

# POWER SUPPLY + BUFFER

## User Manual



Thank you for buying one of our products!

Please read and understand all safety instructions in this manual carefully before you use the product. This manual is only for instruction purposes, the actual operation of the product may differ.

Thank you!

Connecting different effects in series or parallel may have good or bad effects, depending on their circuitry. One of the most common problems is the loss high frequency caused by too many connections and long cables. There may also be noise caused by ground loops, due to the use of multiple parallel power cables to connect multiple effects, which can create ground loops between the effects. Ground loops will introduce noise from other magnetic fields into our effects chain and may cause unstable operation of the equipment. Noises are amplified by the devices in the loop, resulting in excessive noise at the output.

A solution for these problems is to keep each device's power supply independent by using a DC power supply with truly independent outputs to power your devices. To solve the high frequency loss caused by too many connections and long cables, users can use the high input impedance / low output impedance characteristics of a BUFFER circuit to transmit the signal with almost no attenuation.

To solve these problems, we have designed a power supply system with independently isolated outputs and we have included a buffer circuit:

- Fully independent and isolated power supplies provide quiet, noiseless DC power for a variety of pedal types in a small footprint device.
- Whether you need a space-saving solution for a small travel pedal board or you are looking for a small, reliable power supply - this device will meet your requirements.
- This power supply unit is equipped with 10 DC outputs, each fully isolated to eliminate annoying ground loop noise: 1 USB output 5 V / 800 mA, 1 x 18 V / 100 mA, 2 x 9 V / 500 mA, 2 x 9 V / 300 mA, 4 x 9 V / 200 mA.
- Each power supply interface is equipped with an LED light, so users have a clear indication of the usage situation in any environment.
- The power supply is also equipped with an integrated buffer circuit, which can be used to optimize the operation of other devices.

### Precautions for safe operation

1. Please disconnect the AC power supply to the device when not in use.
2. Please confirm that the AC power adapter is connected to the IN input before you use the device. A wrong connection may cause damage to the device.
3. Please do not use AC power adapters obtained from other sources, such as power adapters that are not professionally tested and certified. They may cause damage to the equipment. The user is responsible for using the correct power supply.
4. The output ports of the device are protected against overload and short circuit. If you are not sure how much current is required by your equipment, you should reduce the load on each output to ensure that the overload protection is not triggered during use.

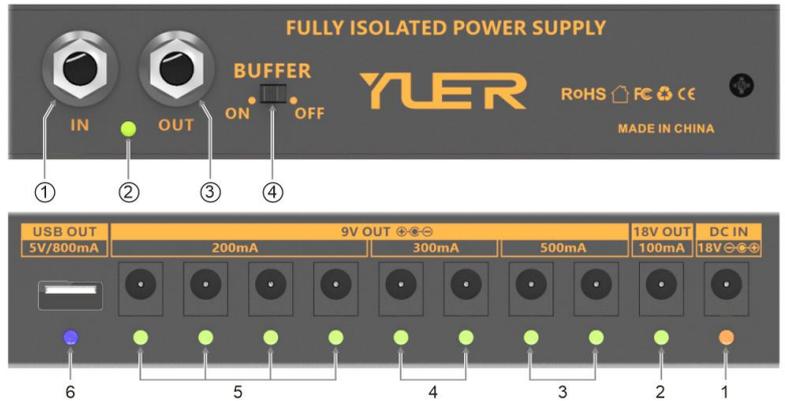
### Detailed safety instructions

1. Use only within the voltage and current range specified on this power supply.
2. Only use the supplied AC power adapter and DC adapter cables.
3. Do not use this product in humid environment such as rain, water mist, etc. Avoid splashing liquid on the device.
4. Please avoid any foreign objects (paper, plastic or metal, etc.) from being inserted or falling into any gaps or openings of this product.
5. Please do not use excessive force when handling the product to avoid damage to the product.
6. If the surface of the product needs to be cleaned, please wipe it with a clean, dry cloth. Please do not use liquid cleaners such as benzene, detergent, flammable polish, etc.
7. This symbol is used to warn the user that it is forbidden to move a removable rack with the power supply device on the top without protection measures. This is to prevent the device on the top from falling and causing personal injury. In your own interest, please only use movable rack systems, tripods, fixed frames, consoles or other accessories produced or recommended by the manufacturer.
8. Do not open this equipment or attempt to disassemble or modify internal parts in any way. This equipment does not contain any parts that can be repaired by the user. If any abnormality occurs, please stop using it immediately and consult professional maintenance personnel.
9. Please do not dispose of the equipment together with household garbage. Correct disposal can reduce environmental pollution and health hazards. The correct disposal method varies from place to place, so please contact relevant local organizations for details.
10. This product is manufactured according to strict product specifications and is only available in certain areas. If you purchase the device via the Internet, mail order or telephone sales, please verify that the product is available in your area. Use of this product in any unverified area is hazardous and no longer covered by the manufacturer's or distributor's warranty rights. Please also keep the invoice as proof of purchase; otherwise you will not be entitled to the manufacturer's or distributor's warranty.
11. Disassembly of the product by non-authorized personnel is strictly forbidden. Do not use or install alternative devices with the product or perform any unauthorized modifications. There are no parts inside the product that can be maintained by the operator. If you need repair service, please contact a trained professional.
12. Please refer to the specific warnings or precautions in this manual to avoid personal injury or product damage.



## Names and functions of components

1. BUFFER input 1/4" mono connector.
2. BUFFER working indicator, green LED when on, LED off when off.
3. BUFFER output 1/4" mono connector.
4. BUFFER switch: turn BUFFER function on or off, TRUE BYPASS when off



1. 18 VDC input port, plug the output of AC power adapter in here. Orange indicator LED with correct function. LED off in if short circuit or polarity protection is triggered.
2. 18 V / 100 mA DC, center negative, output socket. The maximum output current is 100 mA, Green indicator LED with correct function. LED off in if short circuit or polarity protection is triggered.
3. 9 V / 500 mA DC, center negative, output sockets. The maximum output current is 500 mA, Green indicator LED with correct function. LED off in if short circuit or polarity protection is triggered.
4. 9 V / 300 mA DC, center negative, output sockets. The maximum output current is 300 mA, Green indicator LED with correct function. LED off in if short circuit or polarity protection is triggered.
5. 9 V / 200 mA DC, center negative, output sockets. The maximum output current is 200 mA, Green indicator LED with correct function. LED off in if short circuit or polarity protection is triggered.
6. Standard USB-A socket, +5 VDC power output. The maximum output current is 800 mA. Blue indicator LED with correct function. LED off in if short circuit or polarity protection is triggered.

Note: In case of serious overload or a short-circuit, independent protection measures are triggered for each individual output interface. The respective output will be turned off. Please disconnect the connection as soon as possible and verify that the connected device meets the parameters for the output interface.

## BUFFER use (for instruction purposes only, actual operation may differ):

1. Connect the buffer between your guitar and other effects to suppress the loss of signal and external interference caused by excessive cable length.
2. Connect the buffer between your effects and the amplifier to enhance the sound of the equipment connected before the BUFFER and eliminate unnecessary noise.
3. Add a BUFFER before and after your effects chain.
4. Activate the BUFFER according to your tonal preferences.

## How to connect



- Packing list**
- Power supply: 1 piece (dimensions: 160x60x32 mm, weight: 400 g)
  - DC cable: 9 pieces (plug size: outside diameter: 5.5 mm, inside diameter: 2.1 mm)
  - AC Adapter: 1 piece
  - Owner's manual: 1 piece