

AMP109J Pair Tracing probe

OPERATING INSTRUCTIONS



Battery Installation

AMP109J requires a 9 volt (PP3 or IEC 6LR61) battery. ONLY Alkaline batteries are recommended.

To change the battery, release the two screws on the underside. Do not attempt to enter the rest of the case you will damage the sealing and will void the warranty.

To avoid ingress of water ensure that the gasket is correctly seated when refitting battery cover.

Operation

Your AMP109J has only one pushbutton control. Press and hold for half a second to switch on. You'll hear a high beep to confirm. Press and hold again for half a second to switch off. You'll hear a lower beep to confirm.

When first switched on the AMP109J is in high sensitivity mode. Change the setting by pressing the button quickly. A confirmation tone is produced: BEEP = low sensitivity, BEEP, BEEP = high sensitivity.

Timeout

To conserve the battery AMP109J will switch off after five minutes.

At the end of the timeout period the AMP109J will shutdown after producing a sign off tone consisting of three beeps followed by a higher pitched beep.

Battery low

If the battery voltage drops during operation, an audible indication is given. This indication will also be given each time the unit is switched on if the battery is low. This is three falling tones.

When you have heard this for the first time you will have about two hours continuous operation remaining.

Headset operation

Plug in a suitable headset. Headset No. 7 or 8, or Receiver Headgear 17 or 18. **SAFETY: Use of other headphones may result in the user's audio exposure exceeding safe limits.** Operation is identical to using the probe on its own. The loudspeaker will be switched off to prevent disturbing others. If the socket gets dirty, just clean it with a brush.

Compatibility

AMP109J will work with any Oscillator 87 or Oscillator 99.

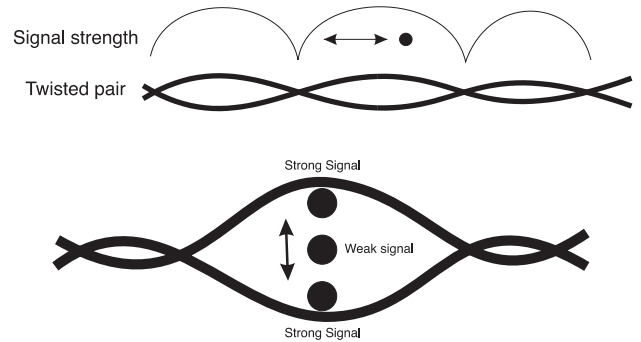


Pair tracing

Amplifier 109J detects the electrostatic field around the wire pair and reproduces this after filtering to remove mains interference.

In most circumstances the low sensitivity setting will work well but if the signal is weak or noisy then choosing the higher sensitivity setting may help. Use a headset in a noisy environment.

Placing the probe alongside the pair gives a strong signal except where the wires cross. Here there should be a noticeable null. Move the probe back and forth along the wire to confirm this.



Placing the tip in the centre of an opened twist of the pair should give a minimum signal. If it does not decrease suspect a split pair (two wires from different pairs) or a faulty pair one wire broken or high resistance.

Shorting the pair should cause the signal to completely disappear or fall to a very low level. This verifies that you have the right pair.

The weatherproof packaging of the unit will ensure that the unit is not damaged by moisture. However, care should be taken to shake off excess water from the unit prior to use to avoid feedback from the output of the unit to the probe tip.

Note: Amplifier 109J is not is designed for cable tracing. For cable tracing use Tester 453A, Item code 315036

Faulty cable pairs

No tone?	=	Suspect it's the wrong cable or a complete cable disconnection or the oscillator is disconnected
Tone on one wire	=	One wire disconnection
Low tone on one wire and full tone on other	=	High resistance fault on low level wire
Power hum on pair with tone	=	Earth (ground) fault on one or both wires
Power hum only	=	Disconnection and earth fault
Noise with tone	=	Crosstalk (severe cable fault) or earth fault
Can't kill tone with a short	=	One wire is disconnected or part of another pair or there is a high resistance fault on one wire.
Hiss from adjacent pair	=	ISDN or other digital service or baseband modem transmission DO NOT INTERCEPT.
Continuous tone	=	Dying battery on the oscillator

Accessories



RECEIVER HEADGEAR 17A
ITEM CODE 377051



RECEIVER HEADGEAR 18A
ITEM CODE 377052



ADAPTOR TEST 3A
ITEM CODE 141735

Battery: 6LF22 (item code 171419) or 6LR61 (item code 192316) : 9 volt.