

# High Gain Wideband Digital Aerial

## 27884LAB

# Labgear

## USER GUIDE

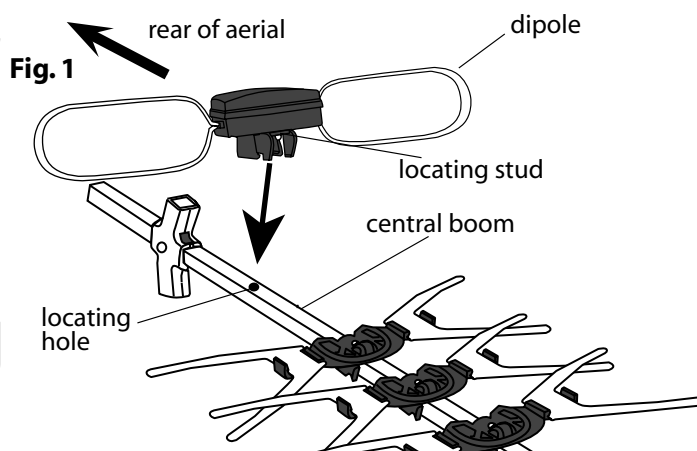
Congratulations on the purchase of your high gain wideband aerial which is designed to receive both analogue and digital terrestrial signals. This aerial has been manufactured to the standard required to get the best reception of digital terrestrial TV services (such as Freeview™). If the aerial is to be used for DTT reception check before installation at [www.dtg.org.uk/retailer/coverage](http://www.dtg.org.uk/retailer/coverage) to confirm that your home is in a coverage area and to find where your local transmitter is. For optimum results install the aerial using double screened digital coax cable and screened coax outlets.

### Main Features

- Wideband - suitable for all UK TV reception areas, covering UHF channels 21 to 68
  - Receives both digital and analogue TV signals
  - Perfect for use in the majority of locations although in very high strength signal areas an attenuator may be required, or for very weak strength signal areas an amplifier may be needed
- The aerial requires some assembly - please read these instructions carefully before beginning.**

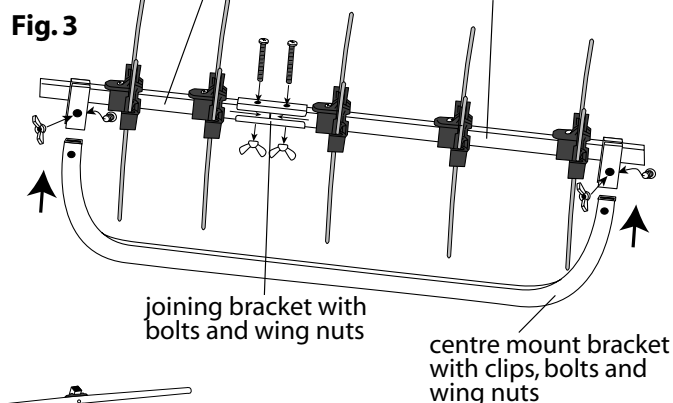
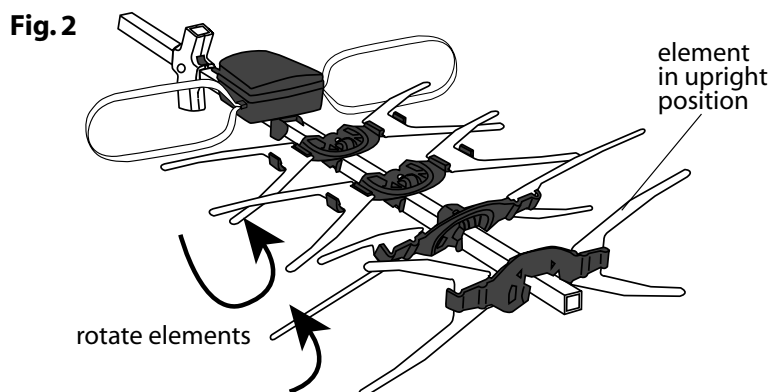
### A. Fitting the dipole assembly

The dipole clips onto the central boom. Ensure that the cable exit hole (from the terminal box) faces the rear of the aerial and that the locating stud fits into the locating hole on the boom as shown in Fig. 1.



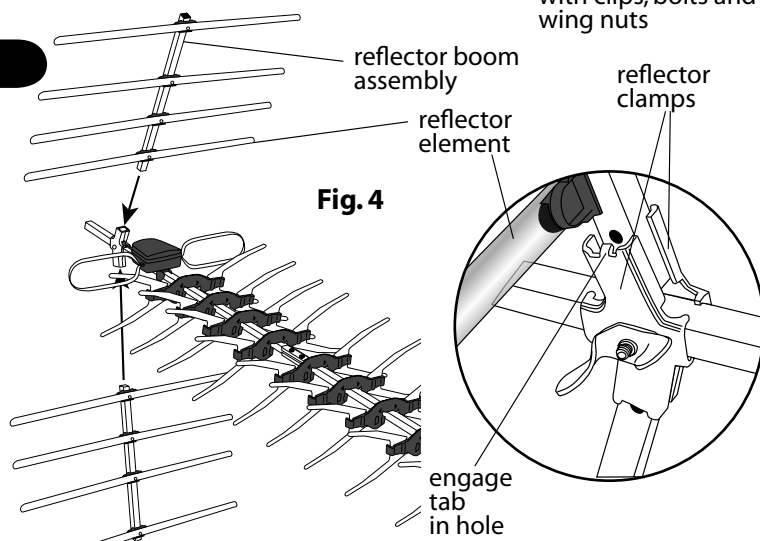
### B. Rotating aerial elements, central boom and centre mount assembly

1. Rotate the elements about the central fixing clip until they 'snap' into an upright position as shown in Fig. 2.
2. The central boom comes in two sections using the bracket supplied and the holes drilled in the boom sections join these two sections as shown in Fig. 3.
3. Attach centre mount bracket in the position shown using the clips supplied.



### C. Fitting the reflectors

1. Using the reflector clamps, screw and large wing nut, fix the reflector assemblies to the main aerial boom.
2. Check that the reflector clamp tabs locate in the holes of the reflector boom sections and that the wing nut is tight - see Fig. 4.
2. Ensure that the reflector elements are facing towards the front of the aerial (convex surface forward).



**Please Note: Coaxial cable, mountings and masts are not supplied with this aerial. You will need to select these from the range available according to the specific requirements of your installation. The quality of the coaxial cable used is as important as the quality of the aerial and you should make sure that if it is not specifically marked as suitable for digital TV it is of the same quality as that used for digital satellite installations.**

## D. Connecting coax cable

1. Before preparing and stripping the cable ready for connection, feed the coax cable through the hole in the terminal cover.
2. Prepare cable as shown in Fig. 5.
3. Feed prepared cable through braid clamp and thread the centre wire through the hole in the central terminal as shown in Fig. 5.
4. Clamp the cable braid securely first, then tighten the screw on the central terminal. Trim any stray braid that might come into contact with the centre wire or central terminal.
5. Replace terminal cover carefully and securely making sure that the cable is not trapped or kinked.

Fig. 5

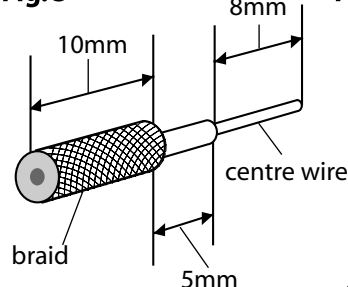
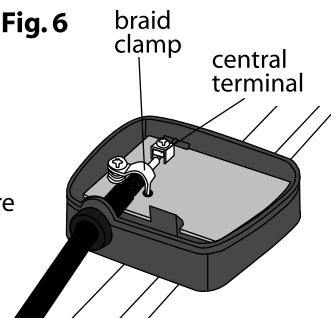


Fig. 6



## E. Coax cable routing and fixing aerial to a mast

For optimum performance it is very important that the coax cable should be routed as shown in the diagrams opposite.

Two methods are shown, Fig. 7 shows cable run for centre mounting on the mast and Fig. 8 shows rear mounting on the pole supplied.

**DO NOT ALLOW THE CABLE TO TOUCH THE AERIAL BOOM AT ANY POINT.**

PVC insulation tape can be used as shown to hold the cable in place.

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

When centre mounting, slide the aerial mount back and forth through mast bracket to find the most evenly balanced position, this will minimise the strain on aerial, bracket and mast.

Before mounting check that the mast is in good condition and firmly fixed.

1. Using the clamp supplied fix the aerial to the mast - see Fig. 7 & 8.
2. After the aerial direction has been fine tuned for best reception tighten the bolts firmly until the aerial is securely fixed to the mast.

Please note that this aerial can also be loft mounted.

**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.**

Fig. 7

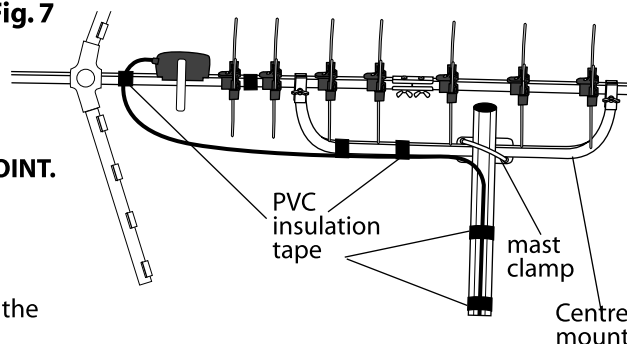
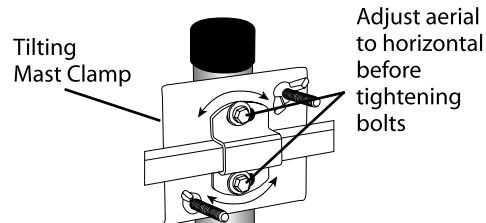


Fig. 8



**PLEASE NOTE: A coax plug is not included with this aerial. If you need to fit one please follow the wiring instructions shown below.**

## Box contents

- 1x Central boom: assembly square aluminium in 2 sections joined (L) approx 1240mm with 10x 'X' type elements
- 2x Reflector booms: Square aluminium (L) approx 330mm with 8x Reflector elements: Curved aluminium (L) approx 500mm
- 1x Centre mount bracket with clips: assembly square aluminium
- 1x Bow tie shaped dipole and printed circuit balun
- 1x Aerial clamp

## Troubleshooting

**No picture:** Check all connections from aerial to 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.

**Coax plug wiring instructions**

- 1 Unscrew coax plug housing and slide cap over cable.
- 2 Strip 23mm of cable outer sheath. Gather copper braid, wrap around outer sheath, slide claw over braid and crimp.
- 3 Strip 18mm of inner insulation to leave 5mm exposed
- 4 Undo screw on plug/clamp, slide clamp over inner wire & tighten screw. Reassemble plug
- 5 Trim inner wire flush with plug.

**Customer Careline: 08457 573 479**

Local rate UK number, Monday to Friday 9am-5pm

**Website:** <http://www.labgear.co.uk>

## Other Useful Websites for Digital Advice:

\*To confirm that your home is in a coverage area, to find out what DTT channels should be available locally and to find out where your nearest transmitter is (distance and compass bearing) visit: [www.dtg.org.uk/retailer/coverage.html](http://www.dtg.org.uk/retailer/coverage.html)