# SS-1 Pro / SS-1

Audio Grade Network Switch

# User Manual

MATRIX AUDIO | 矩声®

# Catalog
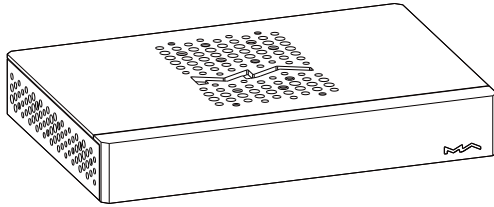
Product
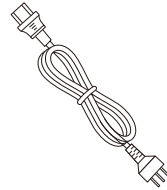
Power cable
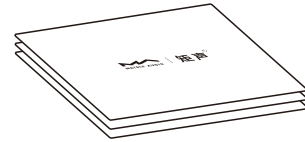
Quick start guide & warranty card

## Front



**1** **Power Status indicator LED**
The indicator LED will flash when the device is starting up. After the device is initialized, the LED will stay on.

**2** **Clock mode indicator LED** (Exclusively on SS-1 Pro)
INT indicates the device is operating in internal clock mode, while EXT denotes external clock mode. A flashing LED suggests that the clock signal is not locked, whereas a steady LED indicates a stable clock signal.

## Rear
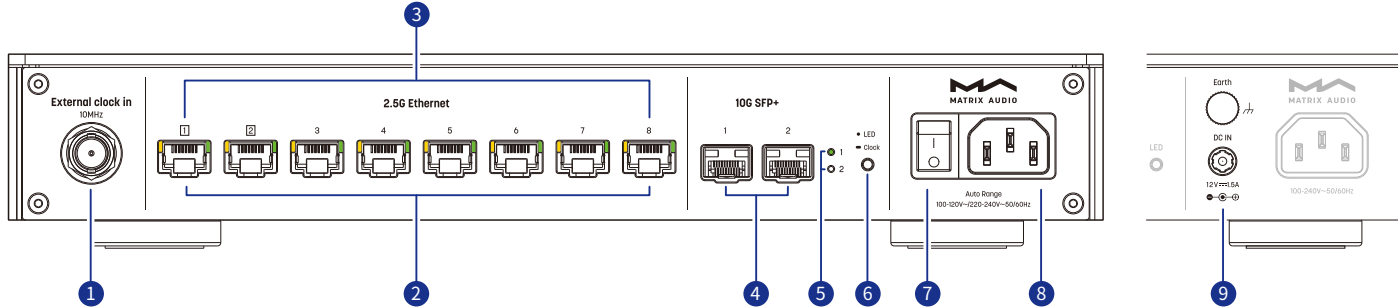


1. **External clock input** (Exclusively on SS-1 Pro)
   If you want to use an external clock source, connect the external clock to the device through a 50Ω impedance coaxial cable, and set the device to "External clock" mode.

2. **Ethernet ports**
   SS-1/SS-1 Pro has two RJ45 ports with speeds up to 100Mbps (ports marked 1 and 2).
   SS-1 Pro has six RJ45 ports with speeds up to 2.5Gbps.
   SS-1 has four RJ45 ports with speeds up to 2.5Gbps.

3. **Ethernet indicator LED**
   The green LED indicates that a 2.5Gbps link is connected; when flashing, it signifies data is being transferred.
   The yellow LED indicates that a 10/100/1000Mbps link is connected; when flashing, it signifies data is being transferred.

4. **SFP ports**
   Two 10Gbps SFP/SFP+ ports.

5. **SFP indicator LED**
   The green LED indicates that the link is connected; when flashing, it signifies data is being transferred.

6. **Setting button**
   Set the LED indicators on the rear panel
   Press this button once while the device is on to turn all the LED indicators on or off, preventing light interference in dark environments caused by LED flickering.

Set the clock mode (Exclusively on SS-1 Pro)
Press and hold this button for about 2 seconds while the device is on to switch clock modes. The LED indicator of corresponding clock mode on the front panel will light up after the switch. The device will automatically reboot after switching the clock mode. The network connection will be disconnected for tens of seconds.

7. **Power switch** (Exclusively on SS-1 Pro)

8. **Power input: AC input**
   Please use a power cable which includes an earth wire and ensure you have a reliable earth wire connection. Otherwise, the casing of the device may have a slightly charged touch.

9. **Power input: DC input** (Exclusively on SS-1)
   SS-1 has a built-in switching power, and a DC input is reserved for an external power to upgrade the power supply. When a DC input is attached, the internal AC input of the device will be disconnected.
   When the device is using DC power input, if the device needs to be grounded, please connect the ground wire to the ground screw on the rear panel.
   External power supply: DC 12V ±10%
   Power wattage: Larger than 18W
   Power plug: Outer diameter 5.5mm; inner diameter 2.1mm (+ for inner, - for outer)
   Note: Please pay attention to the polarity of the external power plug. Do not connect a power supply higher than 12V to the device to avoid damage to the device.

# Technical specifications

### Standards and Protocol
- IEEE 802.3：10BASE—T
- IEEE 802.3 u：100BASE-X
- IEEE 802.3 z：1000BASE-T
- IEEE 802.3 ab：1000BASE-T
- IEEE 802.3 ae：10G BASE-SR/LR
- IEEE 802.3 bz：2.5G/5G BASE-T
- IEEE 802.3 cb：2500BASE-X

### Ports
SS-1 Pro
- 100Mbps/10Mbps RJ45 x2
- 2.5Gbps/1Gbps/100Mbps/10Mbps RJ45 x6
- 10Gbps SFP/SFP+ x2

SS-1
- 100Mbps/10Mbps RJ45 x2
- 2.5Gbps/1Gbps/100Mbps/10Mbps RJ45 x4
- 10Gbps SFP/SFP+ x2

### External Clock Input  (Exclusively on SS-1 Pro)
- 10MHz / 50Ω impedance / Sine wave or square wave input

### LED Indicators
- System LED - Power/Status indicator LED x1
- System LED - Clock mode indicator LED x2
- Port LED - Speed, Link & Activity LEDs

### Max MAC entries
- 16K MAC address table

### Power Specs
SS-1 Pro
AC input
- Auto voltage range linear power supply
- Power Voltage: AC 100V-120V 50/60Hz / AC 220V-240V 50/60Hz. Voltage auto adaptive.
- Power Consumption: < 15W

SS-1
AC input
- Wide voltage switching power supply
- Power Voltage: AC 100V-240V 50/60Hz
- Power Consumption: < 15W

DC input
- External power voltage: DC 12V ±10%
- External power wattage: Larger than 18W
- Power plug: Outer diameter 5.5mm; inner diameter 2.1mm (+ for inner, - for outer)

### Weight & size
SS-1 Pro

**Weight:**
- 3.4kg (7.50 pounds)

**Size:**
- Width：330 mm (12.99 inches)
- Depth：235 mm (9.25 inches)
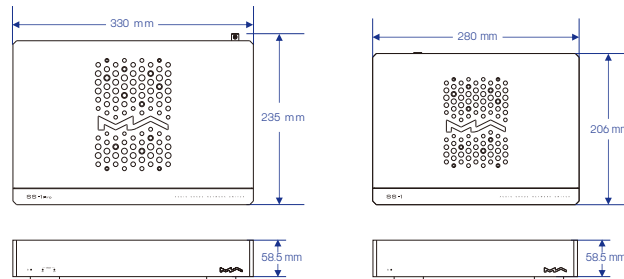- Height：58.5 mm (2.30 inches)

SS-1

**Weight:**
- 2.3kg (5.07 pounds)

**Size:**
- Width: 280 mm (11.02 inches)
- Depth: 206 mm (8.11 inches)
- Height: 58.5 mm (2.30 inches)



* For improvement purpose, specifications subject to changes without prior notice.

- This product is for indoor use only.

- For full ventilation, it is recommended to reserve a space of larger than 5 cm around the device.

- Do not cover the air vents with stuffs such as papers, tablecloths, and curtains to obstruct ventilation.

- Do not place stuff with flame, such as lighted candles, on the device.

- If the device is used in tropical areas, please be careful to prevent insects from entering the unit through the   air vents.

- The device must not be subject to water droplets or splashes. Please do not place stuffs filled with liquids such as vases and cups on or near the device.

# MA | 矩声®

MATRIX AUDIO