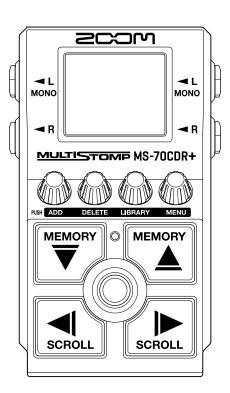


MS-70CDR+

MULTISTOMP



Operation Manual

You must read the Usage and Safety Precautions before use.

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Proper display is not possible on grayscale devices.

Notes about this Operation Manual

You might need this manual in the future. Always keep it in a place where you can access it easily. The contents of this document and the specifications of the product could be changed without notice.

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- The illustrations and display screens in this document could differ from the actual product.

Terms used in this manual

Patch memory

Patch memories store effects along with their on/off states and parameter setting values, allowing easy recall. Effects are saved and recalled in units of patch memories. Up to 6 effects can be added to a patch memory, and up to 100 patch memories can be stored.

LIBRARY

Various guitar effects are ready in the LIBRARY. Effects can be selected from the LIBRARY to be added to patch memories.

Category

Effects are grouped by types into categories. The display backlight color changes according to the category.

AUTO SAVE

This function automatically saves changes to patch memory and effect settings.

ECO MODE

This function will automatically turn the power off 10 hours after the last operation.

PRESELECT

This function allows continued use of the current patch memory sound while switching to another patch memory at a distant number.

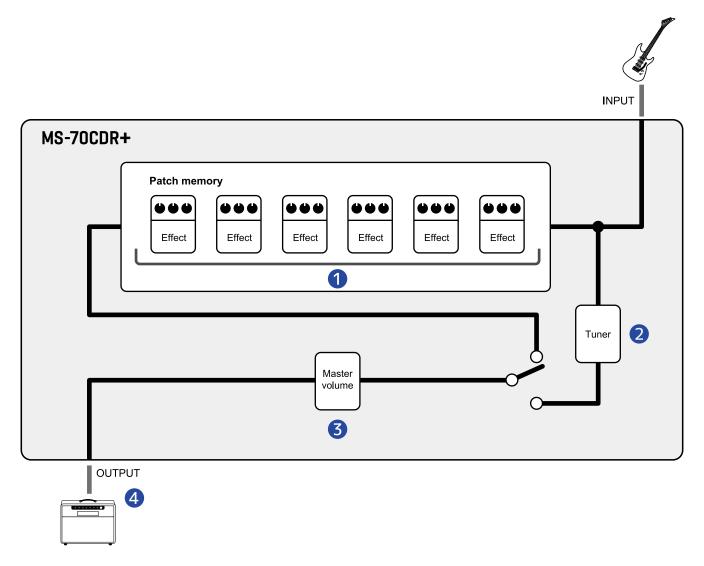
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MS-70CDR+ overview

Signal flow

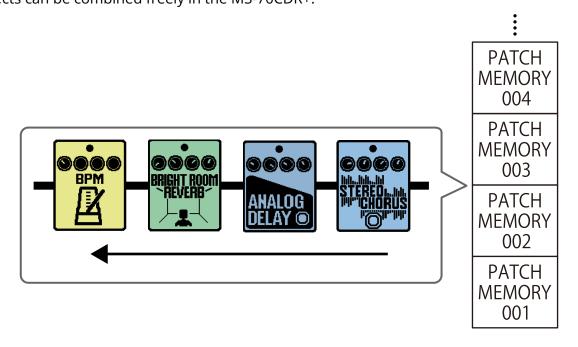


- 1 Patch memory
 - The input guitar sound passes through effects in order. (→ Adjusting effect parameters)
- 2 Tuner
 Use this to tune the connected guitar. (→ Using the tuner)
- Master volume
 This adjusts the overall volume. This setting is retained even when the patch memory is changed. (→ Adjusting the overall output level)
- OUTPUT Connect an amp here.

Patch memory structure

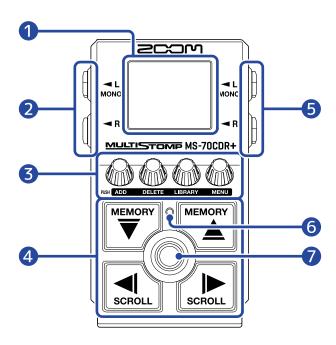
Patch memories

These store the effects used, their order, on/off states and parameter settings. Effects are saved and recalled in units of patch memories. Up to 100 of these can be stored. Up to 6 effects can be combined freely in the MS-70CDR+.



Functions of parts

Top



- Display
 - This shows information, including the name of the selected effect along with its parameter values.
- 2 Output jacks

Connect an amp or another effect here.

Use MONO for mono connections.

- 3 Parameter knobs
 - Use these to adjust effect parameters and make various settings.
- 4 Direction buttons

Use these to select patch memories and effects, for example.

They can be operated by foot.

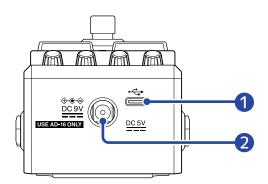
- 5 Input jacks
 - Connect a guitar or another effect here.
- 6 On/Off indicator

Use this to check if an effect is on or off.

7 Footswitch

Use this to turn effects on and off.

Back



- 1 USB (Type-C) port Connect this to a computer, iPhone or iPad. This supports operation on USB bus power.
- 2 DC 9V AC adapter connector Connect a dedicated AC adapter (ZOOM AD-16) here.

Overview of operation screens

The MS-70CDR+ is operated by using its buttons and knobs while looking at screens on the display. This section explains those screens.

Home Screen

This appears when the power is turned on.

Effects in the selected patch memory are shown. The patch memory can be edited and its effects turned on and off.



- Use \nearrow and \nearrow to select patch memories.
- Use and to select the effects in the patch memory. When selecting effects, numbers will show their order.

The backlight color changes according to the category of the selected effect.



Opening the Home Screen

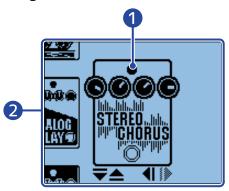
• If the MENU Screen is open, press



• If the LIBRARY Screen is open, press (to confirm the selected effect.

LIBRARY Screen

Effects in patch memories can be changed.



- 1 Selected effect
 - The selected effect is shown larger in the middle.

The backlight color changes according to the category of the selected effect.

2 Effect list

Effects in the same category are ordered vertically. Use and to select effects in the same category.

Use and to select effects in different categories.

Opening the LIBRARY Screen

On the Home Screen, use and to select an effect to replace, and press

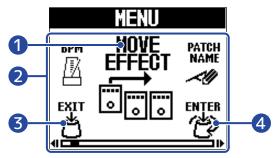


Closing the LIBRARY Screen

Press to confirm the selected effect and reopen the Home Screen.

MENU Screen

Various MS-70CDR+ settings can be made.



- Selected setting item
 - The selected setting item is shown larger in the middle.
- 2 Setting items

Setting items are shown with icons. Turn to select them.





This reopens the Home Screen.

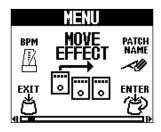


This shows the selected setting item.

Using the MENU Screen



1. Press to open the MENU Screen.



2. Turn to show the icon for the desired setting item.

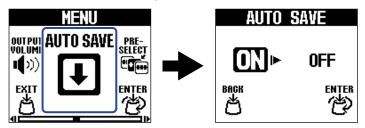
Please see the linked reference sections for details about each setting.

BPM	Change the tempo. (→ Changing the tempo)	EFFECT	Change the effect order. (→ Changing the order of effects)
PATCH NAME	Change the patch memory name. (→ Changing patch memory names)	REVERT PATCH	Restore the patch memory to its original settings. (→ Restoring patch memories to original settings)
COPY PATCH	Copy and save patch memories. (→ Copying and saving patch memories)	NEW PATCH	Create a new patch memory. (→ Creating patch memories)
ERASE PATCH	Erase a patch memory. (→ Erasing patch memories)	OUTPUT VOLUME	Adjust the overall output level. (→ Adjusting the overall output level)
AUTO SAVE	Turn the AUTO SAVE function on/off. (→ Setting the AUTO SAVE function)	PRE- SELECT	Turn the PRESELECT function on/off. (→ Using the preselect function)
LIBRARY SOUND	Set the sound used on the LIBRARY Screen. (→ Setting the sound on the LIBRARY Screen)	USB MIDI CH	Set the channel used to receive USB MIDI. (→ Setting the channel used to receive USB MIDI)
BATTERY TYPE	Set the type of batteries used. (→ Setting the type of batteries used)	BACKLIGHT	Adjust the backlight brightness. (→ Adjusting the backlight brightness)
CONTRAST	Adjust the display contrast. (→ Adjusting the display contrast)	ECO MODE	Turn the ECO mode on/off. (→ Setting the ECO MODE)
FACTORY RESET	Restore settings to their factory defaults. (→ Restoring factory default settings)	VERSION	Check the firmware version. (→ Checking the firmware version)
HELP P	Show a 2D code for checking MS-70CDR+ operation procedures. (→ Checking the latest information for the MS-70CDR+)		

3. Press ENTER

This opens the selected setting screen.

(This example is when "AUTO SAVE" is selected.)



4. Turn to select a setting.

The selected setting is highlighted.



5. Press ENTER

This confirms the setting.

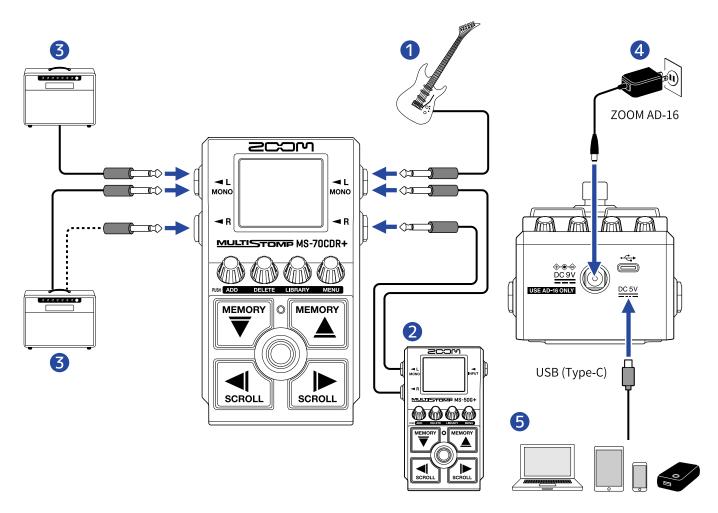
HINT



When a setting screen is open, press to return to the <u>Home Screen</u> or <u>MENU Screen</u>.

- When appears at the bottom left of the screen, this opens the Home Screen.
- When appears at the bottom left of the screen, this opens the MENU Screen.

Making connections



- Guitar
- 2 Effect
- **3** Guitar amp
- 4 AC adapter (ZOOM AD-16)
- **5** Computer (Mac/Windows), iPhone/iPad or portable battery

Connect with a USB cable (Type-C).

This port can be used to update the firmware, use Handy Guitar Lab for MS-70CDR+ or provide power with a portable battery.

The Handy Guitar Lab for MS-70CDR+ iOS/iPadOS app can be used to manage patch memories and to edit and add effects. Handy Guitar Lab for MS-70CDR+ can be downloaded from the App Store.

Turning the power on/off

Turning the power on

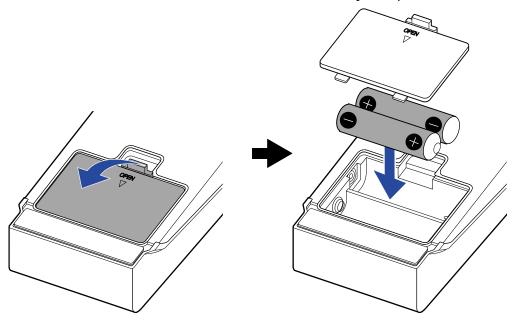
1. Minimize the volume of the amp.

NOTE

To prevent noise and malfunction, connect a guitar amp before turning the power on.

- 2. Supplying power
 - Using batteries

Open the cover on the bottom and install batteries into the battery compartment.

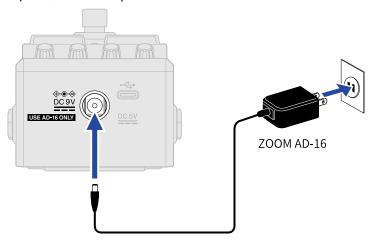


NOTE

- Use only one type of battery (alkaline, NiMH or lithium) at a time.
- Set the type of battery used correctly so that the amount of remaining battery charge can be shown accurately. (→ Setting the type of batteries used)

■ Using an AC adapter

Use a ZOOM AD-16 AC adapter, which is specified for this unit.



When an AC adapter is connected, the MS-70CDR+ will power on.

3. Connect a cable to an INPUT jack.

When using batteries for power, connecting a cable to an INPUT jack (L/MONO) will turn on the power. This turns on the MS-70CDR+ power and opens the Home Screen.



NOTE

The power will not turn on if only the R INPUT jack has a cable connected to it. Confirm that a cable is connected to the L/MONO jack.

4. Raise the amp volume.

ECO MODE overview

- By default, ECO MODE is set to ON, so the power will automatically turn off if no use occurs for 10 hours.
- ECO MODE can also be turned OFF. (→ Setting the ECO MODE)

Turning the power off

- **1.** Minimize the volume of the amp.
- **2.** Disconnect cables from the INPUT jacks.
 - If using batteries

Disconnect cables from the INPUT jacks (L/MONO) to turn off the display and the power.

■ If using an AC adapter

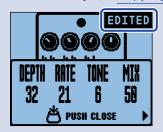
Disconnect the AC adapter to turn off the display and the power.

Adjusting effects

Patch memories can be edited, including replacing effects and adjusting parameters.

Saving changes

- When the AUTO SAVE function is ON, changes to patch memories will be saved automatically. (The default setting is ON.) (→ Setting the AUTO SAVE function)
- If the AUTO SAVE function is OFF, patch memories will not be saved automatically. When the content of a patch memory has been changed, EDITED will appear at the top right of the display, showing that it is different from the saved settings. Save it as necessary. (→ Copying and saving patch memories)



Turning effects on/off

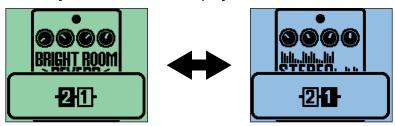
On the <u>Home Screen</u>, the effects used in the patch memory are shown and can be turned on and off using the footswitch.



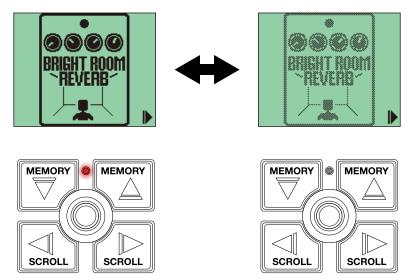
1. Use and on the <u>Home Screen</u> to select a patch memory with an effect you want to turn on/ off (→ Switching patch memories).

2. Use \square and \square to select the effect you want to turn on/off.

One effect in the patch memory is shown on the display.



3. Press to turn the effect on/off.



The On/Off indicator lights when the effect is on.

When the effect is off, the On/Off indicator is unlit and the effect icon will appear faded on the display.

HINT

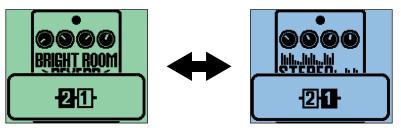
Some effects assign special functions to the footswitch. (This includes effects that turn on only while the footswitch is being pressed, for example.) Special functions can be selected on the Effect Adjustment Screen. (→ Footswitch special functions)

Switching effects

Effects in a patch memory can be replaced with other effects as desired.



- 1. Use and on the <u>Home Screen</u> to select the patch memory with an effect that you want to replace (→ Switching patch memories).
- **2.** Use \square and \square to select the patch you want to replace.

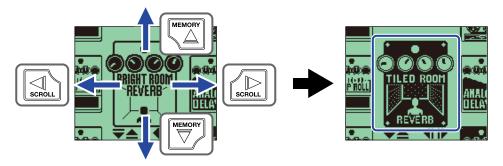


3. Press

This opens the LIBRARY Screen that shows all the effects.

When the LIBRARY Screen is open, you can preview the sound of only the selected effect or the entire patch memory. (→ Setting the sound on the LIBRARY Screen)

4. Use $\stackrel{\text{MEMORY}}{\bigcirc}$, $\stackrel{\text{MEMORY}}{\bigcirc}$, and $\stackrel{\triangleright}{\bigcirc}$ to select effects.



HINT

Turn to show the Effect Adjustment Screen where the parameters of the selected effect can be adjusted. (→ Adjusting effect parameters)

5. Press .

This replaces the selected effect and reopens the Home Screen.



NOTE

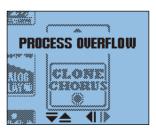
 If an effect has been deleted using the Handy Guitar Lab for MS-70CDR+ app, be disabled.



• Each patch memory can only have one LINE SELECTOR module and one BPM module.

Note about the number of effects in patch memories

Using the MS-70CDR+, you can combine 6 effects as you like. If the processing capability limit is exceeded, however, a "PROCESS OVERFLOW" warning will appear and effects will be bypassed. Change one of the effects to end this condition.

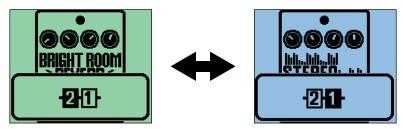


Adjusting effect parameters

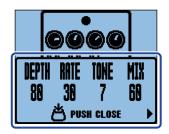
The individual effects used in patch memories can be adjusted.



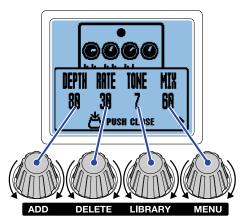
- 1. Use and on the <u>Home Screen</u> to select the patch memory with an effect that you want to adjust (→ Switching patch memories).
- 2. Use and to select the effect with parameters that you want to adjust.



This opens the Parameter Adjustment Screen of the selected effect.



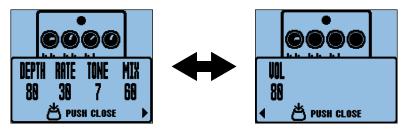
4. Turn to adjust an effect parameter.



Press to return to the original screen.

When parameters are on multiple pages, ◀ and ▶ will appear at the bottom of the screen.

Use $\boxed{\mathbb{Q}}$ and $\boxed{\mathbb{Q}}$ to show the parameters to be adjusted.

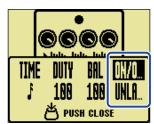


HINT

Set Time, Rate and other effect parameters to musical notes to sync them to the tempo. (\rightarrow <u>Tapping to change the tempo.</u>)

Footswitch special functions

Some effects assign special functions to footswitches, including turning the effect on only while the footswitch is being pressed. The name of the parameter for selecting a special function will appear highlighted on the display.



Adding effects

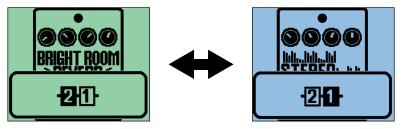
Effects can be added to patch memories.

Up to 6 effects can be combined freely on the MS-70CDR+.



- 1. Use and on the <u>Home Screen</u> to select the patch memory to which you want to add an effect (→ Switching patch memories).
- 2. Use and to select the position where you want to add an effect.

 The effect can be added to the left of (after) or the right of (before) the shown effect.



3. Press ...

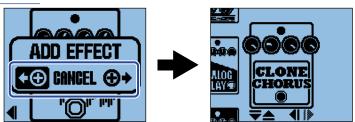
This opens the ADD EFFECT Screen.



4. Turn to select whether to add on the left or the right, and press .



This opens the LIBRARY Screen that shows all the effects. Select the effect to add. (→ Switching effects)





To cancel adding an effect, turn on the ADD EFFECT Screen and select "CANCEL". Then, press



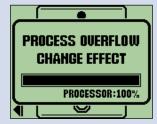
NOTE

is pressed when 6 effects have already been added to the patch memory, the following message

will appear and adding the effect will fail. In this case, delete an effect from the patch memory first. (→ Deleting effects)



• If "ADD" is pressed when processing power has reached its limit, the following message will appear and the effect will not be added. In this case, replace one of the effects. (→ Switching effects)

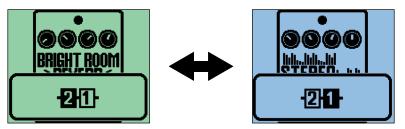


Deleting effects

Effects in patch memories can be deleted.



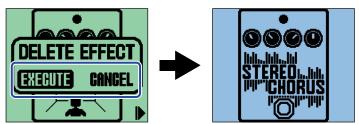
- 1. Use and on the <u>Home Screen</u> to select the patch memory with the effect that you want to delete (→ Switching patch memories).
- **2.** Use \square and \square to select the effect to delete.



This opens the DELETE EFFECT Screen.



This will delete the selected effect from the patch memory. The effect that was to the left of that effect will be shown.



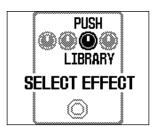




HINT

If the only effect in the patch memory is deleted, the SELECT EFFECT Screen will open. Press select an effect. (→ Switching effects)



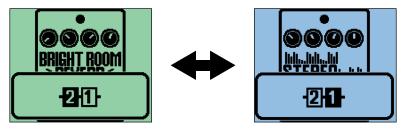


Changing the order of effects

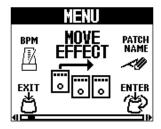
Effects in a patch memory can be reordered as desired.



- 1. Use and on the <u>Home Screen</u> to select a patch memory with effects that you want to reorder (→ Switching patch memories).
- **2.** Press \square and \square to select an effect to reorder.

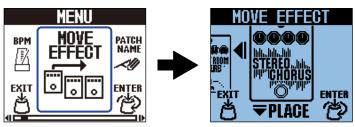


3. Press to open the MENU Screen.

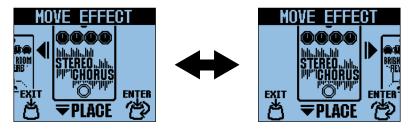


4. Turn to select "MOVE EFFECT" and press .

This opens the MOVE EFFECT Screen.



5. Turn to move the effect to the desired position.





This confirms reordering and reopens the Home Screen.

Tapping to change the tempo.

The BPM, which is used for the tempo synchronization of delay time, for example, can be set separately for each patch memory.

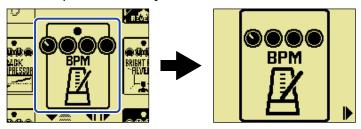


- 1. Use and on the <u>Home Screen</u> to select the patch memory with the tempo that you want to adjust (→ Switching patch memories).
- 2. Press to open the LIBRARY Screen. Then, use , , and to select the BPM

module, and press \bigcirc (\rightarrow Adding effects).

The BPM module is in the SFX category (yellow) of the LIBRARY Screen.

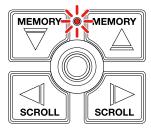
This adds the BPM module to the patch memory.



NOTE

- The BPM module cannot be added if the patch memory already has 6 effects. In this case, delete an effect
 from the patch memory first. (→ Deleting effects)
- Each patch memory can only have one BPM module.
- **3.** Press .

The tempo can be set by tapping (n) repeatedly (tap tempo).

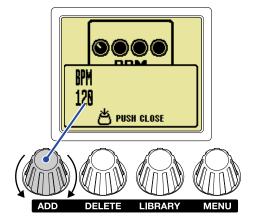


The indicator blinks at the set tempo interval.

If a BPM module is added to a patch memory, that module can then be used to change the tempo of the patch memory.

HINT

- The tempo setting range is $40-250 \ J$ (bpm).
- Turn to show the Tempo Adjustment Screen where the tempo can be set numerically.





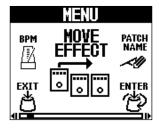
Press to return to the original screen.

Changing the tempo

The tempo can be changed from the MENU.

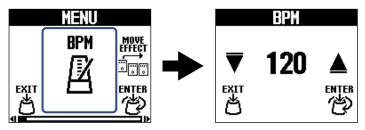


- 1. Use and on the <u>Home Screen</u> to select the patch memory with the tempo that you want to adjust (→ Switching patch memories).
- 2. Press to open the MENU Screen.

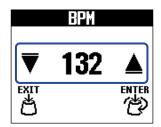


3. Turn ENTER to select "BPM", and press ENTER

This opens the BPM Screen.



4. Turn to set the tempo.



5. Press ENTER .

This reopens the Home Screen.

HINT

The tempo adjusted here is linked to the tempo adjusted in the BPM module of the patch memory and will be used by all its effects.

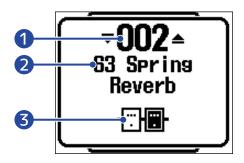
Switching patch memories

The MS-70CDR+ manages effects in patch memories. A patch memory can have up to 6 effects and save their on/off states and parameter settings.



1. Use and and on the Home Screen to select a patch memory.

When a patch memory is selected, information about it will be shown briefly.



- 1 Patch memory number
 This shows the number of the selected patch memory.
- Patch memory name
 This shows the name of the selected patch memory.
- 3 Number of effects in the patch memory
 This shows the number of effects in the selected patch memory.

HINT

- Up to 100 patch memories can be created.
- The MS-70CDR+ has a preselect function. This allows the next patch memory to be selected in advance
 and then switched to with one press. This is useful when you want to switch patch memories that are not
 near the current one when performing live, for example. (→ Using the preselect function)

Using the preselect function

The MS-70CDR+ has a preselect function that can be used.

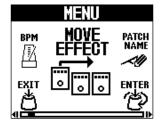
If PRESELECT is ON, when and are used to switch patch memories, the change will not occur immediately. Pressing afterward will finalize the patch memory change.

This makes it possible to switch directly to a patch memory that is not near the current one during live performance.

Turning the PRESELECT function ON/OFF

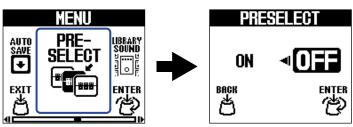


1. Press to open the MENU Screen.

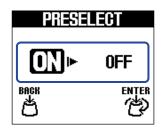


2. Turn to select "PRESELECT" and press enter

This opens the PRESELECT Screen.



3. Turn to switch it ON/OFF.



Setting Explanation	
ON	This turns on the PRESELECT function.
OFF	This turns off the PRESELECT function.

4. Press ENTER .

This confirms the setting.

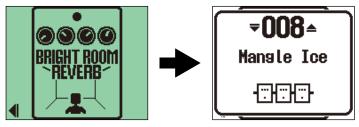
5. Press EXIT

Selecting patch memories when PRESELECT is ON

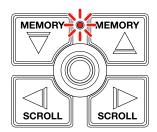


1. Use and on the Home Screen to show the next patch memory to select.

Example: Selecting patch memory 008 while performing with 001



The On/Off indicator will blink.



2. Press to confirm the selection.

An effect in the selected patch memory will be shown.

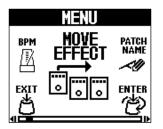


Managing patch memories

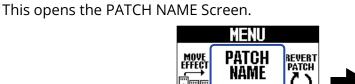
Changing patch memory names

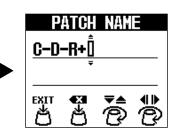


- 1. Use and on the <u>Home Screen</u> to select the patch memory with the name that you want to change (→ Switching patch memories).
- 2. Press to open the MENU Screen.



3. Turn to select "PATCH NAME" and press to select.

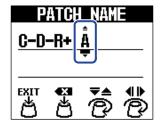




4. Turn to move the cursor.



5. Turn to insert a character.



- Press to delete the character before the cursor.
- Press and hold to delete all the characters.
- 6. Press EXIT

This confirms the name and reopens the Home Screen.

HINT

The characters and symbols that can be used are as follows.

 $!\% \&'+, -. = _(space) A-Z, a-z, 0-9$

Copying and saving patch memories

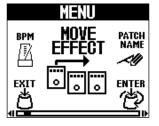
The AUTO SAVE function is ON by default. When it is OFF, changes, including adjustments to effects, as well as volume settings, will not be saved automatically. Save changes manually in this case. Patch memories can also be saved (copied) to other locations.



HINT

See "Setting the AUTO SAVE function" for details about this function.

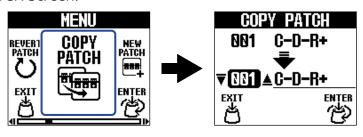
- **1.** Use $\stackrel{\text{MEMORY}}{\bigcirc}$ and $\stackrel{\text{MEMORY}}{\triangle}$ on the Home Screen to select the patch memory that you want to copy or save (\rightarrow Switching patch memories).
- 2. Press to open the MENU Screen.



3. Turn to select "COPY PATCH" and press



This opens the COPY PATCH Screen.



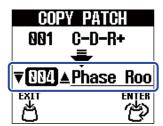
If AUTO SAVE is OFF, (→ Setting the AUTO SAVE function), "SAVE PATCH" will appear instead of "COPY PATCH". In this case, select "SAVE PATCH".



4. Turn to select the patch memory where it will be copied or saved, and press

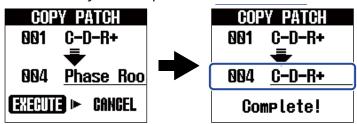


Patch memories labeled "Empty" contain no effects.



5. Press

This copies or saves the patch memory and reopens the Home Screen.



To cancel copying or saving, turn (in) to select "CANCEL" and press





HINT

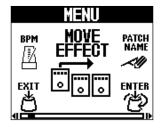
If the AUTO SAVE function is off, patch memories will not be saved automatically. (→ Setting the AUTO SAVE function)

Erasing patch memories

Unnecessary patch memories can be erased.

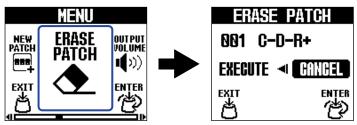


- **1.** Use rightarrow and rightarrow on the Home Screen to select the patch memory that you want to erase (\rightarrow Switching patch memories).
- 2. Press to open the MENU Screen.

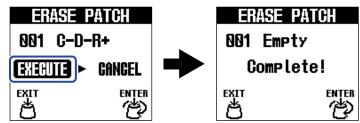


3. Turn to select "ERASE PATCH" and press

This opens the ERASE PATCH Screen.







Erased patch memories will have their contents cleared and be shown as "Empty".

To cancel erasure, turn to select "CANCEL" and press to select "CANCEL" and press.

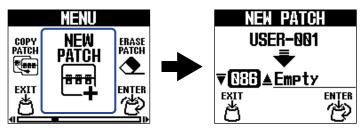
Creating patch memories

New patch memories can be created.



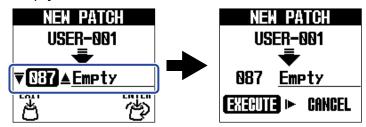
- 1. Press to open the MENU Screen.
- 2. Turn to select "NEW PATCH" and press ENTER.

This opens the NEW PATCH Screen.



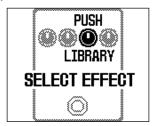
3. Turn to select where to create the patch, and press to select where to create the patch.

Patch memories labeled "Empty" contain no effects.





This creates a new patch memory and opens the SELECT EFFECT Screen.



Follow the instructions in "Switching effects" to assign effects and edit the patch memory.

To cancel creation, turn to select "CANCEL" and press





NOTE

Up to 100 patch memories can be saved. The NEW PATCH Screen will not be shown if there are no empty patch memories. Erase unnecessary patch memories to enable use. (→ Erasing patch memories)

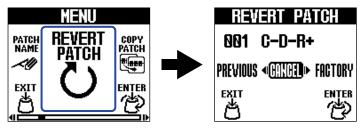
Restoring patch memories to original settings

After a patch memory is changed, it can be restored to the state it was in immediately after selection or the factory default state.

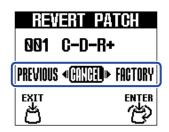


- 1. Press to open the MENU Screen.
- 2. Turn to select "REVERT PATCH" and press

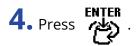
This opens the REVERT PATCH Screen.



3. Turn to select the desired state.



Setting	Explanation
PREVIOUS	This restores the patch memory to the state it was in immediately after selection.
FACTORY	This restores the patch memory to its factory default state.





This restores the patch memory to the state selected in step 4, and reopens the <u>Home Screen</u>.

To cancel this operation, turn to select "CANCEL" and press to select "CANCEL" and press.





Using the tuner

Activating the tuner

Enable the tuner to use the MS-70CDR+ to tune a guitar.

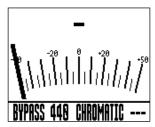


NOTE

The tuner cannot be used when the selected effect has a special function assigned, for example, effects that are on only while the footswitch is being pressed.

1. Press and hold .

This activates the tuner and opens the Tuner Screen.



2. Play the open string that you want to tune and adjust its pitch.



- The nearest note name and pitch detuning will be shown.
- When the pitch is correct, the left and right indicators will both be shown and the display backlight will become green.

Closing the tuner

Press when the tuner is in use to close it and reopen the previous screen.

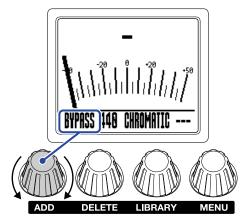
Changing tuner settings

The standard pitch used by the tuner and the tuner type can be changed. Flat tuning is also possible.

Setting the output method



Turn to set the output method.



Setting	Explanation
BYPASS	The guitar sound is output with effects bypassed.
MUTE	The guitar sound is not output.

HINT

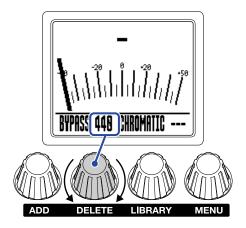
Adjusting the EQ and volume of a guitar amp, for example, is easier if the MS-70CDR+ effects are bypassed.

Changing the standard pitch of the tuner





Turn to change the standard pitch.



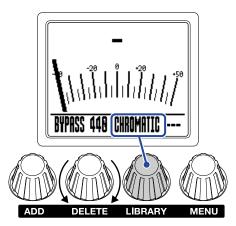
HINT

The setting range is 430–450 Hz for middle A.

Setting the tuner type



Turn to select the tuner type.



Setting	Explanation
CHROMATIC	The pitch detuning is shown according to the nearest note (in semitones).
Other tuner types	The nearest string number is shown according to the selected type, and the amount of detuning from its pitch is shown. The following tuner types can be selected.

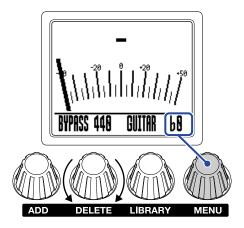
Display	Explanation		String number/note						
Display			6	5	4	3	2	1	
GUITAR	Standard guitar tuning with a 7th string	В	Е	Α	D	G	В	E	
OPEN A	Open A tuning (open strings play A chord)	-	Е	Α	Е	Α	C#	E	
OPEN D	Open D tuning (open strings play D chord)	-	D	Α	D	F#	Α	D	
OPEN E	Open E tuning (open strings play E chord)	-	Е	В	Е	G#	В	E	
OPEN G	Open G tuning (open strings play G chord)	-	D	G	D	G	В	D	
DADGAD	Alternate tuning often used for tapping and other techniques	-	D	Α	D	G	Α	D	

Using flat tunings

All strings can be tuned flat from ordinary tuning by 1 (\flat 1), 2 (\flat 2) or 3 (\flat 3) semitones.



Turn to change the flat tuning.



NOTE

Flat tuning cannot be used when the tuner type is CHROMATIC.

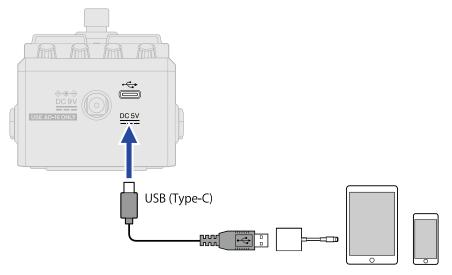
Operating the MS-70CDR+ from an iPhone/iPad

The MS-70CDR+ can be controlled from an iPhone/iPad using Handy Guitar Lab for MS-70CDR+, an iOS/iPadOS app.

NOTE

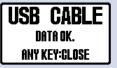
The Handy Guitar Lab for MS-70CDR+ app must be installed on the iPhone/iPad beforehand. The Handy Guitar Lab for MS-70CDR+ app can be downloaded from the App Store. See the operation manual for the Handy Guitar Lab for MS-70CDR+ app for details about making settings and conducting operations.

- 1. Start the MS-70CDR+.
 - If using batteries, connect a cable to an INPUT jack (L/MONO).
 - If using an AC adapter, connecting to the iPhone/iPad with a USB cable will start it.
- 2. Use a USB cable to connect the MS-70CDR+ and the iPhone or iPad.



NOTE

• Use a USB (Type-C) cable that supports data transfer. The following screen will appear when the MS-70CDR+ is connected.



The following screen will appear if a cable that does not support data transfer has been used. Replace the cable with one that supports data transfer.

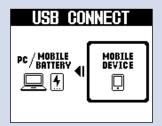


- Use a Lightning to USB 3 Camera Adapter to connect to an iOS/iPadOS device with a lighting connector.
- The USB CONNECT Screen will appear if batteries are being used. Turn to select "MOBILE DEVICE" as



the connected device, and press (MINU).





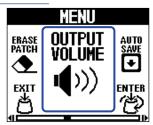
3. Launch Handy Guitar Lab for MS-70CDR+ on the iPhone/iPad.

Making unit settings

Adjusting the overall output level

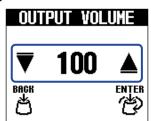
The volume of the MS-70CDR+ output sound can be adjusted. Reduce the volume if the output sound becomes distorted.

1. Select "OUTPUT VOLUME" on the MENU Screen.



2. Turn to adjust the volume.

The setting value is shown on the display.



3. Press ENTER .

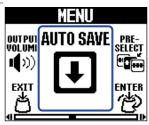
This confirms the setting.

4. Press EXIT

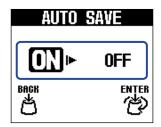
Setting the AUTO SAVE function

When the AUTO SAVE function is ON, patch memories will be saved automatically when their contents are changed.

1. Select "AUTO SAVE" on the MENU Screen.



2. Turn to switch it ON/OFF.



Setting Explanation	
ON	This turns on the AUTO SAVE function.
OFF	This turns off the AUTO SAVE function.

3. Press ENTER

This confirms the setting.

4. Press EXIT

This reopens the Home Screen.

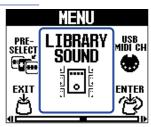
HINT

If the AUTO SAVE function is off, patch memories will not be saved automatically. Save them as necessary. (→ Copying and saving patch memories)

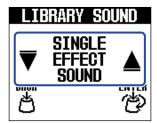
Setting the sound on the LIBRARY Screen

The sound that can be checked on the LIBRARY Screen can be changed.

1. Select "LIBRARY SOUND" on the MENU Screen.



2. Turn to switch the setting.



Setting	Explanation	
SINGLE EFFECT SOUND	This enables checking the sound of just the selected effect.	
PATCH MEMORY SOUND	This enables checking the sound of the entire patch memory.	

3. Press ENTER

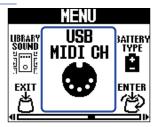
This confirms the setting.

4. Press EXIT

Setting the channel used to receive USB MIDI

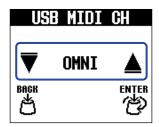
The MS-70CDR+ supports program changes by USB MIDI, and the channel used for receiving them can be set.

1. Select "USB MIDI CH" on the MENU Screen.



2. Turn to switch the setting.

Set it to "OMNI" to receive them on all channels.



3. Press ENTER

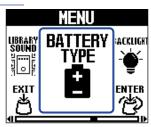
This confirms the setting.

4. Press EXIT .

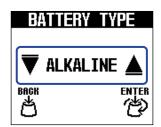
Setting the type of batteries used

Set the type of battery used correctly so that the amount of remaining battery charge can be shown accurately.

1. Select "BATTERY TYPE" on the MENU Screen.



2. Turn to set the type of battery used.



Setting	Explanation		
ALKALINE	Alkaline batteries		
Ni-MH	Nickel-metal hydride batteries		
LITHIUM	Lithium batteries		

3. Press ENTER .

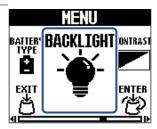
This confirms the setting.

4. Press EXIT .

Adjusting the backlight brightness

The brightness of the backlight can be adjusted. Select "NORMAL" to extend battery life.

1. Select "BACKLIGHT" on the MENU Screen.



2. Turn to adjust the backlight brightness.



Setting	Explanation
NORMAL	This is regular brightness.
BRIGHT	This makes the backlight brighter.

3. Press ENTER

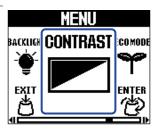
This confirms the setting.

4. Press EXIT

Adjusting the display contrast

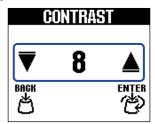
The display contrast can be adjusted.

1. Select "CONTRAST" on the MENU Screen.



2. Turn to adjust the display contrast.

The setting value is shown on the display.



3. Press ENTER .

This confirms the setting.

4. Press EXIT .

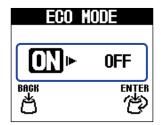
Setting the ECO MODE

This function can be used to turn the power off automatically if unused for 10 hours.

1. Select "ECO MODE" on the MENU Screen.



2. Turn to switch it ON/OFF.



Setting	Explanation
ON	The power will automatically turn off if unused for 10 hours.
OFF	This disables ECO mode.

3. Press ENTER

This confirms the setting.

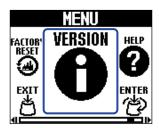
4. Press EXIT

Managing the firmware

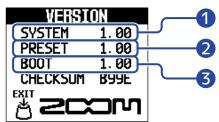
Checking the firmware version

The version of the firmware used by the MS-70CDR+ can be checked.

1. Select "VERSION" on the MENU Screen.



2. Check the version on the VERSION Screen.
This shows the firmware and preset versions.



- 1 MS-70CDR+ firmware version
- 2 Preset version
- 3 Boot version
- 3. Press EXIT

This reopens the Home Screen.

Updating

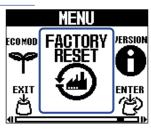
The MS-70CDR+ firmware can be updated to the latest version.

The latest firmware can be downloaded from the ZOOM website (zoomcorp.com).

Restoring factory default settings

Settings can be restored to the factory defaults.

1. Select "FACTORY RESET" on the MENU Screen.



2. Turn to select "YES".



3. Press ENTER

Resetting will be executed, restoring default settings.



NOTE

Resetting will overwrite all settings, including patch memories, with their factory defaults. Be certain before using this function.

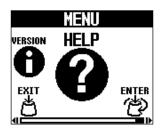
HINT

To cancel resetting, select "NO" in step 2.

Checking the latest information for the MS-70CDR+

A 2D code for help related to the MS-70CDR+ can be shown on its display.

1. Select "HELP" on the MENU Screen.



2. Use a smartphone or tablet, for example, to read the 2D code shown on the HELP Screen.



zoomcorp.com/help/ms-70cdrplus

3. Press EXIT

Appendix

Troubleshooting

The unit will not power on

- If using batteries, connect a cable to an INPUT jack (L/MONO). (→ Turning the power on/off)
- Check the connections. (→ Making connections)

There is no sound or output is very quiet

- Check the connections. (→ Making connections)
- Adjust the levels of the effects. (→ Adjusting effect parameters)
- Adjust the output volume. (→ Adjusting the overall output level)
- Confirm that the tuner output is not set to "MUTE". (→ Setting the output method)

There is a lot of noise

- Confirm that an instrument cable is not the cause.
- Use a genuine ZOOM AC adapter. (→ Making connections)

Batteries lose their charge quickly

Making the following settings could increase the battery operation time.

- Set the type of battery used correctly. (→ Setting the type of batteries used)
- Set the display backlight to "NORMAL". (→ Adjusting the backlight brightness)
- Due to their characteristics, using nickel metal hydride batteries (especially high-capacity ones) or lithium batteries should enable longer use than alkaline batteries when power consumption is high.

Specifications

Maximum number of simultaneous effects		6 effects
User patch memories		100
Sampling frequency		44.1 kHz
A/D conversion		24-bit 128× oversampling
D/A conversion		24-bit 128× oversampling
Signal processing		32-bit
Frequency response		20 Hz - 20 kHz (+0.5 dB/-0.5 dB) (when 10kΩ load)
Display		160×128 dot-matrix LCD
Inputs	L/R	Standard mono phone jacks Rated input level: -20 dBu Input impedance (line): $470~\text{k}\Omega$
Outputs	L/R	Standard mono phone jacks Maximum output level: +7.2 dBu (when output impedance 10 k Ω or higher)
Input S/N		122 dB
Noise floor (residual noise)	L/R	–100 dBu
Power		AC adapter: 9V DC 500mA center negative (ZOOM AD-16) 2 AA batteries (alkaline, lithium or rechargeable NiMH batteries)
Estimated operation times using batteries	 These values are approximate. Battery operation times were determined using in-house testing methods. They will vary greatly according to use conditions. 	Alkaline batteries: about 7 hours (about 5 hours using stereo input) NiMH batteries (1900 mAh): about 6.5 hours (about 5 hours using stereo input) Lithium batteries: about 14 hours (about 10 hours using stereo input)
USB		Port: USB 2.0 Type-C / Supported cable type: Type-C Handy Guitar Lab: USB 1.1 Full Speed • Use a USB cable that supports data transfer. USB bus power is supported.
Dimensions		133 mm (D) × 79 mm (W) × 61 mm (H)
Weight		368 g (excluding batteries) 415 g (including batteries)

Note: 0 dBu = 0.775 V

MIDI implementation chart

[MultiStomp]

Model: MS-70CDR+ Date: Mar. 1, 2024

Version:1.00

Fun	ction	Transmitted	Recognized	Remarks
Basic Channel	Default Changed	X X	1 - 16 1 - 16	Memorized
Mode	Default Message Altered	X X *******	X X ********	
Note Number	True Voice	X *******	X *******	
Velocity	Note ON Note OFF	X X	x x	
After Touch	Keys Ch's	X X	x x	
Pitch Bend		х	х	
Control Change		х	х	
Program Change	True Number	X *******	o 0 - 100 0 - 100	
System Exclusive		х	х	
System Common	Song Position Song Select Tune Request	x x x	x x x	
System Real Time	Clock Commands	X X	x x	
Aux Messages	Local ON/OFF All Notes OFF Active Sense System Reset	X X X X	X X X X	
Notes				

Mode 1 : OMNI ON, POLY Mode 3 : OMNI OFF, POLY

Mode 2 : OMNI ON, MONO Mode 4 : OMNI OFF, MONO

o:Yes x:No



ZOOM CORPORATION

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