



MUSIC SYNTHESIZER

MODX MS

MODX M7

MODX MS

Supplementary Manual

Contents

New Functions in Version 3.00.....2

Additional New Effect types 3

Additional New Waveform 7

Additional New Performances..... 7

Part LFO 8

Scene 10

DAW Remote 11

New Functions in Version 3.00

Yamaha has upgraded the MODX M firmware, adding the following new functions.
This manual describes the additions and changes with respect to the Operation Manual.

- New effect types (*GS1 Ensemble & Tremolo*, *CS Ring Modulator*, *M/S EQ Compressor*) have been added.
- A new waveform (*Clavi*) has been added.
- New 60 Performances have been added.
- FM-X and AN-X parameters can now be set to the *Destination* for *Part LFO*.
- *Note Limit* and *Note Shift* functions for *Scene* with External Part support.
- ESP Control has been added to the *Mode (Remote Control Mode)* of *DAW Remote*.

Additional New Effect types

New effect types (*GS1 Ensemble & Tremolo*, *CS Ring Modulator*, *M/S EQ Compressor*) have been added. The new effect types and associated effect parameters are as follows.

■ Chorus

Effect Type	Effect Type Description	Parameter name (display name)	Parameter Description
<i>GS1 Ensemble & Tremolo</i>	Pleasant chorus effect used in the Ensemble (three-phase BBD analog chorus) & Tremolo built into the GS1 (released in 1981).	<i>Ensemble BBD Drive</i> (<i>Ens BBD Drive</i>)	Sets the distortion level of the BBD for the <i>Ensemble</i> effect.
		<i>Ensemble Dry/Wet</i> (<i>Ens Dry/Wet</i>)	Sets the dry and wet balance of the <i>Ensemble</i> effect.
		<i>Ensemble LFO Depth</i> (<i>Ens LFO Depth</i>)	Sets the depth of the <i>Ensemble</i> effect. When set to 100, the depth of the effect is equivalent to that of the GS1.
		<i>Ensemble LFO Speed</i> (<i>Ens LFO Speed</i>)	Sets the LFO speed for the <i>Ensemble</i> effect.
		<i>Ensemble Pan</i> (<i>Ens Pan</i>)	Sets the spaciousness of the <i>Ensemble</i> effect.
		<i>Tremolo LFO Depth</i> (<i>Trm LFO Depth</i>)	Sets the depth of the Tremolo effect.
		<i>Tremolo LFO Speed</i> (<i>Trm LFO Spd</i>)	Sets the LFO speed of the Tremolo effect.
		<i>Tremolo On/Off</i> (<i>Trm On/Off</i>)	Turns the Tremolo effect on or off.
		<i>Tremolo Phase</i> (<i>Trm Phase</i>)	Inverts L and R of the LFO phase of the Tremolo effect.

Effect Type	Effect Type Description	Parameter name (display name)	Parameter Description
CS Ring Modulator	The effect based on the Ring Modulator on the CS series analog synthesizers.	<i>Attack (Attack)</i>	Sets the <i>Attack Time</i> of the EG that changes the modulation frequency.
		<i>Decay/Release (Decay/Release)</i>	Sets the <i>Decay Time</i> and <i>Release Time</i> of the EG that changes the modulation frequency.
		<i>Depth (Depth)</i>	Sets the depth of EG that changes the modulation frequency.
		<i>Drive (Drive)</i>	Sets the level of distortion.
		<i>EG Depth Mode (EG Depth Mode)</i>	Sets the behavior of <i>Depth</i> . When set to <i>Normal</i> , the behavior is the same as the Ring Modulator used in the CS series synthesizers. The slower the <i>Speed</i> is, the slower it takes for the modulation frequency to reach the value where <i>Depth</i> is set to 1.0. When set to <i>Deep</i> , the modulation frequency value that reaches where <i>Depth</i> is set to 1.0 will be the fastest regardless of the <i>Speed</i> setting.
		<i>EG Key On Reset (EG Key Reset)</i>	When this is set to On, the EG value is reset to 0 at every key on.
		<i>EG Mode (EG Mode)</i>	Sets the shape of the EG that changes the modulation frequency. When set to <i>Atk-Dcy</i> , the modulation frequency moves up and down according to the <i>Depth</i> value during key-on. When set to <i>Riser</i> , the modulation frequency continues to rise during key-on.
		<i>Luster (Luster)</i>	Changes the frequency balance of the sound.
		<i>Modulation (Modulation)</i>	Sets the amount of modulation.
		<i>Output Level (Output Level)</i>	Sets the output level.
		<i>Speed (Speed)</i>	Sets the modulation frequency.
		<i>Stereoize (Stereoize)</i>	Creates a stereo sound spread to the right and left.

■ Comp (Compressor)

Effect Type	Effect Type Description	Parameter name (display name)	Parameter Description
<i>M/S EQ Compressor</i>	This effect splits the signal into Mid and Sides and then applies EQ and Compressor to each.	<i>Compressor Type (Comp Type)</i>	Sets the character of the compressor.
		<i>M/S EQ Position (EQ Position)</i>	Selects whether the EQ is positioned in front of or after the compressor. “Pre” means “in front of,” and “post” means “after.” The “LC” indicates that the low-cut filter is added. The Mid setting is shown in front of the slash (/), and the Side setting is shown after the slash.
		<i>Mid Compressor Curve (M Comp Curve)</i>	Sets the comp curve of the compressor and the amount of distortion to apply to the Mid component of M/S.
		<i>Mid EQ High Freq (M EQ High Freq)</i>	Sets the frequency of the high EQ band to apply to the Mid component of M/S.
		<i>Mid EQ High Gain (M EQ High Gain)</i>	Sets the gain of the high EQ band to apply to the Mid component of M/S.
		<i>Mid EQ High Q (M EQ High Q)</i>	Sets the Q of the high EQ band to apply to the Mid component of M/S. When Q is set to the lowest value, the HSF is used.
		<i>Mid EQ Low Frequency (M EQ Low Freq)</i>	Sets the frequency of the low EQ band to apply to the Mid component of M/S.
		<i>Mid EQ Low Gain (M EQ Low Gain)</i>	Sets the gain of the low EQ band to apply to the Mid component of M/S.
		<i>Mid EQ Low Q (M EQ Low Q)</i>	Sets the Q of the low EQ band to apply to the Mid component of M/S. When Q is set to the lowest value, the LSF is used.
		<i>Mid Gain (M Gain)</i>	Sets the output gain applied to the Mid component of M/S.
		<i>Mid Makeup Gain (M Makeup Gain)</i>	Sets the output gain of the compressor applied to the Mid component of M/S.
		<i>Mid Threshold (M Threshold)</i>	Sets the initial level of the compressor applied to the Mid component of M/S.
		<i>M/S Balance (M/S Balance)</i>	Sets the mix balance between the Mid and Side components of M/S.
		<i>Side Compressor Curve (S Comp Curve)</i>	Sets the comp curve of the compressor and the amount of distortion applied to the Side component of M/S.
		<i>Side EQ High Frequency (S EQ High Freq)</i>	Sets the frequency of the high EQ band applied to the Side component of M/S.
		<i>Side EQ High Gain (S EQ High Gain)</i>	Sets the gain of the high EQ band applied to the Side component of M/S.
		<i>Side EQ High Q (S EQ High Q)</i>	Sets the Q of the high EQ band applied to the Side component of M/S.
		<i>Side EQ Low Frequency (S EQ Low Freq)</i>	Sets the frequency of the low EQ band applied to the Side component of M/S.
		<i>Side EQ Low Gain (S EQ Low Gain)</i>	Sets the gain of the low EQ band applied to the Side component of M/S.
		<i>Side EQ Low Q (S EQ Low Q)</i>	Sets the Q of the low band of EQ applied to the Side component of M/S. When Q is set to the lowest value, the LSF is used.

Effect Type	Effect Type Description	Parameter name (display name)	Parameter Description
		<i>Side Gain (S Gain)</i>	Sets the output gain applied to the Side component of M/S.
		<i>Side Makeup Gain (S Makeup Gain)</i>	Sets the output gain of the compressor applied to the Side component of M/S.
		<i>Side Threshold (S Threshold)</i>	Sets the initial level of the compressor applied to the Side component of M/S.
		<i>Stereo Expander (Stereo Expand)</i>	Increases the Side component of M/S to amplify the M/S effect.

Additional New Waveform

A new waveform (*Clavi*) has been added.

It features a bright, crisp and funky sound, and includes two pickup configurations: CA and DA positions.

Additional New Performances

The MODX M features 60 new Performances using the latest features.

For information on the added Performances, refer to the *Data List*.

Part LFO

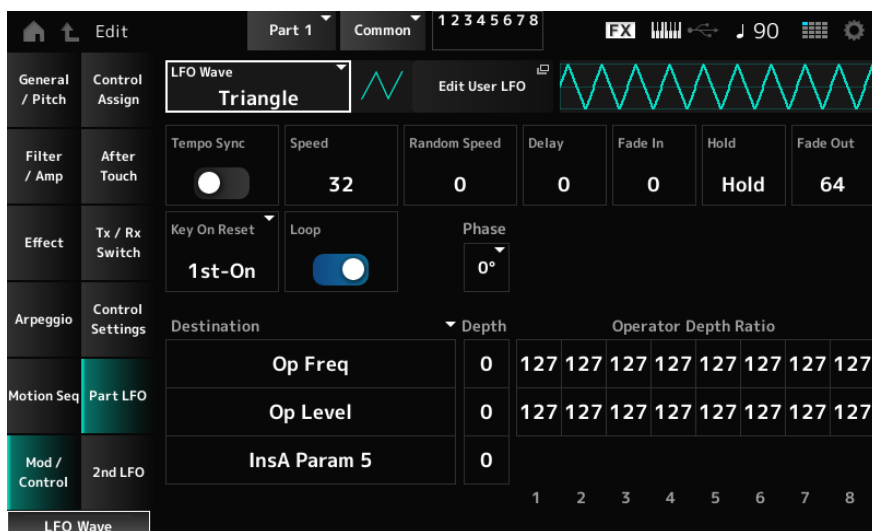
FM-X and AN-X parameters can now be set to the *Destination* for *Part LFO*.

Part LFO

Operation

[PERFORMANCE (HOME)] → *Part Common* selection → [EDIT/↺] → *Mod/Control* → *Part LFO*

FM-X



Destination (LFO Destination)

Sets the function to be controlled by the LFO Wave.

Settings: *Insertion Effect A Parameter1–24, Insertion Effect B Parameter1–24* (depending on the *Insertion Effect*), *Pan, 2nd LFO Speed, Cutoff, Resonance, Feedback, Op Freq, Op Spectral, Op Detune, Op Level*

Depth (LFO Depth)

Sets the depth of *LFO Wave* control for each *Destination*.

Settings: 0–127

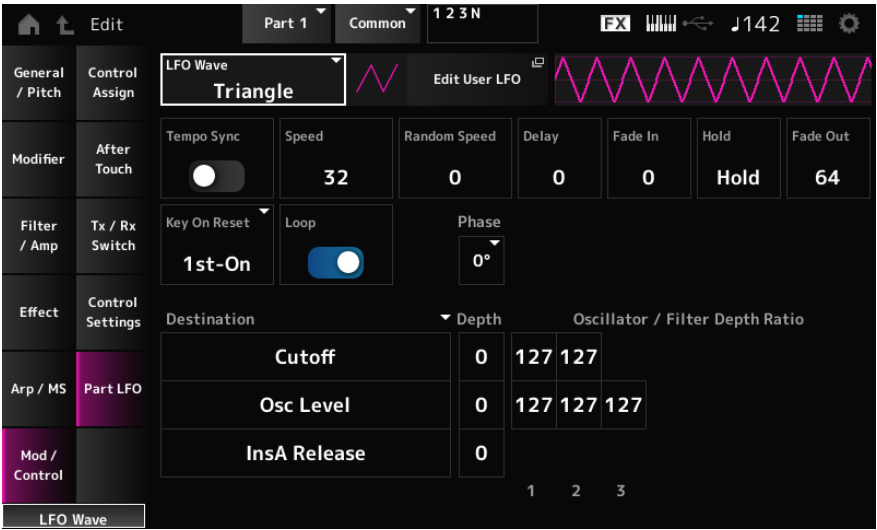
Operator Depth Ratio (LFO Operator Depth Ratio)

Adjusts the *Depth* for each Operator.

Set this parameter to *Off* to turn off the LFO.

This parameter is shown only when the selected *Destination* is related to Elements.

Settings: *Off*, 0–127



Destination (LFO Destination)

Sets the function to be controlled by the LFO Wave.

Settings: *Insertion Effect A Parameter1–24, Insertion Effect B Parameter1–24 (depending on the Insertion Effect), Pan, LFO Speed, FM Level, Ring Level, Osc Level, Noise Tone, Noise Level, Folder Texture, Cutoff, Resonance*

Depth (LFO Depth)

Sets the depth of LFO Wave control for each Destination.

Settings: 0–127

Oscillator/Filter Depth Ratio (LFO Oscillator/Filter Depth Ratio)

Adjusts the Depth for each Oscillator or Filter.

Set this parameter to Off to turn off the LFO.

This parameter is shown only when the selected Destination is related to Oscillator or Filter.

Settings: Off, 0–127

Scene

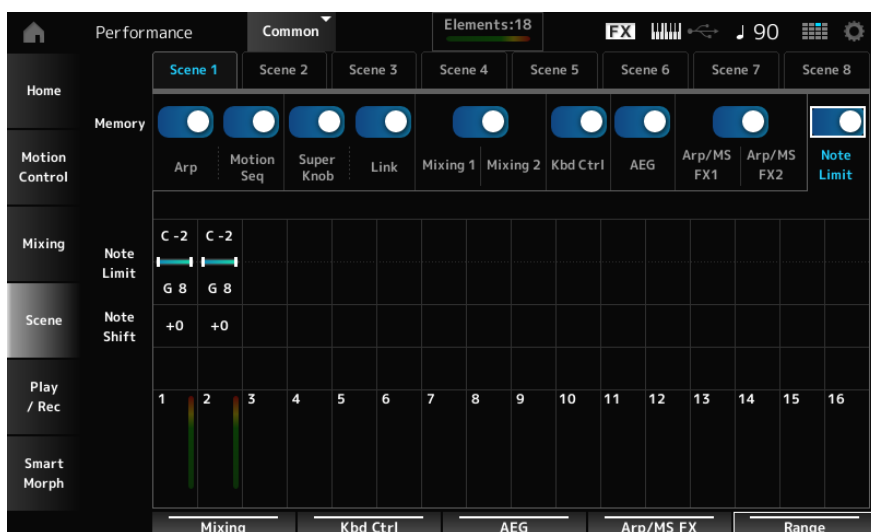
A *Note Limit* tab has been added to *Scene*, allowing you to set both *Note Limit* and *Note Shift*.
Note Limit and *Note Shift* are now supported for External Parts as well.

Scene

Operation

[PERFORMANCE (HOME)] → *Scene*

When the *Memory Switch* for *Note Limit* is set to On



■ Internal

Note Limit

Sets the note range (lowest and highest notes).

When the first note of Note Limit is set higher than the second (for example, C5 to C4), the notes in the ranges C–2 to C4 and C5 to G8 will be played.

Settings: C–2–G8

Note Shift

Adjusts the pitch of the notes played by the internal sound in semitones.

Settings: –48–+0–+48

■ External

Zone Note Limit

Sets the note range (lowest and highest notes) for the Zone.

When the first note of Note Limit is set higher than the second (for example, C5 to C4), the notes in the ranges C–2 to C4 and C5 to G8 will be played.

Settings: C–2–G8

Zone Note Shift

Shifts the pitch of the notes sent by MIDI in semitones.

Settings: –47–+0–+47

DAW Remote

ESP Control has been added to the *Mode (Remote Control Mode)* of DAW Remote.

ESP Control is a mode that allows you to control the *Expanded Softsynth Plugin (ESP)* for MONTAGE M/MODX M, enabling seamless integration between MODX M and ESP.

DAW Remote

Operation

[DAW REMOTE]

Mode (Remote Control Mode)

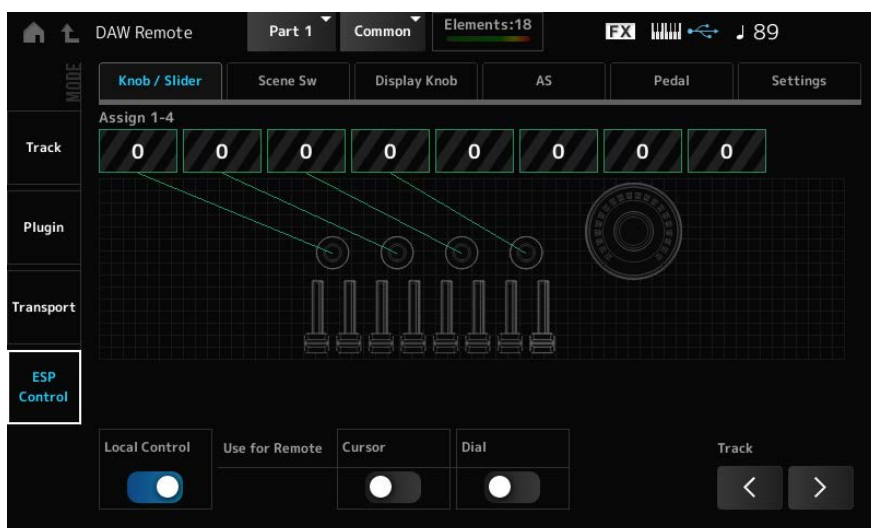
Select the DAW remote function from four modes of operation.

Settings: *Track, Plugin, Transport, ESP Control*

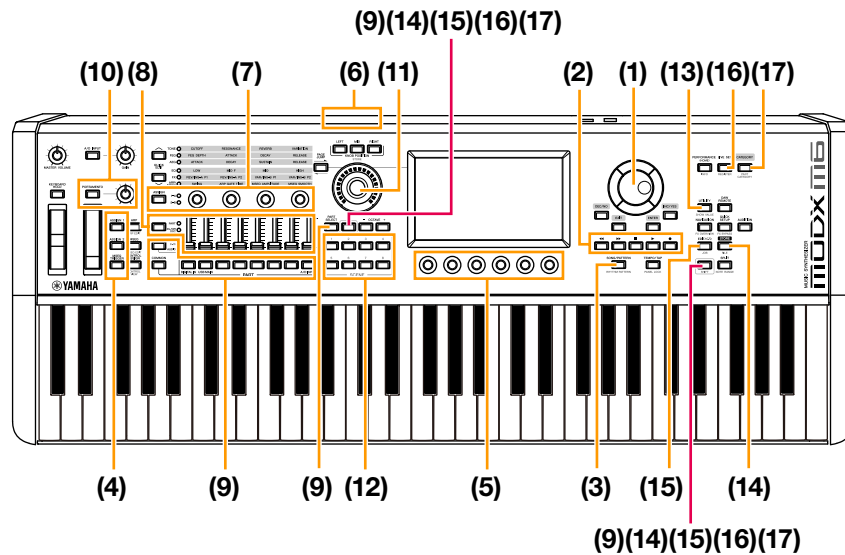
ESP Control: The mode for controlling the *Expanded Softsynth Plugin (ESP)* for MONTAGE M/MODX M. In addition to controlling ESP (port 4: SysEx), you can simultaneously perform remote control of the DAW via port 1 (CC) and port 2 (*Mackie Control*).

For using controllers

■ ESP Control mode



Controllers



	Controllers	Operations	Location
(1)	Data dial, cursor buttons	Moving the cursor position and song position	DAW (port 2)
(2)	Sequencer transport buttons	Transport (Recording and playback)	DAW (port 2)
(3)	[SONG/PATTERN] button	Turning the loop playback on or off	DAW (port 2)
(4)	[ASSIGN 1] button, [ASSIGN 2] button, [MSEQ TRIGGER] button	Control change	DAW (port 1)
(5)	Display knobs	Control change	DAW (port 1)
(6)	FOOT CONTROLLER jacks, FOOT SWITCH jacks	Control change	DAW (port 1)
(7)	[ASSIGN] button, knobs 1–4 (5–8)	Assignable knobs 1–8	ESP (port 4)
(8)	Slider function [PART]/[EL/OP/OSC] button, Control sliders 1–8	Volume for Part, Element, Operator, and Oscillator	ESP (port 4)
(9)	[SHIFT] button, Part group [1-8/9-16]/[AUDIO] button, [COMMON] button, PART buttons, [PART SELECT] button	<ul style="list-style-type: none"> Selection of Part, Element, Operator, and Oscillator Switching Mute for Part, Element, Operator and Oscillator. 	ESP (port 4)
(10)	[PORTAMENTO] button, PORTAMENTO [TIME] knob	<ul style="list-style-type: none"> Setting Portamento on or off. Adjusting the Portamento Time. 	ESP (port 4)
(11)	Super knob	Super knob	ESP (port 4)
(12)	SCENE buttons	Scene 1–8	ESP (port 4)
(13)	[UTILITY] button	Opening and closing the <i>Utility</i> screen.	ESP (port 4)
(14)	[STORE] button	Opening and closing the <i>Store</i> screen.	ESP (port 4)
(14)	[SHIFT] button+ [STORE] button	Opening and closing the <i>File Load/Save</i> list.	ESP (port 4)
(15)	[SHIFT] button + [EDIT/COPY] button	Opening and closing the <i>Data Transfer</i> screen.	ESP (port 4)
(16)	[LIVE SET] button	Opening and closing the <i>Live Set Edit</i> screen.	ESP (port 4)
(16)	[SHIFT] button + [LIVE SET] button	Opening and closing the <i>Live Set Register</i> screen.	ESP (port 4)
(17)	[CATEGORY] button	Opening and closing the <i>Performance Category Search</i> screen.	ESP (port 4)
(17)	[SHIFT] button + [CATEGORY] button	Opening and closing the <i>Part Category Search</i> screen.	ESP (port 4)

