

MC-101 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. Press the [NOTE] button to switch the PAD MODE to NOTE mode.

2. Hold down the [NOTE] button.

This turns the arpeggiator on.

Hold down the [NOTE] button once more to turn off the arpeggiator.

MEMO

- Push the [NOTE] button while holding down the [EXIT] button to quickly switch between ON/OFF.
- When in CHORD mode, you can use the same steps to configure the arpeggiator function.

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>UP: Notes you press will be sounded, from low to high.</p> <p>DOWN: Notes you press will be sounded, from high to low.</p> <p>UP&DOWN: Notes you press will be sounded, from low to high, and then back down from high to low.</p> <p>RANDOM: Notes you press will be sounded, in random order.</p> <p>NOTE ORDER: 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>GLISSANDO: 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>CHORD: All notes you press will sound simultaneously.</p> <p>AUTO1: The timing at which keys will sound will be assigned automatically, giving priority to the lowest key that was pressed.</p> <p>AUTO2: The timing at which keys will sound will be assigned automatically, giving priority to the highest key that was pressed.</p> <p>PHRASE: 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.</p> <p>For the "x2" variations, the unit plays two notes at each step.</p> <p>1/4: Quarter note</p> <p>1/8: Eighth note</p> <p>1/16: Sixteenth note</p> <p>1/4T: Quarter-note triplet</p> <p>1/8T: Eighth note triplet</p> <p>1/16T: Sixteenth note triplet</p> <p>1/32: 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 Drv	VENDOR	Select this when connecting to your computer.
	GENERIC	Select this when connecting to a device such as your smartphone.
		If the power supply level is insufficient, hold down the [VALUE] dial while starting up the MC-101 to switch to battery power.
D.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.

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
POS	OFF, PC, TRK1-4, MIXOUT	<p>Switches between Scatter insert destinations when pressing the pad. You can change the target of the Scatter effect for each pad.</p> <p>* When this is off, the insert destinations are not switched, and this follows the POS setting for SCATTER overall.</p> <p>* The effect may be applied to the older insert destination target, depending on the effect.</p>

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

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

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

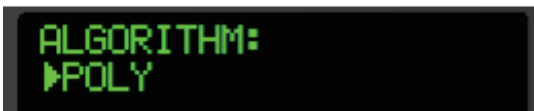
1. Select the tone track whose sound you want to change.
2. Press the [VALUE] dial.

The browser menu appears.



3. Use the [VALUE] dial to select "RANDOM," and press the [VALUE] dial.

RANDOM TONE DESIGNER appears.



4. Select the algorithm using the [VALUE] dial, 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.
DRUM	Generates a synth drum tone.
KICK	Generates a kick drum tone.
SNARE	Generates a snare drum tone.
CYMBAL	Generates a cymbal tone.
C.BELL	Generates a cowbell tone.

Note Sub Step Function Added (Tone Track)

You can now use sub steps in a tone track.

Editing the sub step of a step

1. Press the PAD [SEQ] button.
The pads switch to SEQ mode.
2. Press a pad on which notes are input (a pad that is lit up red).
The STEP EDIT screen appears.
The notes belonging to the selected step are shown.

3. Press the same pad again.
The contents shown on screen change.
Set the sub step using the [C2] knob.

The following parameters were added to the STEP EDIT screen.

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

Note Length/Tie Edit Function Added (Drum Track)

Editing the note length/tie

1. Press the PAD [SEQ] button.
The pads switch to SEQ mode.
2. Press the pads on which notes are input (the pads that are lit up red) while holding the [SHIFT] button.
The DRUM STEP EDIT screen appears.
The notes belonging to the selected step are shown.

3. Press the same pad again.
The contents shown on screen change.
Set the note length using the [C1] knob.

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

Parameter	Value	Explanation
END	0-99, TIE	Sets the timing at which the note stops playing. TIE: Connects the note with the note in the next step.

Functions Added to the Total Effect Compressor

Gain reduction meter display added for each band



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.

Added Shortcuts

Action	Operation
Input a tie	In SEQ 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 clips being selected when a pad is muted was fixed.
- The issue with preview being unavailable in the sound browser was fixed.
- The issue with the sound not being applied immediately when a sound file is imported 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.
- The issue with the target of the clip to edit being incorrect was fixed.
- The issue with the [OCT+], [OCT-] and [TIE/REST] buttons not working in CHORD mode when the scale in NOTE mode was set to a value other than “Chromatic” was 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.

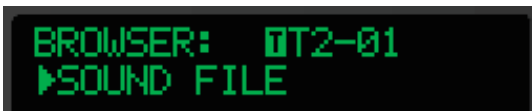
For more about Roland Cloud, refer to the Roland website.

➔ <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 [NOTE] button to switch the PAD MODE to NOTE mode.
3. Press the [VALUE] dial.

The browser menu appears.



4. Use the [VALUE] dial to select "SOUND FILE," and press the [VALUE] dial.

The sound file browser appears.



Controller	Explanation
[VALUE] dial	<p>If a folder level is selected: Moves to the next lower level.</p> <p>If a file is selected: Shows the contents of the file.</p> <p>If the contents of the file are shown: Loads the sound.</p>
[EXIT] button	<p>If a folder level other than root is selected: Moves to the next higher folder level.</p> <p>If the root folder is selected: Exits the sound file browser.</p> <p>If the contents of the file are shown: Returns to the file selection.</p>

MEMO

"F:" shown at the beginning indicates a folder.

NOTE

About user licenses

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

When a sound pack is imported into the MC-101 unit, the MC-101 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 "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
Format Error	<p>This appears if the selected sound file is not compatible with the MC-101, or if the file is damaged.</p> <p>Check the models that are listed as compatible for the file you downloaded, and try downloading again.</p>
License Error	<p>This appears if the selected sound file is associated with a different user license.</p> <p>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.</p> <p>To initialize the user license information, go to the UTILITY MENU and execute FACTORY RESET.</p> <p>When you execute FACTORY RESET, the system settings return to their factory-set state.</p>

Added Number of Scenes

By switching banks, you can now use a larger number of scenes.

Action	Operation
Switching the scene bank	<p>Hold down the PAD MODE [CLIP] button and press the PAD [9]–[16].</p> <p>To switch to banks 9–16, once again press the same pad [9]–[16].</p>
Fixing the scene indication	With the scene shown in the screen, press the [SHIFT] button.
Saving the contents of the scene	Hold down the PAD MODE [CLIP] button and long press the PAD [1]–[8].
Deleting the contents of the scene	While holding down the [SHIFT] button and the [PROJECT] button, press a pad [1]–[8].

Parameter Added to MIDI Input/Output Function

The following parameter is added to the CLIP SETTING screen.

Parameter	Value	Explanation
Tx PC	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	<p>The specified program change number is transmitted when the clip has switched.</p> <p>This function is convenient when you want the clip and the sound of an external sound module to change together.</p>

MEMO

- In track settings, you'll need to turn Tx PC "ON." For details, see "Reference Manual" (PDF).

PAD MODE CHORD Added

A “**chord mode**” that lets you use the pads to play chords is added as a choice of PAD MODE.

You can save up to 13 chords in one project.

Switching to chord mode

1. While in NOTE mode, press the [NOTE] button.

The unit switches to chord mode, and the [NOTE] button blinks. Press the [NOTE] button once again to return to NOTE mode.

Editing a chord

1. Hold down the [SHIFT] button and press the [FILTER] button.

The CHORD DESIGNER appears.

Controller	Explanation
[VALUE] dial	Changes the item shown.
[SOUND] button	Previews the sound of the chord.
PAD [2], [3], [5], [6], [7], or [9]–[16]	Select the pad to which the chord is written. The chord is saved when you hold down the [SOUND] button and press a pad.

Parameter	Explanation
KEY	Specifies the note that will be the key of the scale.
SCALE	Specifies the scale from which the chord is extracted. ➔ For details on scales, refer to “List of scales (when KEY is C)” (p. 9)
ROOT	Specifies the root note of the chord.
SPREAD	Specifies the constituent notes. The displayed numbers indicate the scale degree of each note, with the root as 1.
>>WRITE PAD	When you press the [VALUE] knob, the chord is saved in the selected pad.

Parameters Added

The following parameter is added to the TONE SETTING/KIT SETTING screen.

Parameter	Value	Explanation
Mix Level	0–127	Adjusts the volume of the mixed sounds. This lets you adjust the overall track volume while preserving the volume changes even when motion is used to vary the Level parameter.

The following parameters are added to the drum track pad settings.

Parameter	Value	Explanation
Voice	MULTI, SINGLE	Sets the way sounds are played when the same pad is pressed a number of times. MULTI: Layer the sound of the same pads. Even with continuous sounds where the sound plays for an extended time, such as with crash cymbals, the sounds are layered, without previously played sounds being eliminated. SINGLE: Only one sound can be played at a time when the same pad is pressed. With continuous sounds where the sound plays for an extended time, the previous sound is stopped when the following sound is played.
EnvMode	NO-SUS, SUSTAIN	Specifies the behavior when a pad is pressed. NO-SUS: The volume immediately starts decaying when you press the pad. SUSTAIN: The volume starts decaying when you release the pad.

The following parameter is added to the MOTION DESIGNER settings.

Parameter	Value	Explanation
FORM TYPE	COS, RND	COS: A waveform whose phase is 90 degrees offset relative to SIN. RND: A random value is output.

NOTE UTILITY Function Added

You can now use “**NOTE UTILITY**” in the STEP EDIT screen of a tone track or drum track.

1. Press the [SEQ] button to switch the PAD MODE to SEQ mode.

2. Hold down the [SHIFT] button and press a pad [1]–[16].

The STEP EDIT screen appears.

3. Hold down the [SHIFT] button and press a [FILTER] button.

The NOTE UTILITY appears.

Function	Explanation
SHIFT NOTE UP	Raises all notes of the clip by 1 (semitone). * This function is only for a tone track.
SHIFT NOTE DOWN	Lowers all notes of the clip by 1 (semitone). * This function is only for a tone track.
SHIFT NOTE LEFT	Moves all notes of the clip to the preceding step.
SHIFT NOTE RIGHT	Moves all notes of the clip to the following step.
QUANTIZE	Quantizes all notes of the clip.

User Sample Edit Function Added

We added a function for editing a user sample that was imported to a tone track or drum track.

For a drum track

- 1. Press the [NOTE] button to switch the PAD MODE to NOTE mode.**
- 2. Hold down the [SHIFT] button and press the pad [1]–[16] into which you imported the sample that you want to edit.**
The menu appears.
- 3. Use the [VALUE] dial to select “SAMPLE EDIT,” and press the [VALUE] dial.**
The user sample edit screen appears.

For a tone track

- 1. Hold down the [SHIFT] button and press the [SOUND] button.**
The menu appears.
- 2. Use the [VALUE] dial to select “SAMPLE EDIT,” and press the [VALUE] dial.**
The user sample edit screen appears.

Parameter	Value	Explanation
Mode	FWD, ONESHOT, REV, REV-ONE	Specifies the playback method.
Start	0–8388607	Specifies the position at which playback starts.
Loop	0–8388607	Specifies the loop position.
End	0–8388607	Specifies the position at which playback ends.
OrgKey	C-1–G9	Specifies the pitch of the sample.
Fine	-50.0–50.0 cent	Finely adjusts the pitch.
Gain	0 dB, +6 dB, +12 dB	Specifies the approximate volume of the sample.
Level	0–127	Specifies the volume.

Added Shortcuts

Action	Operation
Copy the contents of a drum kit pad	In a drum track’s NOTE mode, hold down the [SHIFT] button and press the [FX] button to copy the contents.
Paste the contents of a drum kit pad	Once again hold down the [SHIFT] button and press the [FX] button to paste the contents.

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 copying did not occur correctly for STEP 2 in the step copy/paste function.
- When recalling a scene, the clip to edit is now also switched.
- Fixed the problem that had sometimes prevented editing of the BPM when a looper track’s sample Strtch is set to “OrgBPM.”
- Fixed the problem in which REC MEAS was sometimes not applied when a clip is created.
- Fixed the problem that had sometimes caused freezing when a sample is previewed.
- Fixed the problem in which a CC (control change message) sometimes failed to be output when a track’s knobs ([C1]–[C4]) 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	Plays 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.

Added Functions for [C1]–[C4] Knobs

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

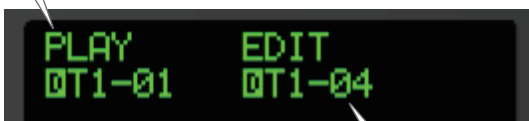
Parameter	Explanation
KnobTrk	SINGLE: Use the [C1]–[C4] knobs to control the SOUND, FILTER, MOD, and FX parameters of one track. MULTI: Use the [C1]–[C4] knobs to control the parameters of the four tracks selected by the [SOUND], [FILTER], [MOD], and [FX] buttons.

Added Functions for CLIP MODE

You can now edit clips other than the one being played.

The display of CLIP MODE has been changed.

Displays the clip currently playing. While the unit is stopped, "STOP" is displayed.



Displays the clip currently being edited. When switching clips to play, "NEXT" is displayed.

Action	Operation
Change the clip to play or edit.	Press the pad [1]–[16].
Change the clip to edit.	Hold down the [SHIFT] button and press the pad [1]–[16]. Turn the [VALUE] dial.
Delete the Clip.	Hold down the [SHIFT] and the [PROJECT] button and then press the pad [1]–[16].

SMF Import Function Added

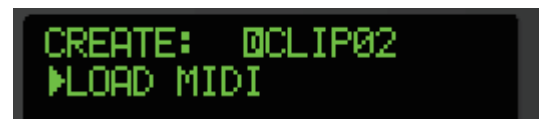
An SMF (Standard MIDI File) saved on an SD card can be imported into a clip.

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

1. Set PAD MODE to CLIP, and select the empty clip into which you want to load the SMF (Standard MIDI File).

2. Press the [VALUE] dial.

The CREATE screen appears.



3. Select LOAD MIDI.

4. Select MIDI FILE.

The MIDI/SMF file browser appears.



Controller	Explanation
[VALUE] dial	If a folder level is selected: Moves to the next lower folder level. If a file is selected: Loads the sample.
[EXIT] button	If a folder level other than root is selected: Moves to the next higher folder level. If the root folder is selected: Exits the SMF browser.

MEMO

"F:" shown at the beginning indicates a folder.

NOTE

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

5. Press the [ENTER] button to load.

MIDI Input/Output Functions Added

How 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

Now you can use the Auto Channel function.

Incoming MIDI messages are sent to the track selected by the TRACK SEL [1]–[4] buttons.

This 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 TRACK SEL [1]–[4] buttons.

Added Shortcuts

Action	Operation
Duplicating a Measure	In tone or drum track, hold down the [SEQ] button and press the MEASURE [>] button.
Copy selected step Paste to selected step	In the NOTE EDIT screen of tone track, hold down the [SHIFT] button and press the [FX] button to copy. Repeat to paste.
Enter a SubStep in the drum track	In drum track, hold down the [SEQ] button and press a pad [1]–[16].
Switching KnobTrk setting	Press the [SOUND], [FILTER], [FX], and [MOD] buttons simultaneously.

Problems Fixed

- 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 the MFX parameter assigned to the knob to not change correctly when using the [VALUE] dial to change the MFX Type.
- We fixed the problem that had caused freezing when a damaged WAV file was imported.
- We fixed the problem that caused the unit to freeze when exiting storage mode.
- We fixed the problem that user samples were read 1 sample shorter after imported.

Functions Added in Ver.1.20

Scale Performance Function Added

The following item is added to the PAD EDIT screen.

Parameter	Explanation
SCALE	Specifies the scale. ➔ For details on scales, refer to "List of scales (when KEY is C)."

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.

Sample Browser Function Added

The sample browser now supports a folder hierarchy.

Controller	Explanation
[VALUE] dial	When a folder level is selected: Moves to a lower folder. When a file is selected: Loads the sample.
[EXIT] button	When a folder level other than root is selected: Moves to the higher folder level. When the root folder is selected: Exits the WAV browser.
[SOUND] button	Previews the sample.

MEMO

"F:" shown at the beginning indicates a folder.

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	✓				✓		✓	✓				✓
Pelog	✓	✓		✓				✓	✓			
Hirajoshi	✓		✓	✓				✓	✓			
Miyakobushi	✓	✓				✓		✓	✓			
Ryukyū	✓				✓	✓		✓				✓

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 OUT	OFF, ON	Specifies whether scene changes are output to MIDI OUT.
Control Tx USB	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 Note	OFF, ON	Specifies whether the notes of each track are output. * This is not shown for a looper track.
Tx CC	OFF, ON	Specifies whether knob operations of each track are output.
Tx PC	OFF, ON	Specifies whether clip changes of each track are output.

Added Shortcuts

Operation	Operation
Temporarily set the sequencer playback mode to random	Hold down the TRACK SEL [1]–[4] buttons of a tone/drum track, and press the MEASURE [>] button.
Temporarily set the sequencer playback mode to reverse	Hold down the TRACK SEL [1]–[4] buttons of a tone/drum track, and press the MEASURE [<] button.
Use the metronome	Hold down the [TEMPO] button and press the [EXIT] button.

Added Metronome Function

You can now use a metronome function.

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

The following parameter is added to the TEMPO screen.

Parameter	Value	Explanation
METRONOME	ON, OFF	Specifies whether the metronome is used (ON) or not used (OFF). * You can also switch this on/off by holding down the [TEMPO] button and pressing the [EXIT] button.

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 freezing occurred when the 200th or later file was selected in the project select screen or the WAV FILE select screen.
- Other minor problems have been fixed.

Functions Added in Ver.1.02

Added Functions for SCATTER

Expanded range of parameter settings

When the **“Reverse”** setting is **“ON,”** you can now use **“RetrigGlide.”**

Playback location indication

The step playback location can now be shown during playback.

Added Functions for TONE STEP EDIT

Improved operability

By holding down the SOUND/FILTER/MOD/FX button and turning the VALUE dial, you can now change the adjustment range of each parameter and make fine adjustments to the value.

Added alphabetical order display to the drum kit sound browser

Alphabetical order display is now provided for drum kits.

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

Current Project Name Display Function

If you hold down the [PROJECT] button, the Project Name is now displayed.

MOTION Punch-In

By holding down the [REC] button and operating the [C1]–[C4] knobs, you can now punch-in Motions.

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.

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 the unit was not recognized by a USB-connected PC when the PC was started or restarted.
- We fixed the problem that had caused a hangup when loading from a project in the tone browser.
- We fixed the problem in which the DrumInst was sometimes not applied in the preset browser.
- 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.