

Cross Country Wireless, 7 Thirlmere Grove, BOLTON, BL4 0QB, UK

Email <u>chrism@crosscountrywireless.net</u>
Web page <u>http://www.crosscountrywireless.net</u>

Telephone +44 (0) 1204 410626 Mobile +44 (0) 7752 391908

Yahoo group: http://uk.groups.yahoo.com/group/cross country wireless/

Z Match antenna matching unit FAQs Read this before installation!

Important! The maximum RF power should not exceed 15 W.

Caution! High RF voltages may be present on the antenna terminals when transmitting

What are the specifications?

The Z Match AMU covers from 3.5 to 30 MHz and will match resistive loads of 10 to 5000 ohms to 50 ohms. Reactive components can also be cancelled out. It will also act as a galvanic isolation transformer protecting the station equipment from electrostatic charges on the antenna. The output is balanced and is suitable for feeding balanced antennas and feedlines.

What is the maximum RF power?

The maximum RF power should not exceed 15 W. A gas discharge tube connected across the input provides in-built nearby lightning surge and overpower protection. Excess RF power above 15 W can and will damage the tuning capacitors.



What are the connections?

Looking at the connections with the box lid uppermost the left hand BNC connector is the input from the transceiver or receiver.

The central BNC connector and the terminals are the antenna connections.

How do I connect it?

Connect your transceiver or receiver to the input BNC connector. Open wire or ladder line feeders can be connected to the red and black terminals high impedance output. Coax antenna feeders can be connected to the BNC connector low impedance output.





How do I tune it?

Tune both controls for maximum signal strength on receive then apply RF power on transmit and tune both controls for minimum VSWR at the transmitter. Looking from the front the left hand control is Tune, the right hand one is Load.

Can I connect the BNC shields together?

Yes but we wouldn't recommend it. The Z Match AMU is designed to galvanically isolate the antenna from the transceiver or receiver. It also blocks common mode RF noise on the station mains electrical earth from travelling up the feeder to the antenna. Connecting the two BNC shields together removes the galvanic isolation.

Can I connect two antennas to both outputs at the same time?

We recommend only using one antenna at a time for best performance. The Z Match AMU would match the combined antenna system but it is very unlikely that the power split between two antennas would be equal.

Will it work for short wave listening outside the amateur bands?

Yes it works well. Just tune for maximum signal. The high Q tuned circuit in the Z Match acts as a very effective receiver preselector and will protect your receiver from electrostatic charges on the antenna and nearby lightning surges.

What are the dimensions of the Z Match AMU?

The overall dimensions are 125 mm (L) x 85 mm (W) x 55 mm (H).

What is the weight of the Z Match AMU?

The weight is 192 g.

Where can I get help or advice from other Z Match users?

Join the Cross Country Wireless Yahoo group: http://uk.groups.yahoo.com/group/cross country wireless/