



®

ZOOM

FIRE-36

MODELING GUITAR AMPLIFIER

Operation Manual

Introduction

Thank you for selecting the **ZOOM MODELING GUITAR AMPLIFIER FIRE-36** (simply called the "FIRE-36" in this manual). Please take the time to read this manual carefully so as to get the most out of this product and to ensure optimum performance and reliability. Please keep this manual in a convenient place for future reference.

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USAGE AND SAFETY PRECAUTIONS

SAFETY PRECAUTIONS

In this manual, symbols are used to highlight warnings and cautions for you to read so that accidents can be prevented. The meanings of these symbols are as follows:



This symbol indicates explanations about extremely dangerous matters. If users ignore this symbol and handle the device the wrong way, serious injury or death could result.



This symbol indicates explanations about dangerous matters. If users ignore this symbol and handle the device the wrong way, bodily injury and damage to the equipment could result.

Please observe the following safety tips and precautions to ensure hazard-free use of the FIRE-36.

• Power requirements



- Connect only to AC power outlets rated 100-120 V or 220-240 V 50/60Hz (depending on the voltage range of the unit; refer to the back panel).
- Ground the unit by connecting the ground terminal of the power plug to a good external ground. Do not ground to water pipe, gas pipe, telephone wiring, or lightning arrestor to prevent the risk of electric shock or explosion.
- During lightning or when not using the unit for an extended time, disconnect the power cord from the AC outlet.
- Do not pinch the power cord, bend it forcibly, or place heavy objects on the power cord.

• Environment



Avoid using your FIRE-36 in environments where it will be exposed to:

- Extreme temperatures
- Heat sources such as radiators or stoves.
- High humidity or moisture
- Excessive dust or sand
- Excessive vibration or shock



Keep a minimum distance of 5 cm around the unit for sufficient ventilation.
Do not impede the ventilation openings with objects such as newspapers or curtains.

• Handling



- Never place objects filled with liquids, such as vases, on the FIRE-36 since this can cause

electric shock.

- Do not place naked flame sources, such as lighted candles, on the FIRE-36 since this can cause fire.



The FIRE-36 is a precision instrument. Do not exert undue pressure on the keys and other controls. Also take care not to drop the unit, and do not subject it to shock or excessive pressure.

- **Alterations**



Never open the case of the FIRE-36 or attempt to modify the product in any way since this can result in damage to the unit.

- **Volume**



Do not use the FIRE-36 at a loud volume for a long time since this can cause hearing impairment.

- **Connecting cables and input and output jacks**



You should always turn off the power to the FIRE-36 and all other equipment before connecting or disconnecting any cables. Also make sure to disconnect all connection cables and the power cord before moving the FIRE-36.

Usage Precautions

- **Electrical interference**

For safety considerations, the FIRE-36 has been designed to provide maximum protection against the emission of electromagnetic radiation from inside the device, and protection from external interference. However, equipment that is very susceptible to interference or that emits powerful electromagnetic waves should not be placed near the FIRE-36, as the possibility of interference cannot be ruled out entirely.

With any type of digital control device, the FIRE-36 included, electromagnetic interference can cause malfunctioning and can corrupt or destroy data. Care should be taken to minimize the risk of damage.

- **Cleaning**

Use a soft, dry cloth to clean the FIRE-36. If necessary, slightly moisten the cloth. Do not use abrasive cleanser, wax, or solvents (such as paint thinner or cleaning alcohol), since these may dull the finish or damage the surface.

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

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Features

The FIRE-36 is a guitar amplifier with the following features.

- **Versatile guitar amplifier and compact effect sound modeling**

The FIRE-36 lets you select from 22 drive types which faithfully duplicate the sound of famous guitar amplifiers and compact effects. The available choices range from vintage amps to modern distortion sounds, and everything in between. There are also one-touch keys that let you boost the sound, prolong sustain, and emphasize lows or highs.

- **Digital effects ideal for guitar play**

The FIRE-36 also incorporates a full range of modulation effects and reverb/delay effects.

- **Store amp settings as “patches”**

Multiple amplifier and effect settings can be easily stored as user “patches”. This allows you to instantly call up a desired combination of settings and effects, using the keys on the panel of the unit or using an optional foot switch. A number of preset patches with recommended settings are also available.

- **POWER DAMP SWITCH**

With the FIRE-36, you can lower the volume without loss of sound character by power amp.

- **Built-in auto-chromatic tuner**

An easy-to-use auto-chromatic tuner is built right into the unit.

- **Versatile input/output configuration**

The AUX IN jack makes it easy to connect a CD player, MD player or other source device. The RECORDING/PHONES jack lets you plug in a pair of headphones or a recorder.

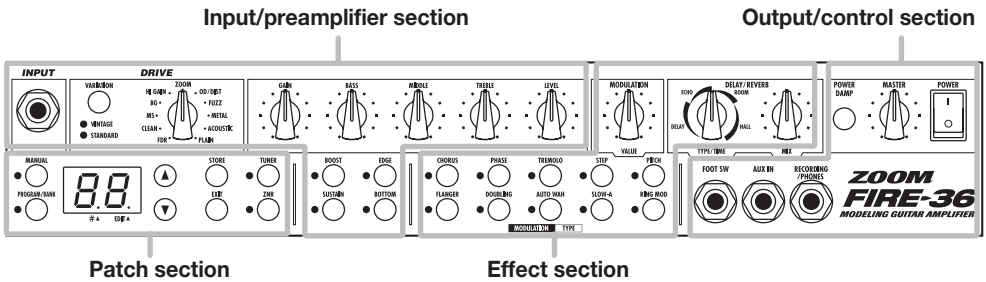
The FCC regulation warning (for U.S.A.)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be

determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

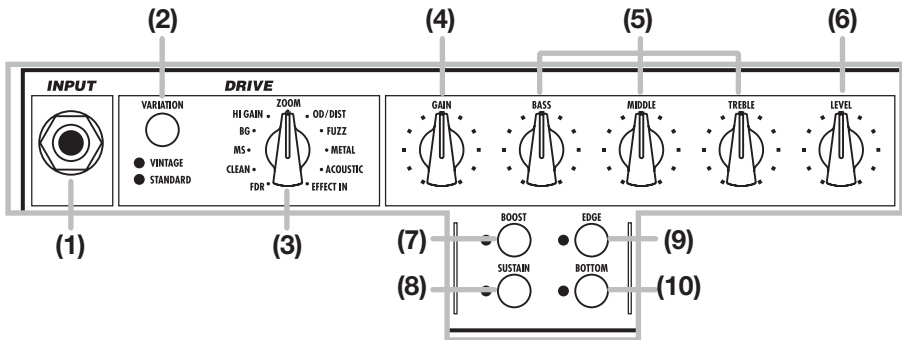
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Controls and Functions



◆ Input/preamplifier section

This section comprises the input jack and controls for adjusting distortion depth and tone.



(1) [INPUT] jack

Connect the electric guitar here, using a dedicated instrument cable.

(2) [VARIATION] key

(3) [DRIVE TYPE] knob

Select the simulated amp type and distortion (drive) type.

The [DRIVE TYPE] knob gives access to 11 types, and the [VARIATION] key provides further variations (vintage/standard). The LED for the currently selected variation lights up.

(4) [GAIN] knob

Adjusts the input gain. Turning this knob up increases distortion depth.

(5) [BASS]/[MIDDLE]/[TREBLE] knobs

This is a 3-band equalizer that allows boost/cut in the low, medium, and high frequency range.

(6) [LEVEL] knob

Adjusts the volume after passing the preamplifier.

(7) [BOOST] key

Setting this key to ON (LED lit) boosts the sound pressure level.

(8) [SUSTAIN] key

Setting this key to ON (LED lit) produces longer sustain.

(9) [EDGE] key

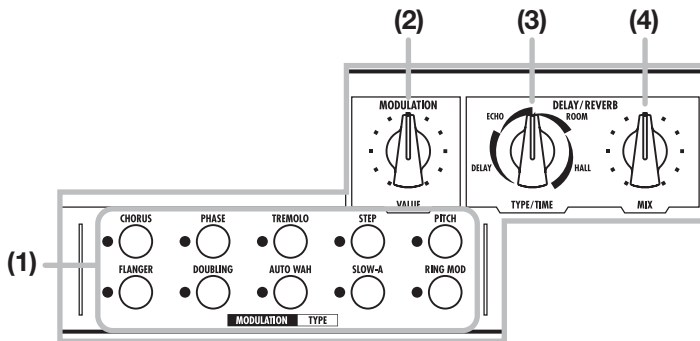
Setting this key to ON (LED lit) emphasizes the high frequencies.

(10) [BOTTOM] key

Setting this key to ON (LED lit) emphasizes the low frequencies.

◆ Effect section

This section controls the built-in digital effects. The FIRE-36 provides modulation effects and delay/reverb effects.



(1) [TYPE] key (MODULATION)

Selects the effect type to be used for the modulation effect. The key also turns the modulation effect on or off.

(2) [VALUE] knob (MODULATION)

Serves to change the effect parameter (effect intensity) of the currently selected modulation effect.

(3) [TYPE/TIME] knob (DELAY/REVERB)

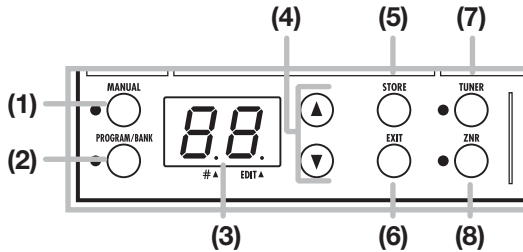
Selects the effect type to be used as delay/reverb effect and adjusts the effect parameter (reverberation duration and delay interval).

(4) [MIX] knob (DELAY/REVERB)

Adjusts the depth of the delay/reverb effect (guitar and effect mixing balance).

◆ Patch section

This section lets you store and recall effect patches. It also serves to operate the built-in tuner and noise reduction functions.



(1) [MANUAL] key

(2) [PROGRAM/BANK] key

This key switches between manual mode, where you use the controls on the front panel to shape the sound, and program mode where you use settings stored in preprogrammed patches.

When the [MANUAL] key is ON (LED lit), the manual mode is selected. When the [PROGRAM/BANK] key is ON (LED lit), the program mode is selected. (The default setting at power-on is manual mode.)

(3) Display

Shows the number of the currently selected patch, or the value of setting parameters of the FIRE-36.

(4) [▲]/[▼] keys

Serve to switch between patches and to adjust ZNR (ZOOM Noise Reduction).

(5) [STORE] key

Stores the current settings as a user patch.

(6) [EXIT] key

Cancels an operation and calls up the number of the currently selected patch onto the display.

(7) [TUNER] key

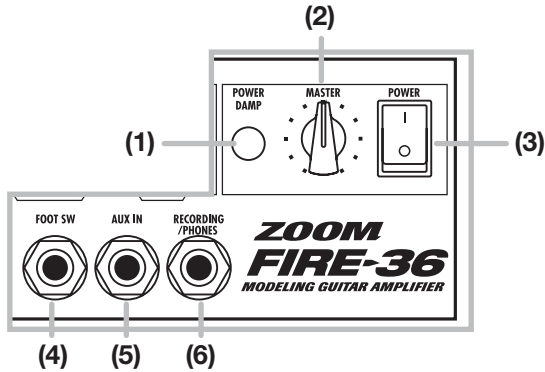
This key activates the built-in tuner of the FIRE-36.

(8) [ZNR] key

This key turns ZOOM Noise Reduction on or off. (ZNR is ON by default at power-on.)

◆ Output/control section

This section lets you adjust the overall amp volume and connect external devices including a foot switch.



(1) [POWER DAMP] switch

This switch allows you to lower the volume without loss of sound character by power amp.

(2) [MASTER] knob

Adjusts the volume.

(3) [POWER] switch

Controls the power on/off status.

(4) FOOT SW jack

A separately available foot switch (ZOOM FS-01) can be connected here, allowing you to toggle between manual mode and program mode with your foot.

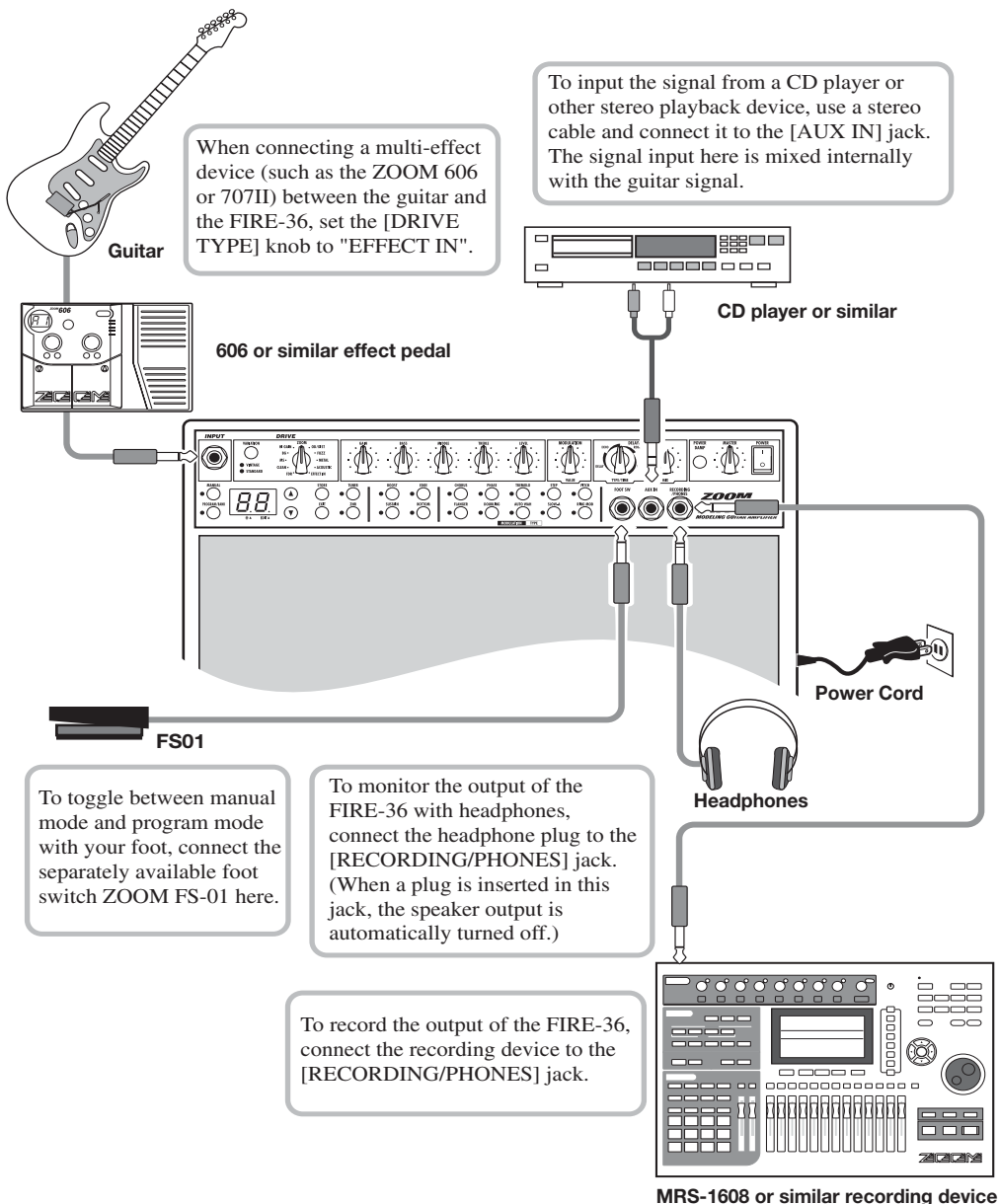
(5) [AUX IN] jack

This is a stereo input that accepts the signal from a CD player or MD player.

(6) [RECORDING/PHONES] jack

This is a stereo output that can be used to connect a recording device or a pair of headphones.

Connections



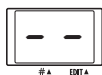
Using the FIRE-36

This section explains how to operate the panel controls and how to use patches and other functions of the FIRE-36.

Basic operation

- 1. Verify that the [MASTER] knob is turned fully anticlockwise. Then turn the [POWER] switch on. Set the [GAIN]/[BASS]/[MIDDLE]/[TREBLE]/[LEVEL] knobs to the center position.**

Immediately after turning on the power, the manual mode is selected ([MANUAL] key is lit).



Display in manual mode

- 2. Use the [DRIVE TYPE] knob and the [VARIATION] key to select the drive type and variation.**

Amplifier characteristics and distortion depth will differ, depending on the selected drive type. To create your sound in manual mode, first use the [DRIVE TYPE] knob to select the drive type, and then choose the variation (standard/vintage) with the [VARIATION] key.

(For information on available drive types, see page 18.)

- 3. Raise the [MASTER] knob to a suitable position, and adjust the distortion depth and volume with the [GAIN] knob and [LEVEL] knob while playing your guitar.**

Normally, you will use the [GAIN] knob to adjust distortion depth and the [LEVEL] knob to adjust the level for a particular patch. The [MASTER] knob controls the overall volume, common to all patches.

- 4. Use the [BASS]/[MIDDLE]/[TREBLE] knobs to adjust the tone.**

You can also use the [BOOST], [SUSTAIN], [EDGE], and [BOTTOM] keys to increase the sound pressure, prolong sustain, and emphasize the high or low frequency range.

- 5. To change the ZNR (ZOOM Noise Reduction) setting, press the [ZNR] key.**

The LED of the key flashes, and the current setting (Z1 - Z9, oF) is shown for about 2 seconds on the display. Use the [▲]/[▼] keys to select the new setting. To switch ZNR on or off, press the [ZNR] key once more. Higher setting values result in more effective noise reduction. Set the value as high as possible without causing the sound to be cut off abruptly.

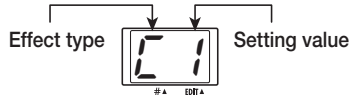
- 6. To turn the unit off, turn the [MASTER] knob all the way down and then turn off the [POWER] switch.**

Using effects

The FIRE-36 incorporates two types of effects (modulation and delay/reverb). This section explains how to activate the effects and use them to achieve various kinds of sound.

1. To use a modulation effect, press the corresponding [TYPE] key.

The respective LED lights up and the modulation effect is activated. The selected effect type and setting value are shown for about 2 seconds on the display.



Available modulation effect types and their abbreviations are listed in the table below.

Key (effect type)	Code	Key (effect type)	Code
[CHORUS] key		[AUTO WAH] key	
[FLANGER] key		[STEP] key	
[PHASE] key		[SLOW-A] (slow attack) key	
[DOUBLING] key		[PITCH] (pitch shift) key	
[TREMOLO] key		[RING MOD] (ring modulator) key	

2. Use the [VALUE] knob.

For example, if you press the [CHORUS] key in step 1 and then operate the [VALUE] knob, the setting value changes in the range from C1 to C9, with the effect intensity (in this example the chorus modulation rate) changing accordingly.

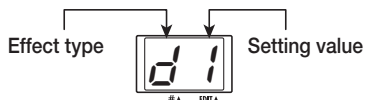
(For details regarding effect types and setting values, see pages 19 - 22.)

HINT

- You can use only one type of modulation effect at a time.
- Also if the effect type and setting value are not currently shown on the display, the setting value of the currently selected effect type (whose TYPE key LED is lit) will change.

3. To use a delay/reverb effect, turn the [TYPE/TIME] knob and select the effect type and setting value you want to use.

When you operate the [TYPE/TIME] knob, the display shows the currently selected effect type and the setting value.



The available delay/reverb effect types and the corresponding codes are shown in the table below.

Key (effect type)	Code	Key (effect type)	Code
DELAY		ROOM	
ECHO		HALL	

When the knob is turned clockwise from the extreme left position, the effect type and value settings cycle as follows: d1 - d9 (delay → E1 - E9 (echo) → r1 - r9 (room) → H1 - H9 (hall). (For details regarding effect types and setting values, see page 22.)

4. Use the [MIX] knob to adjust the ratio of original sound (guitar sound) and delay/reverb sound.

The setting range is 0 - 9. Turning the knob clockwise increases the depth of the delay/reverb effect. Turning the knob fully counterclockwise turns the delay/reverb effect off.

HINT

You can change the effect settings of patches in the same way in program mode.

Loading and storing patches

The FIRE-36 offers a bank of ten read/write user patches (U) and a bank of ten read-only preset patches (A, b). Patches in each bank are numbered 0 - 9.

This section explains how to call up stored user patches or preset patches and how to save amplifier and effect settings in a user patch.

◆ Loading a patch

1. Press the [PROGRAM/BANK] key in the patch section, so that the LED lights up.

The FIRE-36 switches from manual mode to program mode, and the currently selected patch is

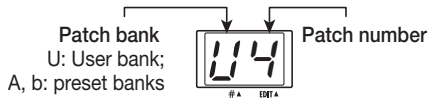
shown on the display.



In program mode, the knobs and controls on the panel become inactive, and the settings of the patch shown on the display are enabled.

2. Use the [▲]/[▼] keys to select the bank and number of the desired patch.

With the [▲]/[▼] keys, you can cycle through the patches in the order U0 - U9 → A0 - A9 → b0 - b9 → U0 ... (For information on factory default patch contents, see page 17.)



When you press the [PROGRAM/BANK] key, the patch number stays the same and only the bank is toggled: U1 → A1 → b1 → U1.

3. Operate the controls in the input/preamp section and the effect section as required, to adjust the distortion, tone, volume, effect type and intensity, etc.

It is also possible to modify a patch after it was loaded. When a knob or key was operated, a dot appears at the bottom right of the display. This indicates that the contents of the patch have changed. (When you return to the original settings, the dot disappears.)



HINT

You can store the contents of a changed user patch by pressing the [STORE] key. For information on the procedure, see the section "Storing a patch".

NOTE

If you have changed some settings and then select another patch, the settings of the previous patch will return to the stored condition. If you want to preserve your changes, store the user patch.

◆ Storing a patch

● NOTE ●

When you store a patch, any patch currently stored under the same number will be overwritten (erased and replaced with the new settings). Take care not to accidentally erase a patch that you want to keep.

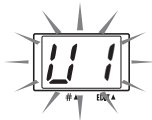
- 1. Use the knobs and keys on the panel to establish the desired sound.**
- 2. Press the [STORE] key in the patch section.**

The indication "U" (for user bank) and the patch number (0 - 9) are shown on the display. In this condition, storing the settings as a user patch is possible.



- 3. Use the [▲]/[▼] keys to select the desired user patch (U0 - U9).**

The preset patches (A0 - A9, b0 - b9) are read-only and cannot be selected as store targets.



- 4. To store the patch, press the [STORE] key once more.**

The store process is carried out, and the unit goes into program mode.

To cancel the process and return to the condition of step 1, press the [EXIT] key instead of the [STORE] key.

■ HINT ■

By calling up an existing patch and then selecting another destination for the store process, copying a patch is possible.

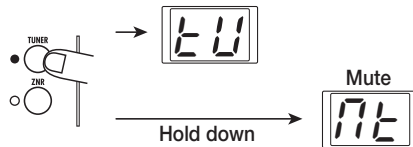
Using the built-in tuner

The FIRE-36 incorporates an auto-chromatic tuner which can be activated by pressing the [TUNER] key.

1. Press the [TUNER] key in the patch section.

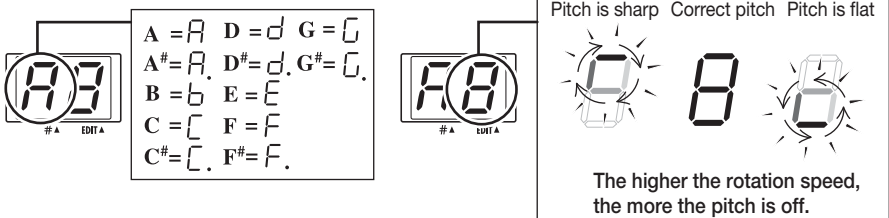
The LED of the key lights up and the internal tuner becomes active.

If you want to tune while keeping the sound output on, press the [TUNER] key only briefly. (The display indication shows "tU".) If you want to tune while the sound is muted, hold down the [TUNER] key somewhat longer. (Release the key when the display indication shows "Mt".)



2. Play the open string you want to tune

The left side of the display shows the note which is closest to the current pitch. The right side of the display shows how far the pitch is off. Adjust the pitch while observing the display.



3. To change the tuner reference pitch, press one of the [▲]/[▼] keys.

The current reference pitch is shown for two seconds. The default setting is "40" (center A = 440 Hz).



4. While the reference pitch is shown, you can use the [▲]/[▼] keys to change the setting.

The setting range is 35 - 45 (center A = 435 Hz - 445 Hz).



NOTE

When power is turned off and on again, the reference pitch is reset to "40" (center A = 440 Hz).

5. When tuning is complete, press the [TUNER] key to turn the tuner off.

The tuner function is disabled.

NOTE

During use of the tuner, effects are turned off.

Switching the mode with the foot switch

Using the separately available foot switch, you can toggle between manual mode and program mode during play.

1. Turn off power to the FIRE-36 and connect the foot switch FS-01 (available separately) to the [FOOT SW] jack.

NOTE

Please do not connect or disconnect the foot switch while power is turned on.

2. Turn power to the FIRE-36 on.

The FIRE-36 is in manual mode.



Display in manual mode

3. Press the foot switch while you are playing your instrument.

When you push the foot switch, the FIRE-36 switches to program mode, and the currently selected patch becomes active. If required, use the [PROGRAM/BANK] key and [▲]/[▼] keys to switch the bank and patch number.



Program mode display

4. To return to manual mode, press the foot switch again, or press the [MANUAL] key.

Returning the FIRE-36 to the factory default settings (all initialize)

If required, you can return the settings of the user patches (U0 - U9) to the condition in which the unit was shipped. (This function is called "all initialize".)

● **NOTE** ●

When you carry out this function, any settings that you have stored in user patches will be lost. Proceed with care.

1. Hold down the [STORE] key while turning power to the unit on.

The indication "AL" appears on the display.





2. To execute the all initialize function, press the [STORE] key once more.




All user patches are returned to the factory default condition. If you wish to cancel the process, press the [EXIT] key instead of the [STORE] key.

Drive Types and Effect Types

■ DRIVE


Selects the modeling material (amp) and distortion type (drive type).

Drive type	Display	Variation	Name	Description
FDR		VINTAGE	FDR BLUES	Classic bluesy sound of built-in type tube amp.
		STANDARD	FDR CLEAN	Clean sound of built-in type tube amp.
CLEAN		VINTAGE	J CLEAN	Clean bright combo amp sound.
		STANDARD	MATCH	Warm and powerful combo amp sound.
MS		VINTAGE	MS OLD	Nostalgic British-style tube stack amp sound.
		STANDARD	MS DRIVE	British-style tube stack amp drive sound.
BG		VINTAGE	BG OLD	Sound of an old-style tube combo amp with gutsy midrange.
		STANDARD	BG DRIVE	Drive sound of a tube stack amp with gutsy midrange.
HI GAIN		VINTAGE	MP 1	Sound of a high-gain tube preamplifier.
		STANDARD	PVY	Tube stack amp drive sound in the heavy metal style.
ZOOM		VINTAGE	9002	ZOOM original 9002 sound.
		STANDARD	Z POWER	ZOOM original powerful amp sound.
OD/DIST		VINTAGE	VINTAGE OD	Sound of dry overdrive effect connected to combo amp.
		STANDARD	TB DIST	Sound of fully revved up distortion effect connected to combo amp.
FUZZ		VINTAGE	WILD FUZZ	Sound of high-gain aggressive fuzz connected to stack amp.
		STANDARD	FUZZ	Sound of nostalgic sixties fuzz connected to stack amp.

METAL		VINTAGE	MTZ	Typical metal style sound with distinctive midrange.
		STANDARD	MT 7	Heavy metal sound great for 7-string guitar.
ACOUSTIC		VINTAGE	AC FAT	Changes the sound of an electric guitar into that of an acoustic guitar.
		STANDARD	AC STANDARD	The DRIVE [VARIATION] key switches the style between fat and standard.
PLAIN		VINTAGE	VINTAGE	Clean guitar amp sound great for direct input to a ZOOM multi-effect processor.
		STANDARD	STANDARD	The VINTAGE setting produces an even tighter sound.


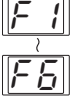
■ ZNR

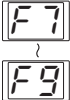
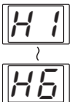








This is ZOOM's original noise reduction which suppresses noise during play pauses. Use the [ZNR] key to turn the function on and off, and use the [▲]/[▼] keys to adjust the setting value.


















	Setting value	Description
ZNR		Higher settings result in more effective noise reduction. Set the value as high as possible without causing the sound to be cut off abruptly.



■ MODULATION

This effect gives body and vibration to the guitar sound. Use the [TYPE] key to select the effect type and use the [VALUE] knob to adjust the setting value.

Effect type	Setting value	Description
CHORUS		Mixes pitch-shifted components (up and down) to original signal, for spacious and solid sound. Higher setting values result in deeper chorus effect.
FLANGER		Pitch-up/down modulation adds pronounced character to the sound. Higher setting values result in faster modulation.









<p>FLANGER →CHORUS</p>		<p>Serial connection of flanger and chorus. Higher setting values result in faster flanger modulation. (Chorus depth is fixed.)</p>
<p>PHASE</p>		<p>Adds a swooshing modulation to the sound. Higher setting values result in faster flanger modulation.</p>
<p>PHASE→ CHORUS</p>		<p>Serial connection of phaser and chorus. Higher setting values result in faster phaser modulation. (Chorus depth is fixed.)</p>
<p>DOUBLING</p>		<p>This effect adds a very short-delay sound to the original sound, which gives the impression of several players playing the same phrase, resulting in more solid sound. Higher setting values result in stronger doubling action.</p>
<p>DOUBLING →CHORUS</p>		<p>Serial connection of doubling and chorus. Higher setting values result in stronger doubling action. (Chorus depth is fixed.)</p>
<p>TREMOLO</p>		<p>This effect varies the volume periodically. Higher setting values result in faster tremolo.</p>
<p>TREMOLO →CHORUS</p>		<p>Serial connection of tremolo and chorus. Higher setting values result in faster tremolo. (Chorus depth is fixed.)</p>
<p>AUTO WAH</p>		<p>This is an effect that automatically adds wah depending on the playing intensity. Higher setting values result in higher auto wah start sensitivity, producing wah even with low-level signals.</p>
<p>AUTO WAH →CHORUS</p>		<p>Serial connection of auto wah and chorus. Higher setting values result in higher auto wah start sensitivity. (Chorus depth is fixed.)</p>
<p>STEP</p>		<p>This effect causes random pitch changes and creates an auto arpeggio sound. Higher setting values result in faster sound change.</p>

STEP→CHORUS	 	Serial connection of step and chorus. Higher setting values result in faster sound change. (Chorus depth is fixed.)
SLOW-A	 	This effect slows down the sound attack speed, resulting in the impression of “violin playing”. Higher setting values result in slower attack speed.
SLOW-A→PITCH	 	Serial connection of slow attack and pitch shift. Higher setting values result in slower attack speed. (Pitch shift is fixed to one octave higher.)
PITCH	This effect varies the pitch of the original sound. You can select one of nine preset pitch shift patterns (P1 - P9).	
		Mixes the original sound and a sound component shifted one octave down.
		Mixes the original sound and a sound component shifted a perfect fifth down.
		Adds a chorus effect to the P2 setting.
		Mixes the original sound and a sound component shifted a perfect fourth down.
		Adds a chorus effect to the P4 setting.
		Mixes the original sound and a sound component shifted one octave up.
		Mixes the original sound and a sound component shifted slightly, resulting in a chorus effect with only slight modulation.
		Mixes the original sound and sound components shifted a perfect fourth down and up.
	Mixes the original sound and sound components shifted an octave down and up.	
RING MOD	 	Adds amplitude modulation to the sound, resulting in a metallic effect. Higher setting values result in higher modulation frequency.

RING MOD →CHORUS	 	Serial connection of ring modulator and chorus. Higher setting values result in higher modulation frequency. (Chorus depth is fixed.)
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■ DELAY/REVERB

This effect adds a delayed component or reverb to the guitar sound. Use the [TYPE/TIME] knob to select the effect type and setting value, and use the [MIX] knob to adjust the ratio of effect sound and original sound.

Effect type	Setting value	Description
DELAY	 	This is a conventional digital delay effect. Higher setting values result in longer delay time. The feedback amount is set to an optimum value.
ECHO	 	This delay effect recreates the warm sound of a tape echo. Higher setting values result in longer delay time. The feedback amount is set to an optimum value.
ROOM	 	This effect simulates reverberation in a room. Higher values result in a deeper effect.
HALL	 	This effect simulates reverberation in a hall. Higher values result in a deeper effect.

Specifications

Power Output	36 W RMS
Speaker	25 cm, 5 ohms
Inputs	Guitar input : standard mono phone jack (nominal input level -20 dBm, input impedance 470 kilohms) AUX IN : standard stereo phone jack (nominal input level -20 dBm, input impedance 10 kilohms)
Output	Combined recording/headphone output : standard stereo phone jack (nominal output level +4 dBm with output load impedance 10 kilohms or higher)
Drive	22 types
Effect Programs	19 types (10 MODULATION + 4 DELAY/REVERB + BOOST + SUSTAIN + EDGE + BOTTOM + ZNR)
Effect Modules	7 modules (MODULATION + DELAY/REVERB + BOOST + SUSTAIN + EDGE + BOTTOM + ZNR)
Program Patches	USER : 10 (rewritable, with store) PRESET : 2 banks x 10 = 20 Total 30 patches
Sampling Frequency	31.25 kHz
A/D Conversion	20-bit, 64-times oversampling
D/A Conversion	20-bit, 8-times oversampling
Control Connector	FOOT SW (FS01)
Display	2-position 7-segment LED
Dimension	485 mm (W) x 240 mm (D) x 410 mm (H)
Weight	12 kg
Included Items	Power Cord

*0 dBm = 0.775 Vrms

*Design and specifications subject to change without notice.

Troubleshooting

- **Power does not come on.**
 - Is power cord correctly plugged into AC outlet?
 - Is [POWER] switch set to ON?
- **No sound, or low volume.**
 - Is the guitar correctly connected to the FIRE-36?
See page 9 for information on connections.
 - Is something plugged into the [RECORDING/PHONES] jack?
If something is plugged into the [RECORDING/PHONES] jack, the speaker is automatically cut off.
 - Is the [LEVEL] knob or [MASTER] knob turned down?
Turn the knobs clockwise while playing your guitar.
- **Sound is too distorted or breaks up.**
 - [GAIN]/[LEVEL] knobs may be turned up too high?
Turn the knobs counter-clockwise. Adjust the volume with the [MASTER] knob.
- **The foot switch does not toggle modes.**
 - Is a ZOOM foot switch connected?
Use only the foot switch ZOOM FS-01.

Patch List

BANK	PATCH	PATCH NAME	DRIVE TYPE	COMMENT
U	0	Fire Drive	PVY	Powerful drive sound with huge and full sonic impact
	1	DBL Clean	MATCH	Standard clean sound with doubling effect
	2	Straight Rock	MTZ	Crisp rock sound
	3	Delayed OD	VINTAGE OD	Overdrive sound with delay suitable for melody and lead
	4	Wild Fuzz	WILD FUZZ	Powerful fuzz sound use for backing and lead
	5	Multi Arpeggio	STANDARD	Vintage flanging clean sound
	6	Wah Useful	PVY	Almighty auto-wah sound
	7	Crunch BK	MS OLD	Crunch sound for backing
	8	Real Stack	MS DRIVE	Straight stack-amp sound
	9	Pitched DRV	BG OLD	Standard pitch sound added downer 1-octave
A	0	PV-Hard	PVY	Simulation of the drive feeling of the high gain amp sound
	1	Clear Chorus	STANDARD	Clear, transparent clean chorus sound
	2	Z-Power	Z POWER	Power lead sound of the ZOOM original
	3	M-Stack	MS DRIVE	Simulation of the standard stack amp sound
	4	Combo Drive	BG OLD	Light drive combo amp sound
	5	FDR-Clean	FDR CLEAN	Standard amp sound for studio recording
	6	V-ROCK	MTZ	Versatile rock distortion
	7	BG-Stack	BG DRIVE	Simulation of the BG stack amp sound
	8	MP-Power	MP 1	Amp sound that has hard distortion and quick response
	9	Match Box	MATCH	High quality crunch sound simulating the combo amp
b	0	DRIVE-S	VINTAGE OD	Clear overdrive sound
	1	Clean Lead	STANDARD	Chorus & Delay sound for clean lead
	2	Fat Tweed	FDR BLUES	Fat sound attached weight to the mid range
	3	Good Old "Z"	9002	Characteristic, old Zoom sound with chorus
	4	Mystic Chord	J CLEAN	Fantastic pitch sound use for chord arpeggio
	5	Old Stack	MS OLD	Simulation of the typical old stack amp sound
	6	Silver Panel	FDR CLEAN	Simulation of the combo amp sound with characteristic tremolo and reverb
	7	Phaser Cut	STANDARD	Phaser sound for cutting
	8	Blues Lead	VINTAGE OD	Almighty blues sound
	9	Neo Fuzz	FUZZ	Fuzzy sound that studio musician uses habitually



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FIRE-36- 5000-1

ZOOM FIRE-36M Supplemental Manual

Thank you for selecting the ZOOM FIRE-36M. This product is a modified version of the Modeling Guitar Amplifier FIRE-36M. It incorporates all the functions of the FIRE-36 and adds built-in mics for picking up the sound of the speaker, and a set of direct output jacks. This document explains functions and specifications that have been added or changed. For information on common functions and specifications, refer to the supplied manual of the FIRE-36.

■ FIRE-36M features

In addition to providing equivalent functionality as the FIRE-36, the FIRE-36M offers the following features.

- It incorporates all the functions of the FIRE-36 and adds two built-in mics with dedicated preamplifier for picking up the sound of the speaker. Without the need for cumbersome setup, you can easily obtain dynamic mic sound (mic 1) and condenser mic sound (mic 2) of the guitar amp.
- RECORDING OUT connectors let you supply the amp signal directly to other equipment. Use the mic input signals and the line output signal separately, or control the mixing balance between the three signals for sending to a recorder or other external device.

■ Changes in controls and jacks

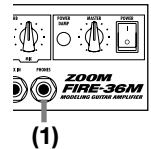
The following controls and jacks of the FIRE-36M are different from the FIRE-36.

Front panel

(1) [PHONES] jack

A pair of headphones can be connected to this jack. When a plug is inserted here, the sound from the speaker is automatically cut off.

** The FIRE-36 manual states that this jack "can be used to connect a recording device or a pair of headphones", but in the FIRE-36M, the jack is a dedicated headphone jack.*



Rear panel

(1) RECORDING OUT [BALANCE] jack

This is a balanced XLR output jack which can be used to supply a signal to the balanced input of a recorder or mixer.

(2) RECORDING OUT [UNBALANCE/PHONES] jack

This is an unbalanced TRS phone output jack which can be used to supply a signal to the unbalanced input of a recorder or mixer. It can also be used as an additional headphone jack. (The speaker is not cut off when a plug is inserted here.)

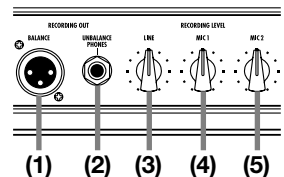
(3) [LINE LEVEL] knob

This control adjusts the line signal level at the RECORDING OUT jacks (1) and (2). If the knob is turned fully counterclockwise, no line signal is output.

(4) [MIC 1 LEVEL] knob

(5) [MIC 2 LEVEL] knob

These controls adjust the signal level for the dynamic mic sound (mic 1) and condenser mic sound (mic 2). If the knobs are turned fully counterclockwise, no mic signal is output.



■ Using the signal from the internal mics

The FIRE-36M has two microphones and a dedicated preamplifier built into the cabinet to allow direct pickup of the sound from the loudspeaker. The sound from the mics is mixed with the internal line signal of the amplifier and supplied directly to the RECORDING OUT jacks.

This section explains how to supply the mic signals to an external recorder or other device via the RECORDING OUT jacks.

1. With the level knobs on the rear panel turned fully down, connect the recorder, mixer, or other external device to the RECORDING OUT jack.

For information on how to connect your instrument and how to use the front panel controls, see the FIRE-36 manual.

** If you plug a pair of headphones into the [PHONES] jack on the front panel, the speaker is cut off and the mics will pick up no sound and therefore deliver almost no signal.*

2. Adjust the [MASTER] knob on the FIRE-36M to obtain a suitable volume.

** If the volume setting is too high or too low, the mics will not produce a proper signal. Start with the [MASTER] knob in the center (12 o'clock) position and make adjustments as required by the playing environment.*

** Depending on the guitar and the amplifier settings, the output from the power amplifier and speaker may be distorted. The sound picked up by the mics may also be unpleasant in such a case, but this is not a defect.*

3. Adjust the [LINE LEVEL], [MIC 1 LEVEL] and [MIC 2 LEVEL] knobs to obtain the desired balance between the line signal and the mic signals.

The controls should be turned up fairly high, but not so high that clipping in the input stage of the connected equipment occurs.

** The [MIC LEVEL] control has a wide adjustment range to allow for the considerable volume changes of the speaker. Adjust the control frequently to match the speaker volume.*

** Also make input level adjustments at the connected device, as necessary.*

■ Troubleshooting

● **No mic signal can be heard**

- Is something connected to the front panel [PHONES] jack?
- Are the [MIC 1 LEVEL] and [MIC 2 LEVEL] knobs on the rear panel turned up to an adequate position?
- The mic signal has no effect on the output from the speaker.

● **Mic signal is distorted**

- Is the front panel [MASTER] knob turned up too high?
- Has the input level been adjusted properly at the connected device?
- Try adjusting the [MIC 1 LEVEL] and [MIC 2 LEVEL] knobs.

● **Other sound is heard together with the mic signal**

The mics also pick up ambient sound. Perform monitoring in a quiet location.

■ Specifications

Microphone 2 x Omnidirectional condenser microphones
Output

Headphone output

Standard stereo phone jack
 80 mW into 32-ohm load

Balanced output

XLR-3-32 jack
 Rated output level +4dBm with output load impedance 10 kilohms or more

Unbalanced output

Standard stereo phone jack
 Rated output level +4dBm with output load impedance 10 kilohms or more

* 0 dBm = 0.775 Vrms

* Design and specifications are subject to change without notice.