to your instrument. For more details about this service, go to the following website.

http://music.yamaha.com/idc/

- Make sure that your Tyros3 is connected to the Internet, and press the [MUSIC FINDER] button to call up the MUSIC FINDER display.
- **3** Press the [J] (MUSIC FINDER +) button to open the Web page. The information of the selected record is shown.
- 4 Press the [EXIT] button to exit the browser screen and return to the MUSIC FINDER display.



The available contents of the Music Finder Plus service are subject to change.

Registration Memory

Saving and Recalling Custom Panel Setups –

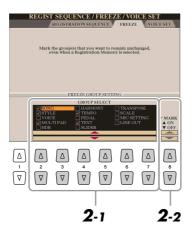
_			-				
C	^	n	•	Δ	n	•	¢
•	v		ı	C		ш.	2

Disabling Recall of Specific Items (Freeze)77 Calling Up Registration Memory Numbers in Order (Registra-		
tion Sequence)		
• Confirming the Registration Sequence Setting in the Main Display 79		
• Saving the Registration Sequence Settings		

Disabling Recall of Specific Items (Freeze)

Registration Memory lets you recall all the panel setups you made with a single button press. However, there may be times that you want certain items to remain the same, even when switching Registration Memory setups. For example, you may want to switch Voices or effect settings while keeping the same accompaniment Style. This is where the Freeze function comes in handy. It lets you maintain the settings of certain items and leave them unchanged, even when selecting other Registration Memory buttons.

- Call up the operation display. $[FUNCTION] \rightarrow [E]$ REGIST SEQUENCE/FREEZE/VOICE SET \rightarrow TAB $[\blacktriangleleft][\blacktriangleright]$ **FREEZE**
- **2** Determine the items to be "frozen." Select the desired item by using the $[2 \blacktriangle \blacktriangledown]$ – $[7 \blacktriangle \blacktriangledown]$ buttons, then enter or remove the checkmark by using the [8 ▲] (MARK ON)/[8 ▼] (MARK OFF) buttons.



- Press the [EXIT] button to exit from the operation display.
- Press the [FREEZE] button on the panel to turn the Freeze function

A CAUTION

Settings in the REGISTRATION FREEZE display are automatically saved to the instrument when you exit from this display. However, if you turn the power off without exiting from this display, the settings will be lost.

Calling Up Registration Memory Numbers in Order (Registration Sequence)

As convenient as the Registration Memory buttons are, there may be times during a performance when you want to quickly switch between settings—without having to take your hands from the keyboard. The convenient Registration Sequence function lets you call up the eight setups in any order you specify, by simply using the TAB [\blacktriangleleft][\triangleright] buttons or the pedal as you play.

- Select the desired Registration Memory bank to program a sequence.
- **2** Call up the operation display. [FUNCTION] \rightarrow [E] REGIST SEQUENCE/FREEZE/VOICE SET \rightarrow TAB [\blacktriangleleft][\blacktriangleright] REGISTRATION SEQUENCE
- 3 If you intend to use a pedal to switch Registration Memory settings, specify here how the pedal will be used—to advance or to reverse through the sequence.

Use the [C] (REGIST+ PEDAL) button to select the pedal for advancing through the sequence.

Use the [D] (REGIST- PEDAL) button to select the pedal for reversing through the sequence.

∠ NOTE

If you assign the function to a pedal here, the other function set in the Foot Pedal display (page 109) becomes invalid

Indicates the name of the currently selected Registration Memory Bank.

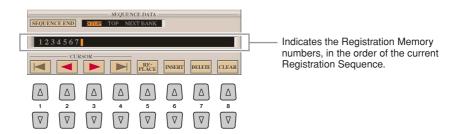


- 4 Use the [E] (SEQUENCE END) button to determine how Registration Sequence behaves when reaching the end of the sequence.
 - **STOP** Pressing the TAB [▶] button or the "advance" pedal has no effect. The sequence is "stopped."
 - **TOP** The sequence starts again at the beginning.
 - **NEXT BANK** The sequence automatically moves to the beginning of the next Registration Memory Bank in the same folder.



5 Program the Sequence order, from left to right.

Press one of the REGISTRATION MEMORY [1]–[8] buttons on the panel, then press the [6 $\blacktriangle \nabla$] (INSERT) button to input the number.



[1 ▲▼]- [4 ▲▼]	CURSOR	Moves the cursor.
[5 ▲▼]	REPLACE	Replaces the number at the cursor position with the currently selected Registration Memory number.
[6 ▲▼]	INSERT	Inserts the number of the currently selected Registration Memory number before the cursor position.
[7 ▲▼]	DELETE	Deletes the number at the cursor position.
[8 ▲▼]	CLEAR	Deletes all numbers in the sequence.

- 6 Press the [F] button to turn the Registration Sequence function on.
- 7 Press the [EXIT] button to exit from the operation display.

Confirming the Registration Sequence Setting in the Main Display

In the Main display, you can confirm whether the Registration Memory numbers are called up according to the sequence programmed above.



The Registration Sequence is indicated at the top right of the Main display, letting you confirm the currently selected number.

To shift the Registration Memory numbers, use the TAB [◀][▶] buttons when the Main display is shown. When pedal operation has been set in step 3 on page 78, you can also use a pedal to select the Registration Memory numbers in order. The pedal can be used for Registration Sequence no matter which display is called up (except for the display in step 3 on page 78).

To return to the first Sequence, press the TAB $[\blacktriangleleft]$ and $[\blacktriangleright]$ buttons simultaneously when the Main display is shown. This cancels the currently selected Sequence number (the box indicator at the top right goes out). The first Sequence will be selected by pressing one of the TAB $[\blacktriangleleft][\blacktriangleright]$ buttons or by pressing the pedal.

Saving the Registration Sequence Settings

The settings for the Sequence order and how Registration Sequence behaves when reaching the end of the sequence (SEQUENCE END) are included as part of the Registration Memory Bank file. To store your newly programmed Registration Sequence, save the current Registration Memory Bank file.

Press the REGIST BANK [+] and [-] buttons simultaneously to call up the REGISTRATION BANK Selection display.

2 Press the [6 ▼] button to save the Bank file.



Keep in mind that all Registration Sequence data is lost when changing Registration Memory Banks, unless you've saved it with the Registration Memory Bank file.

Recording Audio with the Hard Disk Recorder

Contents

Importing an Audio File80
Editing the Recorded Data
• (1) Normalize82
• (2) Adjusting the Volume
• (3) Replacing the Main/Sub Tracks
• (4) Deleting a Track
Re-recording
NORMAL REC / NORMAL REC (PLUS PLAYBACK)
• PUNCH IN OUT / PUNCH IN OUT (MERGE)84
Setting the Start/End Points of the Audio
Playlist Mode87
• Creating a Playlist
• Playing a Playlist
• Playlist Controls

Importing an Audio File

In addition to letting you record audio directly with the Tyros3, the Hard Disk Recorder also allows you to import audio data from a USB storage device to Main track. The benefits of this feature are many. For example, you can:

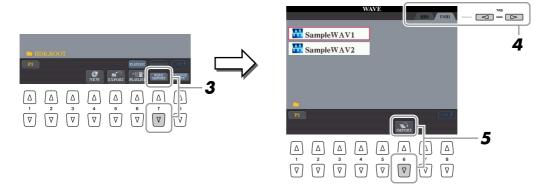
- Use existing audio material (commercially available samples, loops, sound effects, etc.) on the Tyros3.
- Record your performance to another device (such as on a computer or audio sequencer), add vocals and other instruments as desired, then import the finished audio to the Tyros3.
- Export a recording made on the Tyros3 to a computer-based audio editor—giving you more comprehensive editing features and greater editing convenience—then import the audio back to the Tyros3. (See "Exporting an Audio File" on the Owner's Manual.)

Files which can be imported must have these characteristics:

- Stereo Wave data
- 44.1 kHz sample rate
- 16-bit resolution
- A length of less than or equal to 80 minutes
 - Insert the USB storage device (or connecting cable) to the USB TO DEVICE terminal.
 - **2** Press the HARD DISK RECORDER [SELECT] button to call up the AUDIO display.



3 Press the [8 ▼] (CHANGE MENU) button if necessary, then call up the Import function by pressing the [7 ▼] (WAVE IMPORT) button.



4 Select the desired device as a destination by using the TAB [◀][▶] buttons.

Generally, a USB device will show up as "USB1" in the display. When the device is selected, all folders and audio files on the device are automatically shown.

5 Press the [6 **▼**] (IMPORT) button.

Alternately, if you desire to import only one file, you can import it by double clicking the appropriate [A]–[J] button.

6 Select the desired audio file by using the [A]–[J] buttons.

The selected file name is highlighted. You can continue to select additional files here, as many as desired. If multiple pages (P1, P2, ...) are shown at the bottom, you can select files from these displays, too. After that, press the [7 ▼] (OK) button.

7 At the prompt, press the [F] (YES) button.

Importing may take as little as a couple of seconds or as long as a few minutes, depending on the file size, as well as the number of files you are importing. To confirm the imported file, press the [EXIT] button to return to the AUDIO display.



Do not disconnect the device while the READ/WRITE lamp is on or flashing. Doing so may result in loss or corruption of the data or malfunction of the device.



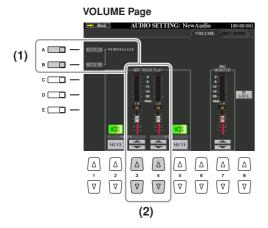
If you are importing multiple files and you cancel Import while the operation is in process, some of the files will be imported and unaffected by cancelling the operation.

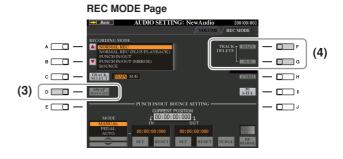


If the same file name already exists, a message appears prompting you to overwrite. Selecting [YES] imports the file and overwrite the Main track. The data of Sub track will be deleted.

Editing the Recorded Data

In the display called up by pressing the HARD DISK RECORDER [SETTING] button, you can edit the recorded data. After you finish editing, press the [I] (SAVE) button to save the edition.





(1) Normalize

Normalize raises the volume of the recorded audio to the optimum level. Use this to make the recorded audio as loud as possible, without distortion. Technically, this operation scans the recorded file for the highest level, then raises the volume of the entire file so that the highest peak is set to the maximum, non-distorting level. Normalization is calculated for the loudest signal found in either channel of the stereo recording and the same gain is applied to both channels.

- In the VOLUME Page, press the [A] (NORMALIZE MAIN) button or [B] (NORMALIZE SUB) button.
- 2 At the prompt, press the [G] (OK) button to start normalizing the selected track.

To cancel the operation, press the [H] (CANCEL) button.



Normalize can only be applied to a file that has been saved. If you haven't saved the recorded file yet, the display prompts you to save it before using Normalize.

(2) Adjusting the Volume

In the VOLUME Page, use the $[3 \blacktriangle \blacktriangledown]/[4 \blacktriangle \blacktriangledown]$ buttons or sliders to adjust the output level of Main/Sub tracks.



To control overall volume of the audio file, press the [BALANCE] button once or twice to call up the BALANCE (2/2) display, then use the [5] slider.

(3) Replacing the Main/Sub Tracks

In the REC MODE Page, press the [D] (SWAP MAIN-SUB) button to replace the Main and Sub tracks.

(4) Deleting a Track

In the REC MODE Page, press the [F]/[G] buttons to delete the Main/Sub track. If you want to undo the operation, press the [H] (UNDO) button just after pressing the [F] or [G] button.

Re-recording

You can re-record the data which you created in the following five ways.

- Replace a certain range of the data: PUNCH IN/OUTSee page 84
- Overdub a certain range of the data: PUNCH IN/OUT (MERGE).....See page 84
- Merge the Main and Sub tracks to the Main track: BOUNCE

......See the Owner's Manual.



Re-recording of the data repeatedly will result in deterioration of the sound quality.

NORMAL REC / NORMAL REC (PLUS PLAYBACK)

You can replace the whole audio data of a track by NORMAL or mix the audio data with the previous one by NORMAL REC (PLUS PLAYBACK). The NORMAL REC (PLUS PLAYBACK) method does not add any tracks but simply mixes the new recording to the existing data. After stopping recording, the data will be erased from the stop point.



Since you will be overdubbing parts onto this audio, it's best to keep the first recording simple. For example, you may want to record just a rhythm pattern (such as by playing back a Style) or a simple bass riff over which you can add other parts.

- Press the HARD DISK RECORDER [SELECT] button and select the recorded file to be re-recorded from the AUDIO display.
- Press the HARD DISK RECORDER [SETTING] button, then use the TAB [◀][▶] buttons to select the REC MODE tab.
- 3 Use the [C] (TRACK SELECT) button to select the track to be rerecorded.



- **4** Use the [A]/[B] buttons to select a recording method.
 - Replace the whole data: NORMAL REC
 - Mix the recorded data: NORMAL REC (PLUS PLAYBACK)
- 5 If you select "NORMAL REC (PLUS PLAYBACK)," play back the recorded audio and practice the part that you want to overdub while the audio is playing. Change the volume settings if necessary.

If you wish to add a keyboard-played Voice from the Tyros3, select the desired Voice. If you wish to record your singing voice or an external instrument, connect a microphone or instrument and make the appropriate settings. Adjust the HDR Track Play and Rec Monitor levels here as desired.

6 Press the [REC] button to enable recording.

The display automatically switches to the REC MODE Page.

7 Press the [PLAY/PAUSE] button to start recording. Play the keyboard (or sing, etc.) and record your performance.

8 When finished recording, press the [STOP] button.

After stopping recording, the data will be erased from the stop point.



The playback sound of the other (not rerecorded) track is not recorded.



9 To hear your new recording, press the [PLAY/PAUSE] button.

If you've made a mistake or you're not completely satisfied with your performance, you can undo the operation by pressing [H] (UNDO) button on the REC MODE page.

10 Press the [I] (SAVE) button to save the recording.



The Hard Disk Recorder automatically reduces the level of the previous track by a certain, slight amount to accommodate the new recording. This is done to minimize possible distortion. You can use the Normalize effect to maximize the volume of the overall sound. For details, see page 82.

A CAUTION

Keep in mind that even if you neglect to save the recorded data in this step, the originally recorded file (before re-recording) will still remain on the hard disk drive.

PUNCH IN OUT / PUNCH IN OUT (MERGE)

This method of recording can only be used on an existing recording. It allows you to re-record over a specific part of the already-recorded material. You can replace the original part with the new recording by PUNCH IN/OUT, or keeping the original and mixing it with the new by PUNCH IN/OUT (MERGE). This lets you either correct a mistake in the recording or overdub new parts onto the original recording. Keep in mind that the parts before and after the Punch In/Out section are not recorded over and remain as the original data—they play back normally to guide you in and out of the recording.





You can re-record over only one range at one time.



The beginning and ending of the recorded data using the Punch In/Out function is faded in/out automatically. This is done to minimize possible noise at the beginning and ending of the recorded data. We recommend that you specify the beginning and ending points at sections in the data where the volume is low.

- Press the HARD DISK RECORDER [SELECT] button and select the recorded file to be re-recorded from the AUDIO display.
- Press the HARD DISK RECORDER [SETTING] button, then use the TAB [◀][▶] buttons to select the REC MODE tab.
- 3 Use the [C] (TRACK SELECT) button to select the track to be rerecorded.



- **4** Use the [A]/[B] buttons to select a recording method.
 - Replace a certain range of the data: PUNCH IN/OUT
 - Overdub a certain range of the data: PUNCH IN/OUT (MERGE)



5 Select the desired Punch In/Out Mode, using the [1 ▲▼]/[2 ▲▼] (MODE) buttons.



• **MANUAL** This lets you manually execute Punch In/Out recording by using the Hard Disk Recorder transport buttons ([REC], [PLAY/PAUSE], etc.).

• **PEDAL** This lets you manually execute Punch In/Out recording by using a connected footswitch to the FOOT PEDAL 2 jack.

• **AUTO** This lets you specify the Punch In and Out points, allowing automatic Punch In/Out recording (see below).

Specifying the recording range in AUTO mode

If you select AUTO as the punch in/out recording method, specify the recording range and practice the recording by using the Rehearsal function.

- I Specify the punch in/out range by pressing the [3 ▲▼]/[5 ▲▼] (SET) buttons at the punch in/out point during the audio song playback.
- 2 If you move the punch in/out point slightly, use the Nudge function.
 In this Nudge function, you can move the punch in/out point slightly (even in millisecond units) while listening to the playback.
 - **2-1** Press the [7 ▲▼] (NUDGE) button to show the Nudge Play display.
 - **2-2** Use the [DATA ENTRY] dial and [PREV]/[NEXT] button to move the NUDGE DATA POSITION to the desired punch in/out position while listening to the playback (500 milliseconds loop playback before/after the specified point). The [DATA ENTRY] dial lets you adjust the point in seconds and the [PREV]/[NEXT] buttons lets you adjust in milliseconds.



- **2-3** Press the [7 ▲▼] (MODE) button to select After/Before. "After" repeats 500 milliseconds after the Nudge Data Position and "Before" repeats 500 milliseconds before the Nudge Data Position when you playback the data in the next step.
- **2-4** Press the [3 ▲▼]/[5 ▲▼] (SET) button to set the moved point. To reset the point to the start/end point of the data, press the [4 ▲▼]/[6 ▲▼] (RESET) button.
- **2-5** Press the [8 ▲▼] (CLOSE) button.

NOTE

The smallest possible range of the Auto punch in/out function is 100 milliseconds.

- **3** Use the REHEARSAL function to practice the recording before the actual recording.
 - **3-1** Press the [8 ▲▼] (REHEARSAL) button. "EXECUTING" is shown above the [8 ▲▼] buttons.
 - **3-2** Press the HARD DISK RECORDER [REC] button and press the [PLAY/PAUSE] button. The audio song is played back repeatedly starting four seconds before the punch in point to four seconds after the punch out point. Play the keyboard or sing the desired part in practice. In this rehearsal function, recording is not started.
 - **3-3** Press the HARD DISK RECORDER [STOP] button.

An NOTE

Repeat playback of the rehearsal function is automatically stopped after playing back 99 times.



6 Record the specific part of the audio song using the one of the methods below.

∠ NOTE

The playback sound of the other (not rerecorded) track is not recorded.

Manual

Press the HARD DISK RECORDER [REC] button and press the [PLAY/PAUSE] button to engage the record mode, then press the [REC] and [PLAY/PAUSE] buttons simultaneously to actually record. To stop recording, press the HARD DISK RECORDER [STOP] button. Pressing the HARD DISK RECORDER [PLAY/PAUSE] button during recording pauses the recording.

Pedal

Press the HARD DISK RECORDER [REC] button and press the [PLAY/PAUSE] button to engage the record mode, then press and hold the footswitch. The point at which you press the footswitch is the punch in point and the point at which you release the pedal is the punch out point.

Auto

Press the HARD DISK RECORDER [REC] button and press the [PLAY/PAUSE] button. Recording automatically starts and stops at the specified point in "Specifying the recording range in AUTO mode" on page 85. The audio song playback automatically stops four seconds after the punch out point.

7 To hear your new recording, press the [PLAY/PAUSE] button. If you've made a mistake or you're not completely satisfied with your performance, you can undo the operation by pressing [H] (UNDO) button on the REC MODE page.

8 Press the [I] (SAVE) button to save the recording.

Setting the Start/End Points of the Audio

This function (within the Property window) lets you set the Start and End points for the audio file. This action is non-destructive and affects only the playback of the data; it does not actually delete any data from the start or end of the file.

- Press the HARD DISK RECORDER [SELECT] button and select the desired audio file.
- **2** Press the [7 ▲] (PROPERTY) button.
- **3** Press the [H] (START/END POINT) button.
- **4** Specify the Start/End point.

The operation of specifying the Start/End points is same as specifying the punch in/out points. For instructions, see "Specifying the recording range in AUTO mode" on page 85.

- **5** Press the [F] (OK) button to enter the new settings to the file. To cancel the operation, press the [G] (CANCEL) button.
- **6** Exit from the Property window by pressing the [F] (OK) button.

🔎 NOTE

When exporting a song for which the Start/End points have been specified, only the specified range will be exported.

Playlist Mode

The Playlist is a convenient feature within the Hard Disk Recorder that lets you collect and organize audio files for automatic playback in "jukebox" fashion. The Playlist mode can be active in the background (for example, when the Main display is selected), letting you play the listed files whenever you wish during your performance. The "Basic/Playlist" indicator at the upper left of the display shows whether the Hard Disk Recorder is set to the Basic mode (playback of a single file) or the Playlist mode (automatic playback of multiple files).

Creating a Playlist

Once you have a number of recorded or imported audio files on the installed hard disk drive, you can assign those files to the Playlist. The files can be put in any order and can be entered any number of times (in other words, a single file can have multiple instances in a Playlist).



A Playlist can contain a maximum of 500 audio files.

- Press the HARD DISK RECORDER [SELECT] button to call up the AUDIO display.
- Select the appropriate folder containing the desired audio files by using the [A]-[J] buttons.
- 3 Press the [8 ▼] (CHANGE MENU) button if necessary, then press the [6 ▼] (Add to PLAYLIST) button.
- Select the desired audio file(s) by using the [A]-[J] buttons.

The selected file name is highlighted. You can continue to select additional files here, as many as desired. If multiple pages (P1, P2, ...) are shown at the bottom, you can select files from these displays, too. To select all the files in the current folder, press the $[6 \ \ \ \ \]$ (ALL) button.



If you want to select all but a few of the files in the folder, a quick method is to use the [6 ▼] (ALL) button to select all of the files, then use the [A]-[J] buttons to de-select specific files.

5 Press the [7 ▼] (OK) button.

To cancel the operation, press the [8 ▼] (CANCEL) button.

6 Check the Playlist to confirm that the files have been added by pressing the [6 ▲] (PLAYLIST) button.

If you change the file icon after adding to the Playlist, the audio file cannot be recognized from the Playlist.

If the Playlist already has audio files, additional files are automatically put at the end of the list. Added files are also automatically selected (checkmarked) for playback.

7 Save the Playlist.

Press the [5 ▲▼] (PLAYLIST FILE) button, then save the Playlist to the USER drive, installed hard disk drive or USB storage device.

Playing a Playlist

Once you've created and/or edited a Playlist (page 88) and you've enabled the Playlist mode, you can play back the files in the list—at any time during your performance.

Keep in mind that playback of files is not instantaneous. Since the Hard Disk Recorder needs to load each file before playing it, playback pauses roughly one or two seconds between files.

- Press the Hard Disk Recorder [SELECT] button to call up the AUDIO
- Press the [6 ▲] (PLAYLIST) button to call up the Playlist display.
- Press the [5 ▲▼] (PLAYLIST FILE) buttons to call up the PLAYLIST FILE display, then select the desired Playlist by using the [A]-[J] buttons.



The [SELECT] button toggles between the Audio and Playlist displays within the Hard Disk Recorder function.



- 4 Press the [EXIT] button to return to the Playlist display.
- 5 Use the [7 ▲▼] buttons to select a file for playback, then actually enter it by pressing the [8 ▼] (SELECT) button.

You can also use the [DATA ENTRY] dial to move the cursor and press the [ENTER] button to actually select the song.

To have the files play back from the beginning of the Playlist, select the first file. A check mark indicates the file is enabled for playback, a minus sign (-) indicates the file will be skipped, and an exclamation mark indicates the file does not contain data.

6 Press the HARD DISK RECORDER [PLAY/PAUSE] button to start play-back of the Playlist from the selected file.

While the Playlist mode is active (the indicator at the top left of the display shows "Playlist"), the HARD DISK RECORDER [PREV]/[NEXT] buttons function as Previous/Next controls for the Playlist. Pressing the appropriate button calls up a pop-up window and selects the previous or next audio file in the Playlist.

Press the HARD DISK RECORDER [STOP] button to stop playback.

To disengage the Playlist mode, press the [6 ▲▼] (AUDIO) buttons to show the AUDIO display and select an audio song.

Playlist Controls

Shown here is a sample Playlist display, with short explanations of the various controls.



[A]	REPEAT	Determines how the audio files will be played back: All files are played in sequence once through to the end (no repeat). All files are played in sequence repeatedly. One selected file is played repeatedly.
[B]	SORT	Determines whether the audio files are sorted in ascending or descending order by name.
[C]	SHUFFLE	Pressing this button randomly rearranges the order of the files.
[D]	UNDO/REDO	Pressing this button (Undo) cancels the last action made to the Playlist. Pressing it again (Redo) restores the cancelled action. Only one level of Undo/Redo is available.
[E]	EXPORT AUDIO	Calls up the Export operation for exporting the selected audio file to a hard disk drive or USB storage devices. (See "Exporting an Audio File" in the Owner's Manual.)
[F]	PROPERTY	Calls up the Property popup display which shows the file name and path of the audio song at the cursor position.

[G]-[J]		 Playlist navigation controls. [G]: Moves cursor/selection to the top of the list. [H]: Moves cursor/selection one page up (when there are multiple pages). [I]: Moves cursor/selection one page down (when there are multiple pages). [J]: Moves cursor/selection to the bottom of the list (just below last entered file).
[2 ▲▼]	MOVE Up/Down	Use these buttons to move the selected file to another location in the list.
[3 🛕]	CUT	These operations let you copy or cut and paste individual list entries. Keep in
[3 ▼]	INSERT	mind that these have no effect on the actual audio data, but just entries in the list.
[4 ▲]	COPY	Cut and Insert
		Press the [3 ▲] (CUT) button.
		2 Select the desired file entry by using the [5 ▲▼] buttons and press the [6 ▲▼] button to actually select it. Then press the [8 ▲] (OK) button. The entry is deleted.
		3 Move the cursor to the desired location in the list (with the [7 ▲▼] buttons) and press the [3 ▼] (INSERT) button.
		Copy and Insert
		Press the [4 ▲] (COPY) button.
		Select the desired file entry by using the [5 ▲▼] buttons and press the [6 ▲▼] button to actually select it. Then press the [8 ▲] (OK) button. The entry is copied.
		3 Move the cursor to the desired location in the list (with the [7 ▲▼] buttons) and press the [3 ▼] (INSERT) button.
[4 ▼]	DELETE	Deletes files from the Playlist. Keep in mind that this does not affect the actual audio data, but simply deletes an entry of the file from the list.
[5 ▲▼]	PLAYLIST FILE	Opens the PLAYLIST FILE display. From this display, you can rename, copy, delete or save the playlists.
[6 ▲▼]	AUDIO	Exits the Playlist display and calls up the Audio display.
[7 ▲▼]	Up/Down	Use these buttons to move the cursor in the list. Use the [DATA ENTRY] dial to quickly move the cursor (red border) through the entries and press the [ENTER] button.
[8 🛦]	MARK	Adds or removes the checkmark to/from the selected data. Only the checkmarked files will be played. Holding this button adds (or removes) the checkmark to (or from) all files.
[8 ▼]	SELECT	Actually selects the file at the cursor position.

Mixing Console

- Editing the Volume and Tonal Balance -

Contents

Editing VOL/VOICE Parameters90
• Song Auto Revoice
Editing FILTER Parameters92
Editing TUNE Parameters92
Editing EFFECT Parameters
• Selecting an Effect type and Creating a User Effect
Editing EQ Parameters96
• Editing and Saving the Selected EQ97
Line Out Settings98

Editing VOL/VOICE Parameters



For information on available Voices for each Style channel, refer to page 38.

When playing GM song data, channel 10 (in the SONG CH 9 to 16 page) can only be used for a Drum Kit Voice.

M NOTE

When changing the rhythm/percussion Voice (drum kits, etc.) of the Style and Song from the VOICE parameter, the detailed settings related to the drum Voice are reset, and in some cases you may be unable to restore the original sound. In the case of Song playback, you can restore the original sound by returning to the beginning of the Song and playing back from that point. In the case of Style play, you can restore the original sound by selecting the same Style again.

[F]	SONG AUTO REVOICE	See page 91.
[G]	SETUP	
[C]/[H]	VOICE	Allows you to re-select the Voices for each part. When the Style channels are called up, neither Organ Flutes Voices nor User Voices can be selected. When the Song channels are called up, User Voices cannot be selected. Please note that the Voice of the Multi Pad cannot be changed via the Mixing Console.
[D]/[I]	PANPOT	Determines the stereo position of the selected part (channel).
[E]/[J]	VOLUME	Determines the level of each part or channel, giving you fine control over the balance of all the parts.

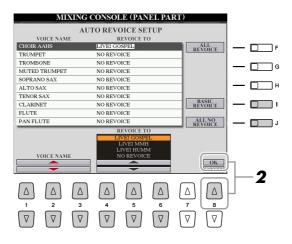
Song Auto Revoice

This feature lets you use the high-quality sounds of the Tyros3 to full advantage with XG-compatible song data. When you play back any commercially available XG song data or that created on other instruments, you can use Auto Revoice to automatically assign the specially created Voices of the Tyros3 (Live!, Cool!, etc.) instead of the conventional XG Voices of the same type.

Press the [G] (SETUP) button in the VOL/VOICE Page of the Mixing Console display.

The Auto Revoice Setup display is called up. On this display, you can specify the Voice which you with to replace with the Tyros3 Voice.





[1 ▲▼]- [3 ▲▼]	VOICE NAME	Selects the XG Voices to be replaced (Voices usually used when playing back).
[4 ▲▼]- [6 ▲▼]	REVOICE TO	Selects the Voices used to replace the XG Voices (when SONG AUTO REVOICE is set to ON).
[F]	ALL REVOICE	Replaces all of the replaceable XG Voices with the rich and authentic Voices of the Tyros3.
[1]	BASIC REVOICE	Replaces only the recommended Voices that are suitable for playing back the song.
[]]	ALL NO REVOICE	All the Voices are returned to the original XG Voices.

2 Press the [8 ▲] (OK) button to apply your Revoice settings.

To cancel the Revoice operation, press the [8 ▼] (CANCEL) button.

3 In the VOL/VOICE Page, press the [F] button to set the SONG AUTO REVOICE to ON.

Editing FILTER Parameters



[D]/[I]	HARMONIC CONTENT	Allows you to adjust the resonance effect (page 13) for each part.
[E]/[J]	BRIGHTNESS	Determines the brightness of the sound for each part by adjusting the cutoff frequency (page 13).

Editing TUNE Parameters



[A]/[B]/ [F]/[G]	PORTAMENTO TIME	Portamento is a function that creates a smooth transition in pitch from the first note played on the keyboard to the next. The Portamento Time determines the pitch transition time. Higher values result in a longer pitch change time. Setting this to "0" results in no effect. This parameter is available when the selected keyboard part is set to Mono.
[C]/[H]	PITCH BEND RANGE	Determines the range of the PITCH BEND wheel for each keyboard part. The range is from "0" to "12" with each step corresponding to one semitone. NOTE If the Pitch Bend range is set to more than 1,200 cents (1 octave) via MIDI, the pitch of some Voices may not be raised or lowered completely.
[D]/[I]	OCTAVE	Determines the range of the pitch change in octaves, over two octaves up or down for each keyboard part. The value set here is added to the setting via the OCTAVE [-]/[+] buttons.
	TRANSPOSE	Allows you to set transposition for overall sound of the instrument (MASTER), Song playback (SONG), or the keyboard pitch (KEYBOARD), respectively. Please note that the "KEYBOARD" also transposes the keyboard pitch of Style playback and the Multi Pads (since these are also affected by keyboard play in the left-hand section).
[E]/[J]	TUNING	Determines the pitch of each keyboard part.

Editing EFFECT Parameters

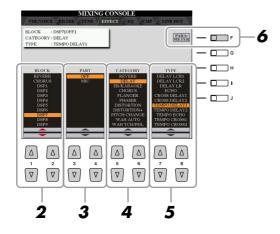


[F]	TYPE	Selects the desired effect type. See below.
[B]/[C]/ [G]/[H]	REVERB	Adjusts the amount of the Reverb sound for each part or channel.
[D]/[I]	CHORUS	Adjusts the amount of the Chorus sound for each part or channel.
[E]/[J]	DSP	Adjusts the amount of the DSP sound for each part or channel.

Selecting an Effect type and Creating a User Effect

1 Press the [F] (TYPE) button in the EFFECT Page of the Mixing Console display.

The Effect Type Selection display is called up.





2 Use the [1 ▲▼]/[2 ▲▼] buttons to select the effect BLOCK.

Effect Block	Effect-appli- cable parts	Effect characteristics
REVERB	All parts	Reproduces the warm ambience of playing in a concert hall or jazz club.
CHORUS	All parts	Produces a rich, "fat" sound as if several parts are being played simultaneously. In addition, other type effects (such as reverb, delay, etc.) can also be selected in this effect block.
DSP1	STYLE PART, SONG CHAN- NEL 1–16	This effect is applied only to Style/Song parts.
DSP2, DSP3, DSP4, DSP5, DSP6	RIGHT 1, RIGHT 2, RIGHT 3, LEFT, SONG CHAN- NEL 1–16	Any unused DSP blocks are automatically assigned to the appropriate parts (channels) as needed. One DSP block is available only for one of the keyboard parts or Song parts.
DSP7	Microphone sound	This effect is applied to the MIC input, in addition to the Vocal Harmony effect.
DSP8, DSP9	STYLE PART	These effects are applied only to Style parts.

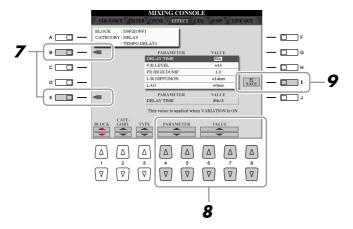


When the "Connection" parameter of the DSP1 (selected on step 6 below) is set to "System," the DSP1 effect will be applied overall to the Style and Song. When it is set to "Insertion," the DSP1 effect will behave as same as other DSP blocks and be applied to only the part(s) selected in step 3.

3 Use the [3 ▲▼]/[4 ▲▼] buttons to select the part to which you want to apply the effect.

Please note that a part cannot be selected if the selected block is REVERB, CHORUS or DSP1.

- **4** Use the [5 ▲▼]/[6 ▲▼] button to select the effect CATEGORY.
- **5** Use the [7 ▲▼]/[8 ▲▼] button to select the effect TYPE.
- 6 If you want to edit the effect parameters, press the [F] button to call up the display for editing the effect parameters.



If you have selected one of the DSP2–6 or 8–9 effect blocks in step 2: You can edit its standard parameters as well as its variation parameter. To select the standard type of parameters, press the [B] button. To select its



"Variation parameter" is the one which can be turned on/off by pressing the [VARIATION] button on the panel.



variation parameter, press the [E] button.

Keep in mind that in some cases noise

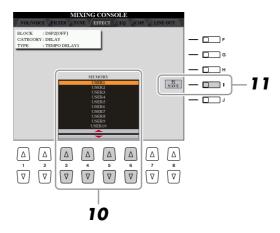
may result if you adjust the effect parameters while playing the instru-

Select one of the parameters you want to edit by using the [4 ▲▼]/[5 ▲▼] buttons, then adjust the value by using the [6 ▲▼]/[7 ▲▼] buttons.

If you have selected the REVERB, CHORUS or DSP1 effect block in step 2, you can adjust the Effect Return Level by pressing [8 $\blacktriangle \nabla$] button.

To re-select the Effect block, category and type, use the $[1 \, \blacktriangle \, \blacktriangledown]$ – $[3 \, \blacktriangle \, \blacktriangledown]$ buttons. The re-selected effect configuration is displayed at the upper left side box in the display.

Press the [I] (SAVE) button to call up the display for saving your original effect.



10 Use the [3 ▲▼]–[6 ▲▼] buttons to select the destination for saving the effect.

The maximum number for effects that can be saved differs depending on the effect block.

11 Press the [I] (SAVE) button to save the effect.

When recalling the saved effect, use the same procedure as in step 5.

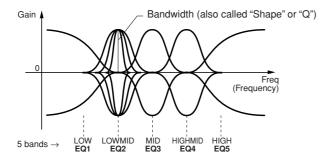
Editing EQ Parameters



[A]/[B]	ТҮРЕ	Selects the desired Master EQ type. This affects the overall sound of the instrument.
[F]	EDIT	For editing the Master EQ. See page 97.
[D]/[I]	EQ HIGH	Boosts or attenuates the high EQ band for each part.
[E]/[J]	EQ LOW	Boosts or attenuates the low EQ band for each part.

Equalizer (also called "EQ") is a sound processor that divides the frequency spectrum into multiple bands that can be boosted or cut as required to tailor the overall frequency response. Usually an equalizer is used to correct the sound from speakers to match the special character of the room. For example, you can cut some of the low range frequencies when playing in large spaces where the sound is too "boomy," or boost the high frequencies in rooms and close spaces where the sound is relatively "dead" and free of echoes.

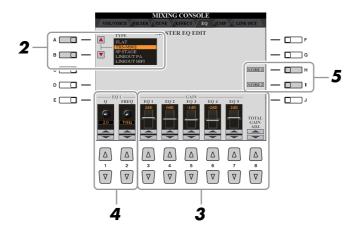
The Tyros3 possesses a high grade five-band digital EQ. With this function, a final effect—tone control—can be added to the output of your instrument. You can select one of the five preset EQ settings in the EQ display. You can even create your own custom EQ settings by adjusting the frequency bands, and save the settings to one of two User Master EQ types.



Editing and Saving the Selected EQ

Press the [F] (EDIT) button in the EQ Page of the Mixing Console display.

The MASTER EQ EDIT display is called up.



2 Use the [A]/[B] buttons to select a preset EQ type.

The set parameters of the selected EQ type are automatically shown at the bottom of the display.

3 Use the [3 ▲▼]–[7 ▲▼] buttons or sliders to boost or cut each of the five bands.

Use the $[8 \, \blacktriangle \, \blacktriangledown]$ buttons to boost or cut all the five bands at the same time.

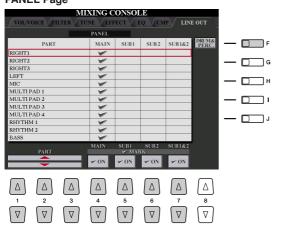
4 Adjust the Q (bandwidth) and the FREQ (center frequency) of the band selected in step 3.

To adjust the bandwidth (also called "Shape" or "Q"), use the $[1 \blacktriangle \blacktriangledown]$ buttons or slider. The higher the value of Q, the narrower the band width. To adjust the FREQ (center frequency), use the $[2 \blacktriangle \blacktriangledown]$ buttons or slider. The available FREQ range is different for each band.

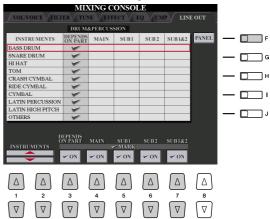
5 Press the [H] or [I] (STORE 1 or 2) button to save the edited EQ type. Up to two types of EQ can be created and saved. When recalling the saved EQ type, use the same procedure as in step 2.

Line Out Settings

PANEL Page



DRUM & PERCUSSION Page



[F]	DRUM&PERC./ PANEL	Switches the displayed menu: PANEL parts or DRUM & PERCUSSION instruments.
[1 ▲▼]- [3 ▲▼]	PART (PANEL Page)	Selects the desired part/drum instrument.
[1 ▲▼]/ [2 ▲▼]	INSTRUMENTS (DRUM & PER- CUSSION Page)	
[3 ▲▼]	DEPEND ON PART (DRUM & PER- CUSSION Page)	Checking here, the selected drum instrument will be output via the jacks set from the PANEL page at left.
[4 ▲▼]	MAIN	Checking here, the selected part/drum instruments will be output from LINE OUT MAIN jacks, PHONES jacks, LOOP SEND jack, and optional speaker.
[5 ▲▼]	SUB1	Checking one of these columns (jacks), the selected part/drum instruments will be output from only the selected SUB jack(s). When you select "SUB1 & 2", the sound will be output in stereo (SUB1: left, SUB2: right).
[6 ▲▼]	SUB2	When using one of the SUB Line Out settings, make sure that you've connected cables to the appropriate LINE OUT SUB jacks on the rear panel. If cables are only connected to the MAIN jacks, the sound of the Part will be output through the MAIN jacks, even if one of the SUB1/SUB2/SUB1&2 is checkmarked.
[7 ▲▼]	SUB1 & 2	Only the DSP2–9 and Vocal Harmony effects can be applied to the sound output from the SUB jacks. Other effects (Reverb, Chorus and DSP1) will not be applied. (If the "Connection" parameter of the DSP1 is set to "Insertion", the DSP1 will also be applied.)

Press [F] button

Internet Direct Connection

- Connecting the Tyros3 Directly to the Internet -

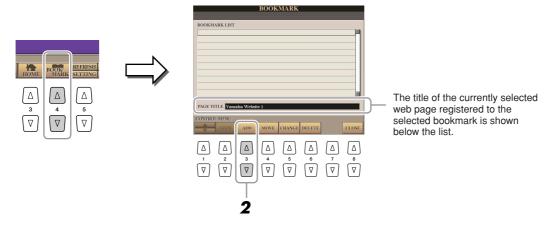
Contents

Registering Bookmarks of Your Favorite Pages99	
• Editing Bookmarks	
About the Internet Settings Display (BROWSER)101	

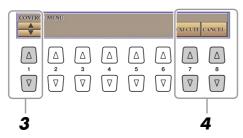
Registering Bookmarks of Your Favorite Pages

You can "bookmark" the page you're viewing, and set up a custom link so the page can be instantly called up in the future.

With the desired page currently selected, press the [4 ▲▼] (BOOK-MARK) button. The Bookmark display appears, showing a list of the currently saved bookmarks.



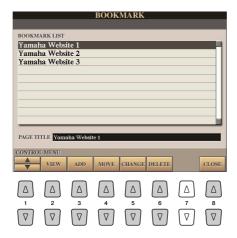
- 2 Call up the display for registering bookmarks by pressing the [3 ▲▼] (ADD) button.
- 3 Select the position of the new bookmark by pressing the [1 ▲▼] but-



- **4** To save the bookmark, press the [7 ▲▼] (EXECUTE) button, or press the [8 ▲▼] (CANCEL) button to cancel.
- Fress the [8 ▲▼] (CLOSE) button to return to the browser.
 The bookmarked page can be opened by pressing the [2 ▲▼] (VIEW) button in the Bookmark display.

Editing Bookmarks

From the Bookmark display, you can change the names and rearrange the order of your bookmarks, as well as delete unnecessary bookmarks from the list.



[1 ▲▼]	(UP/DOWN)	Moves the selection position in the Bookmark list.
[2 ▲▼]	VIEW	Opens the web page of the selected bookmark.
[3 ▲▼]	ADD	Used when saving a bookmark (page 99).
[4 🔻]	MOVE	 Changes the order of the bookmarks. Select the bookmark you wish to move, then press the [4 ▲▼] (MOVE) button. The lower part of the display changes, letting you select the new position for the bookmark. Select the intended position by pressing the [1 ▲▼] button. Move the bookmark to the selected position by pressing the [7 ▲▼] (EXECUTE) button.
[5 ▲▼]	CHANGE	Changes the name of the selected bookmark. Pressing this button calls up the display for entering characters.
[6 ▲▼]	DELETE	Deletes the selected bookmark from the Bookmark list.
[8 ▲▼]	CLOSE	Closes the Bookmark display and returns to the browser display.

About the Internet Settings Display (BROWSER)



Encode	Selects the character code encoding for the browser.
Home page	Shows and allows editing the title of the web page registered as the Home page.
Set current page as Home	For details, refer to "Changing the Home Page" below.
Restore default Home	Restores the home page setting.
Show images	Image data and pictures in the web page are shown in the browser when this is set to on. Image data is not shown when this is set to off.
Time zone	This determines the time setting for the browser.

Changing the Home Page

In the default condition, the top page of the special website is automatically set to be the Home page for the browser. However, you can specify any desired page on the site to be the Home page.

- **1** Open the page you wish to set as your new Home page.
- **2** Press the [5 ▼] (SETTING) button to call up the Internet Setting display.
- **3** Press the TAB [◀][▶] buttons to select the BROWSER tab.
- **4** Press the [1 ▼] button to select the setting "Set current page as Home."
- 5 Use the [2 ▲▼]/[3 ▲▼] or [ENTER] button to actually set the selected page as your new Home page.
- To return to the browser, press the [7 ▲▼] (SAVE) button.
 To cancel, press the [8 ▲▼] (CLOSE) button.

Connections

- Using Tyros3 with Other Devices -

Contents

Microphone Settings102
Microphone Overall Settings
• Talk Settings105
• Editing Vocal Harmony106
Footswitch/Foot Controller Settings
Assigning Specific Functions to Each Foot Pedal
MIDI Settings112
• MIDI SYSTEM Settings
• MIDI Transmit Settings
• MIDI Receive Settings116
• Setting the Bass Note for Style Playback via MIDI Receive 117
• Setting the Chord Type for Style Playback via MIDI Receive 117
• MFC10 Settings

Microphone Settings

Microphone Overall Settings

- Call up the operation display. [MIC SETTING] \rightarrow TAB [\blacktriangleleft][\blacktriangleright] OVERALL SETTING
- 2 Use the [A], [C] and [E] (or [F], [H] and [J]) buttons to select the parameter to be adjusted, then set the value by using the [1 ▲▼]–[8 **▲▼**] buttons or sliders.

For information on each parameter, see pages 103–104.



A CAUTION

Settings in the OVERALL SETTING Page are automatically saved to the instrument when you exit from the display. However, if you turn the power off without exiting from this display, the settings will be

• 3BAND EQ (selected by [A] or [F] button)

EQ (Equalizer) is a processor that divides the frequency spectrum into multiple bands which can be boosted or cut as required to tailor the overall frequency response. The Tyros3 features a high-grade three-band (LOW, MID and HIGH) digital equalizer function for the microphone sound.

[1 AV]/ [3 AV]/ [5 AV]	Hz	Adjusts the center frequency of the corresponding band.
[2 AV]/ [4 AV]/ [6 AV]	dB	Boosts or cuts the level of the corresponding band by up to 12 dB.

● NOISE GATE (selected by [C] or [H] button)

This effect mutes the input signal when the input from the microphone falls below a specified level. This effectively cuts off extraneous noise, allowing the desired signal (vocal, etc.) to pass.

[1 ▲▼]	SW (Switch)	This turns Noise Gate on or off.
[2 ▲▼]	TH. (Threshold)	This adjusts the input level at which the gate begins to open.

● COMPRESSOR (selected by [C] or [H] button)

This effect holds down the output when the input signal from the microphone exceeds a specified level. This is especially useful for smoothing out vocals that have widely varying dynamics. It effectively "compresses" the signal, making soft parts louder and loud parts softer.

[3 ▲▼]	SW (Switch)	This turns Compressor on or off.
[4 ▲▼]	TH. (Threshold)	This adjusts the input level at which compression begins to be applied.
[5 ▲▼]	RATIO	This adjusts the compression ratio.
[6 ▲▼]	OUT	Adjusts the final output level.

● MIC MUTE (selected by [C] or [H] button)

[8 ▲▼]	MIC MUTE	When set to ON, the microphone sound is turned off.
		, , , , , , , , , , , , , , , , , , , ,

● MIC VOLUME (selected by [E] or [J] buttons)

[8▲▼]	MIC VOLUME	Adjusts the output volume of the microphone sound.

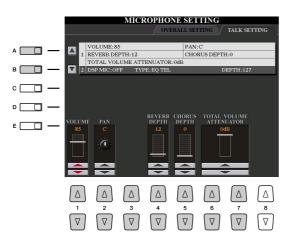
● VOCAL HARMONY CONTROL (selected by [E] or [J] button) The following parameters determine how the Vocal Harmony is controlled.

[1 ▲▼]- [3 ▲▼]	VOCODER CONTROL	The Vocal Harmony effect in Vocoder mode (below) is controlled by note data—the notes you play on the keyboard and/or the notes of the song data. This parameter lets you determine which notes are used to control the harmony.
[1 ▲▼]	MUTE/PLAY	When set to "MUTE," the channel selected below (to control Harmony) is muted (turned off) during keyboard performance or song playback.
[2 ▲▼]	OFF/1-16	When set to "OFF," song data control over harmony is turned off. When set to one of the values 1–16, note data (played from a Song on the Tyros3 or exter nal MIDI sequencer) contained on the corresponding channel is used to control the harmony.
[3 ▲▼]	KBD (Keyboard)	OFF: Keyboard control over harmony is turned off. UPPER: Notes played to the right of the split point control the harmony. LOWER: Notes played to the left of the split point control the harmony.
[4 ▲▼]	BAL. (Balance)	This lets you set the balance between the lead vocal (your own voice) and Vocal Harmony. Raising this value increases the volume of the Vocal Harmony and decreases that of the lead vocal. When this is set to L <h63 (l:="" h:="" harmony="" harmony),="" is="" it="" l63="" lead="" only="" output;="" set="" the="" to="" vocal="" vocal,="" when="">H, only the lead vocal is output.</h63>
[5 ▲▼]	MODE (Vocal Harmony mode)	All of the Vocal Harmony types fall into one of three modes, which produce harmony in different ways. The harmony effect is dependent on the selected Vocal Harmony mode, and this parameter determines how the harmony is applied to your voice. The three modes are described below.
		 AUTO: When the [ACMP] or [LEFT] is set to ON and if chord data exists in the Song, the mode is automatically set to CHORDAL. In all other cases, the mode is set to VOCODER. VOCOD (Vocoder): The harmony notes are determined by the notes you play on the keyboard and/or Song data. You can specify whether the Vocoder effect is controlled by your keyboard performance or by the Song data (VOCODER CONTROL parameter above). CHORD (Chordal): The harmony notes are determined by the following three types of chord: chords played in the chord section of the keyboard (with the [ACMP] turned on), chords played in the LEFT Voice section of the keyboard (with the [ACMP] turned off and the [LEFT] turned on), and chords contained in Song data for controlling the harmony. (Not available if the Song does not contain any chord data.)
[6 ▲▼]	CHORD	The following parameters determine which data in a recorded Song is used for chord detection. OFF: Chords are not detected from the Song data. XF: Chords of XF format are used for the Vocal Harmony. 1–16: Chords are detected from note data in the specified Song channel.
[7 ▲▼]	VOCAL RANGE	Set this to obtain the most natural vocal harmony, depending on your voice.
		NORM.: Normal setting. LOW: Setting for lower voice. This setting is also appropriate for growling and shouting. HIGH: Setting for higher voice. This setting is also appropriate for singing close to the microphone.

Talk Settings

This function gives you special settings for making announcements between songs, separate from the settings for your singing performance.

- Call up the operation display.
 [MIC SETTING] → TAB [◄][▶] TALK SETTING
- 2 Use the [A]/[B] buttons to select the parameter to be adjusted, then set the value by using the [1 ▲▼]–[8 ▲▼] buttons or sliders.



A CAUTION

Settings in the TALK SETTING Page are automatically saved to the instrument when you exit from the display. However, if you turn the power off without exiting from this display, the settings will be lost.



The settings here can be saved to USER, HD or USB as a System Setup file: [FUNCTION] \rightarrow [I] UTILITY \rightarrow TAB [\blacktriangleleft][\blacktriangleright] SYSTEM RESET. See page 126.

• 1 Talk Setting Parameters

[1 ▲▼]	VOLUME	This determines the output volume of the microphone sound.
[2 ▲▼]	PAN	This sets the stereo pan position of the microphone sound.
[4 ▲▼]	REVERB DEPTH	These set the depth of the reverb effects applied to the microphone sound.
[5 ▲▼]	CHORUS DEPTH	This sets the depth of the chorus effects applied to the microphone sound.
[6 ▲▼]/ [7 ▲▼]	TOTAL VOLUME ATTENUATOR	This determines the amount of attenuation to be applied to the overall sound (excepting the microphone input)—allowing you to effectively adjust the balance between your voice and the overall instrument sound.

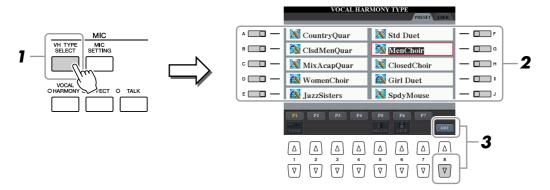
● 2 DSP Parameters

[3 ▲▼]	DSP MIC ON/OFF	This turns the DSP effect applied to the microphone sound ON or OFF.
[4 ▲▼]/ [5 ▲▼]	DSP MIC TYPE	This selects the type of DSP effect to be applied to the microphone sound.
[6 ▲▼]	DSP MIC DEPTH	This sets the depth of the DSP effect applied to the microphone sound.

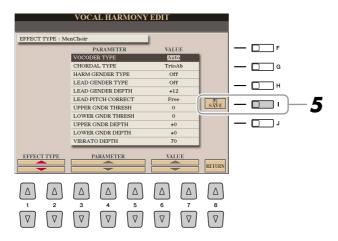
Editing Vocal Harmony

This section explains briefly how to create your own Vocal Harmony types, and lists the detailed parameters for editing. Up to ten Vocal Harmony types can be created and saved.

Press the [VHTYPE SELECT] button to call up the VOCAL HARMONY TYPE Selection display.



- Select a Vocal Harmony type to be edited by using the [A]-[J] buttons.
- Press the [8 ▼] (EDIT) button to call up the VOCAL HARMONY EDIT display.
- Edit the Vocal Harmony.



[1 ▲▼]/ [2 ▲▼]	EFFECT TYPE	Re-selects the Vocal Harmony Type.
[3 ▲▼]- [5 ▲▼]	PARAMETER	Selects the parameter you want to be edit. See page 107.
[6 ▲▼]/ [7 ▲▼]	VALUE	Sets the value of the selected parameter.
[8 ▲▼]	RETURN	Returns to the VOCAL HARMONY TYPE Selection display.

Press the [I] (SAVE) button to save your edited Vocal Harmony type.



The settings here will be lost if you change to another Vocal Harmony type or you turn the power off without executing the save operation.

● Vocal Harmony Edit parameters

VOCODER TYPE	Determines how the harmony notes are applied to the microphone sound when the Harmony mode (page 104) is set to "VOCODER."
CHORDAL TYPE	Determines how the harmony notes are applied to the microphone sound when the Harmony mode (page 104) is set to "CHORDAL."
HARMONY GENDER TYPE	Determines whether the gender of the harmony sound is changed or not.
	Off: The gender of the harmony sound is not changed. Auto: The gender of the harmony sound is changed automatically.
LEAD GENDER TYPE	Determines whether and how the gender of the lead vocal sound (i.e., the direct microphone sound) will be changed. Please note that the number of harmony notes differs depending on the selected type. When set to Off, three harmony notes are produced. Other settings produce two harmony notes.
	Off: No gender change occurs. Unison: No gender change occurs. You can adjust the LEAD GENDER DEPTH below.
	Male: The corresponding gender change is applied to the lead vocal.
	Female: The corresponding gender change is applied to the lead vocal.
LEAD GENDER DEPTH	Adjusts the degree of lead vocal gender change. This is available when the LEAD GENDER TYPE above is set to other than Off. The higher the value, the more "feminine" the harmony voice becomes. The lower the value, the more "masculine" the voice.
LEAD PITCH CORRECT	This parameter is only effective when the LEAD GENDER TYPE above is set to other than Off. When Smooth or Hard is selected, the pitch of the lead vocal is shifted in precise semitone steps.
UPPER GENDER THRESH- OLD	Gender change will occur when the harmony pitch reaches or exceeds the specified number of semitones above the lead vocal pitch.
LOWER GENDER THRESHOLD	Gender change will occur when the harmony pitch reaches or exceeds the specified number of semitones below the lead vocal pitch.
UPPER GENDER DEPTH	Adjusts the degree of gender change applied to harmony notes higher than the UPPER GENDER THRESHOLD. The higher the value, the more "feminine" the harmony voice becomes. The lower the value, the more "masculine" the voice.
LOWER GENDER DEPTH	Adjusts the degree of gender change applied to harmony notes lower than the LOWER GENDER THRESHOLD. The higher the value, the more "feminine" the harmony voice becomes. The lower the value, the more "masculine" the voice.
VIBRATO DEPTH	Sets the depth of vibrato applied to the harmony sound. Also affects the lead vocal sound when the LEAD GENDER TYPE above is set to other than Off.
VIBRATO RATE	Sets the speed of the vibrato effect. Also affects the lead vocal sound when the LEAD GENDER TYPE above is set to other than Off.
VIBRATO DELAY	Specifies the length of the delay before the vibrato effect begins when a note is produced. Higher values result in a longer delay.
	1

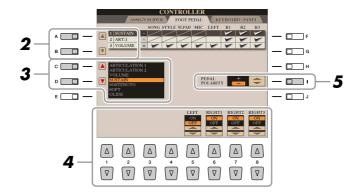
HARMONY 1/2/3 VOL- UME	Sets the volume of the first (lowest), second, and third (highest) harmony note.
HARMONY 1/2/3 PAN	Specifies the stereo (pan) position of the first (lowest), second, and third (highest) harmony note.
	Random: The stereo position of the sound will change randomly whenever the keyboard is played. This is effective when the Harmony mode (page 104) is set to "VOCODER" or "CHODAL." L63>R-C-L <r63: a="" l63="" of="" setting="">R pans the sound hard left, while C is at center, and L<r63 at="" hard="" is="" right.<="" td=""></r63></r63:>
HARMONY 1/2/3 DETUNE	Detunes the first (lowest), second, and third (highest) harmony note by the specified number of cents.
PITCH TO NOTE	When this is set to "ON," you can "play" the Voices of the Tyros3 with your voice. (The Tyros3 tracks the pitch of your voice and converts it to note data for the tone generator. Keep in mind, however, that dynamic changes in your voice do not affect the volume of the tone generator.)
PITCH TO NOTE PART	Determines which of the Tyros3 parts will be controlled by the lead vocal when the PITCH TO NOTE parameter above is "ON."

Footswitch/Foot Controller Settings

Assigning Specific Functions to Each Foot Pedal

The functions assigned by default to the connected footswitch or foot controller can be changed—for example, letting you use the footswitch to start/stop Style playback, or use the foot controller to produce pitch bends.

- Call up the operation display.
 [FUNCTION] → [D] CONTROLLER → TAB [◄][▶] FOOT PEDAL
- 2 Use the [A]/[B] buttons to select one of three foot pedals to which the function is to be assigned.



3 Use the [C]/[D] buttons to select the function to be assigned to the pedal specified in step 2.

For information on available parameters, see pages 110–111.

4 Use the [1 ▲▼]-[8 ▲▼] buttons to set the details of the selected functions (the part for which the function is applied, etc.).

The available parameters differ depending on the function selected in step 3.

5 If necessary, set the polarity of the pedal by using the [I] button.

Pedal on/off operation may differ depending on the particular pedal you've connected to the Tyros3. For example, pressing down on one pedal may turn the selected function on, while pressing a different make/brand of pedal may turn the function off. If necessary, use this setting to reverse the operation.



You can also assign the other functions to the pedal—punch in/out of Song/ Hard Disk Recorder (pages 61, 84) and Registration Sequence (page 78). If you assign multiple functions to the pedal, the priority is: Punch in/out of Song or Hard Disk Recorder \rightarrow Registration Sequence \rightarrow Functions assigned here.

● Assignable Pedal Functions
For functions indicated with "*", use only the foot controller; proper operation cannot be done with a footswitch.

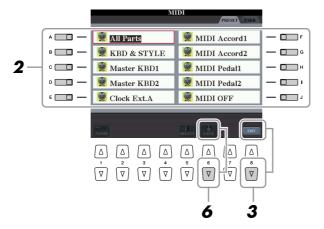
S. ARTICULATION 1/2	When you use a Super Articulation Voice that has an effect assigned to the pedal/footswitch, you can enable the effect by pressing the pedal/footswitch. You can turn this function on or off for each keyboard part on this display.
VOLUME*	Allows you to use a foot controller to control the volume. You can turn this pedal function on or off for each part on this display.
SUSTAIN	Allows you to use a pedal to control the sustain. When you press and hold the pedal, all notes played on the keyboard have a longer sustain. Releasing the pedal immediately stops (damps) any sustained notes. You can turn this pedal function on or off for each keyboard part on this display.
SOSTENUTO	Allows you to use a pedal to control the Sostenuto effect. If you play a note or chord on the keyboard and press the pedal while holding the note(s), the notes will sustain as long as the pedal is held. However, all subsequent notes will not sustain. This makes it possible to sustain a chord, for example, while other notes are played staccato. You can turn this pedal function on or off for each keyboard part on this display. MOTE This function will not affect the Organ Flutes and Super Articulation Voices, even if they have been assigned to the Foot Pedals.
SOFT	Allows you to use a pedal to control the Soft effect. Pressing this pedal reduces the volume and changes the timbre of the notes you play. This is effective only for certain appropriate Voices. You can turn this pedal function on or off for each keyboard part on this display.
GLIDE	When the pedal is pressed, the pitch changes, and then returns to normal pitch when the pedal is released. The following parameters can be set for this function on this display. UP/DOWN: Determines whether the pitch change goes up (is raised) or down (is lowered). RANGE: Determines the range of the pitch change, in semitones. ON SPEED: Determines the speed of the pitch change when the pedal is pressed. OFF SPEED: Determines the speed of the pitch change when the pedal is released. LEFT, RIGHT 1, 2, 3: Turns this pedal function on or off for each keyboard part.
PORTAMENTO	The portamento effect (a smooth slide between notes) can be produced while the pedal is pressed. Portamento is produced when notes are played legato style (i.e., a note is played while the preceding note is still held). The portamento time can also be adjusted form the Mixing Console display (page 92). You can turn this pedal function on or off for each keyboard part on this display. NOTE This function will not affect the Organ Flutes and Super Articulation Voices, even if they have been assigned to the Foot Pedals.
PITCHBEND*	Allows you to bend the pitch of notes up or down by using the pedal. The following parameters can be set for this function on this display. UP/DOWN: Determines whether the pitch change goes up (is raised) or down (is lowered). RANGE: Determines the range of the pitch change, in semitones. LEFT, RIGHT 1, 2, 3: Turns this pedal function on or off for each keyboard part.

MODULATION*	Applies a vibrato effect to notes played on the keyboard. You can turn this pedal function on or off for each keyboard part on this display.
DSP VARIATION	Same as the [DSP VARIATION] button on the panel.
HARMONY/ECHO	Same as the [HARMONY/ECHO] button.
VOCAL HARMONY	Same as the [VOCAL HARMONY] button.
TALK	Same as the [TALK] button.
SCORE PAGE +/-	While the Song is stopped, you can turn to the next/previous score page (one page at a time).
LYRICS PAGE +/-	While the Song is stopped, you can turn to the next/previous lyrics page (one page at a time).
TEXT PAGE +/-	You can turn to the next/previous text page (one page at a time).
HDR PLAY/PAUSE	Same as the HARD DISK RECORDER [PLAY/PAUSE] button.
SONG PLAY/PAUSE	Same as the SONG [PLAY/PAUSE] button.
STYLE START/STOP	Same as the STYLE CONTROL [START/STOP] button.
TAP TEMPO	Same as the [TAP TEMPO] button.
SYNCHRO START	Same as the [SYNC START] button.
SYNCHRO STOP	Same as the [SYNC STOP] button.
INTRO 1–3	Same as the INTRO [I]-[III] buttons.
MAIN A-D	Same as the MAIN VARIATION [A]–[D] buttons.
FILL DOWN	Plays a fill-in, which is automatically followed by the Main section of the button on the immediate left.
FILL SELF	Plays a fill-in.
FILL BREAK	Plays a break.
FILL UP	Plays a fill-in, which is automatically followed by the Main section of the button on the immediate right.
ENDING1-3	Same as the ENDING/rit. [I]–[III] buttons.
FADE IN/OUT	Same as the [FADE IN/OUT] button.
FINGERD/FING ON BASS	The pedal alternately switches between the Fingered and On Bass modes (page 31).
BASS HOLD	While the pedal is pressed, the Accompaniment Style bass note will be held even if the chord is changed during Style playback. If the fingering is set to "FULL KEYBOARD," the function does not work.
PERCUSSION	The pedal plays a percussion instrument selected by the [4 ▲▼]–[8 ▲▼] buttons. You can use the keyboard to select the desired percussion instrument.
RIGHT 1 ON/OFF	Same as the PART ON/OFF [RIGHT 1] button.
RIGHT 2 ON/OFF	Same as the PART ON/OFF [RIGHT 2] button.
RIGHT 3 ON/OFF	Same as the PART ON/OFF [RIGHT 3] button.
LEFT ON/OFF	Same as the PART ON/OFF [LEFT] button.
OTS +/-	Calls up the next/previous One Touch Setting.

MIDI Settings

In this section, you can make MIDI-related settings for the Tyros3. The Tyros3 gives you a set of ten pre-programmed templates that let you instantly and easily reconfigure the instrument to match your particular MIDI application or external device. Also, you can edit the pre-programmed templates and save up to ten of your original templates to the USER display.

Call up the operation display. $[FUNCTION] \rightarrow [H] MIDI$



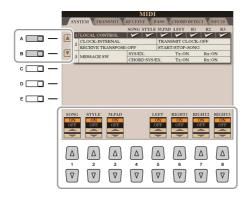
- **2** Select a pre-programmed template from the PRESET Page (page 113). If you have already created your original template and saved it to the USER
 - Page, you can also select the template from the USER Page.
- Press the [8 ▼] (EDIT) button to call up the MIDI display to edit the selected template.
- Use the TAB [◀][▶] buttons to call up the relevant setting display.
 - SYSTEM..... MIDI System Settings (page 114)
 - **TRANSMIT** MIDI Transmission Settings (page 115)
 - **RECEIVE** MIDI Reception Settings (page 116)
 - BASS..... Settings for the bass note of chord for Style playback via MIDI reception data (page 117)
 - CHORD DETECT .. Settings for the chord type for Style playback via MIDI reception data (page 117)
 - MFC10..... Settings for a connected MFC10 MIDI Foot Controller (page 118)
- When you've finished editing, press the [EXIT] button to return to the MIDI template Selection display.
- Press the [6 ▼] (SAVE) button to save the edited template to the **USER Page.**

● Pre-programmed MIDI Templates

ALL PARTS	Transmits all parts including the keyboard parts (RIGHT 1, 2, 3, LEFT), with the exception of Song parts.
KBD & STYLE	Basically the same as "ALL PARTS" with the exception of how keyboard parts are managed. The right-hand parts are handled as a "UPPER" instead of RIGHT 1–3 and the left-hand part is handled as a "LOWER."
Master KBD1	In this setting, the Tyros3 functions as a "master" keyboard, playing and controlling one or more connected tone generators or other devices (such as a computer/sequencer).
Master KBD2	Basically the same as "Master KBD1" above, with the exception that Aftertouch messages are not transmitted.
Clock Ext. A	Playback or recording (Song, Style, Multi Pad, etc.) synchronizes with an external MIDI clock instead of the Tyros3's internal clock. This template should be used when you wish to set the tempo on the MIDI device connected to the Tyros3. Playback or recording of the Tyros3 synchronizes with an external clock received via MIDI A.
MIDI Accord 1	MIDI accordions allow you to transmit MIDI data and play connected tone generators from the keyboard and bass/chord buttons of the accordion. This template lets you play melodies from the keyboard and control Style playback on the Tyros3 with the left-hand buttons.
MIDI Accord 2	Basically the same as "MIDI Accord1" above, with the exception that the chord/bass notes you play with your left hand on the MIDI Accordion are recognized also as MIDI note events.
MIDI Pedal 1	MIDI pedal units allow you play connected tone generators with your feet (especially convenient for playing single note bass parts). This template lets you play/control the chord root in Style playback with a MIDI pedal unit (connected to MIDI B only).
MIDI Pedal 2	This template lets you play the bass part for Style playback by using a MIDI pedal unit (connected to MIDI B only).
MIDI OFF	No MIDI signals are sent or received.

MIDI SYSTEM Settings

The explanations here apply to the SYSTEM Page in step 4 on page 112. Use the [A]/[B] buttons to select the parameters (below), then set the ON/OFF status by using the $[1 \Delta \nabla]-[8 \Delta \nabla]$ buttons.



■ 1 Local Control

Turns the Local Control for each part on or off. When Local Control is set to "ON," the keyboard of the Tyros3 controls its own (local) internal tone generator, allowing the internal Voices to be played directly from the keyboard. If you set Local to "OFF," the keyboard and controllers are internally disconnected from the Tyros3's tone generator section so that no sound is output when you play the keyboard or use the controllers. For example, this allows you to use an external MIDI sequencer to play the Tyros3's internal Voices, and use the Tyros3 keyboard to record notes to the external sequencer and/or play an external tone generator.

■ 2 Clock setting, etc.

CLOCK

Determines whether the Tyros3 is controlled by its own internal clock or a MIDI clock signal received from an external device. INTERNAL is the normal Clock setting when the Tyros3 is being used alone or as a master keyboard to control external devices. If you are using the Tyros3 with an external sequencer, MIDI computer, or other MIDI device, and you want to synchronize it to that device, set this parameter to the appropriate setting: MIDI A, MIDI B, USB 1, or USB 2. In this case, make sure that the external device is connected properly (e.g., to the Tyros3's MIDI IN terminal), and that it is properly transmitting a MIDI clock signal.

TRANSMIT CLOCK

Turns MIDI clock (F8) transmission on or off. When set to OFF, no MIDI clock or Start/Stop data is transmitted even if a Song or Style is played back.

RECEIVE TRANSPOSE

Determines whether or not the Tyros3's transpose setting is applied to the note events received by the Tyros3 via MIDI.

START/STOP

Determines whether incoming FA (start) and FC (stop) messages affect Song or Style playback.

■ 3 MESSAGE SW (Message Switch)

• SYS/EX.

The "Tx" setting turns MIDI transmission of MIDI System Exclusive messages on or off. The "Rx" setting turns MIDI reception and recognition of MIDI System Exclusive messages generated by external equipment on or off.

CHORD SYS/EX.

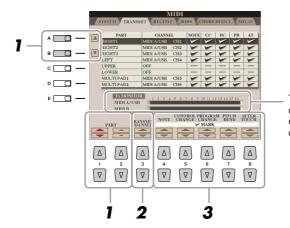
The "Tx" setting turns MIDI transmission of MIDI chord exclusive data (chord detect. root and type) on or off. The "Rx" setting turns MIDI reception and recognition of MIDI chord exclusive data generated by external equipment on or off.

🖄 NOTE

If the Clock is set other than INTERNAL, the Style, Song or Multi Pad cannot be played from the panel buttons.

MIDI Transmit Settings

The explanations here apply to the TRANSMIT Page in step 4 on page 112. This determines which parts will be sent as MIDI data and over which MIDI channel the data will be sent.



The dots corresponding to each channel (1–16) flash briefly whenever any data is transmitted on the channel(s).

Use the [A]/[B] buttons or [1 ▲▼]/[2 ▲▼] buttons to select the part for changing transmit settings.

With the exception of the two parts below, the configuration of the parts is the same as those already explained elsewhere in the Owner's Manual.

UPPER

A keyboard part played on the right side of the keyboard from the Split Point for the Voices (RIGHT 1, 2, and 3).

LOWER

A keyboard part played on the left side of the keyboard from the Split Point for the Voices. This is not affected by the on/off status of the [ACMP] button.

- 2 Use the [3 ▲▼] buttons to select a channel via which the selected part will be transmitted.
- 3 Use the [4 ▲▼]–[8 ▲▼] button to determine the types of data to be sent

The following MIDI messages can be set on the TRANSMIT/RECEIVE display.

- NOTE (Note events)
- CC (Control Change)
- PC (Program Change)
- PB (Pitch Bend)
- AT (Aftertouch)



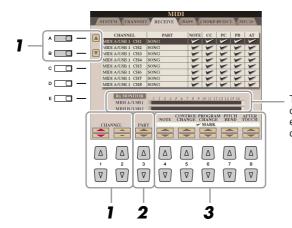
If the same transmit channel is assigned to several different parts, the transmitted MIDI messages are merged to a single channel—resulting in unexpected sounds and possible glitches in the connected MIDI device.



Protected Songs cannot be transmitted even if the proper Song channels 1–16 are set to be transmitted.

MIDI Receive Settings

The explanations here apply to the RECEIVE Page in step 4 on page 112. This determines which parts will receive MIDI data and over which MIDI channels the data will be received.



The dots corresponding to each channel (1-16) flash briefly whenever any data is received on the channel(s).

Use the [A]/[B] buttons or [1 ▲▼]/[2 ▲▼] buttons to select the channel to be received

The Tyros3 can receive MIDI messages over 32 channels (16 channels x 2 ports).

Use the [3 ▲▼] buttons to select the part via which the selected channel will be received.

With the exception of the two parts below, the configuration of the parts is the same as those already explained elsewhere in the Owner's Manual.

KEYBOARD

The received note messages control the Tyros3's keyboard performance.

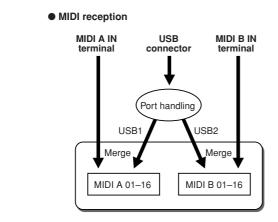
• EXTRA PART 1-4

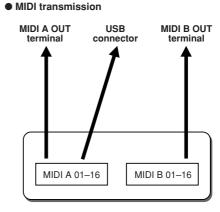
There are four parts specially reserved for receiving and playing MIDI data. Normally, these parts are not used by the instrument itself. The Tyros3 can be used as a 32-channel multi-timbral tone generator by using these four parts in addition to the parts (except for the microphone sound).

Use the $[4 \blacktriangle \blacktriangledown]$ – $[8 \blacktriangle \blacktriangledown]$ button to determine the types of data to be received.

MIDI transmission/reception via the USB terminal and MIDI terminals

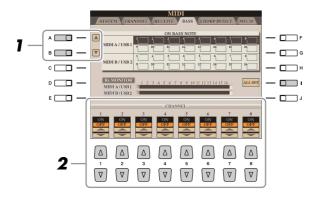
The relationship between the [MIDI] terminals and the [USB] terminal which can be used for transmitting/ receiving 32 channels (16 channels x 2 ports) of the MIDI messages is as follows:





Setting the Bass Note for Style Playback via MIDI Receive

The explanations here apply to the BASS Page in step 4 on page 112. These settings let you determine the bass note for Style playback, based on the note messages received via MIDI. The note on/off messages received at the channel(s) set to "ON" are recognized as the bass note of the chord of Style playback. The bass note will be detected regardless of the [ACMP] or split point settings. When several channels are simultaneously set to "ON," the bass note is detected from merged MIDI data received over the channels.

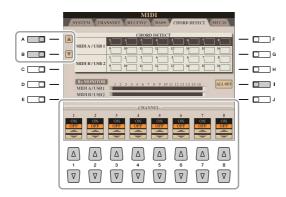


- I Use the [A]/[B] buttons to select the channel.
- 2 Use the [1 ▲▼]–[8 ▲▼] button to set the desired channel to ON or OFF.

You can also set all channels to OFF by pressing the [I] (ALL OFF) button.

Setting the Chord Type for Style Playback via MIDI Receive

The explanations here apply to the CHORD DETECT Page in step 4 on page 112. These settings let you determine the chord type for Style playback, based on the note messages received via MIDI. The note on/off messages received at the channel(s) set to "ON" are recognized as the notes for detecting chords in Style playback. The chords to be detected depend on the fingering type. The chord types will be detected regardless of the [ACMP] or split point settings. When several channels are simultaneously set to "ON," the chord type is detected from merged MIDI data received over the channels.



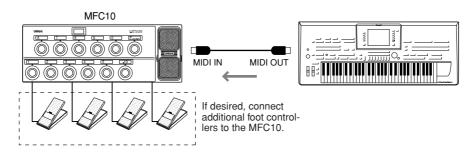
The operation procedure is basically the same as that of the BASS display above.

MFC10 Settings

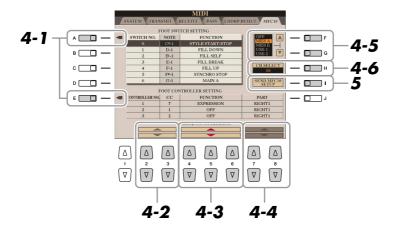
The explanations here apply to the MFC10 Page in step 4 on page 112.

By connecting an optional MFC10 MIDI Foot Controller to the Tyros3, you can conveniently control a wide range of operations and functions by using your feet—perfect for changing settings and controlling the sound while you perform live. Different functions can be assigned to each of the footswitches and up to five foot controllers (optional) can be connected to the MFC10, for additional sound-shaping possibilities.

Connect the MIDI IN terminal of the MFC10 to one of the MIDI OUT terminals of the Tyros3 by using a MIDI cable.



- Set the MFC10 to the normal mode and turn the [FUNCTION] lamp of the MFC10 on.
- Perform steps 1-4 on page 112 to call up the MFC10 Page.
- Set the parameters on this display as desired.



On this display, two settings (below) can be made:

- Each footswitch (F00–F29) on the MFC10 sends a note number to the Tyros3, and the Tyros3 determines how it responds to (which function is executed by) that note number.
- Each foot controller on the MFC10 sends control change messages over a specific control change number to the Tyros3, and the Tyros3 determines how it responds to (which parameter is changed by) that control change number.
- 4-1 Use the [A]/[E] buttons to select "FOOTSWITCH" or "FOOT CONTROL-
- **4-2** Use the $[2 \blacktriangle \blacktriangledown]/[3 \blacktriangle \blacktriangledown]$ buttons to select a footswitch number (F00– F29) or a foot controller number (1-5) to which the function is assigned.

Please note that a note number is assigned to each footswitch and a control change number is assigned to each foot controller beforehand and you cannot change the settings.

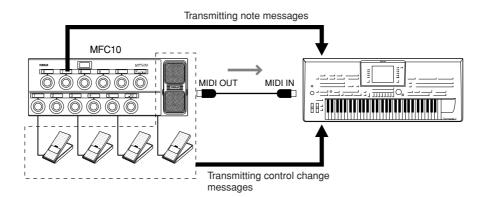


- **4-3** Use the [4 ▲▼]–[6 ▲▼] buttons to specify the function assigned to the footswitch (actually the note number), or the function assigned to the foot controller (actually the control change number). About the functions which can be assigned to the footswitch or foot controller, refer to page 110.
- **4-4** (Only for the FOOT CONTROLLER Setting) Determine the part to which the function assigned to the foot controller is applied by using the [7 ▲▼]/[8 ▲▼] buttons.
- **4-5** Use the [F]/[G] buttons to determine the MIDI port which is to be used when communicating with the MFC10.

 Here, the USB port (USB1, USB2) can be selected even though the MFC10 does not have the USB connector. This is because the computer can be used instead of the MFC10. (The computer can transmit the data equivalent to the data the MFC10 transmits to the Tyros3. For details, see the bottom of the page.)
- **4-6** Use the [H] (CH SELECT) button to determine the MIDI channel which is to be used when communicating with the MFC10.
- Press the [I] (SEND MFC10 SETUP) button to send the settings here to the MFC10.
- **6** Disconnect the MIDI cable from the Tyros3 and the MFC10, and connect the MIDI OUT terminal of the MFC10 to the MIDI IN terminal of the Tyros3 according to the setting above by using a MIDI cable.



Actually the pair of the footswitch number and the note number, the pair of the foot controller number and the control change number, and the MIDI channel for communication set above are transmitted to the MFC10.



- 7 Operate the MFC10 to confirm whether you can properly control the Tyros3 from the MFC10 as set in step 4.
- 8 Press the [EXIT] button to return to the MIDI template Selection display and save the settings above to the USER tab.

Using a computer or another MIDI instrument instead of the MFC10 The following two settings on the MFC10 Page can be saved not to the MFC10 but to the Tyros3 as a MIDI template.

- Note number/Tyros3 function assignment pairs
- Control change number/Tyros3 parameter change assignment pairs

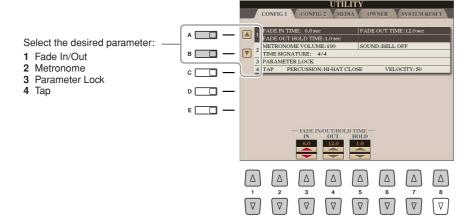
If you are not using an MFC10, you can have note numbers and control change messages from any other appropriate MIDI device (such as a computer, sequencer or master keyboard) control the Tyros3. Make sure to set the appropriate channel in this display for control by the external device.

Utility

- Making Global Settings -

Contents
CONFIG1120
CONFIG2122
MEDIA
OWNER 124
SYSTEM RESET
• Factory Reset—Restoring the Factory Programmed Settings 125
• Custom Reset—Saving and Recalling Your Original Settings as a Sin-

CONFIG1



● 1 Fade In/Out

These parameters determine the behavior when the Style or Song playback is faded in/out by the [FADE IN/OUT] button.

[3 ▲▼]	FADE IN TIME	Determines the time it takes for the volume to fade in, or go from minimum to maximum (range of 0–20.0 seconds).
[4 ▲▼]	FADE OUT TIME	Determines the time it takes for the volume to fade out, or go from maximum to minimum (range of 0–20.0 seconds).
[5 ▲▼]	FADE OUT HOLD TIME	Determines the time the volume is held at 0 following the fade out (range of 0–5.0 seconds).

2 Metronome

[2 ▲▼]	VOLUME	Determines the level of the metronome sound.
[3 ▲▼]- [5 ▲▼]	SOUND	Determines whether a bell accent will be sounded or not at the first beat of each measure.
[6 ▲▼]/ [7 ▲▼]	TIME SIGNATURE	Determines the time signature of the metronome sound.

• 3 Parameter Lock

This function is used to "lock" specific parameters (effect, split point, etc.) to make them selectable only via the panel control—in other words, instead of being changed via Registration Memory, One Touch Setting, Music Finder, or Song and sequence data.

Use the $[1 \blacktriangle \blacktriangledown]$ – $[7 \blacktriangle \blacktriangledown]$ buttons to select the desired parameter, then lock it with the $[8 \blacktriangle]$ (MARK ON) button.

● 4 Tap

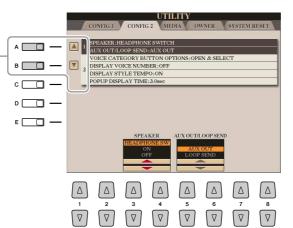
This allows you to set the drum sound and the velocity which will sound when the Tap function is used.

[2 ▲▼]- [4 ▲▼]	PERCUSSION	Selects the instrument.
[5 ▲▼]/ [6 ▲▼]	VELOCITY	Sets the velocity.

CONFIG2

Select the desired parameter:

- 1 Speaker/AUX Out- Loop Send.
- 2 Voice Category Button Options/Display-related Settings



● 1 Speaker/AUX Out-Loop Send

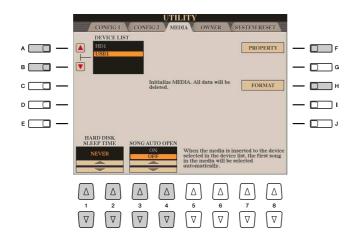
[3 ▲▼]/ [4 ▲▼]	SPEAKER	Determines whether or not the optionally installed speaker will sound. HEADPHONE SW: Speaker sounds normally, but is cut off when headphones are inserted to the PHONES jack. ON: Speaker sound is always on. OFF: Speaker sound is off.
[5 ▲▼]/ [6 ▲▼]	AUX OUT/LOOP SEND	Selects the desired output type corresponding to the AUX OUT/LOOP SEND jack.

● 2 Voice Category Button Options/Display-related settings

gg		
[1 ▲▼]/ [2 ▲▼]	Voice Category Button Options	Determines how the Voice Selection display is opened when one of the VOICE buttons is pressed. OPEN & SELECT: Opens the Voice Selection display with the top (first) Voice of the Voice category automatically selected (when one of the VOICE buttons is pressed). OPEN ONLY: Opens the Voice Selection display with the currently selected Voice (when one of the VOICE buttons is pressed).
[3 ▲▼]/ [4 ▲▼]	Display Voice Number	Determines whether or not the Voice bank and number are shown in the Voice Selection display. This is useful when you want to check which bank select MSB/LSB values and program change number you need to specify when selecting the Voice from an external MIDI device. NOTE
[5 ▲▼]/ [6 ▲▼]	Display Style Tempo	Selects whether the default tempo of each Style is displayed above the Style name or not in the Style Selection display.
[7 ▲▼]/ [8 ▲▼]	Popup Display Time	Determines the time in which the pop-up windows close. (Pop-up windows are displayed when you press buttons such as TEMPO, TRANSPOSE or UPPER OCTAVE, etc.)

MEDIA

You can set or execute important media-related operations for the Tyros3. The word "media" refers to both the USB storage device and installed hard disk drive.





The Tyros3 is capable of formatting an installed hard disk having a cluster size of less than 32 Kbyte, creating a single partition only; multiple partitions cannot be created. However, if the installed hard disk has been pre-formatted into several partitions on another instrument, the Tyros3 can access up to four partitions of the hard disk.

[A]/[B]	DEVICE LIST	Selects the desired media which you want to check the remaining memory (see "PROPERTY" below) or format the media (see the Owner's Manual).
[1 ▲▼]/ [2 ▲▼]	HARD DISK SLEEP TIME	The hard disk unit will go into a "sleep" mode after a specified time of inactivity, both to maximize the lifetime of the hard disk and to minimize unnecessary mechanical noise. This parameter determines the sleep time.
[3 ▲▼]/ [4 ▲▼]	SONG AUTO OPEN	Turns the Song Auto Open function on or off. When this is set to "ON" and the media selected in the Device List above is inserted, the Tyros3 automatically calls up the first Song in the media. NOTE
[F]	PROPERTY	Opens the Property display of the media selected by [A]/[B] buttons. You can check the amount of remaining memory on the media. NOTE
[H]	FORMAT	Formats the media selected by [A]/[B] buttons. Refer to the Owner's Manual.

OWNER

A ____ **–** 🔲 F Select the desired parameter: 1 Owner Name/Language/ В **–** 🔲 G Main Picture — 🔲 н 2 License Key OWNER NAME D ____ BACKUP E _____ RESTORE MAIN PICTURE — 💷 J

● 1 Owner Name/Language/Main Picture

[D]	BACKUP	Lets you backup all data on the instrument to a USB storage device. Refer to the Owner's Manual.
[E]	RESTORE	Loads the backup file from the USB storage device.
[1]	OWNER NAME	Lets you enter your name as the owner. The Owner name is indicated on the opening display when you turn the power on. Refer to the Owner's Manual.
[]]	MAIN PICTURE	Lets you select background picture for the Main display. You can select a picture from among various pictures provided on the Preset Page. After selecting, press the [EXIT] button to close the Selection display. You can also use your original picture in the USB storage device. Make sure the image file is bitmap file (.BMP) and no greater than 640 x 480 pixels. First copy the desired file from USB to USER Page, then select it on the USER Page. NOTE The explanation about picture compatibility above applies also to the background of the Song Lyric display (page 51).
[4 ▲▼]/ [5 ▲▼]	LANGUAGE	Determines the language used for the display messages. Once you change this setting, all messages will be shown in the selected language.
[7 ▲▼]/ [8 ▲▼]	VERSION	Displays the version number of this instrument.
	1	

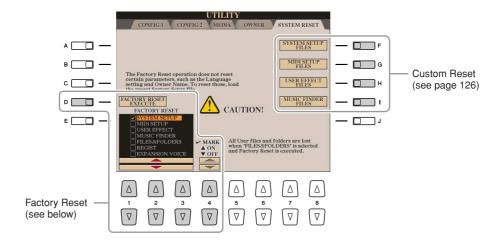
• 2 License Key

When you want to purchase data including Voices or Song, network server authentication may be needed. This means you should register your instrument to the server to use the special data on your instrument. For details on the procedure, go to the following website. http://music-tyros.com/

[E]	CLEAR	Deletes the license key registered in the instrument. A CAUTION If you delete the license key, the data you bought previously will become unusable.
[1]	EXPORT	Exports the instrument's ID to the USB flash memory.
[J]	IMPORT	Imports the license key which has been issued from the server from USB flash memory to the instrument.

SYSTEM RESET

There are two reset methods in the SYSTEM RESET display: Factory Reset and Custom Reset.



Factory Reset—Restoring the Factory Programmed Settings

This function lets you restore the status of the Tyros3 to the original factory settings.

Select the desired item to be restored by using [1 ▲▼]-[3 ▲▼] buttons and add a checkmark to it by pressing the [4 ▲] (MARK ON) button.

To remove the checkmark, press the [4 ▼] (MARK OFF) button.

SYSTEM SETUP	Restores the System Setup parameters to the original factory settings. Refer to the Data List for details about which parameters belong to the System Setup.
MIDI SETUP	Restores the MIDI settings including the MIDI templates on the USER tab display to the original factory status.
USER EFFECT	Restores the User Effect settings including the user effect types, user master EQ types, user compressor types, and user vocal harmony types created via the Mixing Console display to the original factory settings.
MUSIC FINDER	Restores the Music Finder data (all records) to the original factory settings.
FILES & FOLDERS	Deletes all files and folders stored in the USER tab display.
REGIST	Temporarily deletes the current Registration Memory settings of the selected Bank. The same can be done also by turning the [POWER] button ON while holding the B5 key (right-most B key on the keyboard).
EXPANSION VOICE	Deletes all Expansion Voices.

Press the [D] (FACTORY RESET) button to execute the Factory Reset operation for all checkmarked items.

Custom Reset—Saving and Recalling Your Original Settings as a Single File

For the items below, you can save your Original Settings as a Single File for future recall.

- Make all desired settings on the instrument.
- **2** Call up the operation display. [FUNCTION] → [I] UTILITY → TAB [◀][▶] SYSTEM RESET
- 3 Press one of the [F]–[I] buttons to call up the relevant display for saving your data.

[F]	SYSTEM SETUP FILES	Parameters set on the various displays such as the [FUNCTION] \rightarrow [I] UTILITY and microphone setting display are handled as a single System Setup file. Refer to the Data List for details on which parameters belong to the System Setup.
[G]	MIDI SETUP FILES	The MIDI settings including the MIDI templates on the USER tab display are handled as a single file.
[H]	USER EFFECT FILES	The User Effect settings including the user effect types, user master EQ types, user compressor types, and user vocal harmony types created via the Mixing Console displays are managed as a single file.
[1]	MUSIC FINDER FILES	All the preset and created records of the Music Finder are handled as a single file.

- **4** Use the TAB [◀][▶] buttons to select one of the tabs (other than the PRESET) to which your settings will be saved.
- **5** Press the [6 **▼**] (SAVE) button to save your file.
- **6** To recall your file, press the desired [F]–[I] buttons in the SYSTEM RESET display, then select the desired file.

Index

Numerics
1-1656
3BAND EQ103
A ACCENT TYPE43
ADD WAVE18, 23
•
ADD WAVE display19
Additional Voice27
AFTER TOUCH6
AFTERTOUCH13
AI FINGERED31
AI FULL KEYBOARD31
ALIAS27
ALL DATA26
ALL SOUND OFF23
ALL-PURPOSE47
AMPLITUDE12–13
Any Key54
APPEND75
ARABIC19
ARABIC29
ARPEGGIO47
ASSEMBLY36, 40
ASSIGN (Harmony/Echo)8
ASSIGN BANK21
ATTACK13
AUTO CH SET52
AUX OUT/LOOP SEND122
В
BAR CLEAR44
BAR COPY44
BASIC36–37
BASS112, 117
BEAT CONVERTER42
Bookmark99
BOOST/CUT43
BRIGHTNESS13, 92
Browser101
BYPASS47
C
CENTER KEY19

CHANNEL (Song Creator) 56, 63
CHANNEL (Style Creator)
36, 43–44
CHANNEL TRANSPOSE 65
CHORD (Song Creator) 56, 59
CHORD (Style Creator)46–47
CHORD DETECT 112, 117
Chord Events 67
CHORD FINGERING 30
CHORD NOTE ONLY 8
CHORD SYS/EX 114
Chord Tutor 30
CHORUS94
CHORUS DEPTH 14
CHORUS DEPTH (Talk) 105
CLOCK114
COMMON 12
COMPARE 11
COMPRESSOR 103
CONFIG1120
CONFIG2 122
CONTROLLER 6, 10, 109
CONTROLLER (Voice Set) 12
Cool! 4
Custom Drum Voice 22
Custom Reset 126
Custom Voice 17
CUSTOM VOICE EDIT via PC 29
Custom! 5
CustomWA! 5
D
DECAY 13
DELETE (Song Creator) 64
DELETE (Style Creator) 38
DELETE WAVE 20
DIGITAL RECORDING 36, 56, 70
DORIAN 47
DORIAN 5th 47
DRUM MAPPING display 23
Drums 4
DSP 14, 94
DSP MIC105
DVALAN (ICC

E
Echo Types7
EDIT36
EFFECT
EFFECT/EQ14
EG13
Encode 101
END KEY20
Envelope Generator13
EQ14, 96
EQUAL9
Equalizer96
Event List display40, 66
EXPAND/COMP 43
F
Factory Reset 125
Fade In/Out120
Favorite
FILE IMPORT18
FILTER 12–13, 92
FILTER (Event List display) 68
FINE42
Fine-tuning9
FINGERED31
FINGERED ON BASS 31
FIXED DO50
FIXED PITCH19
Follow Lights54
Foot Controller 109
FOOT PEDAL109
FOOTAGE 16
Footswitch 109
Freeze77
Frequency96
FULL KEYBOARD31
G
Gain96
GLIDE 110
GM 5
GROOVE
Guide53
GUITAR46

Н	LOOP69	MUSIC FINDER +
Hard Disk Recorder80	Loop End Marker69	MUSIC FINDER FILES126
HARMONIC CONTENT13, 92	Loop Recording 37	Music Notation49
HARMONIC MINOR47	LYRICS56	
HARMONIC MINOR 5th47	Lyrics 51	N
HARMONY14	Lyrics Event68	NATURAL MINOR47
Harmony Types7	LYRICS LANGUAGE53	NATURAL MINOR 5th 47
HARMONY/ECHO7		NEW BANK 70
Harmony/Echo type7	M	NEW STYLE 37
HIGH KEY48	Main Picture 124	NOISE GATE 103
Home page101	MASTER (Transpose) 10	NORMAL REC83
	Master EQ 96	NORMALIZE 82
I	MASTER TUNE9	Notation49
IMPORT18	MEAN-TONE	Note Events 67
INDIVIDUAL LOAD27	MEDIA 123	NOTE LIMIT48
INITIAL TOUCH6	MELODIC MINOR 47	NOTE NAME50
Internet Direct Connection99	MELODIC MINOR 5th 47	Note Transposition46
	MELODY 47	NTR46
J	MEMORY (OTS)35	NTT46
Jump Markers69	MESSAGE SW (Message Switch)	NUDGE85
	114	
K	Metronome 120	0
Karao-Key54	MFC10 112, 118	OCTAVE92
KBD.VEL (Keyboard Velocity)57	MIC MUTE 103	ON BASS 31
KEY MAPPING display20	MIC SETTING 102, 105	One Touch Setting35
KEY SIGNATURE50	MIC VOLUME 103	Organ Flutes16
KEYBOARD (Transpose)10	Microphone 102	Organ Flutes! 4
KEYBOARD/PANEL6, 10	MIDI Settings 112	ORIGINAL BEAT42
KIRNBERGER9	MIDI SETUP FILES 126	OTS LINK TIMING32
	MIDI Templates 113	OVERALL SETTING102
Language 124	MIX65	Overdub Recording 37
Language124	Mixing Console 90	OWNER 124
Legacy5	MODE (Organ Flutes) 16	Owner Name 124
LENG (Length)16	MODE (Vocal Harmony mode) 104	
LFO12–13	MODULATION (Pedal) 111	P
LIBRARY EDIT24	MODULATION (Voice Set) 12	P.A.T
LIBRARY LOAD28	MONO/POLY 12	PAN (Talk)105
LIBRARY SAVE26	MOVABLE DO50	PAN (Voice Creator)
License Key124	Multi Assign Type 7	PANEL SUSTAIN14
Line Out98	MULTI FINGER31	PANPOT 90
Live!4	Multi Pad70	PARAMETER (Style Creator) 36, 45
Live!Drums5	Multi Pad Creator70	Parameter Lock121
Live!SFX5	MULTI PAD EDIT72	PART OCTAVE12
Local Control114	Music Finder73	PART ON/OFF (Style Setting) 33

PEDAL POLARITY109	REMOVE EVENT 44	Start/End Point86
PEDAL PUNCH IN/OUT62	REMOVE WAVE23	START/STOP (MIDI)114
Performance Assistant55	REPEAT FOLDER52	STEP RECORD display56
PHRASE MARK REPEAT52	REPEAT MODE52	Step Recording (Multi Pad) 71
PITCH BEND RANGE92	REPLACE 75	Step Recording (Song) 56, 59
PITCH SHIFT48	RESP (Response)16	Step Recording (Style)40
PITCH SHIFT TO ROOT48	RETRIGGER 48	STOP (RTR)48
PITCHBEND110	RETRIGGER TO ROOT48	STOP ACMP32
PLAY ROOT46	REVERB 23, 94	STRENGTH43
Playlist87	REVERB DEPTH14	STROKE 47
PORTAMENTO110	REVERB DEPTH (Talk) 105	Style30
PORTAMENTO TIME92	RHY CLEAR 38	Style Assembly40
PORTAMENTO TIME (Voice Set) 12	ROOT FIXED46	Style Creator36
Premium Voices27	ROOT TRANS 46	Style File Format45
Property25	RTR48	STYLE SETTING32
Punch In/Out (Hard Disk Recorder)84	S	STYLE SETTING/SPLIT POINT/ CHORD FINGERING 30, 32, 34
Punch In/Out (Song)61	SAVE & ASSIGN 20, 24	STYLE TOUCH33
PURE MAJOR9	SCALE TUNE9	SWAP MAIN-SUB82
PURE MINOR9	Score49	Sweet! 4
PYTHAGOREAN9	SECTION SET33	SWING42
	SEQUENCE END 78	SYNCHRO STOP WINDOW 32
Q	SET UP (Score)50	SYS/EX56, 114
QUANTIZE44, 50, 64	SETUP (Mixing Console) 91	SYSTEM112, 114
QUICK START53	SETUP (Song Creator)65	System Exclusive Events 67
_	SFF45	SYSTEM RESET125
R	SFF GE45	SYSTEM SETUP125
Realtime Recording (Multi Pad) .70	SFX 4	SYSTEM SETUP FILES126
Realtime Recording (Style)37	SINGLE FINGER 31	
REC END62	SOFT 110	T
REC MODE (Hard Disk Recorder)82	Song49	TALK SETTING 105
REC MODE (Song Creator) .56, 61	SONG (Transpose)10	Тар 121
REC START61	Song Auto Revoice	TARGET 23
RECEIVE112, 116	Song Creator56	TEMPO (Style Setting)
RECEIVE NOTE OFF23	Song Position Markers 69	Text display51
RECEIVE TRANSPOSE114	SONG SETTING52	Time zone101
RECORD display37	SOSTENUTO 110	TOTAL VOLUME ATTENUATOR
REGIST SEQUENCE/	SOUND13	105
FREEZE/VOICE SET 15, 77–78	SOURCE ROOT46	TOUCH LIMIT8
Registration Memory77	SP (Song Position)69	Touch response
Registration Sequence78	SPEAKER 122	TOUCH SENSE (Voice Set) 12
REHEARSAL85	SPEED (Harmony/Echo)8	Touch Sensitivity
RELEASE13	SPLIT POINT34	TRACK DELETE82
RELOAD24	START KEY19–20	TRANSMIT112, 115
		l

TRANSMIT CLOCK114	WAVE VOLUME19
TRANSPOSE92	WAVEFORM COUNT25
TRANSPOSE ASSIGN10	WERCKMEISTER9
TUNE92	
TUNING92	X
Tuning9	XG5
U	
USER EFFECT FILES126	
Utility120	
W	
VARIATION (DSD) 14	
VARIATION (DSP)14 VELOCITY CHANGE44	
VH TYPE SELECT106	
VIBRATO SPEED 16	
VIBRATO SPEED16	
Vocal Cue Time54	
Vocal Harmony106	
VOCAL HARMONY CONTROL 104	
VOCODER CONTROL104	
Voice4	
VOICE (Mixing Console)90	
Voice Creator17	
Voice Editor29	
VOICE RAM25	
VOICE SET15	
Voice Set11	
VOL (Organ Flutes)16	
VOL/VOICE90	
VOLUME (Hard Disk Recorder)82	
VOLUME (Harmony/Echo)8	
VOLUME (Mixing Console)90	
VOLUME (Talk)105	
VOLUME (Voice Creator)23	
VOLUME (Voice Set)12	
VOLUME/ATTACK16	
W	
WAVE COUNT25	
WAVE IMPORT (Hard Disk	
Recorder)81	
WAVE IMPORT (Voice Creator)	
18, 23	
WAVE RAM25	