Intelix AVO-A2-WP110-UK
Installation Manual

Introduction

The Intelix AVO-A2-WP110-UK wallplate balun transmits two mono or one stereo analog audio signal over standard unshielded twisted pair cabling, such as Cat 5 or Cat 6. Used in pairs or with a compatible Intelix balun, the AVO-A2-WP110-UK transmits analog audio in either direction up to 2,500 feet and is ideal for corporate A/V, churches, schools, auditoriums, and almost any other situation involving audio distribution.

The AVO-A2-WP110-UK features two female RCA connectors on the front and a 110 punch-down termination on the rear. The unit includes a 110 termination tool.

The Intelix **AvoCat** Series of baluns is the ideal solution for sending audio and video over structured cabling. **When signal quality matters, choose Intelix.**

Installation

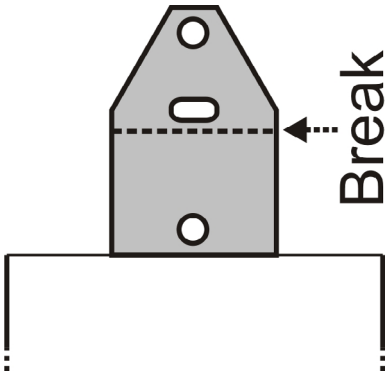
Caution: Do not attempt to disassemble or alter the balun housing. There are no user-serviceable parts inside the unit. Doing so will void your warranty.

To install the Intelix AVO-A2-WP110-UK balun, perform the following steps:

1. Turn off power and disconnect the audio equipment by following the manufacturer's instructions.
2. Make certain that outlets and cross connects to which you will connect the AVO-A2-WP110-UK are configured properly and labeled correctly to identify the point-to-point circuit.

Caution: Do not connect the balun to a telecommunication outlet wired to unrelated equipment. Doing so may damage the unit or any connected equipment. Ensure all connected twisted pair cabling is straight-through (point-to-point).

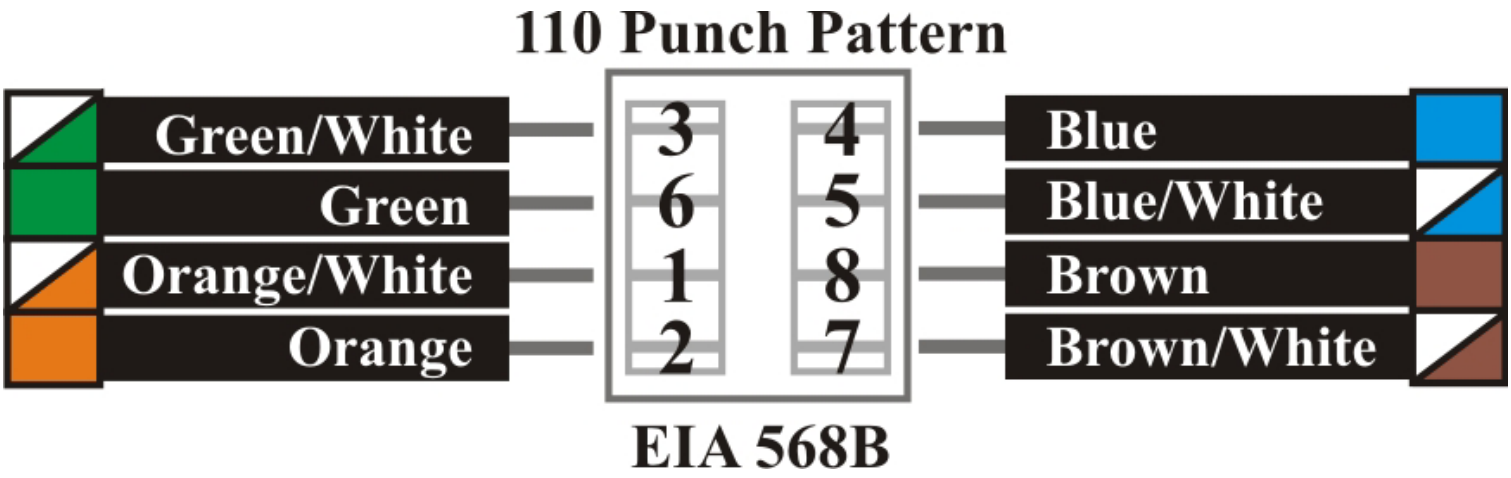
3. Verify the desired twisted pairs are not being used for other LAN or telephony equipment.
4. Prepare the balun housing by removing the optional extension wings. Snap the wing along the break line.
5. Connect the AVO-A2-WP110-UK to a twisted pair cable, such as Cat 5 or Cat 6. Verify the pinout on the balun conforms to EIA/TIA 568B standards, as labeled on the balun.



Caution: Do not strip the jacket from the individual wires in the twisted pair cable. The 110 punch-down connector will strip the wire jacket during termination. Stripping the jacket may result in shorts.

Caution: When connecting twisted pair cables to the 110 punch-down connector on the balun, care should be taken to keep the wires twisted as close to connector as possible. This will help eliminate stray EMF interference.

6. Mount the AVO-A2-WP110-UK in a wallbox.
7. Connect a second compatible Intelix balun to the opposite end of the twisted pair cable. Verify the pinout on the balun conforms to EIA/TIA 568B standards.
8. Connect the RCA outputs from the source equipment to the first AVO-A2-WP110-UK.
9. Connect the RCA inputs from the receive input to the second compatible Intelix balun.
10. Power on the source and destination equipment and test for correct operation.



Exposing Individual Twisted Pairs

There is no single method when exposing the four individual pairs in twisted pair cabling; however, it does help to have a cable stripping tool designed to strip the cable jacket/insulation.

Begin by stripping back the cable's outer jacket/insulation about an inch (or more depending on whether multiple baluns will be connected to the pairs of a single cable) so that the internal wires are exposed. Be careful not to cut the internal wires when stripping the insulation/jacket. Eight twisted wires and a string should now be visible; the string is unnecessary and may be removed. These eight wires, which when combined form four pairs, connect directly to the 110 punch-down connector on the rear of the balun.

Troubleshooting

If your equipment malfunctions with AVO-A2-WP110-UK baluns in place, follow the troubleshooting procedures below:

1. Perform diagnostics on source and destination equipment following the manufacturer's instructions.
2. Check all connections and the twisted pair cabling system.
3. Verify the 110 punch pattern conforms to EIA 568B standards.
4. Verify the maximum recommended cable distances have not been exceeded.
5. Verify that the twisted pair cable does not run parallel to any power cables.
6. Verify no sources of high EMF interference, such as fluorescent lights or motors are in the vicinity.
7. Verify both the source and destination equipment are grounded on the same ground plain. Verify both have three-prong power connectors.
8. Replace the balun with another balun that is known to be operational.

Technical Specifications

Maximum Distance	2,500 feet
Bandwidth	20 Hz to 20 kHz
Impedance	600 ohms, unbalanced
Isolation	500 V
Nominal Level	1.0 volts
Insertion Loss	1 dB
Common Mode Rejection	Greater than 40 dB
Connectors	Two (2) female RCA to one (1) 110 punch
Temperature	Operating: 32° to 131° F (0° to 55° C) Storage: -4° to 185° F (-20° to 85° C) Humidity: 95% non-condensing
Enclosure	Front: standard UK wallplate Rear: metal
Faceplate Color	White
Dimensions	Front: 8.59 cm x 8.59 cm x 0.64 cm (3.38” x 3.38” x 0.25”) Rear: 3.81 cm x 5.08 cm x 3.18 cm (1.50” x 2.00” x 1.25”)
Shipping Weight	1.0 lbs
Ordering Information	*AVO-A2-WP110-UK* – bulk packaged unit
Included Accessories	110 termination tool
Warranty	2 years

Distances and picture quality may be affected by cable grade, cable quality, source and destination equipment, RF and electrical interference, and cable patches. Intelix specifications are based on straight-through cabling with standard-grade Cat 5.

AVO-A2-WP110-UK
Stereo Audio Balun

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RoHS