
A96F -- Line Matching Transformer

General Description

This transformer connects microphones with an XLR-type connector to the 3.5 mm (1/8 in.) inputs found on camcorders and other recording devices. It increases the signal level from the microphone, provides a balanced input, and prevents distortion due to the d.c. bias typically found in camcorder microphone inputs.

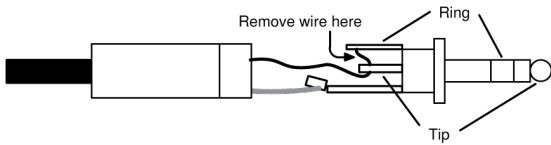
Impedance Selection

The A96F can be modified for microphones rated at 150 Ω . This modification is only necessary if the output level from the A96F is insufficient for your recording device. Use the following steps:

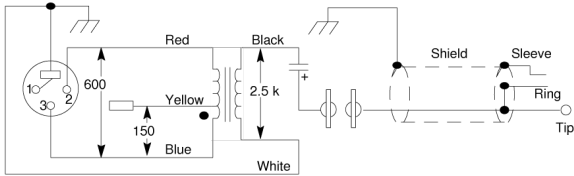
1. Access the wiring in the XLR plug element of the A96F by loosening the screw and sliding the plug from the case.
2. Unsolder the RED lead from pin 2. Insulate the bare wire at the end of the lead with the insulator from the YELLOW lead.
3. Solder the YELLOW lead to pin 2.
4. Rotate the plug element three turns to twist the leads and replace the element in the housing. Replace the screw.

Troubleshooting

1. Unscrew the housing from the miniature plug on the A96F to expose the wires inside the connector.
2. Use wire clippers to cut and remove the wire between the tip and ring leads (see figure below). Make sure to remove the wire completely from between the leads so that there is no contact between the tip and ring.
3. Reassemble the plug.



If the microphone still does not work, contact Shure Application Engineering at 1-800-516-2525. Please have the camcorder user's guide available.



Wiring Diagram

Frequency Response

20 to 20,000 Hz \pm 2 dB

Impedance

| | |
|------------------|---|
| Low Impedance | 600 Ω (supplied) or 150 Ω |
| Medium impedance | 2,500 Ω |

DC Resistance

| | | |
|------------------|----------------------|--------------|
| Low Impedance | 600 Ω winding | 56 Ω |
| | 150 Ω winding | 28 Ω |
| Medium impedance | | Open circuit |

Voltage Ratio

Low Impedance to Medium impedance

| | |
|--------------|--------|
| 600 Ω | +6 dB |
| 150 Ω | +12 dB |

Maximum Input Level

Housing

Full magnetic shield, steel with gray enamel finish

Dimensions

19 mm (3/4 in.) diameter; 89 mm (3.5 in.) long