ZOOMSTUDIO [20] Operation Manual

Thank you for selecting the **ZOOM STUDIO 1201** (hereafter simply called the "1201"). The 1201 is a digital reverb and multi-effect processor offering the following features:

- Total of 363 preset effect patterns (11 effects x 3 banks x 11 variations). A whole panorama of useful effects is available at your fingertips.
- Professional-quality reverb that far surpasses other units in this class and creates a wide and utterly natural sound stage.
- Top-level specs such as 44.1 kHz sampling, 18-bit A/D and D/A converters, and full stereo configuration assure professional performance with any type of source material.
- Many unique and interesting new effects such as Lo-Fi, KARAOKE, and AUTO-FILTER make creating techno tracks or DJ remixes a snap with the 1201.

Please take the time to read this manual carefully so as to get the most out of your 1201 and to ensure optimum performance and reliability. Retain this manual, the warranty card and all other documentation for future reference.

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□ 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 1201.



Power requirements

The 1201 is powered by the supplied AC adapter. To prevent malfunction and safety hazards, Do not use any other kind of AC adapter.

When using the 1201 in an area with a different line voltage, please consult your local ZOOM distributor about acquiring a proper AC adapter.



■ Environment

Avoid using your 1201 in environments where it will be exposed to:

- Extreme temperature
- High humidity or moisture
- · Excessive dust or sand
- Excessive vibration or shock



■ Handling

The 1201 is a precision instrument. Do not exert undue pressure on the unit.

Also take care not to drop the unit, and do not subject it to shock or excessive pressure.



Connecting cables and input and output jacks

You should always turn off the power to the 1201 and all other equipment before connecting or disconnecting any cables. Also make sure to disconnect all cables and the AC adapter before moving the 1201.



■ Alterations

Never open the case of the 1201 or attempt to modify the product in any way since this can result in damage to the unit.

☐ Usage Precautions

■ Electrical interference

The 1201 has been designed to minimize radio frequency emissions and is highly resistant to external interference. However, if placed very

close to equipment such as TV sets or radio receivers, reception interference may occur. If you encounter problems, move the 1201 further away from the affected equipment.

Whatever the type of digital control device, the 1201 included, electromagnetic damage can cause malfunctioning, and can corrupt or destroy data. Since this is an ever-present danger, thorough care should be taken to minimize the risk of damage.

■ Cleaning

Use a soft, dry cloth to clean the 1201. 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.

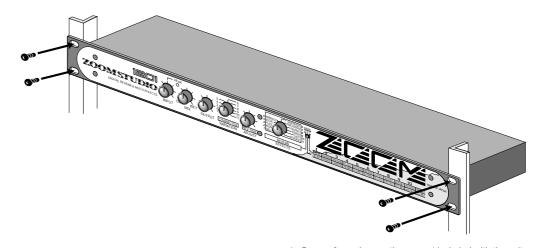
□ Rack Mounting

This product conforms to EIA and DIN specifications for 19-inch rack mounting. We recommend to mount the unit in a rack rather than just placing it on a table or similar. As shown in the illustration, fasten the unit securely in the rack, using the four screw holes.

• This unit uses a metal enclosure and is heavier than it might seem at first glance. When mounting in a rack, firmly support the unit and do not let go until all screws have been fastened. If the unit is not secured properly, it can fall and cause damage and injury.



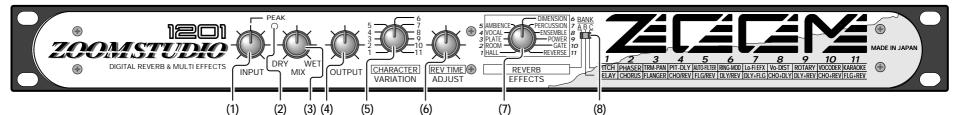
- Do not stack the unit directly on top of other components. Otherwise overheating poses a risk of fire and can lead to performance degradation.
- Before moving the unit, disconnect the AC adapter and all other cables. Otherwise cables or equipment may be damaged.
- Use a sturdy rack and place it on a level, solid surface where there is no danger of the rack vibrating or falling. Otherwise injury to persons or damage to equipment may occur.



* Screws for rack mounting are not included with the unit.

□ Controls and Functions

■ Front Panel



(1) INPUT level control

Adjusts the level of the input signal from an instrument or other program source.

(2) LED indicator

When the 1201 is turned on, this indicator lights up in green. If the input signal exceeds the peak level, the indicator lights up in red and the sound will be distorted. Adjust the INPUT level control so that the indicator flashes only very briefly at the highest signal peaks. When effects were turned off with the optional foot switch FS01, the indicator flashes in orange.

(3) MIX control

Adjusts the ratio between original sound and effect sound. Turning the control towards DRY (counterclockwise) emphasizes the original sound and turning it towards WET (clockwise) emphasizes the effect sound.

(4) OUTPUT level control

Adjusts the output signal level.

(5) CHARACTER/VARIATION selector

- When bank A is selected with the BANK switch:
 Selects the reverb character
- ♦ When bank B or C is selected with the BANK switch: Selects the effect variation.

For each effect,11 character or variation settings are available.

(6) REVERB TIME/ADJUST control

- When bank A is selected with the BANK switch: Adjusts the reverb time.
- When bank B or C is selected with the BANK switch: Adjusts a specific effect parameter. Which parameter is adjusted depends on the currently selected effect.

(7) REVERB TYPE/EFFECTS selector

◆ When bank A is selected with the BANK switch: Selects the reverb type.

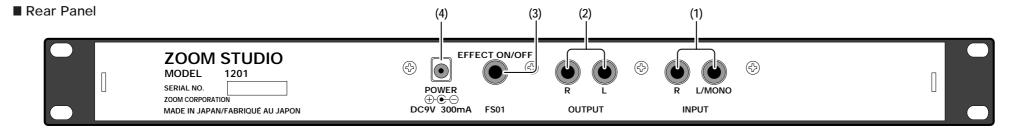
◆ When bank B or C is selected with the BANK switch:

Selects the effect type from each bank.

For each bank, 11 settings are available, resulting in a total of 33 reverb and effect types.

(8) BANK switch

Selects one of the three effect banks (A, B, C). A bank is a group of related effects. Bank A contains reverb type effects and banks B and C contain modulation and multi-effect settings.



(1) INPUT jacks

Serve for connection to the sound source, such as the send jacks of an instrument or mixer. Mono sources should be connected to the L/MONO jack and stereo sources to both jacks (L/MONO for left channel and R for right channel).

Note: A preamplifier (such as integrated in a mixer) or a compact effect device is required when wishing to use the 1201 with an instrument with low output level, such as an electric guitar or bass, or with a high-impedance instrument (470 kilohms or higher).

(2) OUTPUT jacks

Serve for connection to the return jacks of an instrument or mixer, or to recording/playback equipment.

(3) EFFECT ON/OFF jack

The optional foot switch FS01 can be connected here, for switching effects on and off with your foot. When effects are off, only the original sound is heard and the front- panel LED indicator flashes in orange.

(4) DC INPUT jack

The cable from the supplied AC adapter is connected here.

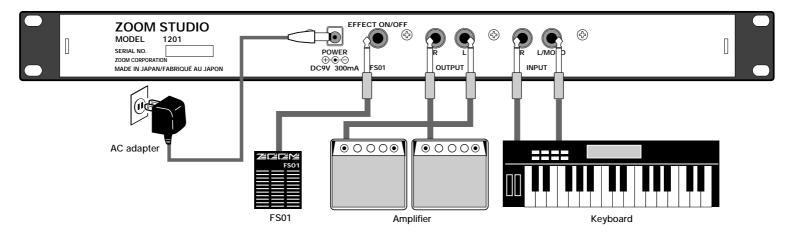
Note: When the AC adapter is plugged into an AC outlet, the 1201 is automatically turned on.

□ Connections

Connect an electronic instrument, microphone, mixer, or other audio equipment to the 1201 as described below.

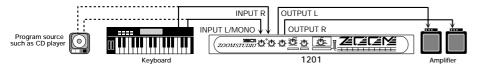


Before making any connections, set the power switches of all equipment to OFF. If the equipment is on, sudden noise surges can lead to hearing damage or damage to the equipment.



■ Connection between sound source such as electronic instrument or CD player and playback equipment

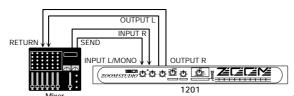
This connection example shows the use of the 1201 as an effect device for electronic instruments. When using the unit in a monaural configuration, connect only the L/MONO jack. The balance between the original sound of the instrument and the effect sound is adjusted by the MIX level control. When wishing to apply an effect such as KARAOKE to stereo sources, a CD player can be connected instead of an electronic instrument. (The KARAOKE effect only works with stereo sources.)



■ Connection to send/return jacks of a mixer

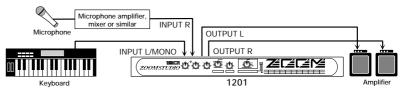
This connection example shows the use of the 1201 in the send/return loop of a mixer to which instruments or other sound sources are connected. In this case, the balance between the original sound

of the mixer (DRY) and the effect sound produced by the 1201 (WET) is normally adjusted at the mixer. Therefore the MIX LEVEL control of the 1201 should be turned fully clockwise, so that only the WET sound is returned to the mixer.



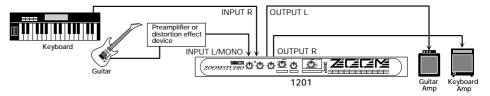
■ Connection for use of the Vocoder effect

When the Vocoder effect is selected, the R input signal is used to create an envelope, and the effect itself is applied to the L/MONO input signal. Therefore the microphone (via a microphone amplifier or mixer) should be connected to the R jack and the keyboard or guitar signal to the L/MONO jack. When connections have been made in this way, talking or singing into the microphone will alter the instrument sound according to the voice envelope curve (Vocoder effect).



■ Using two effects in parallel

The 1201 allows the simultaneous use of two effects in parallel. This is possible with the effects in bank B marked with a "/" on the display. This connection example shows how to use such effects independently in a parallel configuration.



□ Troubleshooting

If there seems to be a problem with your 1201, please check the following points first.

Symptom	Check	Remedy
	Is AC adapter connected correctly?	Make connections as described in "Connections". Use only the AC adapter supplied with the unit.
	Is instrument connected correctly to INPUT jack and playback system to OUTPUT jack?	Make connections as described in "Connections".
	Is shielded cable defective?	Try replacing the cable.
No sound or volume is very low.	Are connected instrument and playback system functioning correctly? Are all volume controls set to proper levels?	Check all devices and adjust controls.
	Are INPUT and OUTPUT level controls of 1201 set to proper positions?	Adjust controls for proper matching with connected equipment.
	Are effects set to off and is MIX control turned towards WET?	Adjust MIX control.
	Is a microphone connected directly to the rear-panel input?	Connect microphone via a microphone amplifier or mixer.
Sound is distorted or breaks up.	Is input signal level too high?	Adjust INPUT level control so that LED indicator lights up only occasionally during signal peaks.

□ Specifications

• Number of preset programs 363 (11 effects x 3 banks x 11 variations)

• A/D converter 18 bit, 64 times oversampling • D/A converter 18 bit, 8 times oversampling

• Sampling frequency 44.1 kHz

• Inputs Rear inputs (L/MONO, R): standard monaural phone jack x 2

Reference input level: -10 dBm to +4 dBm

Input impedance: 7.5 kilohms (MONO), 15 kilohms (STEREO)

• Outputs Rear outputs (L, R): standard monaural phone jack x 2

Reference output level: -10 dBm to +4 dBm

Output impedance: 330 ohms or less

• Control connector EFFECT ON/OFF

• **Power requirements** 9 V DC, 300 mA (from supplied AC adapter)

• **Dimensions** 482 (W) x 44 (H) x 115 (D) mm

• **Weight** 1.5 kg

- * 0 dBm = 0.775 Vrms
- * Design and specifications subject to change without notice.



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