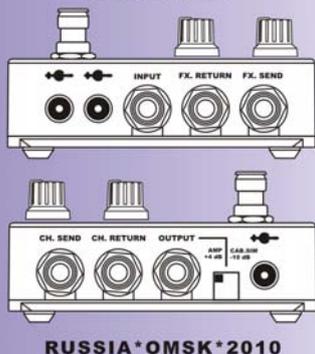


AMT Legend amp's V-1
Guitar preamplifier.
User's manual



www.amtelectronics.com

Safety Instructions

CAUTION! There are no user-serviceable components inside the device. Only qualified specialists must perform the device repair.
WARNING! To avoid possible malfunctions the device must not be exposed to rain or moisture. Prevent water or other liquids from getting inside the device. Do not place vessels filled with liquids (such as vases etc.) on top of the device.

 This symbol points out important information related to the device maintenance and operation, which can be found in the accompanying documentation.

Please read the instruction manual carefully.

1. Keep the manual at hand.
2. Pay close attention to the warning instructions.
3. Adhere to all maintenance instructions.
4. Uses only dry cloth to clean the device, which must be disconnected from the power adapter.
5. Do not place the device next to heat sources, avoid direct sunlight.
6. Lay the power cable in such a way that it is impossible to be stepped on. Besides, avoid its contacts with sharp angles etc. If the plug of the power adapter is used for the device disconnection from mains, it must be easily accessible.
7. Use only auxiliary devices and accessories recommended by the manufacturer.
8. Turn the device off during thunderstorms.
9. All works related the device repair must be carried out only by qualified servicing personnel.
10. **IMPORTANT!** All servicing instructions are intended exclusively for qualified personnel. Do not carry out any repair works not specified in the instruction manual. All repair works are to be carried out by qualified personnel only.

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IMPORTANT INSTRUCTIONS!

NON-OBSERVANCE OF THE FOLOWING INSTRUCTIONS MIGHT RESULT IN YOUR DEVICE DAMAGE. GUARANTEE IS VOID IF THE DAMAGES ARE CAUSED BY NON-OBSERVANCE OF THESE INSTRUCTIONS.

- After transportation or storage of the device under negative temperatures make sure to leave the device under room temperature in its original packaging for **AT LEAST 2 HOURS!**
- To connect the guitar preamp to other devices use exclusively cables intended for such connections.
- Under no circumstances use other types of cables such as for speakers etc.

CONNECTION of the guitar preamp to power adapter:

- Connect the adapter only **AFTER** all audio connections have been accomplished!
- Before connecting the preamp to power adapter make sure that the casing, cables, low-voltage connector and power plug are free from damages: no cuts, cracks, dents and so on and are in operable condition.
- To connect the preamp to the power adapter first insert the low-voltage connector of power adapter into corresponding socket on the right panel of the switch and then plug the adapter into the wall outlet.

DISCONNECTION of the guitar preamp from power adapter:

- To disconnect the guitar preamp from the power adapter first disconnect the adapter from mains and then disconnect its low-voltage connector from the socket on the right panel of the guitar preamp.

COMPLETE SET

1. Guitar preamp	1
2. Instruction manual	1
3. Packaging box	1
4. Power adapter	1
5. Warranty card	1

INTRODUCTION

Legend Amps V-1 guitar preamp is intended for studio use and live performances. "AMT Legend Amps" is a new revolutionary series of one-channel preamps (JFET-preamps) from AMT Electronics, developed with principally new approach to guitar sound formation. The technology of analog modeling of the physical processes occurring in real vacuum tube limiting the guitar signals was used as the basis for the new guitar pedals series. It became possible due to the application of original circuitry solutions. The series' channels structuring conforms to the processes occurring in real tube-based devices. It results in formation of the structure of limitation, dynamics and range close to the ones used in popular tube amplifiers. Having compact sizes and low energy consumption characteristic to semiconductor-based effects AMT Legend Amps possess a number of unique features found in real tube preamps and amplifiers:

- ✓ Preamps included into AMT Legend Amps series provide excellent playing dynamics characteristic to real tube-based devices and are in no way inferior to them.
- ✓ With the limitation range similar to tube channel the preamps of the series ensure terrific thickness and power to the resulting sound. Working with AMT Legend Amps preamps you won't feel the urge to cut out the most informative middle frequencies, which in turn will provide great readability of your guitar in the sound mix.
- ✓ Like tube preamps AMT Legend Amps provide gradual increase of the limiting stages number as the gain grows.
- ✓ The series' preamps use passive circuits of tone shaping which are in full conformity with the tone controls during original tube overdrives.
- ✓ The high level of output signal of AMT Legend Amps (+10 dB at max Level position) corresponds to the tube preamps' output signal levels. Thus you have adjustable signal level which makes it possible to connect the preamps to any input (RETURN, DIRECT, LINE etc.) including INPUT POWER AMP.

Sound Character and Operation Principles of AMT Legend Amps V-1:

AMT V-1 is one of the base modules of the entire AMT Legend Amps series. You can use AMT V-1 to build a complex of multi-channel preamp from mono channels of AMT Legend Amps series - P-1, B-1, M-1, R-1, S-1. The series is constantly expanding thus giving you a chance to obtain a unique 100% analog tool for your guitar sound shaping.

AMT V-1 and AMT F-1 complete sets include power adaptors (unlike other pedals of the series).

AMT V-1 is a preamp with internal CLEAN channel and the possibility of switching to external channel (any auxiliary overdrive effect) by means of a foot switch. AMT V-1 has the insert loop of serial type with standard -10dB level intended for connection of auxiliary effects and boosting the effect signal to standard 0dB level or higher (MASTER VOLUME), which is sufficient to operate directly with power amplifier. In case of connection to a mixer the preamp has speaker simulator mode. The mode can be selected by the switch located on the left panel of the device. AMT V-1 provides the built-in power hub to supply 9...12V to external channel and auxiliary effects.

Some of the AMT V-1 modifications have FX.LOOP operation modes (serial/parallel) switch at the bottom part of the device (under housing cover).

In case of connection to CH.SEND, CH.RETURN AMT V-1 preamp there is a bi-color LED indicator (located on the front panel): Clean channel AMT V-1 - green, Lead external channel - red. If AMT V-1 is used in mono mode (without external overdriven channels) the LED is single-colored and the footswitch acts as «Bypass» Clean channel AMT V-1.

Important Note! The preamps of the AMT Legend Amps series like  other top class devices are sensitive to power source quality.

For this series we do recommend to use the adapter meeting the necessary quality requirements (AC/DC Adapter SA12DC-12V 1,25A).

Before you start

For safe transportation the device was carefully packaged by the manufacturer. However, if the cardboard packaging is damaged you should immediately inspect the device for the absence of external damages.

- In case of damages do NOT SEND the device to manufacturer, but inform the seller or transport agency, since otherwise you will lose the right to damage compensation.
- In order to avoid damages during storage and transportation always use original packing.
- Do not allow children to play with the device and packaging materials.
- Please, recycle all packing materials in the way harmless to the environment.
- In order to avoid the device overheating provide a sufficient airflow around it; do not cover it and do not place near other heat emitting devices.
- Device operation near powerful radio transmitters and sources of high-frequency signals can result in appreciable deterioration of sound. In this case increase the distance between the device and the transmitter and use screened cables for all interconnections.

CAUTION!

Please be aware that high volume can harm your hearing and / or damage the dynamic heads of your acoustic system. Before turning the device on rotate Volume controls to extreme left position (counter-clockwise). At all times try to adhere to moderate volume level.

SPECIFICATIONS

INPUT

Input impedance	1,0 MOhm
Nom. sensitivity	-20dB

OUTPUT

Output impedance	10 kOhm
Output signal level (AMP mode)	+10dB
Output signal level (CAB.SIM. mode)	-10dB

CH. SEND

Output impedance	10 kOhm
Output signal level	0dB

CH. RETURN

Input impedance	1.0 MOhm
Nom. sensitivity	0dB

FX. SEND

Output impedance	10 kOhm
Output signal level	-10dB

FX. RETURN

Input impedance	1.0 MOhm
Nom. sensitivity	-10dB

Power

Voltage	DC 9...12V
Consumed current nom.	6.0mA
Power adapter (optional)	AC/DC Adapter SA12DC-12V 1,25A

Voltage

Load current	1.25 A
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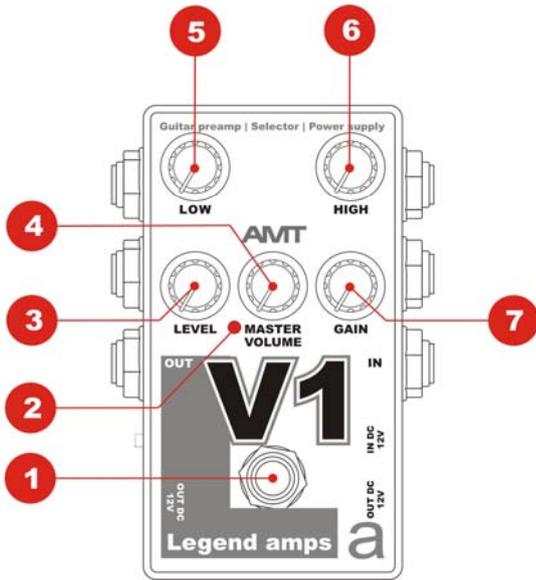
Dimensions / weight

Net dimensions (WxHxD).	111x58x73 mm
Net weight	0.23 kg.
Overall dimensions (WxHxD).	Appr. 125x83x103 mm.
GROSS weight	Appr. 0.3 kg.



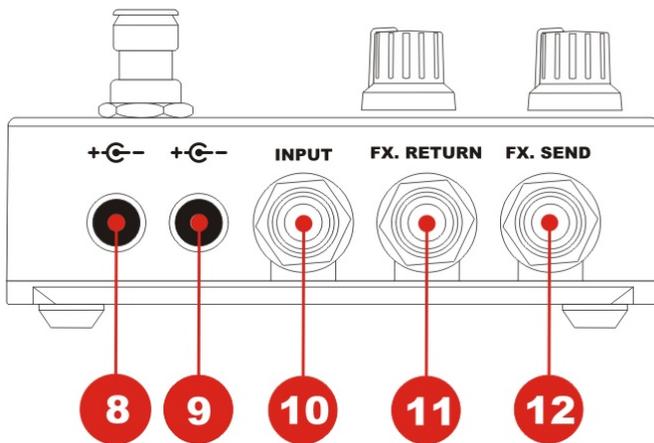
Use only external devices and accessories recommended by the manufacturer.

CONTROLS
Front panel



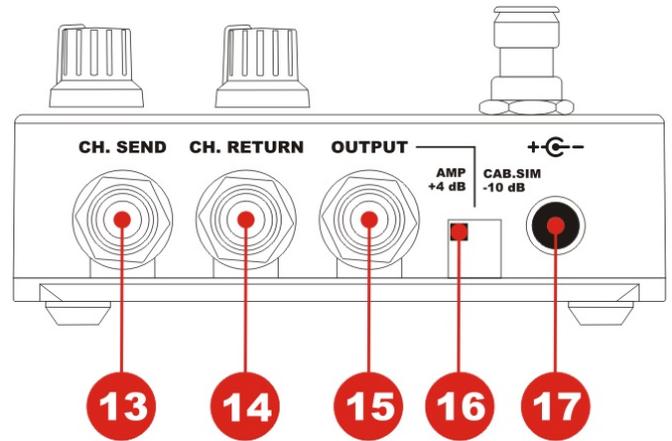
1. FOOTSWITCH engages "CLEAN V-1" / "BYPASS" modes. In case of connected "CH. SEND", "CH. RETURN" FOOTSWITCH engages "CLEAN V-1" / "LOOP".
2. Bi-color guitar preamp operation mode indicator
3. LEVEL adjusts the output signal level of AMT V-1 "CLEAN V-1" preamp.
4. MASTER VOLUME adjusts the output signal level of AMT V-1 preamp and connected external channels
5. LOW adjusts the low frequency level.
6. HIGH adjusts high frequency level.
7. GAIN adjusts the sensitivity level of guitar preamp in relation to guitar signal.

Right panel



8. OUT DC 12V – DC 12V output for connection of external channels.
9. IN DC 12V – for connection of DC 12V power adapter.
10. INPUT – for your guitar connection.
11. FX. RETURN – input for connection with an external effect's output.
12. FX. SEND – output for connection with an external effect's input.

Left panel



13. CH. SEND - output for connection to external preamp's input.
14. CH. RETURN - input for connection with an external preamp's output (please, use only mono jack).
15. OUTPUT - for connection with a power amplifier's input or mixer's line input (selected by AMP/CAB.SIM switch (16).
16. AMP/CAB. SIM - switches between output signal levels (emulation cabinet on/off) of OUTPUT
17. OUT DC 12V – DC 12V output for powering external channels.

CAUTION! All connections are to be carried out only when the power of the preamp has been SWITCHED OFF (BYPASS mode)!

For qualified personnel only.

CAUTION! There are no user-serviceable components inside the device. The device repair must be done only by qualified specialists.

If the device has not been used for a prolonged period of time, it is necessary to remove the battery from the device. To avoid possible malfunctions and injuries related to fire or electric shock prevent various objects and liquids from getting inside the device.

FX.LOOP Mode Switch

WARNING! FX.LOOP mode is to be selected with disconnected power supply and all other cables of the guitar preamp. DO NOT USE the device without the back cover. DO NOT TOUCH the circuit board and other components behind the cover with your hands or objects.

To switch between FX.LOOP modes (parallel/serial):
Remove the bottom cover of the device by slightly loosening 2 (two) fastening screws using cross-point screwdriver.

Carefully move the mini switch to the required operation mode. The PCB shows the following markings: P – parallel and S -serial.

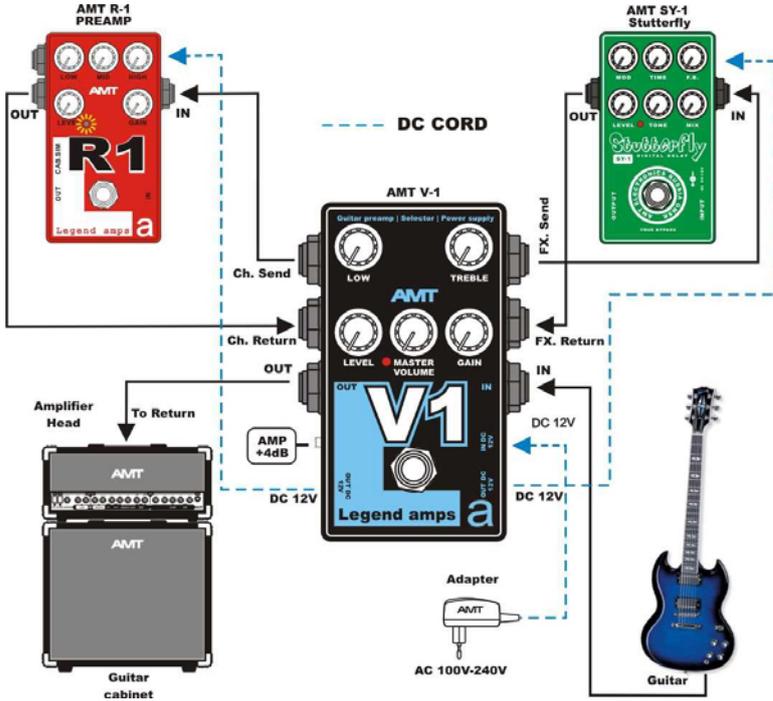
Replace the cover and fix it in place by means of two fastening screws.

Note: some of the earlier modifications do not have FX.LOOP switch.

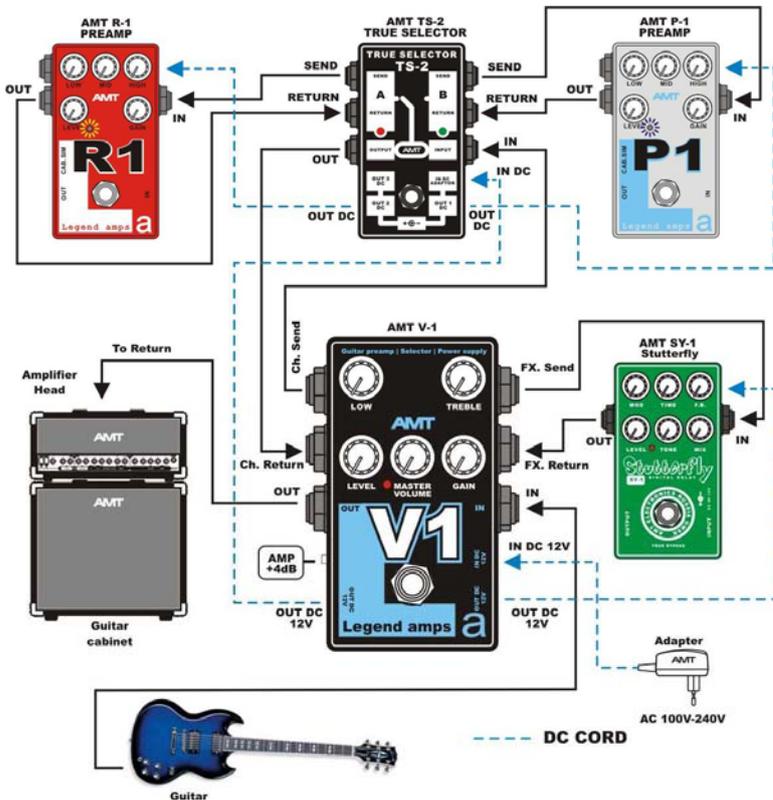
AUDIO CONNECTIONS AND SWITCHING

AMT LA V-1 guitar preamp possesses a wide range of functional possibilities. To operate AMT LA V-1 you can use the recommended connections.

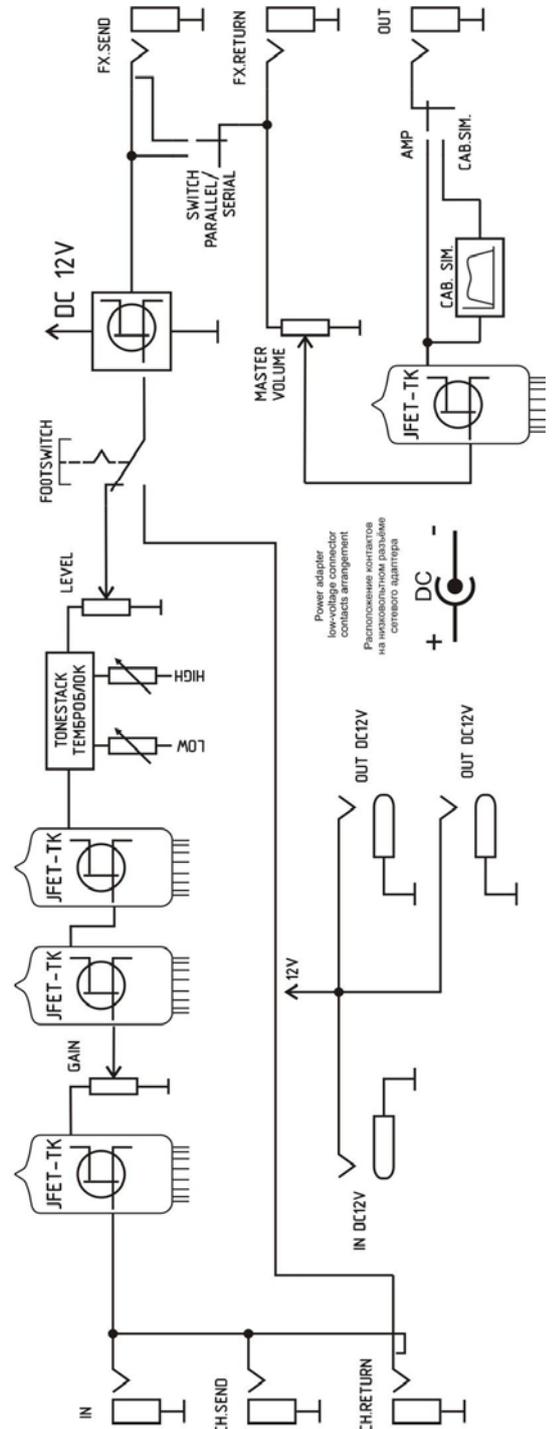
Two channel preliminary amplifier



Three channel preliminary amplifier



AMT V-1 Block diagram
AMT V-1 Блок-схема



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AMT Electronics reserves the right to change the internal and external design of the device which won't decrease its consumer properties without preliminary notification. In this connection the specifications and appearance of the device might differ from the ones shown in this document