# Labgear — *LAB480W Wideband High Gain Digital Aerial*

**Congratulations on the purchase of your high gain digital aerial. The aerial is ideal for the reception of all available signals in weak and fringe areas. Minimal assembly is required, the booms and reflectors just click into place. The aerial is of a particularly robust construction to ensure a long operating life.**

## Main Features

- Ideal for fringe reception areas
- Tilting mast clamp for easy adjustment
- Unique compact folding design
- Supplied with rubber weather boot and f connector

- Length: 1.08m
- Electronic 75Ω balun
- Connection: F type

## Preparing the downlead

*For optimum results install the aerial using double screened CAI approved digital coax cable and screened coax outlets (not supplied). You will need to fit the coax cable with the F type connector (supplied) to connect to the aerial balun.*

1. Prepare the Coax Cable: Firstly fit the rubber weather boot provided, to the aerial end of the cable. Strip the end of the cable as shown in Fig. 1. Once you have stripped the cable, twist the braid and pull it back on itself, make sure that no braid is touching the copper core, this will cause a short on the cable and you will not get a signal.

2. Fit the F connector: Simply twist the 'F' connector onto the prepared cable end and trim central conductor (Fig. 2).
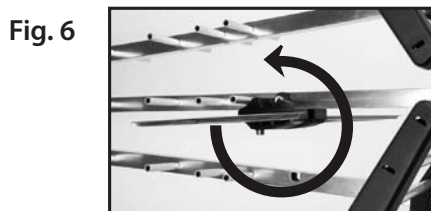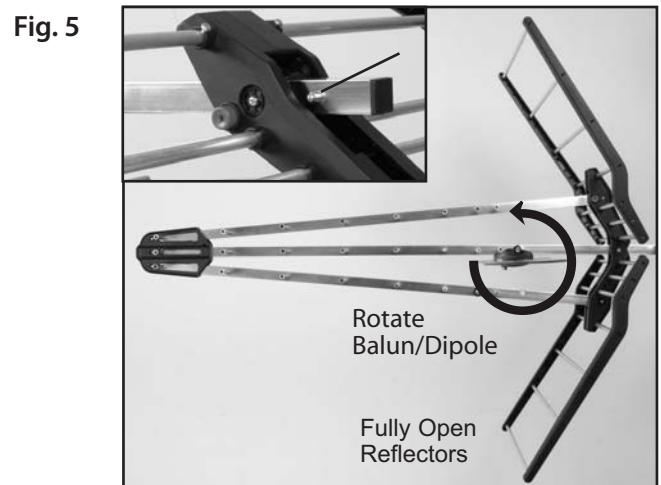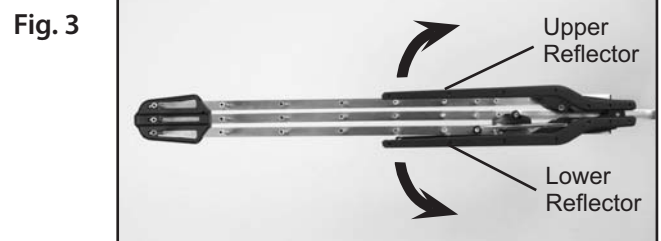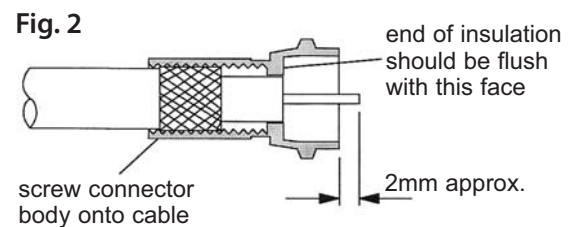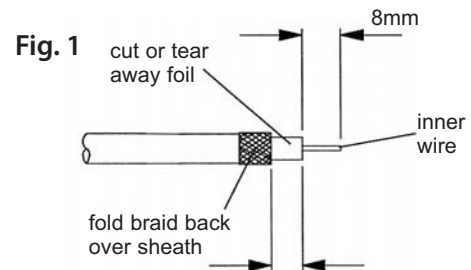
## Aerial Location

For best results the aerial should be mounted on an outdoor aerial mast and pointed in the direction of the nearest transmitter

(see: "Useful Websites for Digital Advice" overleaf) making sure it is in a position where the transmitter signal will not be obstructed by nearby trees and buildings.  If you are in any doubt about the direction in which the aerial should be pointing or the orientation of the aerial (horizontal for main transmitter, vertical for relay transmitter) check your neighbours' aerials.

## Aerial Preparation

1. Gently pull open the reflectors as shown in Figs. 3-4. It is best to do this one at a time. You can tell they are in the fully open position when you hear each of the locating pins shown in Fig. 5 click into position.

2. Next rotate the balun/dipole assembly through 90° until it clips into the upright position on the central boom as shown below. (Fig. 6-8)
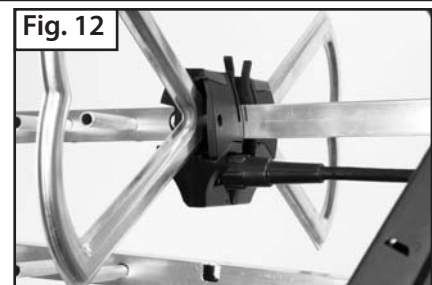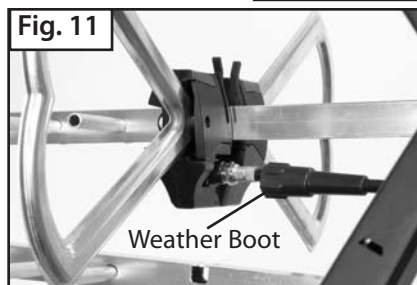
**Fig. 1**
8mm
cut or tear away foil
inner wire
fold braid back over sheath

**Fig. 2**
end of insulation should be flush with this face
screw connector body onto cable
2mm approx.

**Fig. 3**
Upper Reflector
Lower Reflector

**Fig. 4**

**Fig. 5**
Rotate Balun/Dipole
Fully Open Reflectors

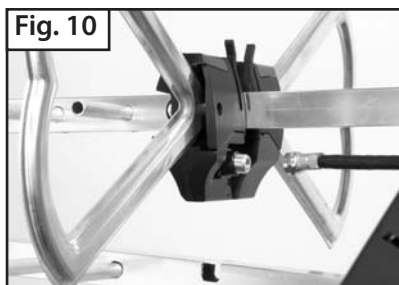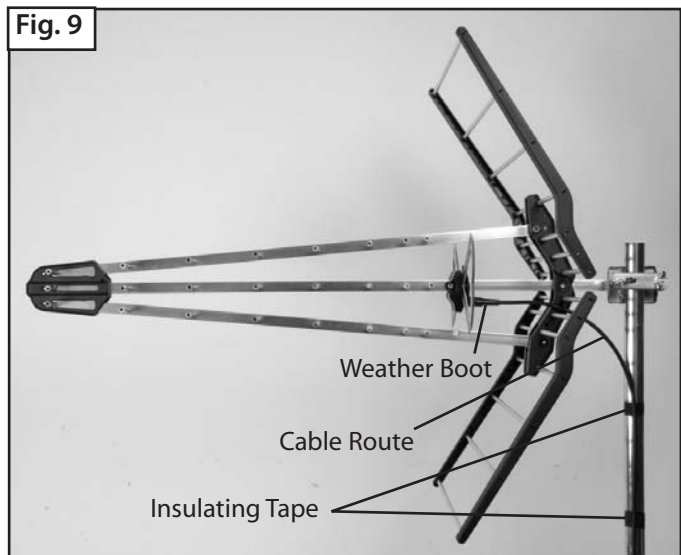**Fig. 6**

**Fig. 7**

**Fig. 8**
Balun/Dipole in Upright Position

## Connecting the downlead

The downlead can be connected before or after mounting your aerial to a mast, according to your preference.

1. Connect the aerial downlead to the 'F' socket on the aerial balun, offer up the cable, with 'F' plug attached, ensuring that its inner wire enters the socket's centre contact. Do not leave the connection finger tight, screw the nut part of the plug onto the connector body and tighten very gently with a spanner (11mm). Do not over tighten as this can damage the balun.

2. Finally, slide the waterproof sleeve (boot) as far as it will go over the connector body, so that it butts up against the balun/dipole housing (see Fig. 10-12).

Please Note: Make sure that the coax cable is routed as shown in Fig. 9 (through the lower reflector but not touching it). Use insulating tape, to secure the coax downlead to the mast.

**Fig. 9**

Weather Boot

Cable Route

Insulating Tape

**Fig. 10**

**Fig. 11**

Weather Boot

**Fig. 12**

## Mounting the aerial on a mast

5. Use the tilting mast clamp supplied to mount the aerial securely to the mast by tightening the wing nuts. (See Fig. 13-14)

6. Adjust the tilt angle and direction to receive the optimum signal. (See Fig. 15)

**Fig. 13**

**Fig. 14**

**Fig. 15**

Loosen nut to tilt
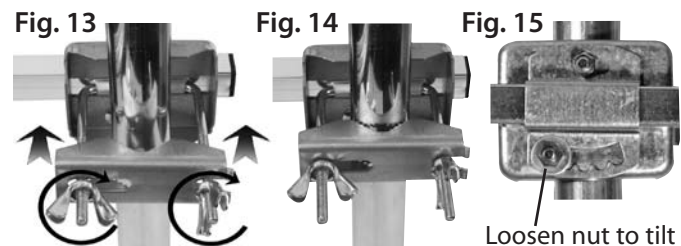
## Folding the aerial

1. If you need to fold down the reflectors, you must first rotate the balun/dipole assembly through 90˚ into a horizontal position on the boom, to do so first release the clips on the top of the balun by pushing them outwards and then rotate as shown in Fig. 16 & 17.

2. To fold down the reflectors press and hold down the two red buttons on either side of the aerial shown in Fig. 18. Then gently fold the reflectors flat.

**Fig. 16**

**Fig. 17**

Rotate Balun/Dipole to Flat Position

**Fig. 18**

Press Red Buttons
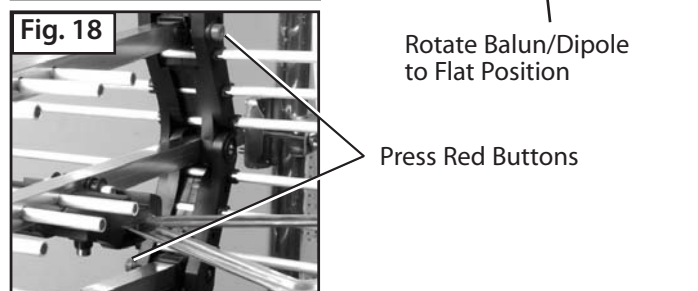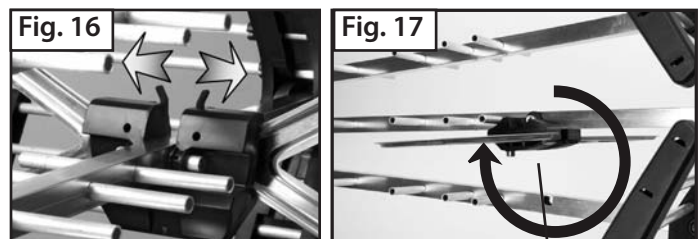
### Troubleshooting
No picture: Check all connections from aerial to the TV.
Poor picture: Check all connections from aerial to TV.
Check aerial is properly aligned to the correct transmitter.
If the aerial has been loft mounted try mounting outside.
Make sure new digital coax cable has been used throughout the installation.
Check the transmitter signal is not obstructed by nearby trees or buildings.
If in a very weak signal area or for long cable runs, installing a masthead amplifier will improve the signal.
If in a strong signal area the signal strength may need to be reduced by fitting an attenuator.

### Caution
When mounting the assembled aerial, always observe safety precautions and use the correct equipment.
Unless you are competent in the use of ladders and other access equipment, do not work outdoors at roof height.
If in any doubt, refer to a qualified aerial installer.

### Useful Websites for Digital Advice:
*To confirm that your home is in a coverage area, to find out which DTT channels should be available locally and to find out where your nearest transmitter is visit:
**www.dtg.org.uk/industry/coverage.html** or **www.digitaluk.co.uk** and enter your postcode. On the dtg site to find out the distance to your nearest transmitter and it's compass bearing select Trade view from the top bar.

*For further information or any queries please contact*
**Customer careline: 08457 573479**
**Local Rate - UK Only**
www.labgear.co.uk