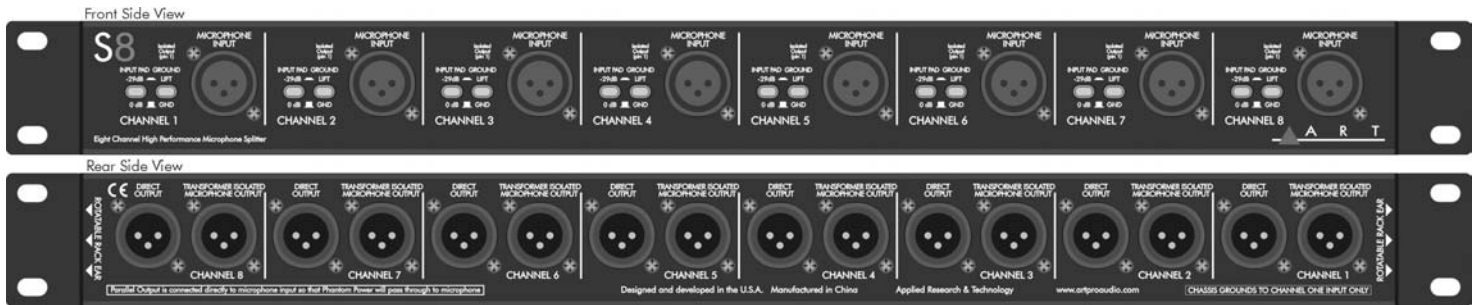


# ART S8 User Manual

## Eight Channel High Performance Microphone Splitter



Use the S8 to split eight balanced low impedance microphone signals into sixteen balanced low impedance microphone signals (eight pairs). Each channel of the S8 provides one direct output and one transformer isolated output from a single microphone. Applications include sending the direct outputs to the main or FOH (Front Of House) mixer, and the second isolated outputs being sent to a monitor or recording mixer. The direct outputs pass phantom power from the main mixer to the microphones for use with condenser microphones.

The S8 includes a ground-lift switch on each isolated output to reduce noise due to ground loops between connected equipment. For versatility the S8 also features an attenuator pad switch on each input that can be used to connect preamplified signals to the two microphone-level S8 outputs on each channel. Typically, preamplified signals would originate from instrument preamplifiers, mixers, keyboards, etc.

Rack mounting ears are reversible for flexibility in system cabling. The 19" 1U black all steel case and its all passive design allow the S8 to provide years of trouble free service.

### SPECIFICATIONS:

NOTE: All measurements made from TRANSFORMER ISOLATED MICROPHONE OUTPUT with PAD SWITCH out (off) and 150 Ohm balanced source feeding MICROPHONE INPUT and 1K Ohm load connected to TRANSFORMER ISOLATED MICROPHONE OUTPUT to simulate a typical "real world" microphone and mic preamplifier.

- FREQUENCY RESPONSE: 20 Hz to 20K Hz,  $\pm 0.25$  dB @ -15 dBu, -3 dB at approximately 165K Hz
- TOTAL HARMONIC DISTORTION: Less than 0.26% from 20 Hz to 20K Hz at -15 dBu input  
Less than 0.1% from 45 Hz to 20K Hz at -15 dBu input  
0.002% Typical at 1K Hz, -15 dBu input
- PHASE RESPONSE: Less than 10 degrees at 20K Hz (ref. 1K Hz)
- INPUT IMPEDANCE: Greater than 1.1K Ohms at 1K Hz (Typical driving source impedance is 150 Ohms)
- OUTPUT IMPEDANCE: Less than 255 Ohms at 1K Hz (Typical output load impedance is 1K Ohms)
- COMMON MODE REJECTION RATIO: Greater than 105 dB @ 60 Hz, Greater than 80 dB @ 3K Hz
- VOLTAGE INSERTION LOSS: Approximately 2 dB at 1K Hz
- MAXIMUM INPUT LEVEL FOR 1% THD: -1.4 dBu at 20 Hz, +3.5 dBu at 30 Hz, +9.4 dBu at 50 Hz
- DIMENSIONS: 1.75"H x 19"W x 3.75"D (44.5mm x 482.6mm x 95mm)
- WEIGHT: 3.75 lbs. (1.7 kg)  
Ref: 0 dBu = 0.775 VRMS

### USAGE:

Connect low impedance dynamic or condenser microphone to any MICROPHONE INPUT on the S8.

(Alternatively connect line level signal to any MICROPHONE INPUT and engage corresponding front panel INPUT PAD switch.)

Connect corresponding DIRECT MICROPHONE OUTPUT to mic input on main mixer (switch phantom power on at mixer if desired).

Connect corresponding TRANSFORMER ISOLATED MICROPHONE OUTPUT to mic input on secondary mixer or recording system.

Set GROUND switches to LIFT or GND. Use whichever setting provides lowest noise performance.

NOTE: The chassis ground connects to the Channel One input ground only, in order to reduce the possibility of channel crosstalk through chassis ground. To provide the noise-shielding benefit of the chassis enclosure when the S8 is not mounted in a grounded rack system, be sure to use the Channel One input when using fewer than eight channel input connections.

## IMPORTANT SAFETY INSTRUCTION – READ FIRST



This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Please read the manual.

### **Read instructions:**

Retain these safety and operating instructions for future reference. Heed all warnings printed here and on the equipment. Follow the operating instructions printed in this user guide.

### **Do not open:**

There are no user serviceable parts inside. Refer any service work to qualified technical personnel only.

### **Moisture:**

To reduce the risk of fire or electrical shock do not expose the unit to rain, moisture or use in damp or wet conditions. Do not place container of liquid on it, which may spill into any openings.

### **Environment:**

Protect from excessive dirt, dust, heat, and vibration when operating and storing. Avoid tobacco ash, drink spillage and smoke, especially that associated with smoke machines.

### **Handling:**

To prevent damage to the controls and cosmetics avoid rough handling and excessive vibration. Protect the controls from damage during transit. Use adequate padding if you need to ship the unit. To avoid injury to yourself or damage to the equipment take care when lifting, moving or carrying the unit.

### **Servicing:**

Refer servicing to qualified technical personnel only.

## WARRANTY INFORMATION

### **Limited Warranty**

Applied Research and Technology will provide warranty and service for this unit in accordance with the following warrants:

Applied Research and Technology, (A R T) warrants to the original purchaser that this product and the components thereof will be free from defects in workmanship and materials for a period of three years from the date of purchase. Applied Research and Technology will, without charge, repair or replace, at its option, defective product or component parts upon prepaid delivery to the factory service department or authorized service center, accompanied by proof of purchase date in the form of a valid sales receipt.

### **Exclusions:**

This warranty does not apply in the event of misuse or abuse of the product or as a result of unauthorized alterations or repairs. This warranty is void if the serial number is altered, defaced, or removed.

A R T reserves the right to make changes in design or make additions to or improvements upon this product without any obligation to install the same on products previously manufactured.

A R T shall not be liable for any consequential damages, including without limitation damages resulting from loss of use. Some states do not allow limitations of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific rights and you may have other rights, which vary, from state to state.

For units purchased outside the United States, an authorized distributor of Applied Research and Technology will provide service.

### **SERVICE:**

The following information is provided in the unlikely event that your unit requires service.

- 1) Be sure that the unit is the cause of the problem. Check to make sure the unit has power, all cables are connected correctly, and the cables themselves are in working condition. You may want to consult with your dealer for assistance in troubleshooting or testing your particular configuration.
- 2) If you believe the ART unit is at fault, go to [www.artproaudio.com](http://www.artproaudio.com). You may contact Customer Service for more assistance, or directly request a Return Authorization for service in the "resources" area of the website.
- 3) If you are returning the unit for service, pack the unit in its original carton or a reasonable substitute. The original packaging may not be suitable as a shipping carton, so consider putting the packaged unit in another box for shipping. Print the RA number clearly on the outside of the shipping box.
- 4) Include, with your unit, a note with the RA number and your contact information including a daytime phone number, preferably attached to the top of the unit.