

# MC-707 Update

## Functions Added in Ver.1.60

### Arpeggiator Function Added

An arpeggiator function has been added to NOTE and CHORD modes.

#### Enabling the arpeggiator

##### 1. Hold down the [SHIFT] button and press the [NOTE] button.

The NOTE MODE SETTING screen appears.

##### 2. Use the [C3] knob to switch the arpeggiator function on/off.

Parameter	Value	Explanation
ARP	OFF, ON	Turns the arpeggiator on/off.

#### MEMO

- When the arpeggiator function is on, press the [NOTE] button to turn the arpeggiator off.
- Press the [NOTE] button when the NOTE MODE SETTING screen is displayed to switch the arpeggiator function on/off.
- Press the [CHORD] button when the CHORD EDIT screen is displayed to switch the arpeggiator function on/off.

The ARP tab and the following parameters were added to the NOTE SETTING screen.

Parameter	Value	Explanation
MOTIF	UP, DOWN, UP&DOWN, RANDOM, NOTE ORDER, GLISSANDO, CHORD, AUTO1, AUTO2, PHRASE	<p>Sets the order in which notes of the chord will sound.</p> <p><b>UP:</b> Notes you press will be sounded, from low to high.</p> <p><b>DOWN:</b> Notes you press will be sounded, from high to low.</p> <p><b>UP&amp;DOWN:</b> Notes you press will be sounded, from low to high, and then back down from high to low.</p> <p><b>RANDOM:</b> Notes you press will be sounded, in random order.</p> <p><b>NOTE ORDER:</b> Notes you press will be sounded in the order in which you pressed them. By pressing the notes in the appropriate order you can produce melody lines. Up to 128 notes will be remembered.</p> <p><b>GLISSANDO:</b> Each chromatic step between the highest and lowest notes you press will sound in succession, repeating upward and downward. Press only the lowest and the highest notes.</p> <p><b>CHORD:</b> All notes you press will sound simultaneously.</p> <p><b>AUTO1:</b> The timing at which keys will sound will be assigned automatically, giving priority to the lowest key that was pressed.</p> <p><b>AUTO2:</b> The timing at which keys will sound will be assigned automatically, giving priority to the highest key that was pressed.</p> <p><b>PHRASE:</b> Pressing a single key will sound the phrase based on the pitch of that key. If multiple keys are pressed, the last-pressed key will be valid.</p>
VARIATION	1/4, 1/8, 1/4T, 1/16, 1/8T, 1/32, 1/4x2, 1/8x2, 1/4Tx2, 1/16x2, 1/8Tx2, 1/32x2	<p>Selects the note value for each step of the arpeggio. For the "x2" variations, the unit plays two notes at each step.</p> <p><b>1/4:</b> Quarter note</p> <p><b>1/8:</b> Eighth note</p> <p><b>1/16:</b> Sixteenth note</p> <p><b>1/4T:</b> Quarter-note triplet</p> <p><b>1/8T:</b> Eighth note triplet</p> <p><b>1/16T:</b> Sixteenth note triplet</p> <p><b>1/32:</b> Thirty-second note</p>
OCTAVE	-3~+3	<p>Sets the key range in octaves over which arpeggio will take place. If you want the arpeggio to sound using only the notes that you actually play, set this parameter to "0." To have the arpeggio sound using the notes you play and notes 1 octave higher, set this parameter to "+1." A setting of "-1" will make the arpeggio sound using the notes you play and notes 1 octave lower.</p>
HOLD	ON, OFF	<p>If you hold down a pedal switch while playing a chord, the arpeggio continues playing even if you release the keyboard.</p>

### USB-Related Functions Added

(Generic Driver Function)

#### Generic driver function

You can now connect this unit to your smartphone or other device (iOS) via USB to transmit and receive MIDI and audio signals between the devices.

The following parameters were added to the SYSTEM SETTING (CTRL tab).

Parameter	Value	Explanation
USB Driver	VENDOR	Select this when connecting to your computer.
	GENERIC	Select this when connecting to a device such as your smartphone.
Direct USB Mixout	OFF	The volume set using the [VOLUME] knob is reflected in the MIX OUT output volume sent via USB.
	1-127	The volume set using the [VOLUME] knob is not reflected in the MIX OUT output volume sent via USB. The sound is output at the set volume.

#### Added PC IN to Audio Insert

You can now select "PC IN" for Audio Insert.

This lets you input audio from a USB-connected device to a track on this unit.

The following parameters were added to the TRACK SETTING (GENERAL tab).

Parameter	Value	Explanation
Audio Insert	PC IN L/R	Inserts the signal input from PC IN as a stereo signal.
	PC IN L	Inserts the signal input from the left channel of PC IN as a stereo signal.
	PC IN R	Inserts the signal input from the right channel of PC IN as a stereo signal.

#### MEMO

To use Audio Insert for only inputting the audio from PC IN to a track, change the value of "PC Level" (from the [PROJECT] button > Setting > PC IN tab) to "0."

### Sound Pack/SVZ Drum Import Function Added

You can now use the sound pack/SVZ file import function on the drum track as well.

See "Sound Pack / SVZ File Import Functions Added (Installing a Sound Pack)" (P.4) for how to install a sound pack.

## RANDOM TONE DESIGNER Function Added

You can randomly generate the tones for a tone track.

### Generating tones

1. Select the tone track whose sound you want to change.
2. Press the [SOUND] button.

The menu screen appears.



3. Use the Cursor buttons to select "RANDOM" and then press the [ENTER] button.

RANDOM TONE DESIGNER appears.



4. Select the algorithm using Cursor buttons, and the press the [VALUE] dial to generate the tone.

Algorithm	Explanation
POLY	Generates a polyphonic tone.
MONO	Generates a monophonic tone.
PAD	Generates a synth pad.
MOD	Generates a modulated tone.
ANALOG	Generates a tone that recreates an analog synthesizer.
A.MONO	Generates a monophonic tone that recreates an analog synthesizer.
A.PAD	Generates a synth pad that recreates an analog synthesizer.
C.BELL	Generates a cowbell tone.
DRUM	Generates a synth drum tone.
KICK	Generates a kick drum tone.
SNARE	Generates a snare drum tone.
CYMBAL	Generates a cymbal tone.

## SCATTER Functions Added

The ON/OFF setting for SCATTER PAD effects can now be controlled via MIDI.

Use note numbers 60–75 on the control channel. See the "MIDI Implementation Chart" (PDF) for details.

The following parameters were added to the PAD settings screen.

Parameter	Value	Explanation
POSITION	EXT, PC, TRK1–8, MIXOUT	Switches between Scatter insert destinations when pressing the pad. You can change the target of the Scatter effect for each pad. * When this is off, the insert destinations are not switched, and this follows the POS setting for SCATTER overall. * The effect may be applied to the older insert destination target, depending on the effect.
PRESS ASGN	OFF, LEVEL, PIT BEND, RETRIG	You can change the values of LEVEL, PIT, BEND and RETRIG within a 0–100% range, according to how hard you press the pad.

The following parameters were added to the SYSTEM SETTING (MIDI tab).

Parameter	Value	Explanation
Receive Scatter MIDI	OFF, ON	Sets whether to receive SCATTER effect signals from an external device.

## Functions Added to the Total Effect Compressor

### Gain reduction meter display added for each band



The scale on the gain reduction meter indicates -3 dB, -6 dB and -10 dB, read from the left.

### Release Sync added to each band

(sets the release time following the tempo)

The following items were added to the TOTAL EFFECTS EDIT screen (COMP tab).

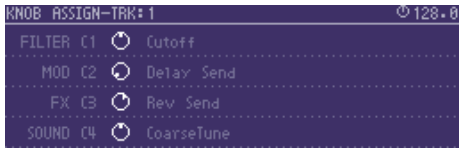
Parameter	Value	Explanation
High Release Sync	OFF, 1/16, 1/8T, 1/16., 1/8, 1/4T, 1/8., 1/4	Sets the release time following the tempo.
Mid Release Sync	OFF, 1/16, 1/8T, 1/16., 1/8, 1/4T, 1/8., 1/4	Sets the release time following the tempo.
Low Release Sync	OFF, 1/16, 1/8T, 1/16., 1/8, 1/4T, 1/8., 1/4	Sets the release time following the tempo.

## Sequencer Edit Functions Added

### Virtual knob added

A virtual knob (the SOUND knob) that can be used for motions is added.

The KNOB ASSIGN screen

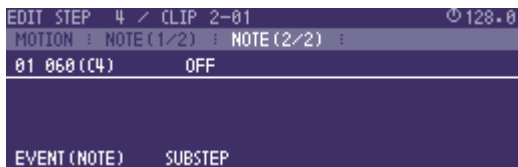


The STEP EDIT screen



### Note Sub Step function added (Tone track)

You can now use sub steps in a tone track.



The following parameters were added to the NOTE STEP EDIT screen.

Parameter	Value	Explanation
SUBSTEP	OFF, 1/2, 1/3, 1/4, FLAM	Sets the sub step.

## Added Shortcuts

Action	Operation
Input a tie	In NOTE mode on the drum track, press the [STEP] button while holding down the [EXIT] button.

## Problems and Functions Corrected

- The time required to save a project has been reduced.
- The issue with being unable to control scenes 9–128 by receiving program change messages was fixed.
- The issue with preview being unavailable in the sound browser was fixed.
- The irrelevant display on the NOTE EDIT screen was deleted.
- The issue with the sound not being applied immediately when a sound file is imported was fixed.
- The issue where sound could not be heard when a project was loaded with CUE enabled was fixed.
- The issue with irrelevant data (such as clip names) being copied when a tone is copied was fixed.
- Other textual errors were fixed.
- When editing steps in CHORD mode, a pad now lights up red if the pad's note and the note for the selected step is the same.

## Functions Added in Ver.1.50

### Sound Pack / SVZ File Import Functions Added (Installing a Sound Pack)

Sound files (sound packs (.SDZ) / .SVZ files) saved on an SD card can be loaded into a tone track.

Sound packs and other sound files are distributed via Roland Cloud.

For more about Roland Cloud, refer to the Roland website.

➔ <https://www.roland.com/>

\* Please be aware that in some countries or regions, it might not be possible to use Roland Cloud at this time.

\* When loading an SDZ/SVZ file, save the file in the ROLAND/SOUND folder of the SD card.

#### 1. Select the tone track whose sound you want to change.

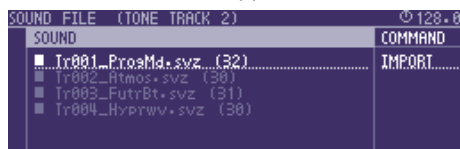
#### 2. Press the [SOUND] button.

The menu screen appears.



#### 3. Select SOUND FILE.

The sound file browser appears.



Controller	Explanation
[>] button	Moves to the next lower folder level.
[<] button	Moves to the next higher folder level.
[ENTER] button	<b>If a folder level is selected:</b> Moves to the next lower level.
[C4] knob (push)	<b>If a file is selected:</b> Shows the contents of the file.
	<b>If the contents of the file are shown:</b> Loads the sound.

#### 4. Press the [ENTER] button to load.

#### NOTE

##### About user licenses

User license data is associated with a sound pack (.sdz).

When a sound pack is imported into the MC-707 unit, the MC-707 can use only sound packs that were downloaded by that user in accordance with the user license data. At this time, the message "Install License" appears, confirming whether or not you install license data in the unit. (This message appears only the first time.)

Sound packs whose user license data is different cannot be used. If you attempt to install a sound pack that has different user license information, the message "Abort! License Error!" appears.

If you want to delete the user license data in the unit, for example if you are selling the unit, go to the UTILITY MENU and execute FACTORY RESET.

When you execute FACTORY RESET, the system settings return to their factory-set state.

### Error Messages Added

Message	Explanation/Action
Abort! Format Error!	This appears if the selected sound file is not compatible with the MC-707, or if the file is damaged. Check the models that are listed as compatible for the file you downloaded, and try downloading again.
Abort! License Error!	This appears if the selected sound file is associated with a different user license. To install, you must either obtain a file that has the same user license as the currently-installed sound file, or initialize the user license. To initialize the user license information, go to the UTILITY MENU and execute FACTORY RESET. When you execute FACTORY RESET, the system settings return to their factory-set state.

### Added Number of Scenes

Now you can use a larger number of scenes.

The following parameter is added to the system settings.

Parameter	Value	Explanation
CALL SCENE	TYPE1	Use the SCENE buttons to directly recall a scene from the bank that you already selected using the step buttons (16 banks × 8 scenes). This setting is similar to the existing operation.
	TYPE2	Use the SCENE buttons to select a bank, and use the step buttons to recall a scene (8 banks × 16 scenes). This setting is convenient when you use bank switching frequently.

#### MEMO

- The contents of the scenes are the same for TYPE1 and TYPE2.
- One TYPE2 bank contains the scenes of two TYPE1 banks.

### TYPE1 operation

#### Recalling a scene

##### 1. Press the PAD MODE [MUTE] button.

PAD MODE changes to MUTE.

##### 2. Press a step [1]–[16] button to select a bank.

##### 3. Press a SCENE [1]–[4] button to recall a scene.

- To recall scenes 5–8, hold down the [SHIFT] button and press a SCENE [1]–[4] button.

#### Saving a scene

##### 1. Press the PAD MODE [MUTE] button.

PAD MODE changes to MUTE.

##### 2. Press a step [1]–[16] button to select a bank.

##### 3. Long-press a SCENE [1]–[4] button to save the scene.

- To save a scene 5–8, hold down the [SHIFT] button and long-press a SCENE [1]–[4] button.

### Deleting a scene

#### 1. Hold down the [CLEAR] button and press a SCENE [1]–[4] button to delete the scene.

- To delete a scene 5–8, hold down the [CLEAR] and the [SHIFT] button, and press a SCENE [1]–[4] button.

### TYPE2 operation

#### Recalling a scene

##### 1. Press a SCENE [1]–[4] button to select a scene bank.

- To select banks 5–8, hold down the [SHIFT] button and press a SCENE [1]–[4] button.  
If you want to change to a bank 1–4 after selecting a bank 5–8, hold down the [SHIFT] button once again and press a SCENE [1]–[4] button.
- You can use 16 scenes per bank.

##### 2. Press a step [1]–[16] button to recall a scene.

After pressing a SCENE [1]–[4] button, you have three seconds to select a scene for recall.

#### MEMO

When PAD MODE is MUTE, you can use the step [1]–[16] buttons to directly recall a scene.

#### Saving a scene

##### 1. Long-press a SCENE [1]–[4] button to select a scene bank.

- To select banks 5–8, hold down the [SHIFT] button and press a SCENE [1]–[4] button.  
If you want to change to a bank 1–4 after selecting a bank 5–8, hold down the [SHIFT] button once again and press a SCENE [1]–[4] button.
- You can use 16 scenes per bank.

##### 2. Hold down a SCENE [1]–[4] button and press a step [1]–[16] button to save the scene.

### Deleting a scene

#### 1. Press a SCENE [1]–[4] button to select a scene bank.

#### 2. Hold down the [CLEAR] button and press a step [1]–[16] button to delete the scene.

After pressing a SCENE [1]–[4] button, you have three seconds to select a scene for delete.

#### MEMO

When PAD MODE is MUTE, you can hold down the [CLEAR] button and press a step [1]–[16] button to directly delete a scene.

## Parameter Added to MIDI Input/Output Function

The following parameter is added to the clip settings (MIDI tab).

Parameter	Value	Explanation
Tx Program Change Number	Default	The program change number 0–15 corresponding to the clip number is transmitted when you select a clip and when the clip has switched.
	OFF	A program change number is not transmitted.
	PC000–127	The specified program change number is transmitted when the clip has switched. This function is convenient when you want the clip and the sound of an external sound module to change together.

#### MEMO

- The TRACK SETTING parameter Tx MIDI Program Change must be set to **“ON.”** For details, see **“Reference Manual”** (PDF).
- The program change number is transmitted when you press the [ENTER] button in the setting screen.

## Added Shortcuts

Action	Operation
Copy the contents of the drum kit pads	In the KIT EDIT screen of the drum track, hold down the [FUNC] button and press the cursor [▲] button.
Paste the contents of the drum kit pads	In the KIT EDIT screen of the drum track, hold down the [FUNC] button and press the cursor [▼] button.

## Problems and Functions Corrected

- When using Auto Channel, notes that are input from an external MIDI device are now output.
- Fixed the problem in which a value specified in the CHORD setting screen sometimes failed to be updated.
- Improved the processing speed of NOTE SHIFTER.
- Fixed the problem in which the STEP value specified in MOTION DRAWER failed to be updated.
- Fixed the problem in which copying did not occur correctly for STEP 2 in the step copy/paste function.
- Fixed the problem in which a CC (control change message) sometimes failed to be output when a track's knobs ([FILTER], [MOD], [FX]) were operated.

## Functions Added in Ver.1.30

### Clip Chain Function Added

The clip chain function lets you play back a specified clip at the desired timing.

You can use the clip chain function to create a song that plays back clips in succession, or use it to specify a fill-in.

The following settings are added to the CLIP SETTING screen.

Parameter	Value	Explanation
NEXT CLIP		Specifies the clip that plays next, and how it operates.
	STAY	Play the same clip as currently.
	STOP	Stops clip playback.
	CLIP 1–16	Plays the specified clip.
LENGTH		Specifies the timing of the next operation.
	OFF	The next operation occurs when the clip plays to the end.
	1–512	Specifies the timing of the next operation in units of steps.

\* You can make settings from the MEASURE EDIT screen in the same way.

### MIDI Input/Output Functions Added

Now you can specify the numbers of the CC (control change) messages that are transmitted by the [FILTER] knob, [MOD] knob, and [FX] knob.

The following items are added to the track settings (MIDI tab).

Parameter	Value	Explanation
Tx FILTER CC Number	CC0, CC1, CC2...CC119	Specifies the CC number transmitted by the [FILTER] knob.
Tx MOD CC Number	CC0, CC1, CC2...CC119	Specifies the CC number transmitted by the [MOD] knob.
Tx FX CC Number	CC0, CC1, CC2...CC119	Specifies the CC number transmitted by the [FX] knob.

### Auto Channel Function Added

Incoming MIDI messages are sent to the track selected by the [SEL] button.

This function is convenient when a MIDI keyboard etc. is connected. The following item is added to the system settings (MIDI tab).

Parameter	Value	Explanation
MIDI Rx Auto Channel	OFF, CH1, CH2, CH3... CH16	If there is input on the specified MIDI channel, those MIDI messages are sent to the track selected by the [SEL] button.

### Audio Insert Function Added

The audio insert function lets you use the MC-707 like a mixer.

Audio that is input to the EXT IN jacks or the stereo RETURN jacks is inserted before the MFX of the specified track.

The following item is added to the track settings (GENERAL tab).

Parameter	Value	Explanation
AudioInsert	OFF	The audio insert function is not used.
	EXT IN L/R	The signal that is input to EXT IN L/R is inserted as a stereo signal.
	EXT IN L	The signal that is input to EXT IN L is inserted.
	EXT IN R	The signal that is input to EXT IN R is inserted.
	RETURN L/R	The signal that is input to RETURN L/R is inserted as a stereo signal.
	RETURN R	The signal that is input to RETURN IN R is inserted.
	RETURN L	The signal that is input to RETURN IN L is inserted.

#### NOTE

Feedback will occur if you connect an effect processor etc. to the SEND jacks and the RETURN jacks, and then set Audio Insert to RETURN for the track that is specified as the SEND/RETURN POS.

### Note Repeat Function Added

You can use the Note Repeat function when pad mode is set to CHORD on a drum track.

The note is repeated at the specified speed.

Action	Operation
Repeat the note	Press a pad [1]–[16].
Specify the speed at which notes repeat	While holding down a pad [1]–[16] or the [CHORD] button, press a step [1]–[6] button.
	<b>step [1]</b> : 1/4
	<b>step [2]</b> : 1/4t
	<b>step [3]</b> : 1/8
	<b>step [4]</b> : 1/8t
	<b>step [5]</b> : 1/16
	<b>step [6]</b> : 1/16t

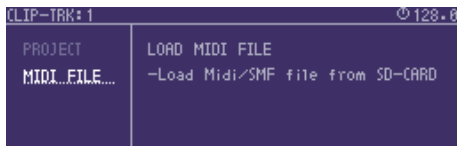
## SMF Import Function Added

An SMF (Standard MIDI File) saved on an SD card can be imported into a clip.

\* SMF that you want to load must be placed in the ROLAND/ GROOVEBOX/MIDI folder of the SD card.

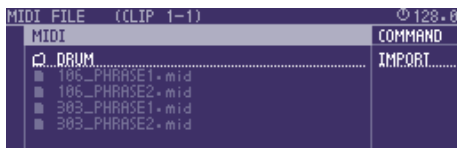
1. Select the clip to which you want to apply a phrase.
2. Press the [CLIP] button.

The menu screen appears.



3. Select MIDI FILE.

The MIDI/SMF file browser appears.



Controller	Explanation
[>] button	Moves to the next lower folder level.
[<] button	Moves to the next higher folder level.
[ENTER] button	<b>If a folder level is selected:</b> Moves to the next lower level. <b>If a file is selected:</b> Loads the sample.
[C4] knob (push)	<b>IMPORT</b> <b>If a folder level is selected:</b> Moves to the next lower level. <b>If a file is selected:</b> Loads the sample.

4. Press the [ENTER] button to load.

### NOTE

All tracks included in the SMF are overwritten onto one clip.

## Display Method Added for Clip Mode

The following item is added to the Clip Mode SETTING screen (PAD tab).

Parameter	Value	Explanation
TRK VIEW	MULTI	Displays 2 clips for each Tracks.
	SINGLE	Displays 16 clips in current Track.

## Sample Edit Function Added

A slice point delete function has been added.

Action	Operation
Delete the slice point	Hold down the [CLEAR] button and press the [C2] knob.

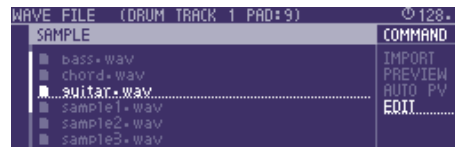
## Function Added to Edit WAV File Before Loading

When importing a sample, you can apply processing such as Normalize or Slice.

1. Access the sample browser.

➔ For more about the sample browser, refer to the reference manual.

2. Move the cursor to the sample that you want to edit.



3. Select EDIT as the COMMAND, and then press the [ENTER] button.

## Step LFO Editor Added

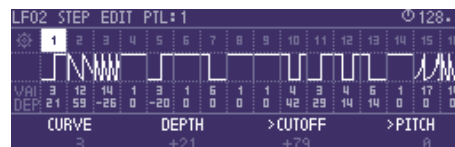
A Step LFO Editor is added for tone tracks.

### Editing the step LFO of a tone track

1. Access the TONE EDIT screen.


2. Set the LFO's FORM to STEP, and press the [ENTER] button.

The step LFO editor appears.



Parameter	Value	Explanation
RATE	0–1023, 1/64T–4	Specifies the rate of the LFO.
SYNC	OFF, ON	Turn this ON if you want the LFO rate to synchronize with the tempo.
KEY TRG	OFF, ON	Specifies whether the beginning of the LFO cycle is aligned with the timing at which you press a key (ON) or not aligned (OFF).
END STEP	1–16	Specifies the size of the loop as a number of steps.
CURVE	0–36	Specifies the type of curve for each step. ➔ For details, refer to "Step curve types" in the reference manual.
DEPTH	-72–+72	Specifies the depth value of each step.
>CUTOFF	-100–+100	Specifies the amount by which the LFO affects the cutoff frequency.
>PITCH	-100–+100	Specifies the amount by which the LFO affects the pitch. If the OSC Type is other than VirtualAnalog, the range of this setting is limited to -63–+63.

### MEMO

The PARTIAL EDIT screen appears when you press the [ENTER] button with the  icon selected.



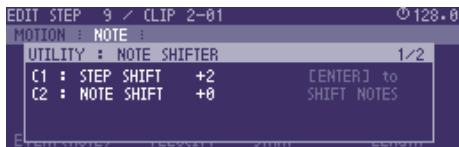
## Note Utility Functions Added

In the STEP EDIT screen's NOTE tab, you can now press the [FUNC] button to use NOTE UTILITY.

Controller	Explanation
[<] button, [>] button	Switches the utility to be used.
[EXIT] button	Exits NOTE UTILITY.

### NOTE SHIFTER

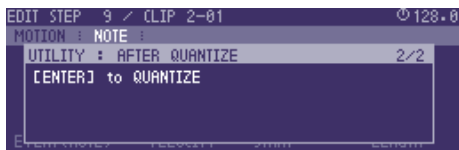
This lets you shift a note's pitch or step.



Controller	Parameter	Explanation
[C1] knob	STEP SHIFT	Specifies the number of steps to shift.
[C2] knob	NOTE SHIFT	Specifies the number of semitones to shift.
[ENTER] button		Applies the shift.

### AFTER QUANTIZE

Quantizes the recorded phrase to steps.



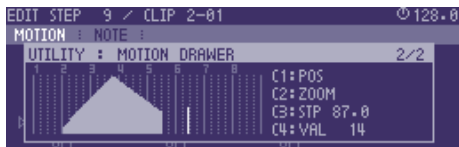
Controller	Explanation
[ENTER] button	Applies quantization.

## Motion Drawing Function Added

A MOTION DRAWER function is added to MOTION UTILITY.

By using MOTION DRAWER, you can draw a motion.

\* In the STEP EDIT screen's MOTION tab, press the [FUNC] button to use MOTION UTILITY.



Controller	Parameter	Explanation
[C1] knob	POS	Changes the position of steps to show.
[C2] knob	ZOOM	Changes the step resolution to show.
[C3] knob	STP	Specifies the position of the steps to which the motion will be drawn.
[C4] knob	VAL	Specifies the position of the steps to which the motion will be drawn.
[CLEAR] button + [C3] knob		Deletes the motion.
[ENTER] button		Writes the motion.

## Problems Fixed

- We fixed the problem in which copying a step's [NOTE] sometimes did not occur correctly.
- We fixed the problem in which System Setting MIDI number conflict was not always shown correctly.
- We improved the number of voices used when using samples in a drum track.
- We fixed the problem that had caused hangups when the [FX PRM] knob and [FX DEPTH] knob were operated while switching MFX in TOTAL MFX.
- We fixed the problem that had caused freezing when a damaged WAV file was imported.



## Functions Added in Ver.1.20

### Sampling Function Added

We've added the function of sampling to a user sample.

#### Sampling to a tone or drum track

##### 1. Press a [SEL] button to select the track whose sound you want to change.

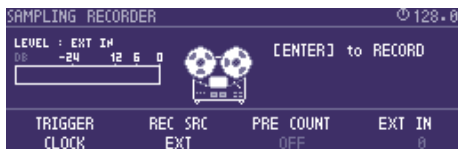
\* If the sound source is Clip, select the clip whose sound you want to change.

##### 2. Press the [SOUND] button.

The menu screen appears.

##### 3. Use the Cursor buttons to select "RECORD" and then press the [ENTER] button.

Now you can use the sampling recorder.



Parameter	Value	Explanation
TRIGGER	ENTER	Recording starts the moment you press the [ENTER] button.
	CLOCK	Recording starts at the timing of the master clock. If PRE COUNT is ON, recording starts after a metronome count-in. If PRE COUNT is OFF, recording starts when the sequencer plays.
	-24 dB, -12 dB, -6 dB	Recording starts when the audio input exceeds the specified volume level.
REC SRC	EXT, PC, TRK1-8, MIXOUT	Selects the recording source.

#### MEMO

- Adjust the input level so that the LEVEL meter at the left of the screen moves in a range lower than 0 dB. If the input exceeds 0 dB, an "OVER!" indication appears.
- By normalizing after sampling, you can adjust the sample to an appropriate level.

##### 4. Press the [ENTER] button to start recording.

If the TRIGGER parameter is set to CLOCK, -24 dB, -12 dB, or -6 dB, the function enters the record-ready state.

##### 5. Press the [ENTER] button to stop recording.

When recording ends, you move to the sample edit screen.

##### 6. Use the [C1]-[C4] knobs to edit the sample.

You can use the cursor [<] [>] buttons to move between pages.



Parameter	Value	Explanation
START	0-8388607	Specifies the position at which playback starts. You can press to maximize ZOOM.
END	0-8388607	Specifies the position at which playback ends. You can press to maximize ZOOM.
NORMALIZE	-12-0 dB	Specifies the volume to which the waveform will be normalized. Press the [C3] knob to execute normalization.
ZOOM	x65536-x1	Horizontally zooms the displayed waveform. Press the knob to switch the waveform display between mono/stereo.
PREVIEW	OFF, ON	Selects whether to preview when a sliced waveform is selected.
POS	1-256	Selects a sliced waveform.
SLICE	HARD, MID, SOFT	Specifies the sensitivity for slicing. Press the [C3] knob to execute slicing.

Controller	Explanation
[^] button	Vertically expands the sample.
[v] button	Vertically shrinks the sample.
[SHIFT] button + [EXIT] button	Re-records the sample
[FUNC] button	Previews the sample.

#### MEMO

- Sampling uses the unused looper clip memory. If necessary, you can delete unneeded looper clips or execute Looper Optimize to obtain free memory.
- If you sample via PROJECT -> SAMPLE BANK MANAGER, pressing the [ENTER] button does not load the sample into the track.

##### 7. Load the sample into the track.

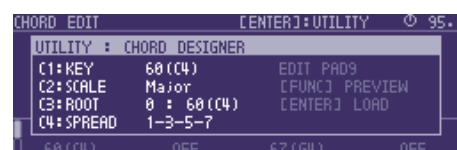
From the sample edit screen, load the sample into the tone or drum instrument.

Controller	Explanation
[ENTER] button	Loads the edited sample into the currently selected track (clip) or instrument.
[FUNC] button + [ENTER] button	Saves the edited sample to SD card as a WAV file. * Samples are saved to the SAMPLE/EXPORT folder with consecutive numbering.

### Chord Designer Function Added

##### 1. In the CHORD EDIT screen, press the [ENTER] button.

CHORD DESIGNER appears.



Chord Designer generates a chord by extracting four notes from the scale you specify.

Controller	Parameter	Explanation
[C1] knob	KEY	Specifies the note that will be the key of the scale.
[C2] knob	SCALE	Specifies the scale from which the chord is extracted. ➔ For details on scales, refer to "Scale List."
[C3] knob	ROOT	Specifies the root note of the chord.
[C4] knob	SPREAD	Specifies the constituent notes. The displayed numbers indicate the scale degree of each note, with the root as 1.

Controller	Explanation
[FUNC] button	Previews the sound of the generated chord.
[ENTER] button	Writes the chord to the selected pad.

### Scale Performance Function Added

The following item is added to the NOTE mode settings.

Tab	Parameter	Explanation
PAD	SCALE	Specifies the scale. ➔ For details on scales, refer to "Scale List."

#### MEMO

- To shift the octave of a scale other than Chromatic, hold down the [NOTE] button and use the [OCT-] [OCT+] pads.
- If you set scale to Guitar or Violin, you can perform using the pads as though they corresponded to a fingerboard.

### List of scales (when KEY is C)

SCALE	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
Chromatic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Minor (Aeolian)	✓		✓	✓		✓		✓	✓		✓	
Major (Ionian)	✓		✓		✓	✓		✓		✓		✓
Dorian	✓		✓	✓		✓		✓		✓	✓	
Phrygian	✓	✓		✓		✓		✓	✓		✓	
Lydian	✓		✓		✓		✓	✓		✓		✓
Mixolydian	✓		✓		✓	✓		✓		✓	✓	
Locrian	✓	✓		✓		✓	✓		✓		✓	
Minor Pentatonic	✓			✓		✓		✓			✓	
Minor Blues	✓			✓		✓	✓	✓			✓	
Bebop Minor (Bebop Dorian)	✓		✓	✓	✓	✓		✓		✓	✓	
Harmonic Minor	✓		✓	✓		✓		✓	✓			✓
Melodic Minor	✓		✓	✓		✓		✓		✓		✓
Major Pentatonic	✓		✓		✓			✓		✓		
Major Blues	✓		✓	✓	✓			✓		✓		
Bebop Major	✓		✓		✓	✓		✓	✓	✓		✓
Altered	✓	✓		✓	✓		✓		✓		✓	
Whole Tone	✓		✓		✓		✓		✓		✓	
Diminished Whole-Half	✓		✓	✓		✓			✓	✓		✓
Diminished Half-Whole	✓	✓		✓	✓		✓	✓		✓	✓	
Gypsy Minor (Hungarian Minor)	✓		✓	✓			✓	✓	✓			✓
Romanian Minor (Ukrainian Dorian)	✓		✓	✓			✓	✓		✓	✓	
Spanish 8 Notes	✓	✓		✓	✓	✓		✓	✓		✓	
Bhairav Thaata (Mayamalavagowla)	✓	✓			✓	✓		✓	✓			✓
Marva Thaata (Gamanasrama)	✓	✓			✓		✓	✓		✓		✓
Purvi Thaata (Kamavardani)	✓	✓			✓		✓	✓	✓			✓
Todi Thaata (Shubhapantuvarali)	✓	✓		✓			✓	✓	✓			✓
Arabic	✓		✓		✓	✓	✓		✓		✓	
Egyptian	✓		✓			✓		✓			✓	
Chinese	✓				✓		✓	✓				✓
Peloga	✓	✓		✓				✓	✓			
Hirajoshi	✓		✓	✓				✓	✓			
Miyakobushi	✓	✓				✓		✓	✓			
Ryukyū	✓				✓	✓		✓				✓

## Sample Browser Function Added

The sample browser now supports a folder hierarchy.

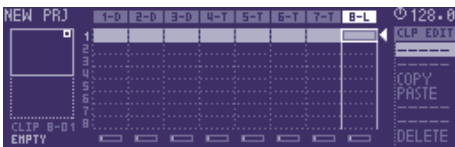
Controller	Explanation
[>] button	Moves to a lower folder.
[<] button	Moves to the higher folder.
[ENTER] button	<b>When a folder level is selected:</b> Moves to a lower folder. <b>When a file is selected:</b> Loads the sample.
[FUNC] button	Previews the sample.
[C4] knob (press)	<b>IMPORT</b> <b>When a folder level is selected:</b> Moves to a lower folder. <b>When a file is selected:</b> Loads the sample.
	<b>PREVIEW</b> Previews the sample.
	<b>AUTO PV</b> Automatically previews when you select a sample.

## Clip Line Load Function Added

When importing clips, you can now import an entire line.

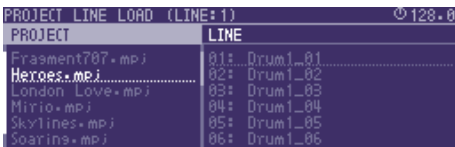
### Loading clips by line

1. In the HOME screen, select a line.



2. Press the [CLIP] button.

The PROJECT LINE LOAD screen appears.



#### MEMO

- Select a line in which all clips are empty.
- The clip name for track 1 is shown.

3. Use the cursor [▲] [▼] buttons to select the load that you want to load, and press the [ENTER] button.

The clips are loaded.

#### MEMO

Loading is not possible if the track type is different, or if there is insufficient memory.

## Looper Track Functions Added

The following functions are added to the sample waveform edit screen (3rd page).

➔ For details on the sample waveform edit screen, refer to “Reference Manual” (PDF).

Controller	Function	Explanation
[C2] knob	EXPORT	Press the [C2] knob to export the sample to the EXPORT folder of the SD card.
[C3] knob	NORMALIZE	Use the [C3] knob to specify the normalized level, and then press the [C3] knob to execute normalization.

## MIDI Input/Output Functions Added

### Knob operations, switching clips, switches scenes, MIDI output

The following items are added to the system settings (MIDI tab).

Parameter	Value	Explanation
Control Channel	CH1, CH2, CH3... CH16	Specifies the MIDI channel that switches scenes.
Control Tx MIDI OUT1	OFF, ON	Specifies whether scene changes are output to MIDI OUT 1.
Control Tx MIDI OUT2	OFF, ON	Specifies whether scene changes are output to MIDI OUT 2.
Control Tx USB MIDI	OFF, ON	Specifies whether scene changes are output to USB MIDI.
Control Rx	OFF, ON	Specifies whether scene changes are received from an external device.

The following items are added to the track settings (MIDI tab).

Parameter	Value	Explanation
Tx MIDI Note	OFF, ON	Specifies whether the notes of each track are output. * This is not shown for a looper track.
Tx MIDI Control Change	OFF, ON	Specifies whether knob operations of each track are output.
Tx MIDI Program Change	OFF, ON	Specifies whether clip changes of each track are output.

## Pad Sensitivity Adjustment Function Added

The following item is added to the system settings (CTRL tab).

Parameter	Value	Explanation
Pad Gain	0-100	Adjusts the pad sensitivity. This is valid when Pad Curve Type is LINER, EXP, or LOG. Increasing this value increases the sensitivity, so that the maximum velocity can be produced more easily.

## Metronome Sound Output Destination Selection Function Added

The following item is added to the system settings.

Parameter	Value	Explanation
Metronome Position	MIXOUT	Output to after the total effect. (Output both to MIXOUT and headphones)
	PHONES	Output only to headphones.
	ASSIGN OUT	Output only to ASSIGN OUT.
	PRE T-FX	Output to before the total effect. (Output both to MIXOUT and headphones)

## Added Shortcuts

Action	Operation
Play the entire line of clips	Hold down the PAD MODE [CLIP] button and press the [STEP] button.
Adjust the Pad Gain	Hold down the [NOTE] button and press the cursor [^] [v] buttons.
Skip the confirmation screen when overwrite-saving a project	In the PROJECT save screen, hold down the [FUNC] button and press the [ENTER] button.
Access the SAMPLING RECORDER screen	Hold down the [SHIFT] button and press the [REC] button.

## Quantize Timing Adjustment Function Added

The following item is added to the QUANTIZE (INPUT QUANTIZE) settings.

Category	Parameter	Explanation
AREA	50: 50-0: 100	Specifies the reference area when quantizing the input.

## Problems Fixed

- We fixed the problem that had occasionally caused brief silence when operating Scatter.
- We fixed the problem that had caused user sample settings to be initialized when importing a WAV into the looper.
- We fixed the problem that had caused playback to be an incorrect pitch when a WAV file of a sample rate other than 44.1 kHz was loaded into a drum track instrument.
  - \* **If a project created in Ver.1.02 or earlier is loaded, the playback pitch will be different if a sample rate other than 44.1 kHz is used in the drum track.**
- We fixed the problem in which the clip name was not correctly reflected when a WAV file was loaded into a clip.
- We fixed the problem in which the FIRST STEP/LAST STEP EDIT screen was not displayed correctly.
- Other minor problems have been fixed.

## Functions Added in Ver.1.02

### Added Functions for CUE

#### Outputting the sound of a track specified as CUE from MIX OUT

The following parameter is added to the system settings (CTRL tab).

Parameter	Value	Explanation
Output Cue To Mix Out	ON, OFF	Specifies whether the sound of a track for which CUE is specified is output (ON) to MIX OUT or is not output (OFF).

➔ For details on the system settings, refer to **“Reference Manual”** (PDF).

#### Maintaining CUE

The CUE status is now maintained when transitioning from PAD MODE CUE to another mode.

### Added Functions for TONE STEP EDIT

#### Changing all events in a step

By holding down the [FUNC] button and turning a [C1]–[C4] knob, the value of all events in the currently-edited step can be changed together.

#### Added shortcut to initialize the START value

You can set the START value to **“0.”**

1. Hold down the [CLEAR] button and turn the [C3] knob.

#### Copying a step

1. Hold down the [FUNC] button and press the [Λ] button to copy the currently-edited step.
2. Hold down the [FUNC] button and press the [v] button to paste to the currently-selected step.

\* Copying a step can be executed only within the same clip.

#### Using a connected MIDI device to edit notes

You can edit notes from a MIDI keyboard or other device connected to the MIDI port.

The following parameter is added to the system settings (MIDI tab).

Parameter	Value	Explanation
Edit Note	ON, OFF	Specifies whether input from an external device is used (ON) or not used (OFF) when editing notes in a TONE track.

➔ For details on the system settings, refer to **“Reference Manual”** (PDF).

### Added Waveforms for MOTION DESIGNER

The following waveforms are added.


**COS:** A waveform whose phase is 90 degrees offset relative to SIN.

**S&H:** A random value is output.

➔ For details on the MOTION DESIGNER, refer to **“Reference Manual”** (PDF).

### Added Functions for SCATTER

#### Added SCATTER browser

In the SCATTER edit screen, you can select the browser icon (  ) and import SCATTER settings from a project on the SD card.

➔ For details on the SCATTER settings, refer to **“Reference Manual”** (PDF).

#### Initializing values in the SCATTER PAD/STEP edit screen

By holding down the [CLEAR] button and pressing a [C1]–[C4] knob, you can initialize the values individually.

#### Expanded range of parameter settings

When the **“REVERSE”** setting is **“ON,”** you can now use **“RETRIG GLD.”**

### Added Metronome Function

You can now use a metronome function by holding down the [FUNC] button and pressing the [TEMPO] button.

The metronome operates and sounds in synchronization with the master clock.

The following parameter is added to the master clock settings.

Parameter	Value	Explanation
METRONOME	ON, OFF	Specifies whether the metronome is used (ON) or not used (OFF).

➔ For details on the master clock settings, refer to **“Reference Manual”** (PDF).

The following parameters are added to the system settings (CTRL tab).

Parameter	Value	Explanation
Metronome Type	TYPE1–9	Specifies the tone of the metronome.
Metronome Level	1-127	Specifies the volume of the metronome.

➔ For details on the system settings, refer to **“Reference Manual”** (PDF).

## Added Step Loop Mode

When playing a tone/drum track, you can play the selected step as a loop.

You can specify the step for each track.

1. Press the [START/STOP] button to play the project.
2. Hold down the [SEL] button and press the [STEP] button.

Loop playback starts for the selected step.

If you select multiple steps, playback will loop in order of the selected steps.

When you take your finger off the [STEP] button, pattern playback resumes.

## Added Automatic Setting Function for LOOPER Clips

When you change the MEASURE of a clip, the clip's STEP LENGTH is now specified in tandem.

## Added Shortcuts

Action	Operation
Temporarily set the sequencer's playback mode to random	Hold down the SEL button of the tone/drum track, and press the MEASURE [>] button.
Temporarily set the sequencer's playback mode to reverse	Hold down the SEL button of the tone/drum track, and press the MEASURE [<] button.
Enter a SubStep in the drum track	In NOTE mode, hold down the [NOTE] button and press the [STEP] button.
Enter MUTE (50%) to a drum track	In NOTE mode, hold down the [MUTE] button and press the [STEP] button.
Invert MUTE for all tracks	Hold down the [FUNC] button and press the [MUTE] button.
Switch the metronome on/off	Hold down the [FUNC] button and press the [TEMPO] button.
Initialize the parameter assigned to a knob	While holding down the [SHIFT] button and the [CLEAR] button, turn the [FILTER], [MOD], or [FX] knob.

## Problems Fixed

- We fixed the problem that had caused inaccuracies in the timing of notes when synchronized with an external device.
- We fixed the problem in which SEND/RETURN did not operate correctly.
- We fixed the problem in which the unit was not recognized by a USB-connected PC when the PC was started or restarted.
- We fixed the problem in which the lit status of the total effect [ON] button differed from the actual status.
- We fixed the problem in which a LOOPER clip would sometimes not play correctly immediately after a project was loaded.
- We improved the situation in which the fade would weaken the attack when recording to a LOOPER clip.
- We fixed the problem in which an unwanted clip would remain when recording to a LOOPER clip was cancelled mid-way.
- We fixed the problem in which an invalid value exceeding the maximum value of 100 could be specified for the Tone parameter of MFX - FUZZ.
- We fixed the problem in which STEP LENGTH could be set to greater than 96 steps if the phrase's SCALE value was set to triplets (1/4T, 1/8T, 1/16T).
- We reduced the noise when SCATTER is operating.
- Other minor problems have been fixed.