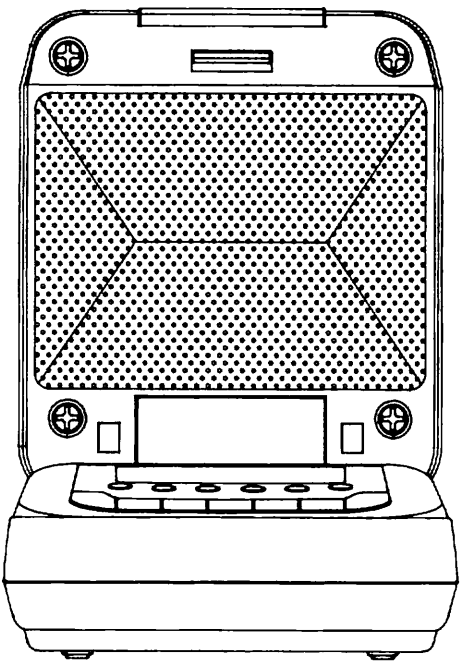
ZOOM®

7010
ZOOM FIRE

OPERATION MANUAL



CONTENTS

Thank you for selecting the ***ZOOM FIRE 7010*** (hereafter called "***7010***")

Outstanding Features

- Small sized high performance speaker.
  You can enjoy dynamic sound with a maximum output of 10W peak with such a small body.

- 28 versatile built-in individual effects.
  Up to seven effects can be combined in a patch, and up to 64 patches (24 user patches and 40 preset patches) are available, offering extraordinary flexibility.

- Integrated auto-chromatic guitar tuner.
  Anytime, anywhere tuning is available.

- Distortion effect is generated using analog circuit, to assure rich and natural-sounding sustain and distortion effects.

- Custom LCD is generated to get information you need at a glance.

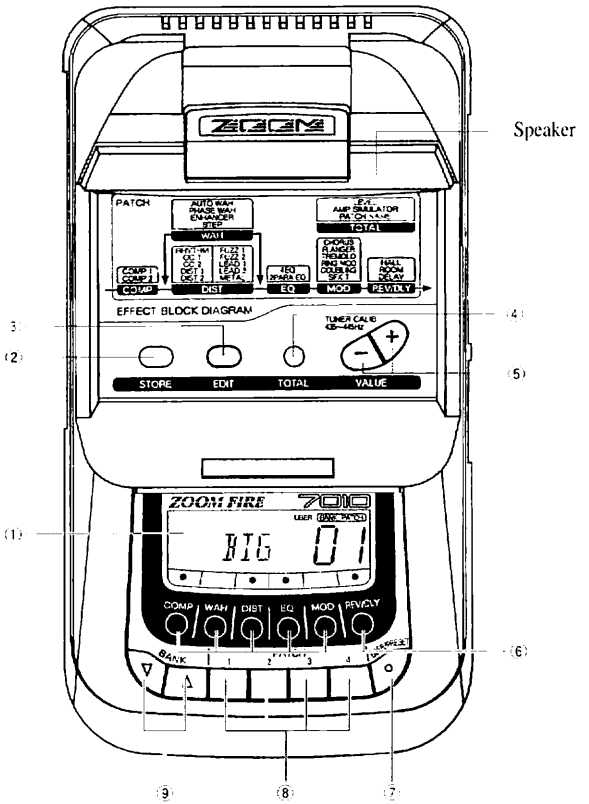
- Stereo mix input terminal is equipped.
  Session is possible with audio source background.

- Operation is also possible with LR6(AA) alkaline dry batteries.
  Carrying the 7010 in battery activation enables you to play anywhere.

- By using the optional foot controller FC02, Pedal control is possible like a floor type effect, for further enhanced playability.

Panel Description

Front Panel



① **Display**
The display shows vital information for operating the 7010.

② **STORE key**
Serves to store a patch.

③ **EDIT key**
Serves to switch between Play mode and Edit mode. This key serves to stop store operation too.

④ **TOTAL key**
Serves to call a setting such as patch level or name except for Effect in Edit mode.

⑤ **VALUE + / – keys**
Serve to change the value of a setting.

⑥ **EFFECT MODULE key**

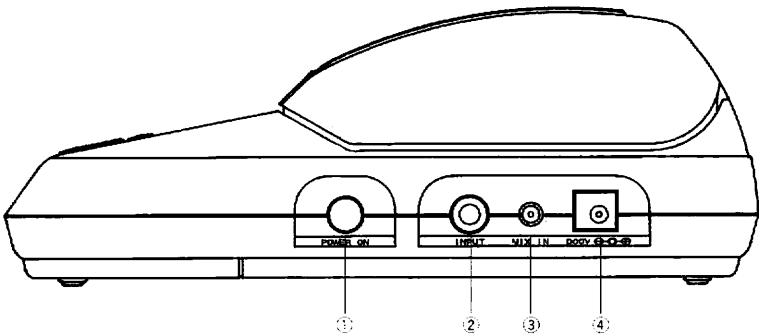
- **In Play mode**
  Serves to switch individual effect module on and off.
- **In Edit mode**
  Serves to call modules and parameters to be corrected.

⑦ **USER/PRESET key**
Serves to switch the group of patches to call.

⑧ **PATCH 1-4 keys**
Serve to switch the patches.

⑨ **BANK ▲ / ▼ keys**
Serve to switch banks of patches to call.

Right side Panel



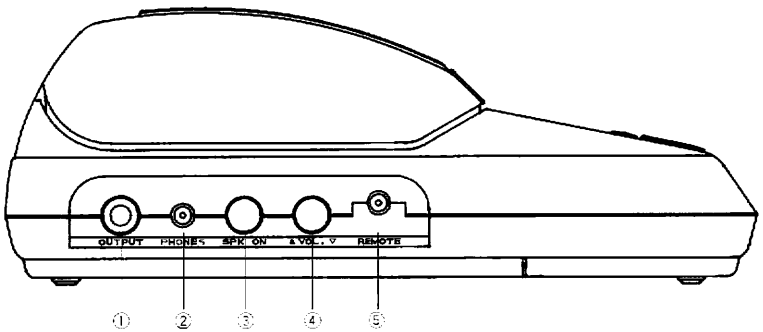
① POWER ON switch
Serves to turn power supply of the 7010 on and off.

② INPUT jack
Serves to connect the guitar.

③ MIX IN jack
Serves to connect output from the headphone terminal of CD players and cassette players.

④ DC INPUT (AC adapter) jack
Serves to connect a supplied AC adapter.

Left side Panel



① OUTPUT jack
Serves to connect to the input of a guitar amplifier or recording mixer.(stereo specification)

② PHONES (head phones) jack
Serves to connect stereo headphones.

③ SPK ON (speaker on) switch
Serves to switch the speaker on or off.

④ VOL. (master volume) knob
Serves to adjust the final output volume of the 7010. Adjusts the speaker or output sound of OUTPUT jack and PHONES jack commonly.

⑤ REMOTE jack
Serves to connect optional FC02.

※For battery activation, open the battery cover, install batteries properly, and firmly close the cover.

Connections

When monitoring the sound through the audio speaker on the 7010.

① **Open the speaker cabinet.**
Holding the 7010 body side, press the open switch and pull the speaker cabinet up.

② **Connect an electric guitar to the INPUT jack.**

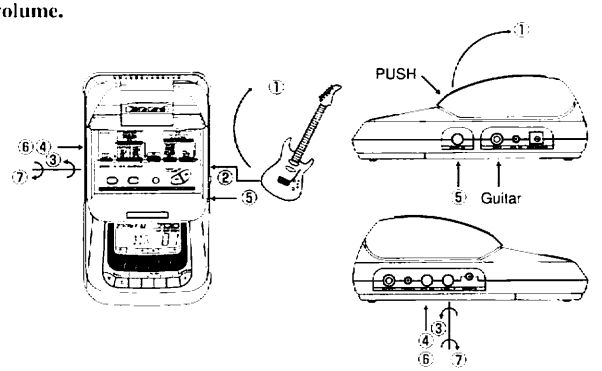
③ **Turn down the volume.**

④ **Push up the SPK ON switch up to turn off (sound off) the speaker.**

⑤ **Press the POWER ON switch to turn on the power supply.**

⑥ **Push the SPK ON switch down to turn on (Sound on) the speaker.**

⑦ **Adjust the volume while playing the guitar.**



When monitoring the sound by headphone with a CD source.

① **Connect head phones to the PHONES jack.**

② **Connect a CD player to the MIX IN jack.**
The MIX IN jack is compatible with the stereo input. Connect by using a cable with a stereo plug.

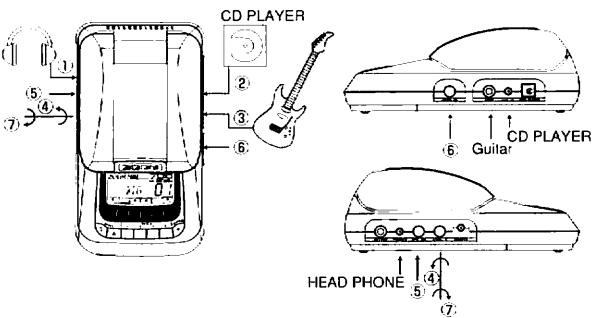
③ **Connect an electric guitar to the INPUT jack.**

④ **Turn down the volume.**

⑤ **Push up the SPK ON switch up to turn off the speaker.**

⑥ **Press the POWER ON switch to turn on the power supply.**

⑦ **Adjust the volume while playing the guitar.**



When monitoring the sound through a guitar amplifier

① Connect an electric guitar to the INPUT jack.

② Connect an electric guitar amplifier to the OUTPUT jack.

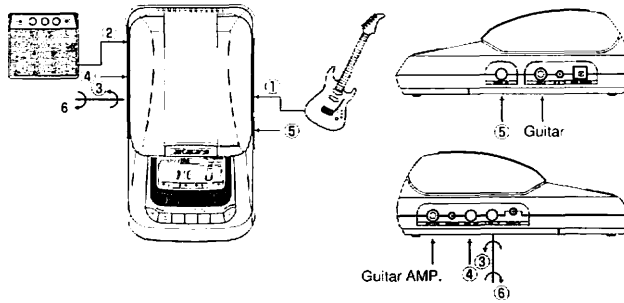
③ Turn down the volume.

④ Push the SPK ON switch up to turn off (sound off) the speaker.

⑤ Press the POWER ON switch to turn on the power supply.

⑥ Adjust the volume while playing the guitar.

NOTE *The OUTPUT jack is compatible with a stereo output, however, the sound input through the INPUT jack is output in monaural. The sound input through the MIX IN jack is output in stereo, according to the sound source.*



When connecting to a cassette tape recorder.

① Open the speaker cabinet.
Holding the 7010 body sides, press the open switch and pull the speaker cabinet up.

② Connect an electric guitar to the INPUT jack.

③ Connect the INPUT jack of the cassette tape recorder to the output jack of 7010.

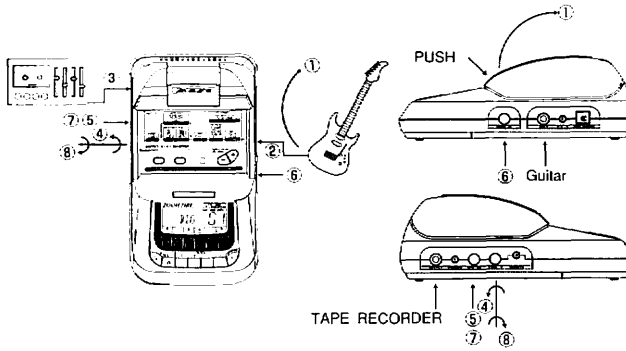
④ Turn down the volume.

⑤ Push the SPK ON switch up to turn off (sound off) the speaker with the knob up.

⑥ Press the POWER ON switch to turn on the power supply.

⑦ Push the SPK ON switch down to turn on (sound on) the speaker.

⑧ Adjust the 7010 output volume, and the input volume of a cassette tape recorder, to a suitable level while playing the guitar.



When connecting a foot controller.

① Connect the optional foot controller FC02 to the REMOTE jack.

② Connect an electric guitar to the INPUT jack.

③ Connect a guitar amplifier to the OUTPUT jack.

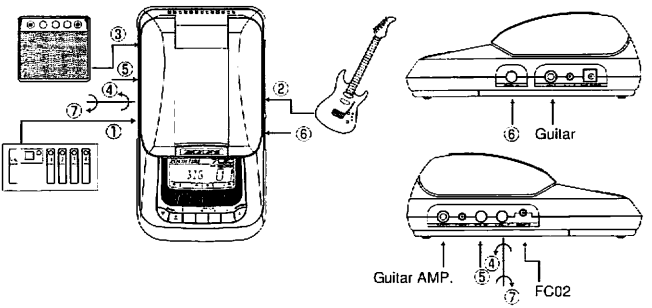
④ Turn down the volume.

⑤ Push the SPK ON switch up to turn off (sound off) the speaker.

⑥ Press the POWER ON switch to turn on the power supply.

⑦ Adjust the volume while playing the guitar.

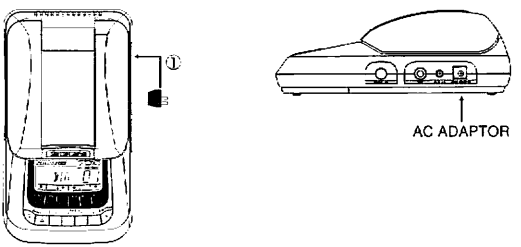
NOTE *Make sure that the power supply of the 7010 is turned off before connecting the foot controller FC02. If the power supply is on when connecting, the foot controller FC02 may not work properly.*



When connecting an AC adapter.

The 7010 can be powered by either an AC adapter or 6 alkaline batteries(1.5V).
Under battery power, the 7010 can work continuously for approximately 4 hours of normal use.

① **Connect the supplied AC adapter to the DC IN jack.**
Then connect other equipment to acquire conditions you wish.



Getting Familiar With Some Basic Terms

This operation manual describes the 7010 using plain words, considering beginners. However, the 7010 contains some special terms which are not used for a compact effector.
This chapter describes some special terms for the 7010.

Effect Module

The 7010 incorporates six effect blocks which are referred to as "effect module". Each effect module can be thought of as a single compact effect. The 7010 therefore operates like six compact effects connected in series.
The following six types of effect modules are available:

- **COMP(COMPRESSOR)**
  An effect which compresses the sound.
- **WAH**
  Effect which periodically revises the sound quality.
- **DIST(DISTORTION)**
  A distortion effect using analog clip circuit.
- **EQ(EQUALIZER)**
  An effect which revises quality of the sound.
- **MOD(MODULATION)**
  A modulation effect which periodically changes the sound quality to give the sound thickness.
- **REV/DLY(REVERB/DELAY)**
  A reverb effect which creates the spatial sound.

Effect Type

Each effect module contains several effect variations which are called "effect types". An effect module can normally use only one effect type at a time. The DISTORTION module utilizes ZNR(ZOOM Noise Reduction)in addition to the distortion effect. For a list of effect types in each effect module, please see the table on page 17.

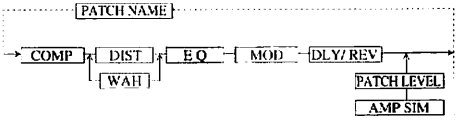
Parameter

The elements which determine the sound and name of an effect are referred to as "parameters". Parameter values can be adjusted for each effect module, to create your own patches with the 7010.

Patches and Groups

A combination of effect modules, each with individual parameter settings plus the final volume level settings, amplifier simulator settings and name is referred to as a "patch".
The 7010 has two memory areas or "groups" where patches are stored:the USER group for patches that can be altered by the user, and the PRESET group for read only patches. There are 24 patches in the USER group and 40 patches in the PRESET group, for a total of 64 patches.

<Patch composition>



Bank

The 7010 calls up patches in sets of four. Each set of four patches is referred to as a "bank".

GROUP	BANK NO.	PATCH NO.
USER	0	1～4
	1	1～4
	2	1～4
	3	1～4
	4	1～4
	5	1～4
PRESET	0	1～4
	1	1～4
	2	1～4
	3	1～4
	4	1～4
	5	1～4
	6	1～4
	7	1～4
	8	1～4
	9	1～4

Mode

The functions of the 7010 can be divided into three different categories. These are called "modes", as described below.

- **Play Mode (Please refer to page 9)**
  In this mode, patches are selected and played. This is the default mode when the power supply is turned on.
- **Edit Mode (Please refer to page 13)**
  In this mode, the parameters of each patch can be edited.
- **Special Mode (Please refer to page 26)**
  Serves to return all patch data to the factory preset settings.

Using the Patches(Play Mode)

The play mode is basically to play using the stored patches. The play mode also can select patches, adjust volume, turn the effect modules on/off and do tunings.

NOTE *The speaker output in the 7010 body can be turned on/off with SPK ON switch on the left side panel. The output of the OUTPUT jack and PHONES cannot be turned on/off.*

Turning on the power supply

(1) Make sure that the power supply of the 7010 is turned off before connecting an electric guitar.
When monitoring with a guitar amplifier, make sure that the guitar amplifier is turned off before connecting.

CAUTION *Turn the volume of each instrument to a minimum.*

(2) Turn on the 7010 power supply.
When monitoring by a guitar amplifier, then turn on the guitar amplifier.

CAUTION *To protect a guitar amplifier speaker, turning off the power supply. Turn off the guitar amplifier first.*

(3) Adjust the volume while playing the guitar.

Panel Display in Play Mode

When the 7010 is turned on, the unit automatically goes into Play mode. In the Play mode, the following information is shown on the display.

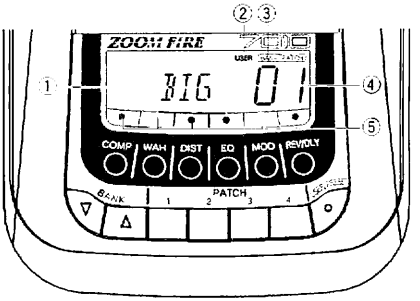
① **Patch name**
The currently selected patch name is shown.

② **Group (USER/PRESET)**
The group where the currently selected patch belongs, is shown.

③ **Bank number**
The currently selected bank number is shown in the BANK field.

④ **Patch number**
The currently selected patch number is shown in the PATCH field.

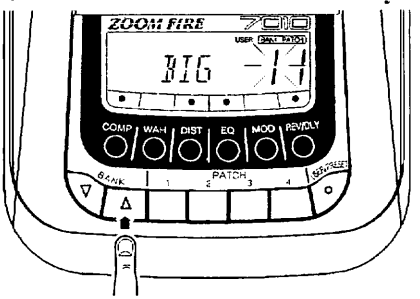
⑤ **Effect module on/off**
The effect indicator lights to show which effects are currently on for a given patch.



Selecting a Patch

(1) Select the group with the USER/PRESET key.
Choose the group from which you want to select a patch, by pushing the USER /PRESET key.

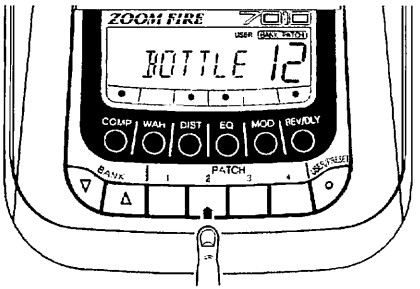
(2) Select the bank with the BANK ▲ / ▼ keys.



With each press of the BANK▲key, the next higher bank is selected, and with each press of the BANK ▼key, the next lower bank. At this time, the bank number flashes. (Bank number continues flashing until the patch is selected.)

NOTE **Merely pressing the BANK▲ / ▼*key does not select the patch.***
To activate the patch, press one of the PATCH keys 1-4, as described below.

(3) Select the patch by pressing one of the PATCH keys 1-4.



Press one of the PATCH keys 1-4 to select the patch which is shown in the PATCH number field on the display.
(The BANK indicator is now constantly lit)

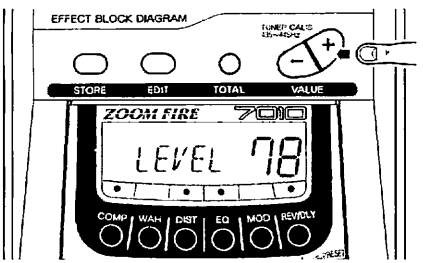
Adjusting the Patch Level

The volume level of the each patch is called the patch level. In the play mode, the patch level can be adjusted.

(1) Press the VALUE +/– keys in the Play mode.
When one of the VALUE +/– keys is pressed, the current patch level setting (0-99) is shown on the display while LEVEL is indicated.

(2) In addition, when one of the VALUE +/– keys is pressed once more, the level can be adjusted.
Pressing VALUE + key increases the value and pressing VALUE – key decreases it.

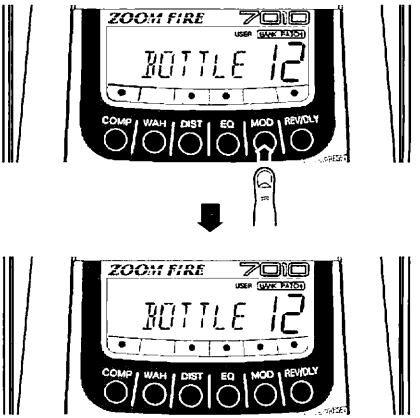
NOTE *The patch level setting changes made in this way is only temporary. If you select a different patch without storing the new level setting first, the setting will be lost.*
The patch level can be adjusted also for the patches from the PRESET group, but the new level setting cannot be stored. When wishing to store the level, store the patch in the USER group.



Turning the Effect module on/off

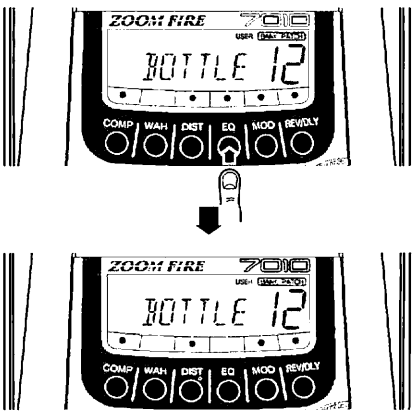
The 7010 is composed of various effect modules. In the play mode, each effect module can be turned on/off by hand easily the same way as continuous compact effects can be individually turned on/off by foot.

(1) Press the EFFECT MODULE key of an effect module which is currently turned off. (effect mode indicator is not shown)



Effect module is now turned on. At this time effect indicator of that effect module is shown.

(2) Press the EFFECT MODULE key corresponding to on-effect module to turn off that effect module. (effect indicator is shown)
Effect module is now turned off. The effect indicator of that effect module disappears.



Bypassing the Effects

You can temporarily turn off all effects in a patch. This status is called "BYPASS". It is useful for checking effect drive.

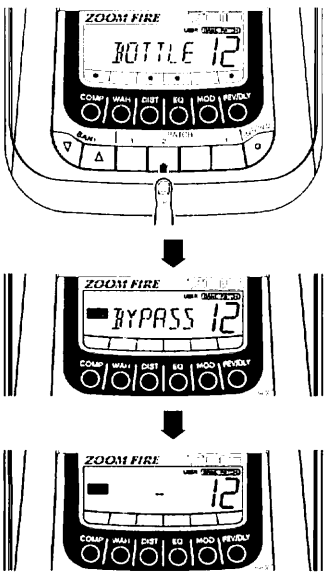
(1) In the Play mode, press the PATCH key whose number is the same as the patch number which is currently selected. (It is indicated in the patch field on the display.)

NOTE *For example, if the patch number shown on the display is '2', press PATCH 2 key to bypass.*

(2) All effects in the patch are bypassed and the original guitar sound is heard.

The display shows "BYPASS" at the same time the PATCH key is pressed to indicate that bypass has been selected.

"BYPASS" is indicated for one second, then change into tuner indication (if there is no input from guitar, the display shows'-') the BYPASS/TUNER indicator also lights up.



NOTE *To make the explanation easier, it is described that "Original sound" in the Bypass condition. However, digital processing of input tone executes both in the effect on and effect off conditions. So it will not be exactly the same as when directly plugging the guitar into the amplifier.*

(3) To return to the Play mode, press the same key again or select another patch.

Muting the Output

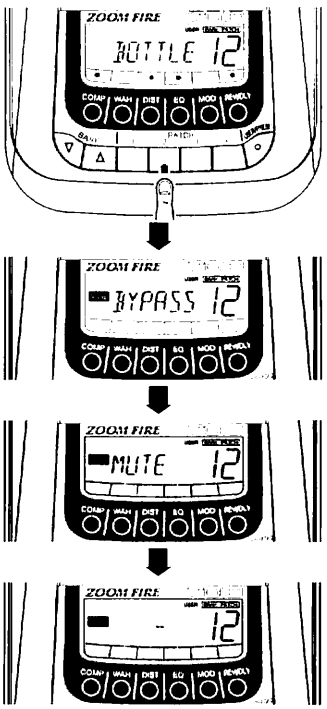
You can temporarily mute the entire output from the 7010. This status is called "MUTE". It is useful for example when wishing to tune an instrument on stage.

(1) In the Play mode, press the PATCH key whose number is the same as the currently selected patch number for one second. (It is indicated in the patch field on the display.)

NOTE *For example, if the patch number shown on the display is '2', press the PATCH 2 key for at least one second to mute the output.*

(2) The output tone is completely muted and the sound of the guitar cannot be heard.

At the moment PATCH key is pressed. The indication "BYPASS" appears first on the display, but if the key is pressed for more than one second, the indication change to "MUTE" to indicate that the output has been muted. The indication shows for one second, then switches to tuner indication (if there is no input from guitar, the display shows '-') also BYPASS/TUNER indicator is



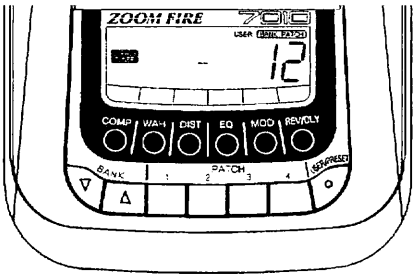
shown.

(3) To return to the Play mode, press the same key

Tuning the guitar

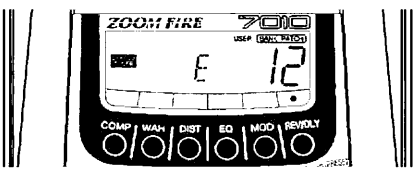
The 7010 incorporates an automatic guitar tuning function.
When the 7010 is set to the bypass or mute mode, the tuning function is automatically enabled.

(1) In the Play mode, press the PATCH key whose number is the same as currently selected patch number (It is indicated in PATCH field on the display) to activate the bypass or mute mode.
The BYPASS/TUNER indication lights.

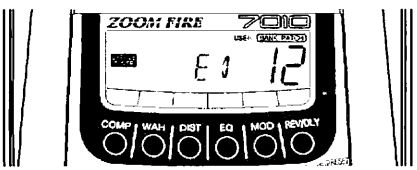


(2) Pick an open string on the guitar.
The display shows the note which is closest to the current pitch. Tune the guitar to the desired pitch.

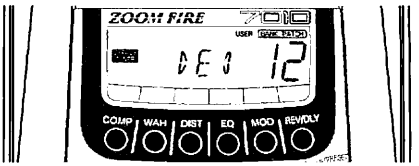
(3) The display shows the desired note, perform fine tuning.
While the tuner function is on, the effect indicator works as a fine tuning meter. If the pitch is too high, the REV/DLY indicators light, if it is too low, the COMP indicator lights.



A guide mark (<) is shown as the pitch of the string gets closer to the displayed note.



When guide marks appear on both sides of the note, the string is tuned correctly.



Guitar Tuner Calibration

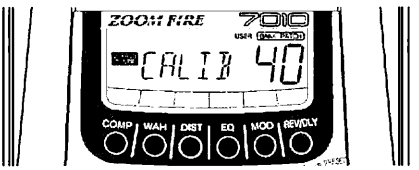
The reference of the integrated chromatic tuner can be adjusted for the frequency of musical interval A.

(1) In the Play mode, press the PATCH key whose number is the same as the currently selected patch number to activate the bypass or mute mode.

(2) Press one of the VALUE +/– Keys.

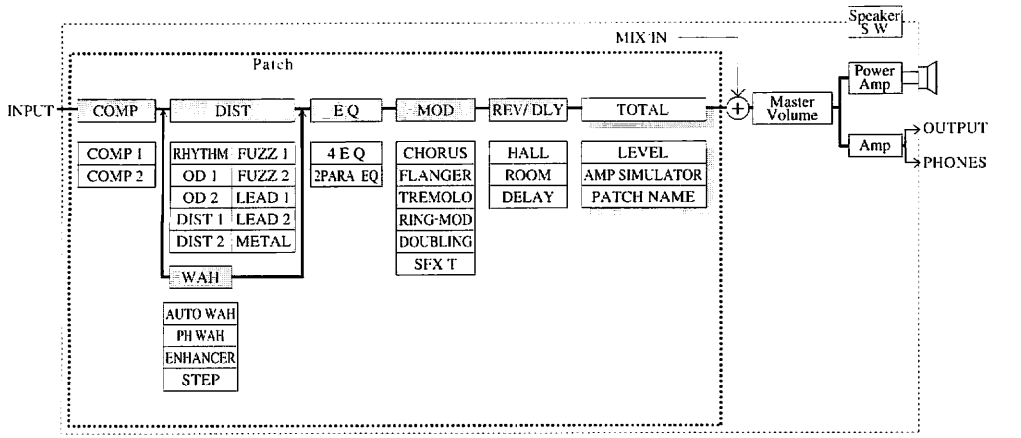
(3) The current reference frequency of musical interval A is shown for a brief duration on the display.

(4) While the reference frequency is shown, use the VALUE +/– keys to adjust the frequency.
The adjustment range is 435Hz to 445Hz. This is shown on the display as "35-45".



NOTE *The default reference frequency setting that is established when the 7010 is turned on is 440Hz.*

Creating a Patch (Edit Mode)



Edit mode allows you to adjust effect module parameters, patch level, and patch name to compose the patch as you will.

Activating Edit Mode

(1) Select the desired patch in the Play mode.

Both groups, User or preset, are available at this time.

NOTE *For details on how to select a Patch, please refer to page 9.*

(2) Press the Edit key

The 7010 is now in the Edit Mode.

At this time, the parameter and the value (VALUE) currently being editing are indicated on the display.

Panel display in edit mode is a little different from the play mode.

For further details, please refer to next section.

(3) To return edit mode to play mode, press the EDIT key again.

Panel Display in Edit Mode

There are 3 kinds of display indications in edit mode.

(1)Effect Type indication

① TYPE Indicator

Indicate the parameter currently edited is the effect type.

② Effect Type

Indicates the name of the selected effect.

③ Effect Indicator

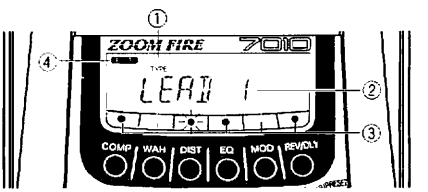
Effect module indicator currently selected for editing flashes.

About other effect modules, if it is ON, the indicator lights up.

If it is OFF, the indicator disappears.

④ EDIT Indicator

Shows that Mode status is EDIT mode.



(2) Effect Parameter Indication

① Individual Parameter Type

Effect parameter name is indicated.

② Parameter Value (VALUE)

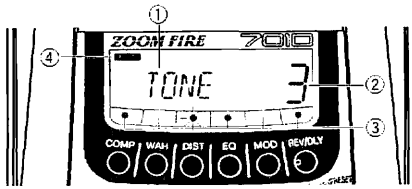
The current parameter value is indicated.

③ Effect Indicator

The indicator of the effect module currently selected is flashing.

④ EDIT Indicator

It shows that mode status is EDIT mode.



(3) Total Parameter Indication

① TOTAL Indicator

Shows the parameter currently edited is a total duty element (total parameter) in the composition of the selected patch such as patch level and patch name. This indicator is flashing.

② Total Parameter Type

Total parameter name currently edited is shown. However, patch name is shown only for patch name.

③ Parameter Value (VALUE)

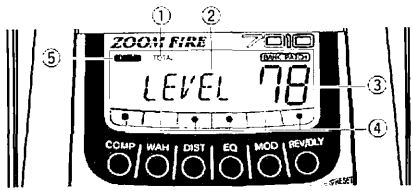
Parameter value currently selected for editing is shown.

④ Effect Indicator

If the effect module is on, the indicator lights up.

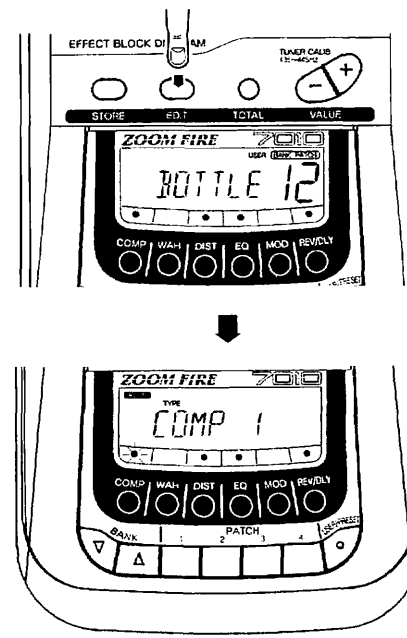
⑤ EDIT Indicator

It shows that mode status is EDIT mode.

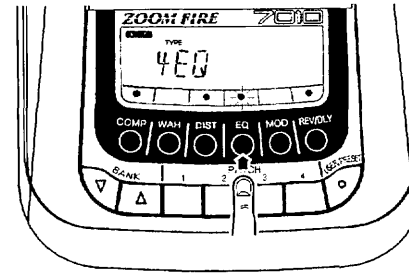


Editing Effect Parameter

(1) Press the EDIT key to activate edit mode.



(2) Select effect module you want to edit with the EFFECT MODULE key.



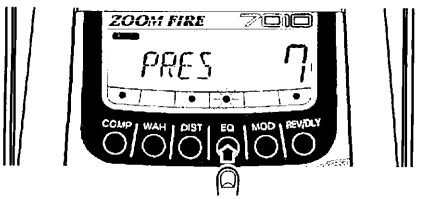
Effect type in the Effect module currently edited is shown, then effect indicator flashes.

NOTE *When the selected effect module is OFF, 'EFX OF' is shown on the display.*
When you want to turn on an effect module which was OFF, press the VALUE + key. On the display 'EFX On' shows.

(3) Editing in the selected Effect module

To call Parameter, press the responding EFFECT MODULE key several times.

Every time you press the EFFECT MODULE key, a different parameter and corresponding value is shown on the display.



You can call parameter with the BANK ▲ / ▼ keys.

(4) Change effect parameter value with the VALUE +/– keys.

For the kinds and functions of each parameter in effect module, please refer to [Effect parameters and Total parameters] on page 19-24.

Editing in this way is only temporary. If you select a different patch without storing the edited patch, it will return to the value before edit. For storing the patch, please refer to the description on page 16.

Switching Effect Modules on and off

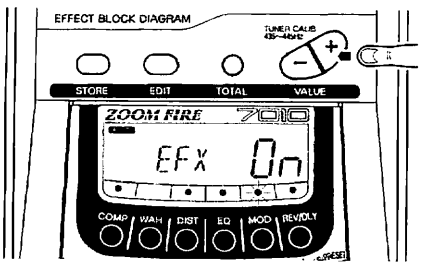
In edit mode, each effect module can be turned on/off independently.

(1) In the edit mode, press the EFFECT MODULE key corresponding to effect module you want to turn on .

EFX OF' is shown on the display.

(2) Press the VALUE + key.

Effect module is now turned on.

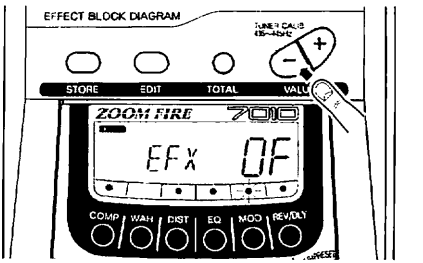


(3) Press the EFFECT MODULE key corresponding to effect module which you want to turn off .

(4) Press the EFFECT MODULE key several times to indicate 'EFX On' on the display.

(5) Press the VALUE– key.

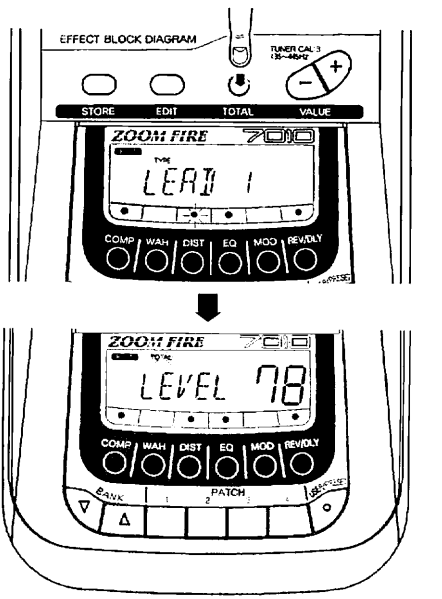
Effect module is now turned off.



You can turn an effect module on and off with USER/PRESET key.

Editing Total Parameter

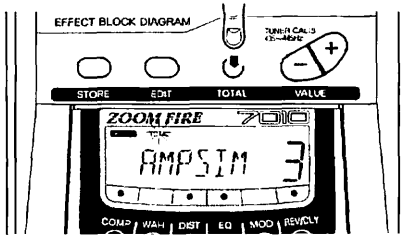
(1) Press the TOTAL key in the edit mode.



Total indicator is flashing at right side of EDIT indicator on the display. It indicates total parameter can be edited.

(2) To call parameter you want to edit in total parameter, press the TOTAL key several times.

Every time you press the TOTAL key, the currently selected parameter types and values are shown on the display.



HINT *You can call parameter with the BANK ▲ / ▼ keys.*

(3) Change total parameter value with the VALUE +/– keys.

NOTE *Setting the patch name as a part of total parameter is possible.*
A patch name of up to 6 letters can be entered. Change each letter with the VALUE +/– keys, Press the TOTAL key when finished.

HINT *For total parameter types and the function, please refer to [Effect parameter and Total parameter] on page 17-22.*

(4) To editing effect parameters continuously, press the EFFECT MODULE key in the effect module which you want to change.

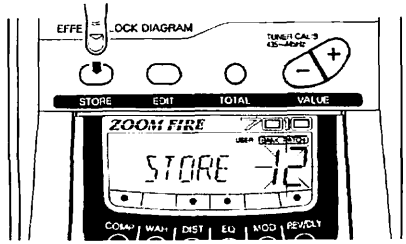
HINT *Press the EDIT key to return to play mode.*

Storing a Patch

If an indicated patch is not stored, the change will be lost when another patch is selected.
To preserve a setting, store the patch as described below.

(1) Press the STORE key in edit mode.

This activates the store standby condition.



NOTE *To stop the store standby condition, press the EDIT key.*

HINT *You can store in the Play mode.*

(2) Designate a patch to store.

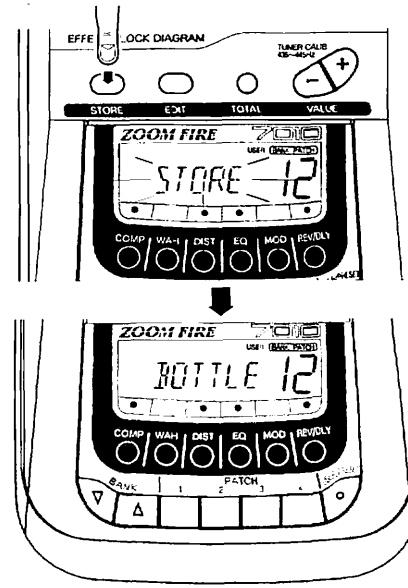
To designate a patch, first choose the bank number with the BANK ▲ / ▼ keys.
Then, specify a patch number with the PATCH 1-4 keys.

NOTE *Patches cannot be stored in the PRESET group. If a patch is chosen from the PRESET group, the store destination will automatically become the USER group. Specify a bank and patch number in the USER group.*

(3) If no store destination is specified for a patch selected from the USER group, the patch will be stored in the original location.

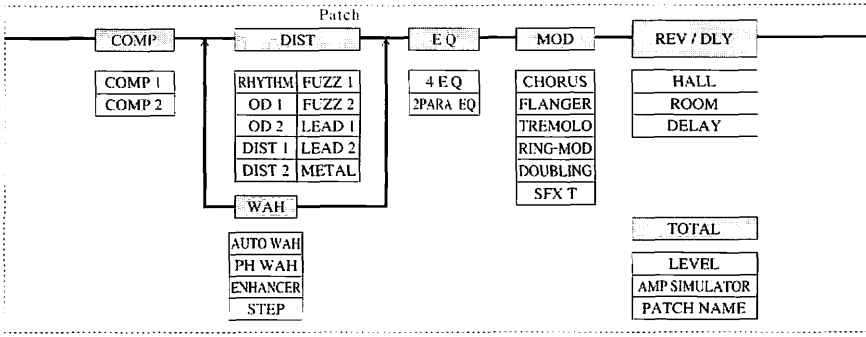
If no store destination is specified for a patch selected from the PRESET group, the patch will be stored in "01" of the USER group.

HINT *When a patch is stored, the patch that was previously stored in that number will be overwritten and cannot be recovered. However, it is possible to restore all factory preset patches. (not individual patches) For the method, please refer to [Returning the 7010 to the factory preset condition (Special Mode)] on page 26.*



(4) Press the STORE key again.

Effect Parameters and Total Parameters



In this section, all effect types and parameters of the 7010 are explained. Parameters that are same for several effect typesare explained minimum.

Effect Module 1: Compressor(COMP)

This module contains 2 kinds of effect types which compress tone input from a guitar, to maintain a level, uniform and even sound.

1 COMP 1 (Compressor 1)

This is a normal type compressor which is used generally as a compression effect.

	1 COMP 1	
Parameter 1	SENS	0-10
Parameter 2	ATTACK	0-10
Effect on/off		ON/OFF

(1) EFFECT TYPE
Selects the effect type.To use the normal compressor, set the parameter to 'COMP 1'.

(2) SENS
Determines the compressor depth. Higher values produce more uniform level and longer sustain.

(3) ATTACK
Determines the time lag between the guitar sound input and the onset of compression. Lower values produce faster onset.

(4) EFFECT ON/OFF
To use the module, turn it on. If not, turn it off.

2 COMP 2 (Compressor 2)

This is a bright compressor which accentuates the higher freqnencies. Suitable for rhythm packing.

	2 COMP 2	
Parameter 1	SENS	0-10
Parameter 2	ATTACK	0-10
Effect on/off		ON/OFF

(1) EFFECT TYPE:
To use the bright compressor, set the parameter to 'COMP 2'.

Effect Module 2: WAH

This module contains 4 kinds of effects which adjust the tone of the sound over time. This module can be placed right before or immediately after the DIST (Distortion) module, in the signal path. The placement in the signal path affects the tone color of the final sound.

1 AT WAH (AUTO WAH)

This is an effect in which the stressed frequency range moves up and down depending on dynamic (strong, weak) of guitar tone.

	1 AT WAH	
Parameter 1	SENS	0-10
Parameter 2	DIR(DIRECTION)	0, 1
Parameter 3	POSIT(POSITION)	0, 1
Effect on/off		ON/OFF

(1) EFFECT TYPE
To use the auto wah, set the parameter to 'AT WAH'.

(2) SENS
Determines the auto wah sensitivity.
Higher values produce wider frequency range with small guitar input.

(3) DIR (Direction)
Determines the tone change direction.
The stressed frequency moves up at 0 and down at 1.

(4) POSIT (Position)
Determines the effect module entering position.
The effect module is entered right before DIST module at 0 and right after at 1.

2 PH WAH (PHASE WAH)

To use this module, turn it on, if not, turn it off.
This is an effect which adds a phase shifted tone to the direct tone and changes the phase shift over time.

2 PH WAH		
Parameter 1	DEPTH	0-10
Parameter 2	RATE	1-20
Parameter 3	PEAK	0-10
Parameter 4	POSIT(POSITION)	0, 1
Effect on/off		ON/OFF

(1) EFFECT TYPE
To use the phase wah, set the parameter to 'PH WAH'.
(2) DEPTH
Determines the phase effect depth.
(3) RATE
Determines the phase swing speed.
(4) PEAK
Gives the sound a characteristic tone, and stresses the effect.

3 ENHANC (Enhancer)

This is an effect to emphasize the frequency bandwidth determined by the frequency parameter and to make the tone contour clear.

3 ENHANC		
Parameter 1	EXPAND	1-10
Parameter 2	FREQ(FREQUENCY)	1-12
Parameter 3	SENS	0-10
Parameter 4	POSIT(POSITION)	0, 1
Effect on/off		ON/OFF

(1) EFFECT TYPE
To use the enhancer, set the parameter to 'ENHANC'.
(2) EXPAND
Determines the width.
Higher values produce a deeper effect.
(3) FREQ (Frequency)
Determines the frequency range to be stressed.
Higher values stress higher frequency range.
(4) SENS
Determines the enhancer sensitivity.
Higher values produce deeper effect of the enhancer with small guitar input.

4 STEP

This creates auto arpeggio effect by adding the effect sound with random tone color changes.

4 STEP		
Parameter 1	DEPTH	0-10
Parameter 2	RATE	1-20
Parameter 3	RESO(RESONANCE)	0-10
Parameter 4	POSIT(POSITION)	0, 1
Effect on/off		ON/OFF

(1) EFFECT TYPE
To use the step, set the parameter to 'STEP'.
(2) DEPTH
Determines the tone variation.
(3) RATE
Determines the effect speed.(speed of an arpeggio)
(4) RESO (Resonance)
Gives the sound a characteristic tone, and stresses the effect.

Effect Module 3:Distortion(DIST)

This module contains a total of 10 kinds of distortion effects. Such as 3 kind of overdrive, 2 kinds of distortion, 2 kinds of fuzz, and 3 lead sounds .

NOTE *This module contains ZNR (Zoom original product noise reduction) Adjust it depending on the guitar.*

1 RHYTHM

This gives cool drive sound which controls bass and stresses treble. Suitable for rhythm backing or blues.

1 RHYTHM		
Parameter 1	GAIN	1-16
Parameter 2	TONE	0-10
Parameter 3	ZNR	0-10
Effect on/off		ON/OFF

(1) EFFECT TYPE
To use the rhythm, set the parameter to 'RHYTHM'.
(2) GAIN
Determines distortion intensity of the overdrive circuit.
Higher values produce more distortion.
(3) TONE
This is a tone-control-type equalizer.
(4) ZNR (Zoom Noise Reduction)
Reduces noise when not playing. Set to highest value that does not un naturall cut the instrument sound.

2 OD 1 (Overdrive 1)

This gives natural sounding overdrive distortion similar to that achieved with conventional compact effects.

2 OD 1		
Parameter 1	GAIN	1-16
Parameter 2	TONE	0-10
Parameter 3	ZNR	0-10
Effect on/off		ON/OFF

(1) EFFECT TYPE
To use the overdrive 1, set the parameter to 'OD 1'.
(2) GAIN
Determines the distortion intensity of the overdrive circuit.
Higher values produce deeper distortion.

3 OD 2 (Overdrive 2)

This gives warm sounding distortion similar to that of a tube amplifier.

3 OD 2		
Parameter 1	GAIN	1-16
Parameter 2	TONE	0-10
Parameter 3	ZNR	0-10
Effect on/off		ON/OFF

(1)EFFECT TYPE
To use the overdrive 2, set the parameter to 'OD 2'.

4 DIST 1 (Distortion 1)

This gives distortion with a bass boost and solid character.

4 DIST 1		
Parameter 1	GAIN	1-16
Parameter 2	TONE	0-10
Parameter 3	ZNR	0-10
Effect on/off		ON/OFF

(1)EFFECT TYPE
To use the distortion 1, set the parameter to 'DIST 1'.
(2)GAIN
Determines the distortion intensity.
Higher values produce deeper distortion.

5 DIST 2 (Distortion 2)

This gives hard distortion sound similar to driving a large amp to full level.

5 DIST 2		
Parameter 1	GAIN	1-16
Parameter 2	TONE	0-10
Parameter 3	ZNR	0-10
Effect on/off		ON/OFF

(1)EFFECT TYPE
To use the distortion 2, set the parameter to 'DIST 2'.

6 FUZZ 1

This gives a modern type fuzz sound.

6 FUZZ 1		
Parameter 1	GAIN	1-16
Parameter 2	TONE	0-10
Parameter 3	ZNR	0-10
Effect on/off		ON/OFF

(1)EFFECT TYPE
To use the fuzz 1, set the parameter to 'FUZZ 1'.
(2)GAIN
Determines the distortion intensity of the fuzz.
Higher values produce deeper distortion.

7 FUZZ 2

This gives a vintage type fuzz sound.

7 FUZZ 2		
Parameter 1	GAIN	1~16
Parameter 2	TONE	0~10
Parameter 3	ZNR	0~10
Effect on/off		ON/OFF

(1)EFFECT TYPE
To use the fuzz 2, set the parameter to 'FUZZ 2'.

8 LEAD 1

This is a smooth tone distortion with expanding sound.

8 LEAD 1		
Parameter 1	GAIN	1-16
Parameter 2	TONE	0-10
Parameter 3	ZNR	0-10
Effect on/off		ON/OFF

(1) EFFECT TYPE
To use the lead 1, set the parameter to 'LEAD 1'.
(2) GAIN
Determines the distortion intensity.
Higher values produce deeper distortion.

9 LEAD 2

This gives granular high-gain tube amp type sound.

9 LEAD 2		
Parameter 1	GAIN	1-16
Parameter 2	TONE	0-10
Parameter 3	ZNR	0-10
Effect on/off		ON/OFF

(1) EFFECT TYPE
To use the lead 2, set the parameter to 'LEAD 2'.

10 METAL

This gives distortion which stresses the treble and bass range, suitable for heavy metal.

10 METAL		
Parameter 1	GAIN	1~16
Parameter 2	TONE	0~10
Parameter 3	ZNR	0~10
Effect on/off		ON/OFF

(1) EFFECT TYPE
To use the metal, set the parameter to 'METAL'.

Effect Module 4:Equalizer(EQ)

This module contains 2 kinds of effect types which control the sound tone.

1 4EQ (4band equalizer)

This equalizer allows boost or cut in the presence (super-high), high, mid and low frequency ranges.

1 4EQ

Parameter 1	PRES(PRESENCE)	-12-12
Parameter 2	HIGH	-12-12
Parameter 3	MID	-12-12
Parameter 4	LOW	-12-12
Parameter 5	LEVEL	1-30
Effect on/off		ON/OFF

(1)EFFECT TYPE
To use the 4 band equalizer, set the parameter to '4EQ'.

(2)PRES (Presence)
Adjusts the range of harmonics and overtones of a guitar. Higher values produce more stress on the range of harmonics and overtones.

(3)HIGH
Adjusts the treble range.
Higher values produce more stress on the treble range.

(4)MID
Adjusts the midrange.
Higher values produce more stress on the midrange.

(5)LOW
Adjusts the bass range.
Higher values produce more emphases on the bass range.

(6)LEVEL
Adjusts the output level for EQ module.

2 2P EQ (2 band parametric equalizer)

This 2 band parametric equalizer allows setting the center frequency range, boost and cut.

2 2P EQ

Parameter 1	HIGH F(FREQUENCY)	1-16
Parameter 2	HIGH G(GAIN)	-12-12
Parameter 3	LOW F(FREQUENCY)	1-16
Parameter 4	LOW G(GAIN)	-12-12
Parameter 5	LEVEL	1-30
Effect on/off		ON/OFF

(1)EFFECT TYPE
To use the 2 band parametric equalizer, set the parameter to '2P EQ'.

(2)HIGH F(High frequency)
Determines the center frequency of the treble range.
Higher values produce higher center frequency range.

(3)HIGH G (High gain)
Adjusts the treble range.
Higher values produce more stress on the treble range.

(4)LOW F (Low frequency)
Determines the center frequency of the bass range.
Higher values produce higher center frequency range.

(5)LOW G (Low gain)
Adjusts the bass range.
Higher values produce more stress on bass range.

Effect Module 5:Modulation (MOD)

This effect module contains 6 kinds of effect types which change tone timewise and give character.

1 CHORUS

An effect sound with periodically changing pitch is added to the direct sound, for rich ambience.

1 CHORUS

Parameter 1	DEPTH	0-10
Parameter 2	RATE	1-20
Parameter 3	MIX	0-10
Effect on/off		ON/OFF

(1)EFFECT TYPE
Select the effect type. To use the chorus, set the parameter to 'CHORUS'.

(2)DEPTH
Determines the modulation depth.

(3)RATE
Determines the modulation rate.

(4)MIX
Determines the signal level fed to the mixer circuit between the output of the EQ module and the input of the REV/DLY module.

2 FLANGE (Flanger)

An effect sound delayed by several dozen milliseconds is added to the direct sound, and the delay is periodically changed, resulting in a strong flange effect.

2 FLANGE

Parameter 1	DEPTH	0-10
Parameter 2	RATE	1-20
Parameter 3	F B (FEEDBACK)	0-10
Effect on/off		ON/OFF

(1) EFFECT TYPE
To use the flanger, set the parameter to 'FLANGE'.

(2) FB (Feedback)
Determines the amount of feedback, i.e. the proportion of the signal routed back to the input of the effect circuit. Increasing this parameter will result in a flange with very pronounced character.

3 TREMOL

This effect allows changing the tone periodically.

3 TREMOL

Parameter 1	DEPTH	0-10
Parameter 2	RATE	1-20
Effect on/off		ON/OFF

(1)EFFECT TYPE
To use the tremolo, set the parameter to 'TREMOL'.

(2)DEPTH
Determines the depth of tremolo effect.

(3)RATE
Determines the rate of tremolo effect.

4 RING M (Ring modulator)

This gives metallic sound with irregular harmonics by applying special modulation.

4 RING M

Parameter 1	DEPTH	0-10
Parameter 2	FREQ(FREQUENCY)	1-20
Effect on/off		ON/OFF

(1) EFFECT TYPE
To use the ring modulator, set the parameter to 'RING M'.

(2) DEPTH
Determines the modulation depth.
Higher values produce winding metallic sound.

(3) FREQ (Frequency)
Determines the modulation frequency range.
Different values change metallic sound.

5 DBL (Doubling)

An effect sound with short delay is added to the direct sound, giving the impression of multiple performers playing together.

5 DBL

Parameter 1	TIME(X 10ms)	0-10
Parameter 2	FB(FEEDBACK)	0-10
Parameter 3	MIX	0-10
Effect on/off		ON/OFF

(1) EFFECT TYPE
To use the doubling, set the parameter to 'DBL'.

(2) TIME
Determines the short delay duration. The value shown on the display multiplied by 10 is the delay in milliseconds The range is 0 to 100ms.

(3) FB (Feedback)
Determines the amount of feedback . i.e. . the proportion of the signal routed back to the input of the effect circuit.

(4) MIX
Determines the mixing ratio of direct sound and delayed sound.
Higher values increase the amount of effect.
This guitar synthesizer tone follows the inputted musical interval.

6 SFX T (Special Effect Termin)

Setting portament or vibrato produces mysterious space sound. However, this synthesizer only pronounces within an octave.

6 SFX T

Parameter 1	BASE	C-B
Parameter 2	WAVE	1-6
Parameter 3	PORTA(PORTAMENT)	0-3
Parameter 4	VIB(VIBRATO)	0-3
Parameter 5	ENV-P	0-3
Effect on/off		ON/OFF

(1) EFFECT TYPE
To use the special effect, set the parameter to 'SFX T'.

(2) BASE
Determines the octave from which the musical interval starts.

(3) WAVE
Wave can be selected from 2 kinds.
WAVE 1:VALUE 1-3 Mild Wave
WAVE 2:VALUE 4-6 Bright Wave
At each wave, higher values allow synthesizer to play in higher musical interval range.

(4) PORTA (Portament)
Determines the portament rate.

(5) VIBRATO
Determines the vibrato depth.

(6) ENV-P (Envelop to pitch amount)
Determines the musical interval amount of change, dending on picking strength.

NOTE *This effect works best when playing single note lines.*

HINT *Using this effect with the delay or the reverb produces more spatial effect.*
In this effect, the synthesizer tone and the guitar tone with ring modulation are mixed to outputs. To turn off the guitar tone, set COMP module, WAH module, and DIST module off, and set output level of EQ module to 1.

Effect Module 6:Reverb/Delay (REV/DLY)

This module contains 3 kinds of effects which add reverb to sound.

1 HALL

This effect simulates a natural hall, expansive sound.

1 HALL		
Parameter 1	TIME	1-10
Parameter 2	TONE	0-10
Parameter 3	MIX	0-10
Effect on/off		ON/OFF

(1) EFFECT TYPE
Select the effect type.
To use the hall, set the parameter to 'HALL'.

(2) TIME
Determines the reverb time.
Higher values produce longer reverb times.

(3) TONE
Determines the reverb tone. Higher values produce brighter sound.

(4) MIX
Determines the balance between direct sound and effect sound.
"0" means direct sound only, and "10" means maximum reverb.

2 ROOM

This effect simulates a room with short reverberation.

2 ROOM		
Parameter 1	TIME	0-10
Parameter 2	TONE	0-10
Parameter 3	MIX	0-10
Effect on/off		ON/OFF

(1) EFFECT TYPE
To use the room, set the parameter to 'ROOM'.

3 DELAY

This is a conventional digital delay effect with a delay time of up to 420 milliseconds.

3 DELAY		
Parameter 1	TIME(X 10ms)	0-42
Parameter 2	F B(FEEDBACK)	0-10
Parameter 3	MIX	0-10
Effect on/off		ON/OFF

(1) EFFECT TYPE
To use the delay, set the parameter to 'DELAY'.

(2) TIME
Determines the delay intervals in 10ms steps.

(3) FB (Feedback)
Determines the amount of feedback, i.e. the proportion of the signal routed back to the input of the effect circuit.

Total Parameter

Total parameters except effect module among elements compose a patch are contained.

1 LEVEL (Patch level)

Determines the level of each patch.

1 LEVEL		
Parameter 1	LEVEL(PATCH LEVEL)	0-99

AMP SIM (Amp simulator)

This parameter simulates the output character of a guitar amp.

2 AMP SIM		
Parameter 2	AMPSIM	0-3

(1) VALUE = 0
Amp simulator off

(2) VALUE = 1
This produces the output character of a 100w combo amp.

(3) VALUE = 2
This produces the output character of a by bright amp which treble is stressed.

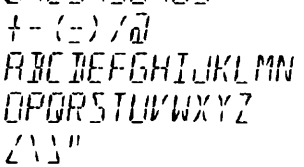
(4) VALUE = 3
This produces the output character of a stack amp with 4 speakers.

3 PATCH NAME

Determines the name of each patch.
Up to 6 letters per a name can be determined.

3 NAME		
Parameter 3	(NAME)	

(1) The following letters can be used.



Battery Operation

The 7010 can be operated by battery activation using 6 LR6(AA) alkaline dry batteries (1.5V). When connecting the AC adaptor, the power supply route from the batteries is automatically disconnected.

Cautions for Dry Batteries

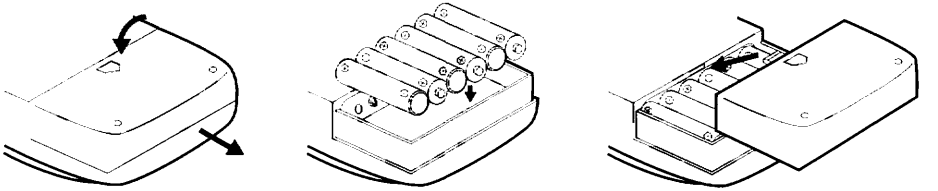
- Make sure to use LR6(AA) alkaline dry batteries of 1.5V.
  Note if any batteries with different characteristics are used, the company shall not take responsibility for safety in operating time or equipment.
- Before replacing batteries, turn off the power supply of the 7010 and connected equipments to prevent damage to the speaker, connecting equipment, or patches by suddenly turning on power.
- The 7010 does not have dry battery charging function. Read the precautions for dry battery before using.
- The batteries have two electrodes. The positive (+) electrode, which projects out from the end of the battery, and the negative electrode, which is flat. Install the batteries according to the indications on the inside of the battery case. The 7010 will not function if the electrodes are not installed in the right direction.
- When not using the 7010 for a long time, take out the batteries from the body to prevent damage by leakage or explosion of dry batteries.
- In case leakage of dry batteries occurs, thoroughly wipe out the liquid in the battery case and the electrode.
  Replace the batteries with new ones, never reuse the leaked batteries.
- Use new batteries whenever possible. Especially if you plan to use the 7010 for a live performance.
  It is recommended that you use the supplied AC adapter when using the 7010 for long periods of time.

Installation of Dry Batteries

1.Open the battery cover.
Pull forward the 'OPEN' mark on the battery cover in the 7010 base to remove it.

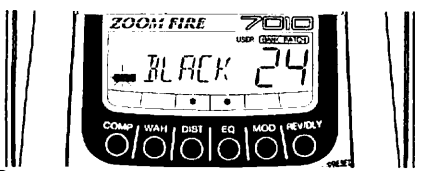
2.Install dry batteries.
Place 6 pieces of LR6(AA) alkaline dry batteries.
Install them aligning the electrodes of + (plus) and -(minus) to the indication in the case.

3.Close the battery cover.
Insert the tab into the hole on the 7010 and align the cover to the 7010 body to close.



Battery Empty Warning Indication

When batteries are almost running down, battery empty warning to urge battery replacement is shown on the display. The 7010 can be operated by battery activation for approximately 4 hours of normal use . In continuous use at maximum output, it can be operated for approximately 2 hours.
However, when not using the speaker mounted in the body, the 7010 can be operated for approximately 8 hours.



Sleep Indication

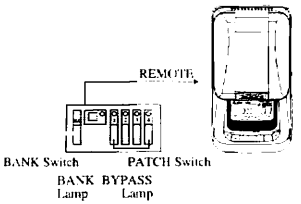
If the 7010 is not used for more than 5 minutes while running off of battery power, the 7010 automatically switches into the "Sleep status" to conserve the batteries. To return to the normal use status from the sleep status, press any key once.

Operating with the Foot controller

The optional foot controller FC02 enables patch selection, bypass and mute of the 7010 by foot.

Connections

❍ Connect the Foot controller to the REMOTE jack of the

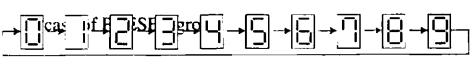


7010 using the cable of the FC02.

NOTE *Make sure to turn off the power supply of the 7010 before connecting the cable.*

Selecting a patch

1. Step on the BANK switch of the FC02 to select a bank.

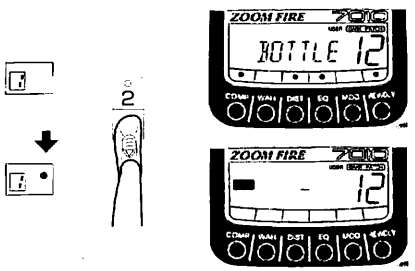


NOTE *USER group and PRESET group cannot be switched by the FC02. Select it with the USER/PRESET key of the 7010 before operating patch selection with the FC02.*

2. Select a patch number with the PATCH 1 to 4 buttoms of the FC02.

Bypassing the effects

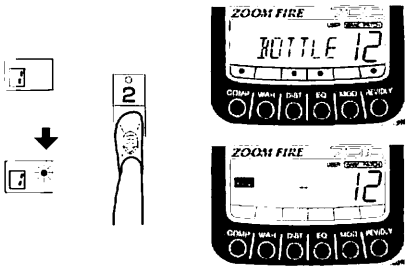
1. The lamp over the FC02 pedal which corresponds to the currently selected patch will be lit.
2. Step on the pedal whose lamp is lit. The unit will enter the bypass mode and the bypass lamp will light.



3. To clear the bypassing, select another patch using the BANK switch and the PATCH switch of the FC02.

Muting the Output

1. Step on the pedal, whose lamp is lit for more than one second.
2. The BYPASS lamp of the FC02 flashes to inform that it is muting.
3. To clear the muting, select another patch using the BANK switch and the PATCH switch of the FC02.



HINT *Remote controlling the 7010 using the FC02 is possible only when the 7010 is in play mode. Note it cannot be operated by the FC02 when it is in other modes.*

NOTE *As described in "Other indication function Sleep indica tion"on page 23, if tone input or key operation is not operated for more than 5 minutes, the 7010 switches to sleep status to save battery dissipation.*
When the 7010 is in sleep status, the bank # and BYPASS lamp fun off and the lamp indicating the patch number lights on in turn in the FC02. To clear the sleep status, step once on a pedal.

PATCH LIST

GROUP	BANK	PATCH	NAME	COMP	WAH	DIST	EQ	MOD	DLY/REV	AMPSIM
USER	0	1	BIG	COMP1		DIST2	4EQ		DELAY	
		2	HR WAH	COMP1	AT WAH	FUZZ1	4EQ		ROOM	
		3	CHOIR		ENHANC		4EQ	CHORUS	HALL	
		4	FLANGE			DIST1	4EQ	FLANGE	DELAY	
	1	1	STACK			DIST1	2P EQ		ROOM	
		2	BOTTLE	COMP1		LEAD1	4EQ		HALL	3
		3	CRYSTL	COMP2	ENHANC		4EQ	CHORUS	DELAY	
		4	Z TOP	COMP1		LEAD2	4EQ	CHORUS	DELAY	
	2	1	BOX	COMP2		OD1	2P EQ	DBL		
		2	EDGE D	COMP1		OD1	4EQ		HALL	2
		3	STONES			RHYTHM	4EQ		ROOM	1
		4	BLACK			FUZZ2	2P EQ			
	3	1	DOUBLE		ENHANC	OD2	4EQ	DBL		
		2	RHYTHM	COMP1		RHYTHM	4EQ		ROOM	
		3	360MAY	COMP1			4EQ	FLANGE	DELAY	
		4	BALLAD	COMP1	ENHANC	DIST1	4EQ	CHORUS	HALL	
	4	1	MELLOW	COMP1	ENHANC	OD1	4EQ		HALL	
		2	J POP	COMP1	ENHANC	OD2	4EQ		HALL	
		3	SURFIN	COMP1	ENHANC		4EQ	TREMOL	HALL	
		4	GHOST	COMP1		FUZZ2	4EQ	SFX T	DELAY	
	5	1	PEAK	COMP2		METAL	2P EQ		ROOM	
		2	BRIGHT	COMP2	ENHANC	OD1	4EQ		HALL	1
		3	PJ WAH	COMP1	AT WAH	RHYTHM	4EQ	DBL	DELAY	
		4	AFRICA	COMP1	AT WAH		4EQ	RING M	DELAY	
PRESET	0	1	LEAD1	COMP1		LEAD1	4EQ		HALL	
		2	NOISY	COMP1	ENHANC	FUZZ1	4EQ		ROOM	
		3	ARPGIO	COMP2	ENHANC		4EQ	CHORUS	DELAY	
		4	TELMIN	COMP1		RHYTHM	4EQ	SFX T	DELAY	
	1	1	ROCKS	COMP1		DIST2	4EQ	DBL	HALL	
		2	BOTTOM	COMP1		RHYTHM	4EQ	CHORUS	ROOM	
		3	ROLL		ENHANC	RHYTHM	2P EQ		ROOM	
		4	BEAUTY	COMP1	STEP	DIST1	4EQ	FLANGE	DELAY	
	2	1	COMBO	COMP1		OD1	4EQ		HALL	
		2	BLUES 1			OD2	2P EQ		HALL	
		3	JAZZ1	COMP1			4EQ		ROOM	
		4	HELICO		AT WAH	LEAD1	4EQ	TREMOL	HALL	
	3	1	SOLO D			DIST1	4EQ	CHORUS	DELAY	3
		2	RADIO	COMP1	ENHANC	DIST1	4EQ		ROOM	2
		3	ACOUS	COMP1	ENHANC		4EQ		HALL	1
		4	ALIEN		STEP	FUZZ1	4EQ	RING M	DELAY	2
	4	1	FUSION	COMP1	ENHANC	OD1	4EQ	CHORUS	DELAY	
		2	LINE 1	COMP2	ENHANC	OD1	4EQ	CHORUS	ROOM	1
		3	GROOVE	COMP1	PH WAH		4EQ		DELAY	
		4	TOUCH		STEP	DIST1	4EQ	CHORUS	DELAY	1
	5	1	DRIVE	COMP1	ENHANC	OD1	4EQ		DELAY	
		2	CRUNCH		ENHANC	RHYTHM	2P EQ		ROOM	
		3	FINGER	COMP1		OD2	4EQ		HALL	
		4	HEAVY			METAL	4EQ	FLANGE	DELAY	
	6	1	FUZZY			FUZZ1	2P EQ		HALL	
		2	WOMAN			RHYTHM	4EQ	DBL		
		3	DYNA	COMP1		RHYTHM			HALL	3
		4	HALF W	COMP1	PH WAH	METAL	4EQ		HALL	
	7	1	STUDIO			DIST2	4EQ	CHORUS	DELAY	1
		2	KING	COMP1	ENHANC	METAL	2P EQ	DBL	DELAY	1
		3	KNIGHT	COMP1			2P EQ	FLANGE	HALL	2
		4	STEP		STEP	DIST2	4EQ		DELAY	
	8	1	LEAD 2		ENHANC	LEAD2	4EQ	DBL		1
		2	JAZZ 2	COMP1		RHYTHM	4EQ	DBL		
		3	LINE 2	COMP1			4EQ	CHORUS	DELAY	1
		4	CRY	COMP1	AT WAH	DIST1	4EQ		DELAY	3
	9	1	LINE 3	COMP1		DIST1	4EQ		DELAY	1
		2	BLUES 2			RHYTHM	2P EQ		HALL	
		3	FUNK	COMP1			4EQ		HALL	
		4	ALONE	COMP1	ENHANC	OD1	4EQ	CHORUS	DELAY	

※ZNR (ZOOM NOISE REDUCTION) should be adjasted for the guitar you use.

Returning the 7010 to the factory preset condition (Special Mode)

Special mode to return to the factory preset condition (All initialize)

All initialize function returns all 24 patches in the USER group to the factory preset condition. This operation looses and rewrites all patches edited and stored.
Use this function with care, because all patches rewritten by the all initialize cannot be recovered.

1. **Turn off the 7010 power supply.**
   To protect the speaker, turn the volume down to minimum.
2. **Turn on the power supply by pressing the POWER ON switch while keeping the STORE key depressed. The indication "INIT AL" is shown on the display. This means that the 7010 is ready for all initialize.**
3. **When wishing to initialize all patches, press the STORE key once more. This restores all patches to their factory preset condition. The 7010 then switches to the Play mode.**

When wishing to cancel the function

Press the EDIT key. The 7010 then switches from ready to the Play mode.

Specifications

Effect types:	28 (max. 7 simultaneous) COMP1, COMO2, AUTO WAH, PHASE WAH, ENHANCER, STEP, RHYTHM, OD1, OD2, DIST1, DIST2, FUZZ1, FUZZ2, LEAD1, LEAD2, METAL, 4EQ, 2PARA EQ, CHORUS, FLANGER, TREMOLO, RING-MOD, DOUBLING, SFX T, HALL, ROOM, DELAY, AMP SIMULATOR, (ZNR)
Effect modules:	6 (max. 6 simultaneous)
Patches:	**USER** 6 banks x 4 = 24 patches (rewritable, storable) **PRESET** 10 banks x 4 = 40 patches Total 64 patches
A/D conversion:	18-bit 128-times oversampling converter
D/A conversion:	18-bit 128-times oversampling converter
Sampling frequency:	31.25 kHz
Input:	Guitar input Standard phone jack/ Monaural x 1 (nominal input level -20 dBm/ input impedance 470kΩ) Mix in Mini phone jack/ Stereo x 1 (input impedance 10kΩ)
Output:	Line output Standard phone jack/ Stereo x 1 (max. output level + 5dBm/ output impedance L= 1kΩ or less, R= 1kΩ or less) PHONES output Mini phone jack/ Stereo x 1 (output 50mW into 32Ω)
Power amp:	5W RMS 8Ω, 10W PEAK
Speaker:	7.7cm x 1
Remote jack:	Optional foot controller FC02 connection special jack
Display:	Custom LCD display
Power supply:	DC9V 1A (supplied special AC adaptor)
Dimensions:	222 (W) x 120 (D) x 80 (H)
Weight:	750 g

※ 0dBm = 0.775Vrms
※ Designs and specifications subject to change without notice.

❑Safety Precautions

❍Power supply

❍Activation by the AC adaptor

- Use the supplied AC adaptor.
  To prevent malfunction and damage to the unit, do not use any other kind of AC adaptor.
- Make aure to use the correct AC adapter for the line voltage in your area.
  When using the 7010 in an area with a different line voltage, please consult your local ZOOM distributor about acquiring a proper AC adaptor.
- When unplugging the adapter pull it from the adapter body, not from the attached cable.
- When not using the 7010 for a long time, unplug the AC adaptor.

❍Activation by dry batteries

- Use 6 pieces of LR6(AA) alkaline dry batteries (1.5V).
- Do not mix different kind of batteries for use, they may be different voltage with the same form.
- Place the plus (+) and minus (−) direction of dry batteries aligning properly to the indication in the battery case.
- The 7010 does not have a battery charging function. Read the precautions carefully to use dry batteries.
- Do not mix new dry batteries and used ones for use.
- When not using the 7010 for a long time, remove the batteries.
- In case leakage of dry batteries occurs, thoroughly wipe out the liquid in the battery case and electrode.
- Close the battery cover when using the 7010.

❍Environment

Avoid using your 7010 in environments where it will be exposed to:

- Extremely high or low temperature
- Extremely high humidity
- Excessive dust or sand
- Excessive vibration or shock

❍Handling

- Since the 7010 is a precision electronic device, avoid applying excessive force to it. Also take care not to drop the unit, and do not subject it to shock or excessive pressure since this can result in damage to the unit.
- Take care when opening or closing the speaker cabinet.
- Do not put any foreign objects (coins, wires, etc.) or liquid (water, soft drinks, etc.) in the 7010.
- Do not cover the slit in the rear of the 7010, since it can raise the internal temperature and cause malfunction.

❍Connecting cables to input and output jacks

- You should always turn off the power to the 7010 and all other equipment before connecting any cables.
- Also make sure to turn off the power and disconnect all cables and the AC adaptor before moving the 7010.

❍Alterations

- Never open the case of the 7010 or attempt to alter the product in any way since this can result in damage to the unit.
- In case any damage occurs as a result of alternation, the company shall not take any responsibility for it.

❑Usage Precautions

❍Electrical Interference

The 7010 is designed to minimize electromagnetic interference and emission of electromagnetic waves. However, interference may occur if placed too close to other electronic equipment. If such problems ocour, move the 7010 away from the affected equipment. Note that electrical equipment containing digital circuitry, such as the 7010, can malfunction or suffer data loss, due to electromagnetic interference.

❍Locating Position

Locate the 7010 in the flat position.
If the 7010 is located with the speaker cabinet open in sloped position, the 7010 may turn over, or the speaker cabinet may suddenly close.

❍Cleaning

Use a soft, dry cloth to clean the 7010. If necessary, slightly moisten the cloth. Never use cleanser wax, or solvents such as cleaning alcohol, benzene, paint thinner.

❍Damage

When the 7010 is damaged or any error occurs, disconnect the AC adaptor and other connecting cables immediately.
Please notify the "product type No.", "product No.", "concrete condition of damage or error", "customer's name, address and telephone No." to your local distributor or ZOOM dealer.

Please keep this manual in a convenient place for future reference.

ZOOM®
CATCH US IF YOU CAN

ZOOM CORPORATION
NOAH Bldg., 2-10-2, Miyanishi-cho, Fuchu-shi, Tokyo 183, Japan
PHONE: 0423-69-7111 FAX: 0423-69-7115

Printed in Japan 7010-5000