

MC-101 Update

Functions Added in Ver.1.80

Undo/Redo Function Added

This function lets you revert a phrase to how it was just before it was edited.

- * The messages **"Can't UNDO"** or **"Can't REDO"** are shown when undo/redo can't be performed.

Undoing the previous operation (UNDO)

1. Press the [EXIT] and MEASURE [<] buttons at the same time.

"UNDO" is shown in the display, and the sequencer returns to the previous state.

For a step recording, this undoes the step that you just inputted or erased.

For a real-time recording, this undoes the recorded step and motion state.

- * When you switch between tracks or clips, the undo content is erased.
- * You can't undo or redo while recording in real time.
- * You can undo up to 10 times.

Reverting an Undo Operation (REDO)

1. Press the [EXIT] and MEASURE [>] buttons at the same time.

"REDO" is shown in the display, and the data reverts to how it was before you did the undo operation.

Tone Partial Editor Function Added

A simple partial editing function for tones has been added.

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

2. Select PARTIAL to display the EDIT screen.

- * While holding down the [SHIFT] button, press the [SOUND], [FILTER], [MOD] or [FX] button to turn the partial on/off that you want to edit.

3. Use the [C1]–[C4] knobs to edit the values.

- * You can edit the parameters by holding down the [SOUND], [FILTER], [MOD] and [FX] buttons and turning the [VALUE] knob.

COM (COMMON)

Here you can make settings related to voicing.

Parameter	Value	Explanation
OCT (OCTAVE)	-3+3	Specifies the pitch of the tone in octave units (maximum of ± 3 octaves).
M/P (MONO/POLY)	MONO, POLY	Specifies whether the tone plays polyphonically (POLY) or monophonically (MONO). MONO: Only the note of the last-played key is played, one note at a time. POLY: Multiple notes can be played simultaneously.
PRT (PORTAMENTO SW)	OFF, ON	Specifies whether the portamento (*1) effect is applied (ON) or not applied (OFF).
TIM (PORTAMENTO TIME)	0-1023	Specifies the time over which the pitch changes when using portamento. Higher settings will cause the pitch change to the next note to take more time.
ANL (ANALOG FEEL)	0-127	Applies time-varying change to the pitch and volume of the tone that is producing sound, adding a sense of variability. As you increase this value toward the maximum, the variability becomes greater, producing instability.

Parameter	Value	Explanation
CRS (COARSE TUNE)	-48+48sem	Adjusts the pitch of the tone's sound up or down in semitone steps (± 4 octaves).

- *1 Portamento is an effect which smoothly changes the pitch from the first-played key to the next-played key. By applying portamento when the MONO/POLY parameter is **"MONO"**, you can simulate slide performance techniques on a violin or similar instrument.

OSC 1-4

Here you can make settings for the oscillators of each partial.

Parameter	Value	Explanation
OSC (OSC TYPE)	PCM, VA, PCM-Sync, SuperSAW, Noise	Specifies the oscillator type. PCM: Sound is produced by PCM. This sounds the wave specified by WAVE GROUP TYPE, WAVE BANK, and WAVE NUMBER. VA: Sound is produced by an analog modeled wave generated by calculation. This sounds the wave of the number specified by WAVE FORM. PCM-Sync: Sound is produced by the wave specified by the SYNC WAV. SuperSAW: Sound is produced by SuperSAW. Noise: White noise is produced.
GRP (WAVE GROUP TYPE)	INT, SAMP	INT: When OSC TYPE is PCM, the internal waveforms of the MC-101 are used. SAMP: When OSC TYPE is PCM, the waveforms loaded into the project are used.
BNK (WAVE BANK)	A, B, C	When OSC TYPE is "PCM" and the WAVE GROUP TYPE is "INT", this sets the banks (A-C) to sound.
WAV (PCM: WAVE NUMBER)		When OSC TYPE is "PCM", this specifies the waveform number in the group specified by WAVE GROUP TYPE and in the bank specified by WAVE BANK. Specifies the sample number when WAVE GROUP TYPE is SAMP.
WAV (VA: WAVE FORM)	SAW, SQR, TRI, SIN, RAMP, JUNO, TRI2, TRI3, SIN2	Specifies the wave that is sounded when OSC TYPE is VA. SAW: Sawtooth wave SQR: Square wave TRI: Triangle wave SIN: Sine wave RAMP: Ramp wave JUNO: Modulated sawtooth wave TRI2: Triangle wave variation TRI3: Triangle wave variation SIN2: Sine wave variation
PW (PULSE WIDTH)	0-127	This is an effect obtained by varying the pulse width duty cycle to modify the waveform. It is available when OSC TYPE is VA, and also allows you to create effects with other than SQR (square wave).
PWM (PWM DEPTH)	-63+63	Specifies the amount (depth) of LFO applied to PULSE WIDTH. LFO follows the settings of LFO2.
SW (PARTIAL SWITCH)	OFF, ON	Turns the partial on/off.
CRS (COARSE TUNE)	-48+48	Specifies the pitch in semitone units (maximum ± 4 octaves).
FIN (FINE TUNE)	-50cen+50cen	Specifies the pitch in one-cent units (maximum ± 50 cents).
LEV (LEVEL)	0-127	Specifies the volume of the partial.

OSC (PCM-SYNC)

Parameter	Value	Explanation
WAV (PCM-Sync: SYNC WAV)		Specifies the wave that is used when OSC TYPE is PCM-Sync.

OSC (SuperSAW)

Parameter	Value	Explanation
DET (SuperSAW: DETUNE)	0–127	Specifies the width of pitch variance between the seven sawtooth waves that are layered within one oscillator. Higher values produce greater pitch variance. (When doing this, OSC Detune changes the pitch for each of the seven sawtooth waves by the same width.)

OSC MOD 1-2/3-4 (Structure)

Structure lets you play two partials as a pair.

By using partial 1 or 3 (the carrier) to modulate the other partial 2 or 4 (the modulator), you can create a wide range of tonal characters.

Parameter	Value	Explanation
STR (STRUCTURE)	Partial 2 or 4 is used to modulate the sound of partial 1 or 3.	
	OFF	Off
	SYNC	This implements the oscillator sync function that is provided by analog synthesizers. The oscillator of partial 1 or 3 is reset at pitch cycles of partial 2 or 4. * This is only enabled when the OSC TYPE of OSC1 or OSC3 is "VA" or "PCM-Sync".
	RING	This implements the ring modulator that is provided by analog synthesizers. The output of partial 2 or 4 is multiplied with partial 1 or 3.
	XMOD XMOD2	This implements the cross modulation function that is provided by analog synthesizers. The output of partial 2 or 4 is applied as the pitch of partial 1 or 3.
LV1/3 (OSC1/3 LEVEL)	0–127	Adjusts the volume of OSC 1 or 3.
LV2/4 (OSC2/4 LEVEL)	0–127	Adjusts the volume of OSC 2 or 4.
RNG (RING LEVEL)	0–127	Adjusts the volume of ring modulation.
MOD (MOD DEPTH)	0–10800 [cent] (XMOD) 0–127 (XMOD2)	Adjusts the depth of cross modulation.

FILTER

Here you can make filter settings.

Parameter	Value	Explanation
TYP (TVF: FILTER TYPE)	OFF, LPF, BPF, HPF, PKG, LPF2, LPF3	Selects the type of TVF filter when FILTER TYPE is TVF. OFF: Off LPF: Low pass filter BPF: Band pass filter HPF: High pass filter PKG: Peaking filter LPF2: Low pass filter 2 LPF3: Low pass filter 3
TYP (VCF: FILTER TYPE)	FLAT, TYPE-JP, TYPE-M, TYPE-P	Selects the type of VCF filter when FILTER TYPE is VCF. Each of these simulates the operation of an analog synthesizer's LPF.
CUT (CUTOFF)	0–1023	Selects the frequency at which the filter begins to have an effect on the waveform's frequency components.

Parameter	Value	Explanation
RES (RESONANCE)	0–1023	Boosts the region of the sound near the cutoff frequency, adding a distinctive character to the sound.
ENV (ENV DEPTH)	-63–+63	Specifies the depth of the filter envelope.
TVF/VCF (FILTER TYPE)	TVF, VCF	Select either TVF or VCF as the filter type. * TVF stands for Time Variant Filter, and is a filter that allows detailed settings to be made for the time-varying change in the sound's frequency components. If VCF is selected, the simultaneous polyphony will be less than when TVF is selected.
KF (KEY FOLLOW)	-200–+200	Set this if you want the cutoff frequency to change according to the keyboard position of the note you play.
SLP (FILTER SLOPE)	-12, -18, -24 [dB/Oct]	This button selects the slope (steepness) of the filter. For VCF, you can choose -12, -18, or -24. For TVF, you can choose only -12 or -24. If the filter TYPE is TVF, the following limitations apply. Only -12 dB or -24 dB can be specified. Even if you specify -18 dB, the sound engine operates internally with the -12 dB setting. If you specify -24 dB, the simultaneous polyphony will be less than when -12 dB is selected.
HPF (HPF CUTOFF)	0–1023	Specifies the cutoff frequency of the -6 dB high-pass filter. * This parameter is effective when FILTER TYPE is VCF.

ENV FILTER

Here you can make filter envelope settings.

Parameter	Value	Explanation
T1A (T1 ATTACK)	0–1023	Specifies the time over which the initial value changes to the maximum value after the key is pressed.
T3D (T3 DECAY)	0–1023	Specifies the time over which the SUSTAIN value is reached following the ATTACK.
L3S (L3 SUSTAIN)	0–1023	Specifies the sustain value of the filter envelope.
T4R (T4 RELEASE)	0–1023	Specifies the time over which the minimum value is reached after the key is released.

ENV AMP

Here you can make amp envelope settings.

Parameter	Value	Explanation
T1A (T1 ATTACK)	0–1023	Specifies the time over which the initial value changes to the maximum value after the key is pressed.
T3D (T3 DECAY)	0–1023	Specifies the time over which the SUSTAIN value is reached following the ATTACK.
L3S (L3 SUSTAIN)	0–1023	Specifies the sustain value of the amp envelope.
T4R (T4 RELEASE)	0–1023	Specifies the time over which the minimum value is reached after the key is released.

ENV PITCH

Here you can make pitch envelope settings.

Parameter	Value	Explanation
DEP (DEPTH)	-100–+100	Specifies the depth of the pitch envelope. Higher values make the pitch envelope produce greater change. Negative "-" values invert the shape of the envelope. If the OSC TYPE is other than VA, this is limited to ± 63 .

Parameter	Value	Explanation
T1A (T1 ATTACK)	0–1023	Specifies the time over which the initial value changes to the maximum value after the note starts.
T3D (T3 DECAY)	0–1023	Specifies the time over which the SUSTAIN value is reached following the ATTACK.
L3S (L3 SUSTAIN)	-511–+511	Specifies the sustain value of the pitch envelope.

ENV COM (ENV Common)

Parameter	Value	Explanation
ADS (ADSR MODE)	The envelope works in simple A-D-S-R mode.	

LFO 1/2

Here you can make LFO settings.

Parameter	Value	Explanation
WAV (WAVE TYPE)	These buttons set the LFO waveform.	
	SIN	Sine wave
	TRI	Triangle wave
	SAW-UP	Sawtooth wave
	SAW-DW	Sawtooth wave (negative polarity)
	SQR	Square wave
	RND	Random wave
	TRP	Trapezoidal wave
	S&H	Sample and Hold wave (changes the LFO value once every cycle)
	CHS	Chaos wave.
RAT (RATE or RATE NOTE)	Modified sine wave. The amplitude of the sine wave is randomly varied once every cycle.	
	VSIN	
	STEP	A waveform generated from data specified by LFO Step 1–16. This produces a fixed pattern of stepped change like a step modulator. * The MC-101 does not support step modulator editing.
RAT (RATE or RATE NOTE)	0–1023 (RATE)	This is effective if SYNC TEMPO is OFF. Specifies the LFO rate without regard to the tempo. Higher values produce a faster LFO rate (a shorter cycle).
	1/64T–4 (RATE NOTE)	This is effective if SYNC TEMPO is ON. Sets the LFO cycle as a note length.
FLT (FILTER DEPTH)	-100–+100	Specifies how deeply the LFO will affect the cutoff frequency.
PIT (PITCH DEPTH)	-100–+100	Specifies how deeply the LFO will affect pitch. * If OSC TYPE is other than VA, the range is limited to -63–+63.
FAD (FADE IN)	0–1023	Specifies the time over which the LFO amplitude will reach the maximum (minimum).
SYN (SYNC TEMPO)	OFF, ON	Set this ON if you want the LFO rate to synchronize with the tempo.
AMP (AMP DEPTH)	-100–+100	Specifies how deeply the LFO will affect the volume.
PAN (PAN DEPTH)	-63–+63	Specifies how deeply the LFO will affect the pan.

EQ

Here you can make equalizer settings.

Parameter	Value	Explanation
SW (EQ SWITCH)	OFF, ON	Turns the equalizer on/off.
LO (LO GAIN)	-24–+24 [dB]	Sets the gain of the low frequency range.

Parameter	Value	Explanation
MID (MID GAIN)	-24–+24 [dB]	Sets the gain of the mid frequency range.
HI (HI GAIN)	-24–+24 [dB]	Sets the gain of the high frequency range.
Q (MID Q)	0.5–16.0	Bandwidth of the mid frequency range. Set a higher value for Q to narrow the range to be affected.
LO (LO FREQ)	20–16000 [Hz]	Sets the frequency of the low range.
MID (MID FREQ)	20–16000 [Hz]	Sets the frequency of the middle range.
HI (HI FREQ)	20–16000 [Hz]	Sets the frequency of the high range.

MATRIX 1–4

Here you can connect various parameters as if you were patching them.

You can connect up to four parameters.

Parameter	Value	Explanation
SRC	For an explanation of each parameter, refer to the "Reference Manual" (p.45) "Parameter List".	Specifies the control-source signal. * If you specify SycCtrl 1–4, you can use the panel [FILTER] [MOD] [FX] knobs to control the parameters.
TO		Specifies the parameter that is controlled. ➔ For an explanation of each parameter, refer to the "Reference Manual" (p.45) "Parameter List".
DEP (DEPTH)	-63–+63	Specifies the amount (depth) by which the parameter is varied.

VELOCITY SENS

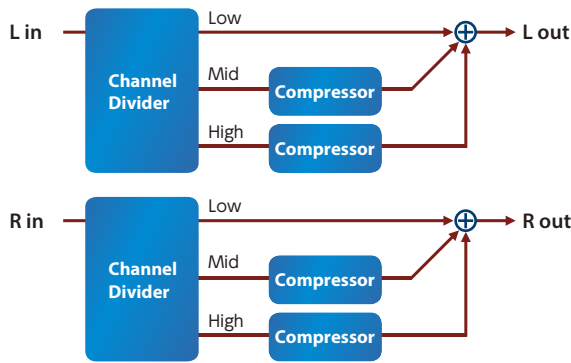
Parameter	Value	Explanation
LVL (LEVEL VELOCITY)	-100–+100	Set this when you want the volume of the partial to change depending on the force with which you press the keys. Set this to a positive (+) value to have the changes in partial volume increase the more forcefully the keys are played; to make the partial play more softly as you play harder, set this to a negative (-) value.
CUT (CUTOFF VELOCITY)	-100–+100	Use this parameter when changing the cutoff frequency to be applied as a result of changes in playing velocity. Specify a positive "+" value if you want the cutoff frequency to raise when you play strongly, or a negative "-" value if you want it to lower.
DEP (FILTER DEP VELO)	-100–+100	Specify this if you want keyboard playing dynamics to affect the filter envelope depth. Specify a positive "+" value if you want the filter envelope to apply more deeply as you play more strongly, or a negative "-" value if you want it to apply less deeply.
T4R (FENV T4R VELO)	-100–+100	Specify this if you want key release velocity to affect Time 4 of the filter envelope. If you want Time 4 to be speeded up for quickly released notes, set this parameter to a positive (+) value. If you want it to be slowed down, set this to a negative (-) value.

Exciter, Phonograph and JD Multi Added to MFX

An Exciter effect has been added to the Filter category, a Phonograph effect has been added to the Lo-fi category, and a JD Multi effect has been added to the Combination category.

Exciter

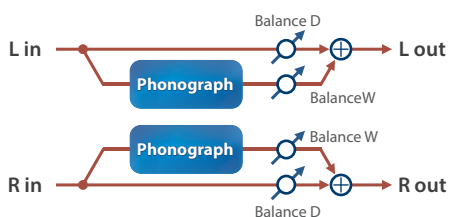
This adds dynamics to the sound, by dynamically bringing up the high end using a split-band compressor.



Parameter	Value	Explanation
Band2 Th	-80.0–0.0 (dB)	Raises the midrange frequency levels when they fall below the specified amount.
Band2 Gain	0–+24 (dB)	Sets how much to raise the levels when the midrange volume is low.
Band3 Th	-80.0–0.0 (dB)	Raises the high-end frequency levels when they fall below the specified amount.
Band3 Gain	0–+24 (dB)	Sets how much to raise the levels when the high-end frequency volume is low.
Split1 F	2000–5000 (Hz)	Frequency at which the low and midrange frequencies are split
Split2 F	3000–10000 (Hz)	Frequency at which the midrange and high-end frequencies are split
Level	0–127	Output Level

Phonograph

Recreates the sound of an analog record being played on a record player. This lets you simulate the unique noises produced when a record is played, as well as the variations that occur when the record spins.

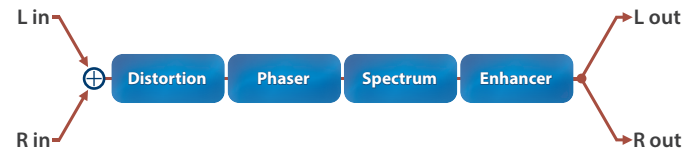


Parameter	Value	Explanation
Signal Dist	0–127	Sets the amount of distortion.
Freq Range	0–127	Sets the frequency characteristics of the playback system. Smaller values create the feeling of an older system with narrow frequency bands.
Disc Type	LP, EP, SP	Sets the turntable rotation speed. This has an effect on the scratch noise cycle.
Scratch NZ	0–127	Sets the volume of noise created by scratches in the record.
Dust NZ	0–127	Sets the volume of noise created by dust on the record.
Hiss NZ	0–127	Sets the volume of continuous hiss noise.
Total NZ	0–127	Sets the volume of noise overall.
Wow	0–127	Sets the amount of variation in record spin (long cycle).
Flutter	0–127	Sets the amount of variation in record spin (short cycle).
Random	0–127	Sets the amount of non-cyclical variation in record spin.

Parameter	Value	Explanation
Total W/F	0–127	Sets the volume of variation in record spin overall.
Balance	D100: 0W -D0: 100W	Sets the volume balance between the original sound (D) and the effect sound (W).
Level	0–127	Sets the output volume.

JD Multi

Recreates the effects included in group A of the JD-800.



Parameter	Value	Explanation
Seq	DS - PH - SP - EN	Selects the connection order of the effects. DS: Distortion PH: Phaser SP: Spectrum EN: Enhancer
	DS - PH - EN - SP	
	DS - SP - PH - EN	
	DS - SP - EN - PH	
	DS - EN - PH - SP	
	DS - EN - SP - PH	
	PH - DS - SP - EN	
	PH - DS - EN - SP	
	PH - SP - DS - EN	
	PH - SP - EN - DS	
	PH - EN - DS - SP	
	PH - EN - SP - DS	
	SP - DS - PH - EN	
	SP - DS - EN - PH	
	SP - PH - DS - EN	
	SP - PH - EN - DS	
	SP - EN - DS - PH	
	SP - EN - PH - DS	
	EN - DS - PH - SP	
	EN - DS - SP - PH	
	EN - PH - DS - SP	
	EN - PH - SP - DS	
	EN - SP - DS - PH	
	EN - SP - PH - DS	
DS Switch	OFF, ON	Turns the distortion on/off.
DS Typ		Sets the type of distortion.
	MELLW DRV	Softer distortion with a slightly darker sound.
	OVERDRIVE	Distortion that resembles a vacuum tube amp being driven.
	CRY DRV	Distortion that emphasizes the high end.
	MELLOW DS	Gives the feeling of distortion playing through a large amp.
	LIGHT DS	Strong distortion with a bright sound.
	FAT DS	Thick distortion that emphasizes the low and high ends.
	FUZZ DS	Distortion that's even more powerful than FAT DS.
DS Drive	0–100	Sets the amount of distortion.
DS Level	0–100	Sets the distortion output level.
PH Switch	OFF, ON	Turns the phaser on/off.
PH Manual	50 [Hz]–15.0 [kHz]	Sets the basic frequency from which the sound is modulated with the phaser effect.
PH Rate	0.1–10.0 [Hz]	Sets the cycle of the phaser modulation.
PH Depth	0–100	Sets the depth of the phaser modulation.
PH Resonance	0–100	Sets the amount of feedback for the phaser. Increasing the value creates a more unusual sound.

Parameter	Value	Explanation
PH Mix	0–100	Sets the level of the phase-shifted sound.
SP Switch	OFF, ON	Turns the spectrum on/off.
SP Band1	-15–+15 [dB]	Sets the gain (amount of boost/cut) in the 250 Hz range.
SP Band2	-15–+15 [dB]	Sets the gain (amount of boost/cut) in the 500 Hz range.
SP Band3	-15–+15 [dB]	Sets the gain (amount of boost/cut) in the 1000 Hz range.
SP Band4	-15–+15 [dB]	Sets the gain (amount of boost/cut) in the 2000 Hz range.
SP Band5	-15–+15 [dB]	Sets the gain (amount of boost/cut) in the 4000 Hz range.
SP Band6	-15–+15 [dB]	Sets the gain (amount of boost/cut) in the 8000 Hz range.
SP Width	1–5	Sets the bandwidth for changing the levels, common to all bands.
EH Switch	OFF, ON	Turns the enhancer on/off.
EH Sens	0–100	Sets how easily the enhancer effect is applied.
EH Mix	0–100	Sets the ratio at which the harmonics generated by the enhancer are mixed with the original sound.
Pan	L64–63R	Changes the pan.
Level	0–127	Sets the output volume.

Scatter Step Edit Function Added

You can now edit the scatter function in steps.

1. Hold down the [SHIFT] button and press the PAD [SCATTER] button.

The SCATTER EDIT MENU screen appears.

STEP 1–16 can now be selected on the SCATTER EDIT menu screen.

See the Reference Manual (p. 31) for the parameters that can be controlled.

Volume Setting Added for WAV File Preview Playback

“WAV Prv.Lv” has been added to the project settings.

Added Setting for Battery Type

You can now select the type of batteries you’re using on this unit.

This setting allows the unit to notify you when the battery is low (“Battery Low”) or when the unit must automatically shut down (“Shutdown”) due to a drop in voltage.

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

2. Select “SYSTEM”, and then set “Batt Type” to “ALKL” (alkaline batteries) or “NiMH” (rechargeable Ni-MH batteries).

Recording Messages from External MIDI Devices as Motions

You can record control change messages and other MIDI messages inputted from an external MIDI device as motions.

The following parameters were added to TRACK SETTING (MIDI).

Parameter	Value	Explanation
Rx ModWheel	ON, OFF	CC 1: You can select whether to apply modulation to a track or record it to a clip.
Rx BrthCtrl	ON, OFF	CC 2: You can select whether to apply breath control to a track or record it to a clip.
RX FootCtrl	ON, OFF	CC 4: You can select whether to apply foot control to a track or record it to a clip.
Rx Volume	ON, OFF	CC 7: You can select whether to apply main volume to a track or record it to a clip.
RX Pan	ON, OFF	CC 10: You can select whether to apply panning to a track or record it to a clip.
Rx Exp	ON, OFF	CC 11: You can select whether to apply expression to a track or record it to a clip.
Rx Hold-1	ON, OFF	CC 64: You can select whether to apply damper pedal to a track or record it to a clip.
Rx RevSend	ON, OFF	CC 91: You can select whether to apply reverb send to a track or record it to a clip.
Rx ChoDlySend	ON, OFF	CC 93: You can select whether to apply chorus send to a track or record it to a clip.
Rx ChPress	ON, OFF	You can select whether to apply channel pressure to a track or record it to a clip.
Rx P.Bend	ON, OFF	You can select whether to apply pitch bend to a track or record it to a clip.

- * The parameters shown are different depending on the type of the selected track.
- * When this is set to OFF, the parameter in question is not recorded. Set this to ON before recording a parameter.
- * You can record up to four parameters in addition to pitch bend for each clip. If more than four parameters are input, they are not recorded.
- * Recorded parameters are not applied if they are set to OFF.
- * To delete recorded motions, delete the applicable motions as shown in “Deleting Motion” of the Reference Manual (p. 27).
- * You can edit the MIDI messages recorded in a motion from the step edit screen.
- * From the step edit (EDIT STEP) screen in “Editing Motion” that’s mentioned in the Reference Manual (p. 27), each time you press the [VALUE] dial, the page switches on the MOTION screen, where you can view and edit the recorded MIDI messages.

Import Function for MC/MV Production Packs Added

You can load the MC/MV Production Packs (clip packs: MCZ files) that are saved on an SD card into a project.

Installing Roland Cloud Manager

1. Download Roland Cloud Manager from Roland Cloud website to your computer.

Download the Roland Cloud Manager installer from the website shown below.

<https://roland.cm/RolandCloudManager>

2. Double-click the installer you downloaded to begin the installation.

Follow the onscreen instructions to install.

When you see the message **"Installation has been completed"**, click the [Close] button.

3. Launch the Roland Cloud Manager that you've installed, and register an account.

Follow the onscreen instructions to register.

Purchasing a Lifetime Key for the contents

You must purchase a Lifetime Key by following the steps below to use paid contents.

To use free contents, refer to "Downloading content files" on the next page.

1. Launch Roland Cloud Manager.

2. Click **"Hardware Instruments"** (Hardware) on the menu tab.

A list of hardware group appears at the top of the screen.

3. On the hardware group tab, click **"AIRA & DANCE"**.

A list of hardware appears on the left side of the screen.

4. Click on **"MC-101"**.

The contents list appears.

5. Click the (Add to cart) icon for the contents you wish to purchase.

This adds the contents to your cart.

6. Click the (Move to cart) button at the top right-hand part of the screen.

The cart screen appears.

7. Check the contents onscreen, and click **"Proceed to checkout"**.

A payment screen appears in your Web browser. Proceed to payment, and close your Web browser when you're finished.

8. Return to the Roland Cloud Manager screen and click **"Accept"** in the **"Purchase Complete"** dialog box. This closes the message.

9. Click the (Download) icon for the contents you wish to download.

A dialog box for specifying the download destination folder appears.

10. Specify the folder to which you want to download the contents, and close the dialog box.

The content files are downloaded into the folder that you specified on your computer.

Downloading content files

1. Launch Roland Cloud Manager.

2. Click **"Hardware Instruments"** (Hardware) on the menu tab.

A list of hardware group appears at the top of the screen.

3. On the hardware group tab, click **"AIRA & DANCE"**.

A list of hardware appears on the left side of the screen.

4. Click on **"MC-101"**.

The contents list appears.

5. Click the (Download) icon for the contents you wish to download.

A dialog box for specifying the download destination folder appears.

6. Specify the folder to which you want to download the contents, and close the dialog box.

The content files are downloaded into the folder that you specified on your computer.

Saving content files to a USB flash drive

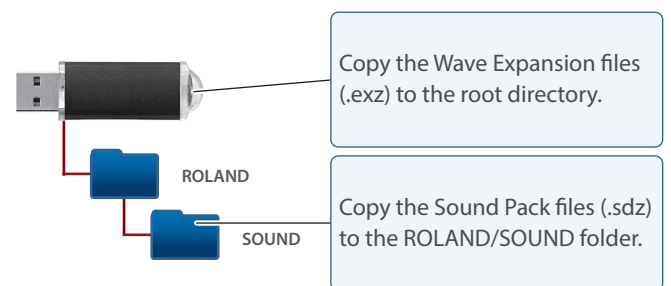
* If this is the first time you're using the USB flash drive, format it on the MC-101.

1. Have ready the tone files you want to add to the MC-101.

2. Connect a USB flash drive to your computer.

3. Save the tone files to the target directory of the USB flash drive.

USB flash drive folder architecture



4. Remove the USB flash drive from your computer.

Importing a MC/MV Production Packs

1. Stop the sequencer, and press the **PAD [CLIP]** button.

The unit switches to CLIP mode.

2. Press the pad of an empty clip.

The selected pad blinks white.

3. Press the **[VALUE]** dial.

4. Use the **[VALUE]** dial to select “LOAD CLIP” and press the **[VALUE]** dial.

The LOAD CLIP screen appears.

5. Use the **[VALUE]** dial to select “SOUND FILE” and press the **[VALUE]** dial.

The clip pack is shown.

When “**CLIP FILE**” is selected, you can import clips (in .mvc format) that are saved on the SD card.

6. Select the pack that you want to load, and then press the **[VALUE]** dial.

This shows the categories.

7. Select the category and clip you want to load, and press the **[VALUE]** dial.

When “**Sound Src CLIP**” is shown, select “**Cancel**” to leave the sound source as “**TRACK**”, or select “**OK**” to change the sound source to “**CLIP**”.

See “**Specifying a Sound for Each Clip**” in the Reference Manual (p. 12) for more information on the sound source.

- * You can't import a clip of a different track type.
- * If you want to use the sound of the import source clip in a tone/drum track, specify the sound source as “**CLIP**”.
- * If you set the Key and Scale in the project settings beforehand, the clip's Transpose value is automatically adjusted when you load a clip whose Key and Scale (clip settings) are already set.

The following parameters were added to the project settings (COMMON tab).

Parameter	Value	Explanation
Key	NONE, C, C#, D, D#, E, F, F#, G, G#, A, A#, B	Sets the root note (key) of the song.
Scale	NONE, MAJOR, MINOR	Sets the scale of the song.

The following parameters were added to the clip settings.

Parameter	Value	Explanation
Key	NONE, C, C#, D, D#, E, F, F#, G, G#, A, A#, B	Sets the root note (key) of the clip.
Scale	NONE, MAJOR, MINOR	Sets the scale of the clip.

Save Function for Clips Added

A clip save function has been added to the clip setting parameters.

1. Hold down the **[SHIFT]** button and press the **[CLIP]** button.

The CLIP EDIT screen appears.

2. Use the **[VALUE]** dial to select “SAVE CLIP”, and press the **[CLIP]** button.

3. Use the **[VALUE]** dial or the **MEASURE [<] [>]** buttons to change the clip name.

4. Press the **[VALUE]** dial.

The message “**Complete**” appears, and the clip is now saved.

- * The save destination differs depending on the track type.

DRUM track: ROLAND/GROOVEBOX/CLIP/DRUM

TONE track: ROLAND/GROOVEBOX/CLIP/TONE

LOOPER track: ROLAND/GROOVEBOX/CLIP/LOOPER

- * Clip packs (.SDZ) can't be saved.

Problems and Functions Corrected

- Arpeggios can now be played via external MIDI.
 - * **This is only enabled when you use an external keyboard to transmit the channel set in “Auto Ch”, SYSTEM SETTING (MIDI).**
- The program changes sent for clips now conform to LSB/MSB. This can be configured from the CLIP EDIT screen.
- The issue with playback getting delayed when synchronized via MIDI has been fixed.
- The issue with the mode not changing in SCENE EDIT even when the [SEQ] button is pressed has been fixed.
- The issue with the Chord Designer not opening when a clip is empty has been fixed.
- The issue with notes not getting imported when importing an SMF file if the 128th step is a note-off message has been fixed.
- MIDI messages whose “Rx-” in TRACK SETTING (MIDI) is “ON” when importing an SMF file can now be imported.
- The issue with total effects being incorrectly applied to the preview playback sound of WAV files has been fixed. Also, the preview playback sound of WAV files is no longer output to USB.
- The issue with Pan and Level not being applied when importing clips from another project file has been fixed.
- In the MOTION tab on the STEP EDIT screen, the steps that did not contain motion data at the beginning were not shown. This has been changed to show the maximum motion value written within the step. (If data exists at the beginning of the step, the display of the starting data is prioritized.)
- The issue where the motion is slow to follow at the beginning of the step when SAW, ARC or SQR are selected in the MOTION DESIGNER has been improved.
- The issue where the MFX is not correctly applied when the clips for multiple tracks that are set to the same MIDI channel and all switch at the same time when a program change message is received has been fixed.
- The issue where notes outside of the range are not muted and play unwanted notes when generating chords using the Chord Designer has been fixed.
- The scene number now blinks when the next scene is standing by (reserved) in the scene chain.
- The issue with the scatter effect not being applied even though the [SCATTER] button was pressed has been fixed.
- The issue where the scatter effect triggered by the pads does not turn on depending on the timing, or turns off at a shorter length than what was set for Pad Quantize has been fixed.
- The MIDI Start that was output when the count-in starts has been corrected, so that it now outputs after the count-in ends.
- The issue where the [START/STOP] button doesn't work during the pre-count for the count-in has been fixed.
- The issue where unrelated parameters are changed in a clip when STEP SHIFT is executed in the STEP EDIT screen has been fixed.
- The issue where the clip's sound is incorrect when selected while the clip chain is playing back has been fixed.
- The issue in which clips do not correctly play back when copied using “COPY: CLIP SOUND” (LOOPER track) has been fixed.
- The issue with quantization not being correct when you raise the “S.Qtz Clip” or “S.Qtz Mstr” value from the OFF setting in the QUANTIZE SETTING screen has been fixed.
- Clips (.mvc) created on the MC-707 or on the MV-1 can now be imported. Save the clips to either the ROLAND/GROOVEBOX/CLIP/DRUM folder, the ROLAND/GROOVEBOX/CLIP/TONE folder or the ROLAND/GROOVEBOX/CLIP/LOOPER folder.
- Other minor problems have been fixed.

Functions Added in Ver.1.71

Scene Chain Function Added

You can now chain scenes together and play them back.

This feature plays back scenes in order from scene 1-1 to the numbers that follow. (1-1→1-2→1-3→...)

Chaining and playing back scenes

1. Hold down the [CLIP] button and press the [SEQ] button.

The SCENE screen is displayed.

2. Hold down the [SHIFT] button and press the pad corresponding to the scene you want to edit.

The SCENE CHAIN screen appears.



Parameter	Value	Explanation
LENGTH	OFF-127	Sets how long it takes before the scene changes. This sets how many master clocks occur before switching to the next scene.
CHAIN	OFF, ON	Switches the scene chain on/off. You can also hold down the [SHIFT] button on the SCENE screen and press the [VALUE] dial to turn this on/off.

Count-In Function Added

The following parameter was added to the SYSTEM SETTING (CTRL tab).

Parameter	Value	Explanation
Count-In Stp	OFF, 1-128	Sets the count-in. When this is on, a count-in plays before recording begins, and the count-in length is set to the number of steps you specify. The output destination for the count-in is the same as for the metronome. When this is set to a number from 1 to 128, the metronome sounds during count-in, regardless of the metronome's on/off setting.

Added Functions to the Chord Designer

The following parameters were added to the Chord Designer.

Parameter	Explanation
WRITE ALL TYP1	Generates chords ascending chromatically in parallel from a single chord. This writes a chord to each pad by changing the KEY setting for each, based on the parameter you set.
WRITE ALL TYP2	Generates chords that ascend along the notes of the scale. This writes a chord to each pad by changing the ROOT setting for each, based on the parameter you set.

Audio Insert Function Added

Use this function to insert audio from a device connected via USB or outputted tracks into a track. Audio input from the PC IN or outputted tracks are inserted before the MFX of the specified track.

The following settings were added to the TRACK SETTING (GEN tab).

Parameter	Value	Explanation
Insert	OFF	The audio insert function is not used.
	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.
	TRACK1-3	Inserts the selected track as a stereo signal before the MFX. * You can insert a track whose number is less than the track that's set. * You can't insert a track at track 1.

- * Lower the faders for tracks containing inserted audio that are not outputted.
- * To configure MFX that differ for each clip in the audio insert's track, set "Sound Src" to "CLIP".

Added Functions to the Looper Track

BPM Sync parameter added

The following parameter was added to TRACK SETTING (GEN tab) for looper tracks.

Parameter	Value	Explanation
BPM Sync	OFF, ON	When this is set to ON, the playback speed for the phrase changes according to the BPM. Set this to OFF if you don't want the playback speed to change.

Export function added

The following function was added to the LOOPER MENU for looper tracks.

Function	Operation	Explanation
EXPORT CLIP	Hold down the [SHIFT] button and press the [SOUND] button, and select with the [VALUE] dial	Press the [VALUE] dial to save the selected clip to the SD card as a WAV file. * Clips are saved in ascending numerical order to the ROLAND/GROOVEBOX/SAMPLE/EXPORT folder.

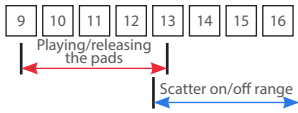
Delay/Reverb Send Added to PC IN

The following parameters were added to PROJECT SETTING (PC IN tab). You can add delay or reverb to the input signal from PC IN.

Parameter	Value	Explanation
PC Dly Send	0-255	Adjusts the amount sent to the total effect delay.
PC Rev Send	0-255	Adjusts the amount sent to the total effect reverb.

Added Functions to the SCATTER

The following parameters were added to the PAD settings screens.

Parameter	Value	Explanation
Pan Glide	-16-0-+16	The pan position moves in a L-R or R-L direction, beginning in the PAN parameter position. This setting determines how many times it moves. When PAN = 0 (center), the pan position moves smoothly as follows. Pan Glide +1: from center to full right; Pan Glide +2: from center to full right to center; Pan Glide +3: from center to full right to center to full left.
Quantize	OFF	Quantization is not used.
	1-16	Quantization is applied at intervals equal to the number of steps set. The timing at which you play or release the pads, as well as how long you press the pads for is adjusted to correspond with the quantize range you set. By playing the pads a little ahead of the beat, you can make SCATTER turn on at the correct timing and length. When Split is "1/16" and Quantize is "4"  When Split is "1/16" and Quantize is "5" 

The following settings were added to the Grain parameter in the PAD settings screen.

Parameter	Value	Explanation
Grain	Random1-8	Plays back the grain at random. The grain used for playback is selected at random, according to the setting. For example, the "Random4" setting makes the grains that fall on the downbeat play back at random. Set this to match the phrase. Random1: 1-16 Random2: 1, 3, 5, 7, 9, 11, 13, 15 Random3: 1, 4, 7, 10, 13, 16 Random4: 1, 5, 9, 13 : Random8: 1, 9 * When SIZE or HOLD exceed a value of "1", the grain does not change while the pad is held down.

Function Added to Select the Metronome Sound Output Destination

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

Parameter	Value	Explanation
MetPos	MIXOUT	Output to after the total effect. (Output not to USB.)
	PRE T-FX	Output to before the total effect. (Output to USB.)
	POST T-FX	Output to after the total effect. (Output to USB.)

Added Shortcuts

Action	Operation
Switch the scene chain on/off	Hold down the [SHIFT] button on the SCENE screen and turn the [VALUE] dial
Recall the first scene	Hold down the [CLIP] button and press the [START/STOP] button

Problems and Functions Corrected

- The issue with uneven timing when synchronizing an effect with the MIDI clock of an external device has been fixed.
- The issue with the LFO gradually going out of sync when the tone parameter LFO's "TEMPO SYNC SW" setting is "ON" has been fixed.
- The issue with sound getting cut off when switching to a different clip in the clip chain has been fixed.
- The issue with the Looper track playing back the wrong clip after Looper Optimize is executed has been fixed.
- The issue with the buffer becoming full when large amounts of data were received via the MIDI IN connector has been fixed.
- The issue with the arpeggiator playing unintentionally when you preview the chords created with the Chord Designer has been fixed.
- The issue where a "Battery Low" or similar message did not appear during certain operations has been fixed. This occurred when connecting to a USB HOST port on an MX-1 aside from the BUS POWERED port (AIRA only) while this unit's remaining battery power was low.
- * When using this unit while connected to a USB HOST port on the MX-1, either connect to the BUS POWERED port to draw power from the MX-1 via USB, or power up the MC-101 while holding down the [VALUE] dial to force the unit into battery-operated power mode.
- Other minor issues have been resolved.

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	Sets the order in which notes of the chord will sound. UP: Notes you press will be sounded, from low to high. DOWN: Notes you press will be sounded, from high to low. UP&DOWN: Notes you press will be sounded, from low to high, and then back down from high to low. RANDOM: Notes you press will be sounded, in random order. 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. 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. CHORD: All notes you press will sound simultaneously. AUTO1: The timing at which keys will sound will be assigned automatically, giving priority to the lowest key that was pressed. AUTO2: The timing at which keys will sound will be assigned automatically, giving priority to the highest key that was pressed. 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.
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	Selects the note value for each step of the arpeggio. For the "x2" variations, the unit plays two notes at each step. 1/4: Quarter note 1/8: Eighth note 1/16: Sixteenth note 1/4T: Quarter-note triplet 1/8T: Eighth note triplet 1/16T: Sixteenth note triplet 1/32: Thirty-second note
OCTAVE	-3--+3	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.
HOLD	ON, OFF	If you hold down a pedal switch while playing a chord, the arpeggio continues playing even if you release the keyboard.

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 or MX-1 with AIRA Link.
	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	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.

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. 14) 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 then 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.

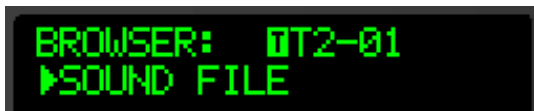
For more about Roland Cloud, refer to the Roland website.

→ <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	If a folder level is selected: Moves to the next lower level. If a file is selected: Shows the contents of the file. If the contents of the file are shown: Loads the sound.
[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 sound file browser. If the contents of the file are shown: Returns to the file selection.

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	This appears if the selected sound file is not compatible with the MC-101, or if the file is damaged. Check the models that are listed as compatible for the file you downloaded, and try downloading again.
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

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

Action	Operation
Switching the scene bank	Hold down the PAD MODE [CLIP] button and press the PAD [9]–[16]. To switch to banks 9–16, once again press the same pad [9]–[16].
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	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

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. 19)
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	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	Lowens 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).

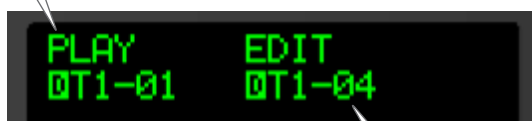
Parameter	Explanation
KnobTrk	SINGLE: Use the [C1]–[C4] knobs to control the SOUND, FILTER, MOD, and FX parameters of one track. MULTI: Use the [C1]–[C4] knobs to control the parameters of the four tracks selected by the [SOUND], [FILTER], [MOD], and [FX] buttons.

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

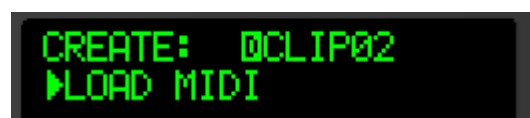
An SMF (Standard MIDI File) saved on an SD card can be imported into a clip.

* 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.