

**ZOOM**<sup>®</sup>  
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# **ZOOM Tri Metal TM-01**

## **Operation Manual**

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# Features

- **The Zoom Tri Metal TM-01 is a dedicated high-gain distortion unit with the following features.**

- **Triple high-gain circuit**

Innovative design with three high-gain circuit stages opens up a world of new distortion possibilities. Of course, the TM-01 fully reflects the Zoom dedication to analog sound design.

- **3-band equalizer with superb effectiveness**

In addition to the BASS and TREBLE controls, the TM-01 features a parametric MIDRANGE control whose turnover point can be adjusted. This gives you full control over the most important frequency range for drive sound. The TREBLE and BASS controls are preset to optimum points for heavy rock or metal, making it a snap to get that real "heavy" sound.

- **Low-noise design**

Using only strictly selected parts, the TM-01 has been designed from the ground up for low noise performance, which is unusual in a distortion type effect.

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- **Mechanical switch for on/off and true bypass**

On/off switching is performed using a mechanical foot switch. In the bypass position, the guitar signal is passed through without any alteration.

- **7-string guitars sound fully supported**

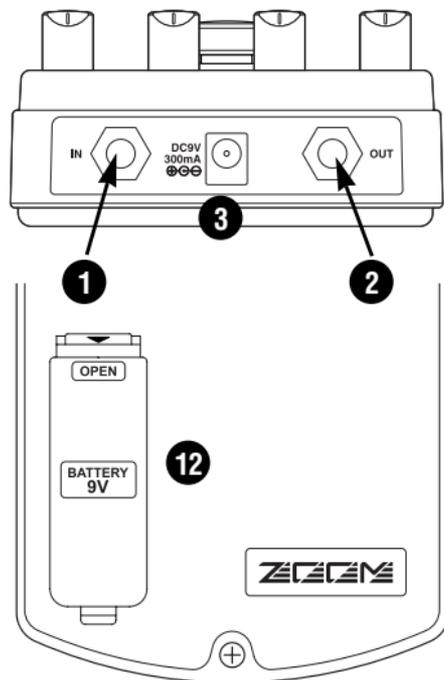
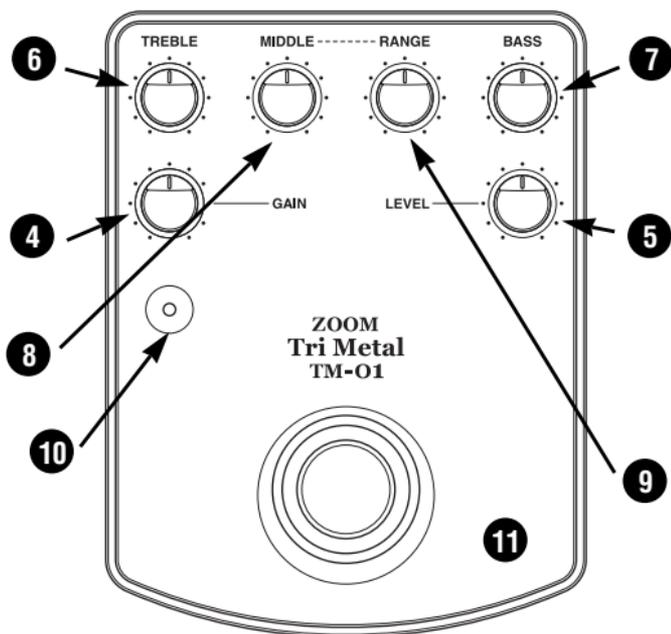
The 7-string guitars is becoming the dominant instrument of heavy rock. With its high-quality circuitry, the TM-01 is a perfect match, bringing out every playing nuance to best effect.

- **Sturdy metal chassis**

The rock-solid case made of aluminum not only looks good, it also can withstand the rigors of use on stage. It's low profile provides excellent stability.

# Parts and Functions

● This section explains the various parts of the TM-01.

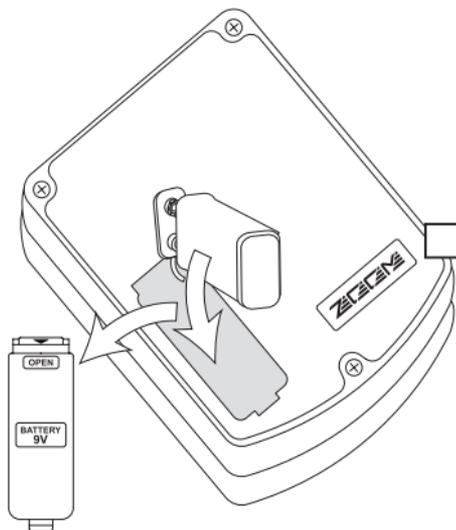


- 1 IN jack**  
The input of the unit acts as a power switch. When you connect the plug of the cable from the guitar here, the unit is turned on.
- 2 OUT jack**  
This is the output of the unit. Connect the plug of the cable going to the guitar amplifier or other effect device here.
- 3 AC adapter jack**  
When powering the unit from the AC adapter, insert the plug from the adapter into this jack. Be sure to use only an AC adapter rated for 9 V DC, center negative, 300 mA (Zoom AD-0006). When the AC adapter is connected, the TM-01 will always be ON, regardless of whether a cable is plugged into the IN jack.
- 4 GAIN control**  
Turning this control clockwise increases the drive effect.
- 5 LEVEL control**  
This control adjusts the output signal level. Turning the control clockwise increases the level.
- 6 TREBLE control**  
This control adjusts the high frequency range.
- 7 BASS control**  
This control adjusts the low frequency range.
- 8 MIDDLE control**  
This control adjusts the middle frequency range.
- 9 RANGE control**  
Adjusts the turnover frequency of the MIDDLE control. The frequency range selected with the RANGE control is adjusted by the MIDDLE control.
- 10 Indicator**  
Illuminates when the TM-01 is active.
- 11 Foot switch**  
Switches the TM-01 effect on and off.
- 12 Battery compartment**  
A 9V battery (6F22) can be inserted here.

# Connections

## ● How to connect the TM-01.

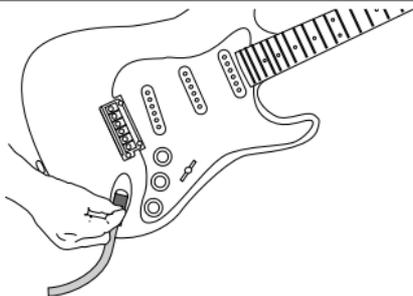
1. Open cover of battery compartment and insert battery



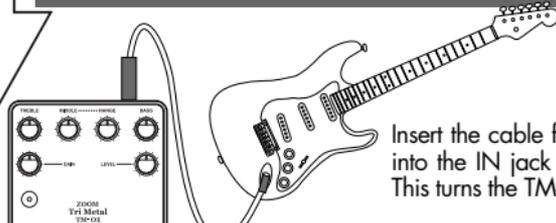
Take care to snap the battery to the connector with correct polarity.

2. Turn amplifier off and connect cable to guitar

Make sure that the plug is inserted fully into the OUT jack of the guitar.

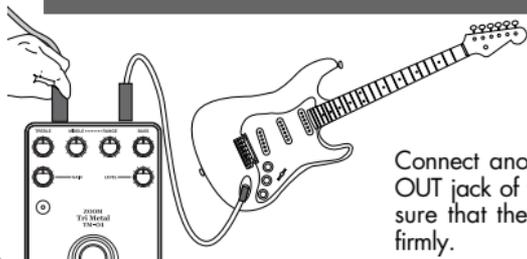


3. Plug cable from guitar into IN jack of TM-01



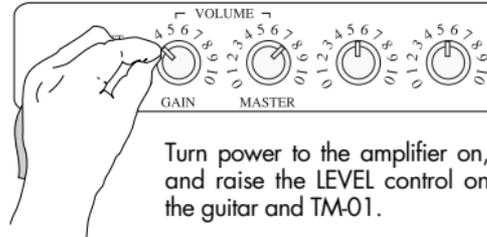
Insert the cable from the guitar into the IN jack of the TM-01. This turns the TM-01 on.

#### 4. Connect cable to OUT jack of TM-01



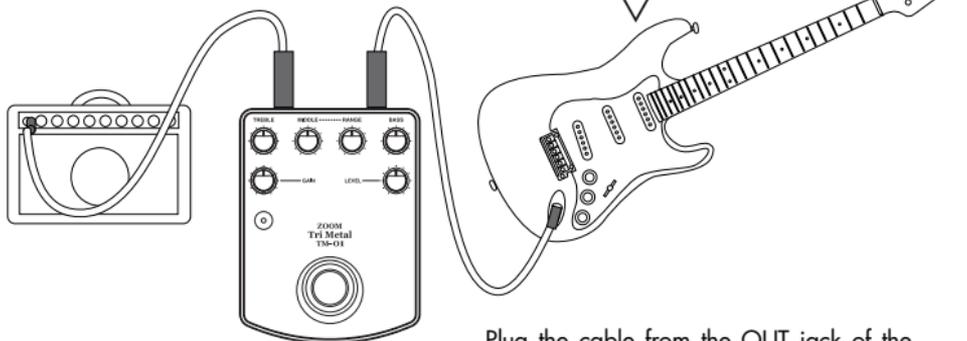
Connect another cable to the OUT jack of the TM-01. Make sure that the plug is inserted firmly.

#### 6. Raise volume



Turn power to the amplifier on, and raise the LEVEL control on the guitar and TM-01.

#### 5. Connect output cable to amplifier



Plug the cable from the OUT jack of the TM-01 to the IN jack of the amplifier.

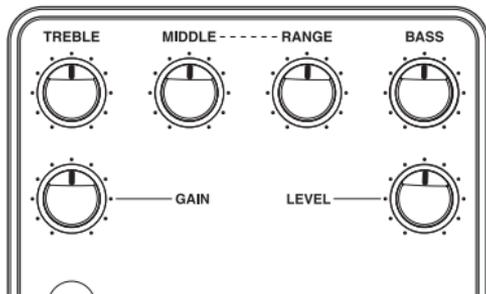


**Always follow the above sequence.**

If steps are performed in reverse order, there is a danger of damage to the amplifier or speakers.

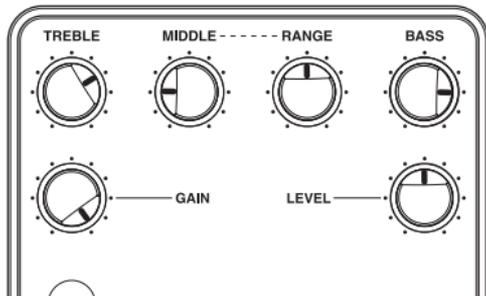
# Sound Samples

- This section shows some actual setting examples. When experimenting, you should make settings so that the amplifier does not distort excessively.



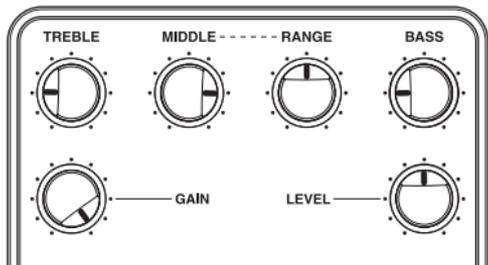
## ★ Standard "glittery" drive sound

With all controls in the center position, the TM-01 already provides strong distortion and the equalizer attenuates the midrange and emphasizes the lows and highs.



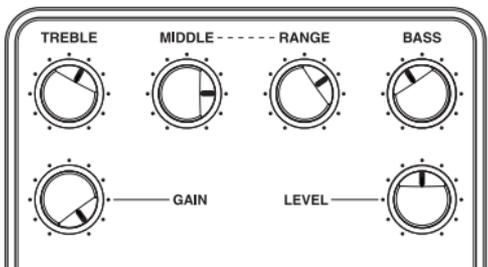
## ★ Super drive sound

These settings make the glittery drive feeling even stronger, in the LA Metal style. The key is to further cut the MIDDLE control and turn up the TREBLE and BASS. The GAIN control can be adjusted to taste, but would be higher than the 10 o'clock position.



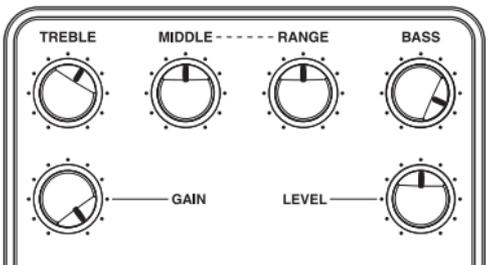
## ★ Drive sound with characteristic middle boost

When you turn down the TREBLE and BASS controls and boost the MIDDLE range, the drive sound gets an even stronger twang. This is great for example for special solo phrases.



## ★ Drive sound with an edge

To make a solo really stand out, turn the RANGE control towards the upper end of the scale, and boost it with the MIDDLE control. This will give you strong distortion, but the sound still is distinct and sharp.

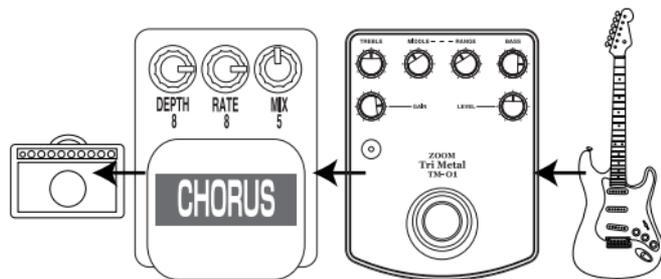


## ★ Drive sound with ample lows

This setting is great for earth-shaking riffs played with a 7-string guitar. The trick lies in turning the BASS control almost all the way up. Picking should be energetic and swift to make the best of this choice.

# TM-01 and Compact Effects

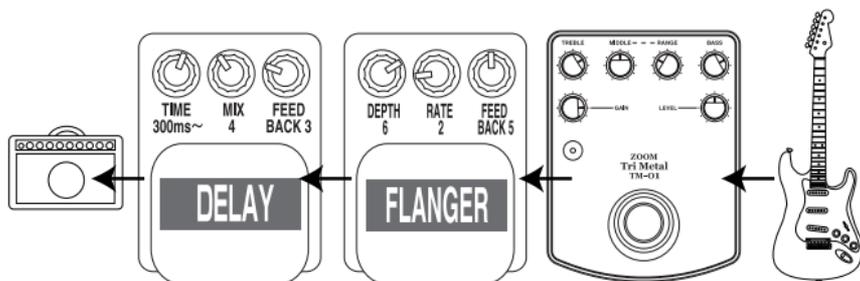
- This section shows how to use the TM-01 together with other compact effect devices.



TM-01 SETTING : GAIN 8 TREBLE 5 MIDDLE 4 RANGE 4 BASS 8

## ★ With a chorus effect

In this example, the chorus uses full modulation at a fairly high rate (speed), to achieve a vibrato-like effect. This simulates the far-out obligato sound that can be heard sometimes in heavy rock making extensive use of 7-string guitars. Adding delay is also a possibility.



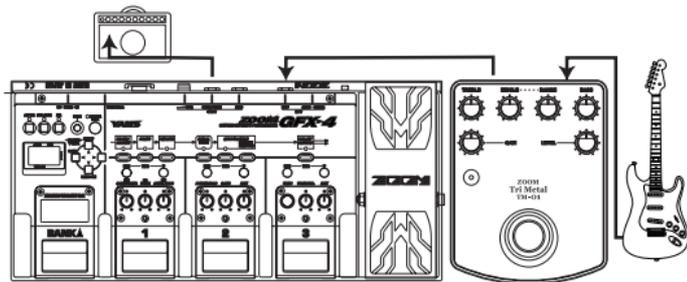
TM-01 SETTING : GAIN 8 TREBLE 7 MIDDLE 5 RANGE 3 BASS 7

## ★ With flanger & delay

This setup uses the impressive harmonics produced by the TM-01 to stress the flanger effect, and adds long delay to spread the sound impression. This also is a great match for heavy rock played on a 7-string guitar. By experimenting with the equalizer settings, you can further increase the depth of the sound.

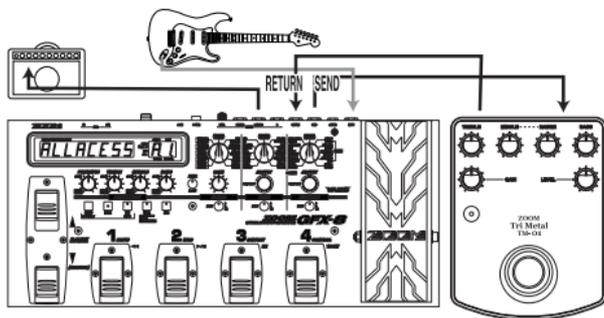
# TM-01 and Multi-Effects

- This section shows how to use the TM-01 together with multi-effect devices such as the GFX-4.



## ★ Creating drive sound with TM-01 only

When also using a multi-effect device, the TM-01 should be connected before the other device. For distortion sound, create the distortion with the TM-01 only.



## ★ Using send/return loop of multi-effect

When using a multi-effect device such as the GFX-8 with send/return jacks, the TM-01 can be used as if it were a part of the other device. You can switch the TM-01 on and off using patch programs of the multi-effect.

# Troubleshooting

● **If there seems to be a problem with the unit, check the following points first.**

## ★ **No sound.**

- ◆ Are connections to the IN and OUT jacks reversed? Check the connections.
- ◆ Is a battery inserted? If there is no battery in the unit and the AC adapter is not used, there will be no sound. Insert a fresh battery, or connect the AC adapter.
- ◆ Is the guitar or amplifier volume or the LEVEL control of the TM-01 turned down? Raise the volume.
- ◆ Are there any problems with other effect devices or with cables? Use a known good cable and connect the TM-01 directly to the amplifier.

## ★ **Sound level is low, and sound is distorted also in bypass mode.**

- ◆ Is the battery exhausted? Insert a fresh battery.

## ★ **Noise is heard.**

- ◆ Are several distortion effects used in series? Excessive compressor settings can also result in noise. Turn only the currently used devices on.
- ◆ Is the cable of good quality? Low-quality cables can cause noise.
- ◆ Is the unit used in the vicinity of a computer monitor, refrigerator, fluorescent lamp, motor, or similar device? The guitar or cable can pick up noise from such devices. In case of problems, increase the distance to such devices.

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## ★ **Battery gets used up very quickly.**

- ◆ Power to the TM-01 gets turned on when a plug is inserted in the IN jack. In this condition, current is drawn from the battery regardless of whether the effect is switched on or off. When not using the unit, be sure to disconnect the plug from the IN jack. Also, the use of alkaline battery rather than manganese is recommended. Connecting the AC adapter (ZOOM AD-0006) allows extended use without having to worry about the battery. When using several effect devices, powering them from AC adapters is recommended. \*The initially supplied battery is for checking only and may have a short service life.

## ★ **Distortion is not strong enough. Sound is not clear.**

- ◆ Turn up the position of the GAIN control and of the TREBLE/MIDDLE/RANGE/BASS controls. Also don't forget to fully turn up the level and tone controls of the guitar.
- ◆ When using an effect device between the TM-01 and the guitar, check the battery, volume, and cable of that device.

## ★ **Cannot produce the desired sound.**

- ◆ The audible result of using the TM-01 depends on various different factors. Hardware such as effect devices, guitar, and amplifier of course must be considered, but play technique aspects such as picking and fingering are also important. When creating your sound, do not set controls initially to the 0 or 10 position. Start with all controls set to center and perform fine adjustment from there.

# Specifications

- **Controls**
  - Foot switch
  - GAIN control
  - TREBLE control
  - MIDDLE control
  - LEVEL control
  - BASS control
  - RANGE control
- **Input**
  - Standard monaural phone jack
  - Rated input impedance: 470 kilohms
  - Rated input level: -20 dBm
- **Output**
  - Standard monaural phone jack
  - Rated output impedance: 10 kilohms or more
  - Rated output level: +10 dBm
- **Power requirements**
  - Battery (6F22, 9V) or AC adapter AD-0006 (9 V DC, 300 mA, center minus)
- **Battery life**
  - Continuous operation: approx. 26 hours (alkaline) or 8 hours (manganese)
- **External Dimensions**
  - 98 (W) x 127 (D) x 48 (H) mm
- **Weight**
  - 720 g (including battery)
- **Supplied accessories**
  - Instruction manual
  - Battery (6F22, 9V)

\*0 dBm = 0.775 Vrms

\*Design and specifications subject to change without notice.

# Usage Precautions

## ● **Electrical interference**

The TM-01 has been designed to minimize emission of electromagnetic radiation from inside the device, and to minimize susceptibility to external interference.

However, equipment that is very susceptible to interference or that emits powerful electromagnetic radiation should not be placed near the TM-01, as the possibility of interference cannot be ruled out entirely.

If such problems occur, move the TM-01 further away from the affected equipment.

## ● **Cleaning**

Use a soft, dry cloth to clean the TM-01. 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 at hand for future reference.**

# Safety Precautions

In this manual, important information that is intended to prevent the danger of injury to persons and damage to equipment is marked with special symbols. The meaning of these symbols is explained below.



Warning

**Disregarding instructions printed here incurs the risk of death or severe injury to persons.**



Caution

**Disregarding instructions printed here incurs the risk of injury to persons and/or damage to peripheral equipment.**

Please observe the following safety tips and precautions to ensure hazard-free use of the TM-01.

## About power



Warning

Using an AC adapter to power this unit is recommended. When powering the unit from a battery, an alkaline battery should be used.

### AC adapter operation

- Use only an AC adapter rated for 9 V DC, 300 mA, center minus (Zoom AD-0006). Using the unit with a different adapter poses a risk of fire and electric shock.
- Connect the AC adapter only to an AC outlet that supplies the rated voltage required by the adapter.
- When disconnecting the AC adapter from the AC outlet, always grasp the adapter itself.
- Disconnect the AC adapter when not using the unit for an extended time.

### Battery operation

- Use a generic 9V dry battery (6F22) (alkaline or manganese).
- The TM-01 is not designed to charge batteries. Observe the precautions on the battery.
- Remove the battery when not using the unit for an extended time.
- If battery leakage has occurred, wipe the battery compartment and the battery terminals carefully to remove all remnants of battery fluid.
- While using the unit, the battery compartment cover should be closed.

## Usage environment



Caution

**Avoid using the TM-01 in environments where it will be exposed to:**

- Temperature extremes
- High humidity or moisture
- Excessive dust or sand
- Excessive vibration or shock

## Handling



Caution

- The TM-01 is a precision instrument. Except for the foot switch, do not push other parts with your feet or subject them to strong force.
- Take care that no foreign objects (coins or pins etc.) or liquids can enter the unit.
- Be sure to turn the power to all equipment off before making connections.
- Before moving the unit, turn the power off, disconnect all cables and the AC adapter.

## Alterations



Caution

- Never open the case of the TM-01 or attempt to modify the product in any way since this can result in damage.
- ZOOM does not accept responsibility for any damage caused by alteration of the unit.

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