

# Model A15BT User Guide BRIDGING TRANSFORMER

The A15BT matches, bridges, or isolates balanced and unbalanced devices of different impedances and levels.

Impedance: XLR socket (Female), 33,000Ω

XLR plug (Male),  $7500\Omega$ , easily converted to  $600\Omega$ .

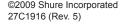
Unbalancing: Either end can be unbalanced by connecting pins 1 and 3.

Voltage difference: From  $33,000\Omega$  to  $7500\Omega$ , 6.4 dB From  $33,000\Omega$  to  $600\Omega$ , 17.4 dB.

#### MEDIUM-IMPEDANCE SELECTION

As supplied, the A15BT XLR plug is at  $7500\Omega$ . To convert to  $600\Omega$ , refer to Figure 1 and proceed as follows:

- Remove the three-pin plug element by turning the screw counterclock-wise and withdrawing the element from the case.
- Remove the GREEN lead pin jack from pin 3, and insulate the jack and bare lead.
- Remove the tape from the pin jack on the WHITE lead and push the jack firmly onto pin 3.
- Replace the plug element in the housing and fasten the screw firmly in place (turn clockwise).







### TYPICAL APPLICATIONS

To connect the 600 line output of a preamplifier, mixer, or recorder to a high-level, highimpedance, unbalanced (Aux) input:

Connect the  $600\Omega$  output to the  $33,000\Omega$  XLR socket of the A15BT. Unbalance the XLR plug on the A15BT and convert it to  $7500\Omega$  or  $600\Omega$  to provide the proper level and best signalto-noise ratio. Connect the A15BT to the Aux input. In this configuration, the A15BT "bridges" the  $600\Omega$  line output. Refer to the table on the back page for the maximum input level to the A15BT

To match a high-impedance microphone output to a medium-impedance (approximately 10,000 Q) input on a reel-to-reel or cassette recorder. Unbalance both ends of the A15BT. Connect the microphone output to the  $33.000\Omega$  XLR socket. Connect the  $7.500\Omega$  XLR plug to the recorder.

For an unbalanced Aux input to accept a balanced low-impedance output: Unbalance the 33,000Ω XLR socket on the A15BT and connect it to the Aux input. Convert the XLR plug to 75000 or 6000 and connect it to the balanced low-impedance device.

When a balanced 600 line output is needed on a unit with an Aux output (such as the Shure SCM268):

Unbalance the A15BT 33.000Ω XLR socket and connect it to the Aux output. The A15BT XLR plug offers a balanced line output at both  $600\Omega$  (at about a -20 dBm level) and  $7500\Omega$ .

#### SPECIFICATIONS

### Frequency Response

20 to 20,000 Hz (See Figure below)



FOR 600~LOAD, WITH INTERNAL WIRING CHANGED TO 600 A, ABOVE CURVES APPLY BUT ALL LEVELS WILL BE APPROXIMATELY IIdB LOWER.

TYPICAL FREQUENCY RESPONSE

### Impedance

XLR Pin Connector (M):

7500Ω or 600Ω 33.000Ω

XLR Socket Connector (F):

Voltage Ratio

 $\underline{7500~\Omega} \qquad \underline{600~\Omega}$ 

Medium-impedance to high-impedance:

+6.4 dB

+17.4 dB

High-impedance to

\_6 4 dB

\_17 4 dB

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Driving Source	Winding Being	Maximum
Impedance (ohms)	Driven (ohms)	Level (Volts)
600	600	0.5
600	7,500	2.5
600	33,000	6.0
7,500	7,500	1.5
7,500	33,000	5.0
33,000	33,000	5.0

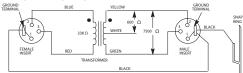
## Case

Full magnetic shield, steel with gray enamel finish

# Dimensions

19 mm (3/4 in.) diameter; 89 mm (3 1/2 in.) long

### CONNECTOR WIRING DIAGRAM



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If you believe this product is defective within the warranty period, carefully repack the unit, insure it and return it with proof of purchase, postage prepaid, to Shure Incorporated, Attention: Service Department, at the address helow

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