

**USER GUIDE** 

# Shift Line TWIN MkIIS Tube guitar preamplifier with IR-based cabinet simulation



The **Twin MkIIIS** is the third revision of our tube guitar preamplifier which boasts a characterful sound, universal connectivity, and a compact enclosure.

The dynamic range has been expanded to achieve more maximum gain. As a result, it can go from its renowned clean sound into crunch and overdrive without external boosting. The cabinet simulation is based on the Impulse Response Convolution technology, which provides a realistic and detailed sound while preserving the character of the power amp, cabinet and microphone used to record the impulse. The device comes with two impulses recorded from the Fender Twin combo amplifier. The microSD card slot allows users to upload their own cabinet impulses.

#### Connections:

- 1. IN is the signal source input.
- 2. **THRU** is a buffered output for the unprocessed signal split from the IN iack.
- 3. **SEND/RETURN** is a series effects loop for external processing. The SEND out can also be used as an additional output.
- 4. OUT is the main output designed to connect the preamplifier to a power amplifier (RETURN or POWER AMP IN on combo amplifiers, INPUT on power amplifiers).
- 5. **AUX IN** is an external audio input (the signal from the AUX IN is only heard through the PHONES output).
- 6. PHONES is a headphones output.
- 7. BALANCED OUT is a balanced output.
- 8. POWER IN is a power supply input.
- 9. microSD is a microSD card slot.

#### Controls:

- GAIN controls input signal amplification. It can go from a crystal-clear sound all the way to a classic California-style overdrive.
- 11. The **BASS, MIDDLE** and **TREBLE** knobs constitute a classic 3-band passive EQ with a mild frequency correction effect.
- 12. **MASTER** controls the volume of the signal coming from the OUT iack.
- VOLUME controls the volume of the signal coming from the PHONES and BALANCED OUT lacks.

The MASTER and VOLUME knobs work independently.

- 14. The **TOP** switch controls the signal's high frequency harmonic content. The "+" position accentuates the highs and the attack. The "-" position provides a milder sound by cutting the high frequencies. The neutral position does not affect the signal in any way.
- 15. The **GND** switch allows to override "ground loops" that can negatively affect the signal when using XLR connections. In the lower position of the switch, the preamp's "ground" is connected to the

signal receiver's "ground". In the middle position, the "grounds" are disconnected. In the upper position, the "grounds" are connected and an additional filter is used to remove interference.

The optimal setting of the GND switch is selected by ear: there should be a minimum amount of 50Hz hum and interference

- 16. The **CAB** switch selects one of the two built-in cabinet impulses recorded from a Fender Twin combo amplifier with two JBL D120F speakers:
- The "A" position selects the impulse recorded by a LOMO 19A19 microphone placed 15 cm away from the edge of the speaker's protective cap.
- · In the middle position, cabinet simulation is disengaged.
- The "B" position selects the impulse recorded by a Sennheiser e609 microphone placed 25 cm away from the center of the speaker.

When using a microSD card, impulses are loaded from the corresponding folder on the card. The CAB switch affects the signal from the BALANCED OUT and the PHONES OUT but does not affect the signal from the main OUT.

## Loading impulses from a microSD card:

Before using a microSD card, make sure it is formatted to the FAT32 filesystem.

When the memory card is used for the first time, a "Shift\_IR" folder is automatically created on it. The folder contains two more folders ("A" and "B", corresponding to the CAB switch positions) in which the default impulses are stored. To use external impulses, replace the default ones with your own files. The supported impulse format is 24bit 48kHZ WAVE PCM1.

To restore the default impulse files, insert a blank microSD card into the device. This will create a "Shift\_IR" folder containing the default files. If no card is inserted, the built-in impulses are used.

# www.shift-line.com/twin



#### SPECIFICATIONS:

Tube type: 12AX7

Memory card type: microSD

IN: 6,3 mm, mono, unbalanced, -20 dB, 1 MOhm input impedance

THRU: 6,3 mm, mono, unbalanced, -20dB, 1 kOhm output impedance

**SEND:** 6,3 mm, mono, unbalanced, -10dB, 1 kOhm output impedance

RETURN: 6,3 mm, mono, unbalanced, -10dB, 1 MOhm input impedance

**OUT:** 6,3 mm, mono, unbalanced, +20dB, 1 kOhm output impedance

BALANCED OUT: XLR, mono, balanced, +10dB, 1 kOhm output impedance

AUX: 3,5 mm, stereo, unbalanced, 0dB, 10 kOhm input impedance

PHONES: 3,5 mm, stereo, unbalanced, +10dB, 10 Ohm output impedance

**POWER IN:** 12v DC 650mA, negative tip, 2.1/5.5 mm diameter. Use only regulated power supply units.

Dimensions (LxWxH): 124x104x55mm (4.9x4.1x2.2")

**Unit weight:** 480 g (1.06 lbs) **PSU weight:** 120 g (0.26 lbs)

## **DELIVERY SET:**

Twin MkIIIS preamplifier;

12V DC 1000mA PSU with 4 changeable plugs;

User guide.

# **IMPORTANT SAFETY INSTRUCTIONS**

Please follow the instructions below so as not to damage the unit.

SHIFT LINE does not accept responsibility for any damage caused by not following these instructions. When transporting or storing the unit at temperatures below 0 C, it is necessary to keep the unit at room temperature for at least 1 hour before switching it on. When connecting the unit to other equipment, use cables specifically designed for this type of connection. Do not use faulty or damaged cables.



# **DANGER! HIGH VOLTAGE!**

DO NOT DISASSEMBLE THE UNIT ON YOUR OWN! DO NOT SWITCH ON AN OPENED-UP UNIT! DO NOT SWITCH ON THE UNIT IF THE 12AX7 TUBE IS NOT INSTALLED.

# CONNECTING AN EXTERNAL POWER SUPPLY ADAPTER:

Plug in the external power supply adapter only after assembling the whole signal chain! Before using the adapter, make sure that its body, connecting cable and plug function properly and are not damaged. First, plug the adapter into an electric mains socket, then connect the adapter's low-voltage jack to the power supply input on the unit's left side panel.

#### DISCONNECTING THE EXTERNAL POWER SUPPLY ADAPTER:

Unplug the external power supply adapter from the electric mains socket, then disconnect the adapter's low-voltage jack from the power supply input on the unit's left side panel.

### REPLACING THE TUBE:

Disconnect the unit from the power supply and wait at least 3 minutes. Remove the 4 screws holding the unit's back panel. Take out the buffer holding the tube in place. Remove the tube by gently rocking it from side to side; do not apply any extra force! Insert the new tube (12AX7 or its analogue). Put the buffer back in its place. Close the back panel and secure it in place with the 4 screws.