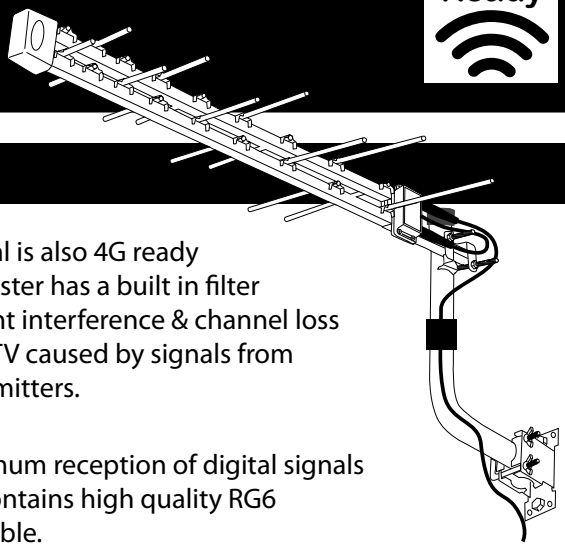
Megaboost Amplified Aerial

27885R4 USER GUIDE



Introduction

The ultra compact Megaboost aerial with it's built-in signal booster offers a quick and economic method of providing good digital signals to your TV/set top box.

Suitable for outdoor or loft installation, it can be mounted on a 1"-1½" mast or on to masonry/brickwork or wood using the bracket, pole and fixings supplied. This aerial is suitable for use in most areas of the UK, with the exception of areas with very low or very high signal strength.

This aerial is also 4G ready - the booster has a built in filter to prevent interference & channel loss on your TV caused by signals from 4G transmitters.

For optimum reception of digital signals the kit contains high quality RG6 digital cable.

General Safety

The risk of accidents can be greatly reduced by planning before starting a project.

- Before starting installation check structure is sound and check for hidden wiring or plumbing.
- When working on an installation outside, beware of over head power lines.
- Observe safe working practices, tread carefully on roofs and ensure adequate lighting is available if working in loft or roof space.
- Before making any connections switch electricity off at the mains.
- Always follow manufacturer's operating and safety instructions before using tools and/or equipment.
- Only carry out work outdoors at height if competent in the use of ladders and related access equipment.
- Always read and follow the manufacturer's instruction label affixed to the ladder.
- To avoid injury always route cables or wiring carefully. Ensure cable is correctly routed before fixing into position, taking care not to over tighten cable clips.
- This product may contain small parts - keep out of reach of children.
- After installation make regular maintenance checks for wear and tear.

Selecting mounting position

Select a mounting position for the aerial. The position should be as high as possible and chosen to give a clear 'view' towards the transmitter. Avoid alignments through trees and or other buildings if possible.

Loft mounting will degrade reception performance considerably and is only recommended for strong signal areas. Digital reception with a loft aerial may be affected by electrical interference from mains wiring.

Preparing downlead cable

Fig. 1

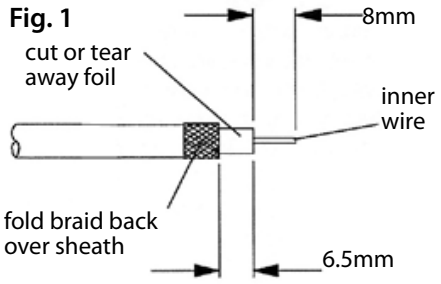
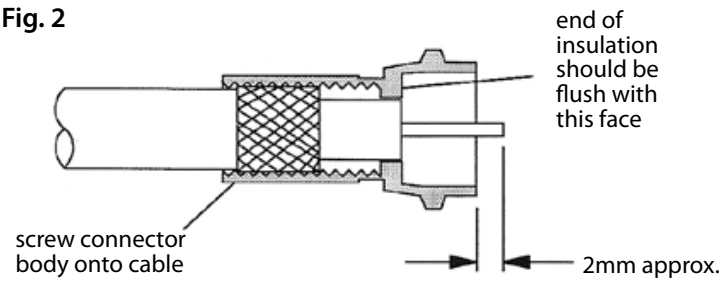


Fig. 2



Measure cable run first and cut cable to fit with a bit to spare. Slide one the weather boots provided over the aerial end of the cable. Prepare both ends of the cable as shown in Fig. 1. Fold the braid wires of the cable back over the sheath and fit one of the screw-on type-F plugs.

The inner wire of the cable should protrude about 2 mm beyond the nut end of the plug.

WARNING: ***To avoid a short circuit you must make absolutely sure that no braid or foil can come into contact with the inner wire.***

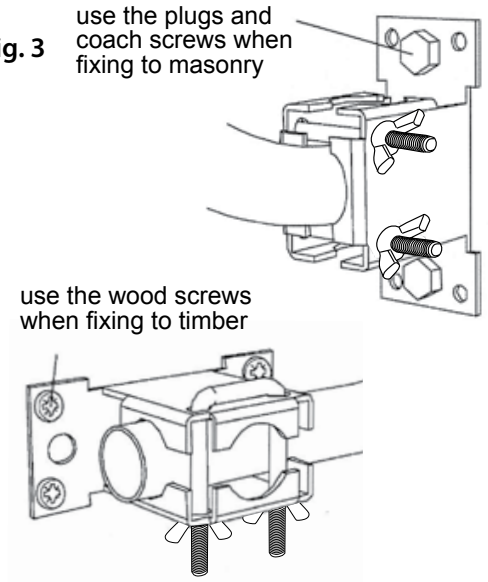
Fixing mounting bracket

Fix the mounting bracket to a suitable vertical surface such as a masonry wall, fascia board or loft timber-Fig. 3.

For fixing to masonry, use the wall plugs and coach screws supplied (10 mm drill size required).
For fixing to a timber surface use the four woodscrews supplied.
When fixing to brickwork, do not fix the bracket higher than 300mm below the top of a wall. With standard brickwork this means fixing on the 5th course of bricks down from the top of the wall. Always drill and plug bricks, not the mortar courses.

Do not use the mounting bracket to fit a pole or mast longer than the one supplied. If a longer mast is required, wall brackets or a chimney lashing kit (not supplied) should be used.

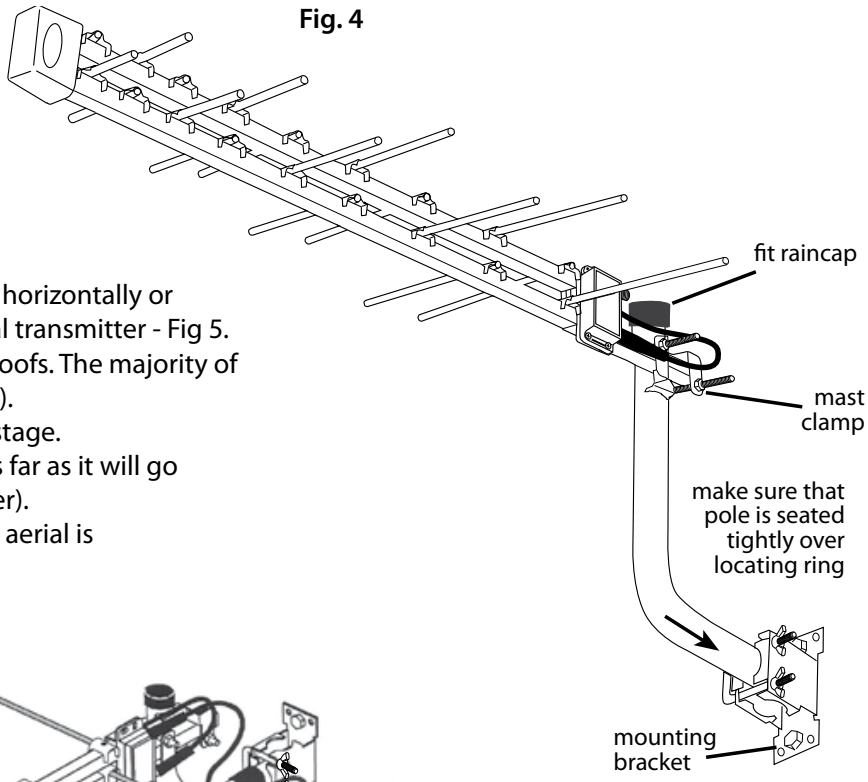
Fig. 3



Mounting the aerial

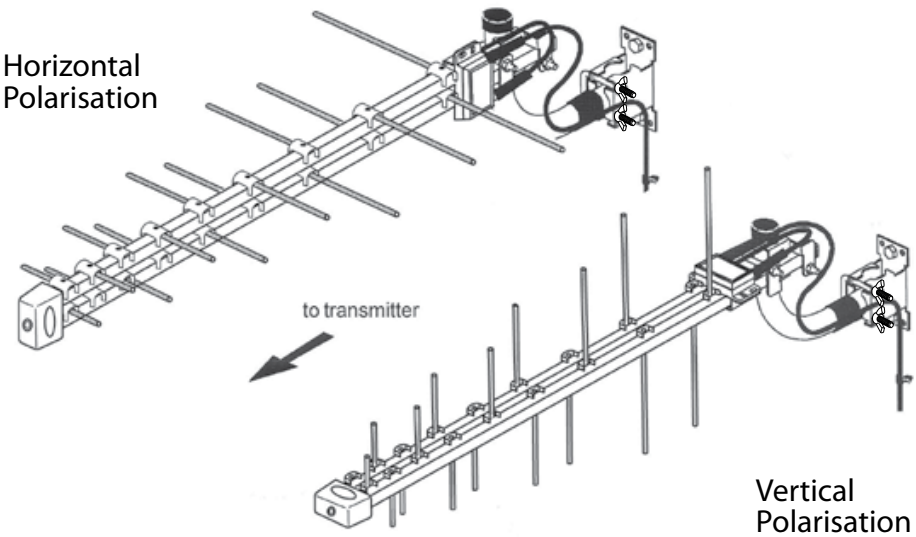
Attach the aerial and mounting pole to the mounting bracket.
Usually, it is easiest to fix the aerial to the pole at ground level, and then attach the pole to the bracket.
The aerial is attached to the pole using the mast clamp supplied - Fig 4.

Fig. 4



The aerial elements must be aligned either horizontally or vertically to suit the polarisation of the local transmitter - Fig 5.
(If in doubt look at aerials on neighboring roofs. The majority of installations require horizontal polarisation).
Do not fully tighten the clamp nuts at this stage.
Push the pole into the mounting bracket as far as it will go and tighten the U-bolt nuts (10 mm spanner).
Ensure that the pole is vertical and that the aerial is pointing approximately in the direction of the transmitter.

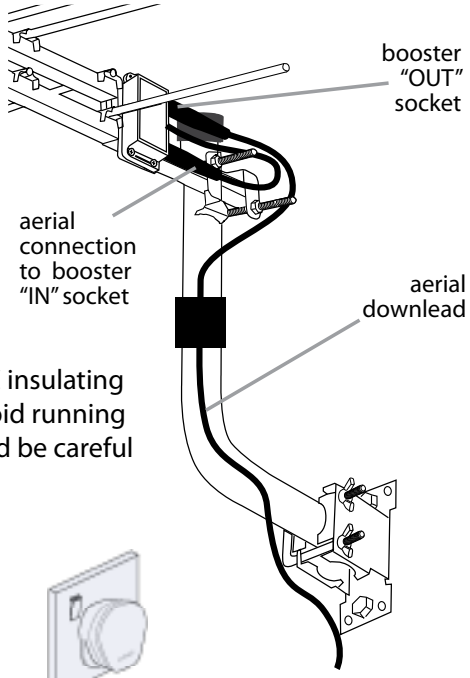
Fig. 5



Connecting and running cables

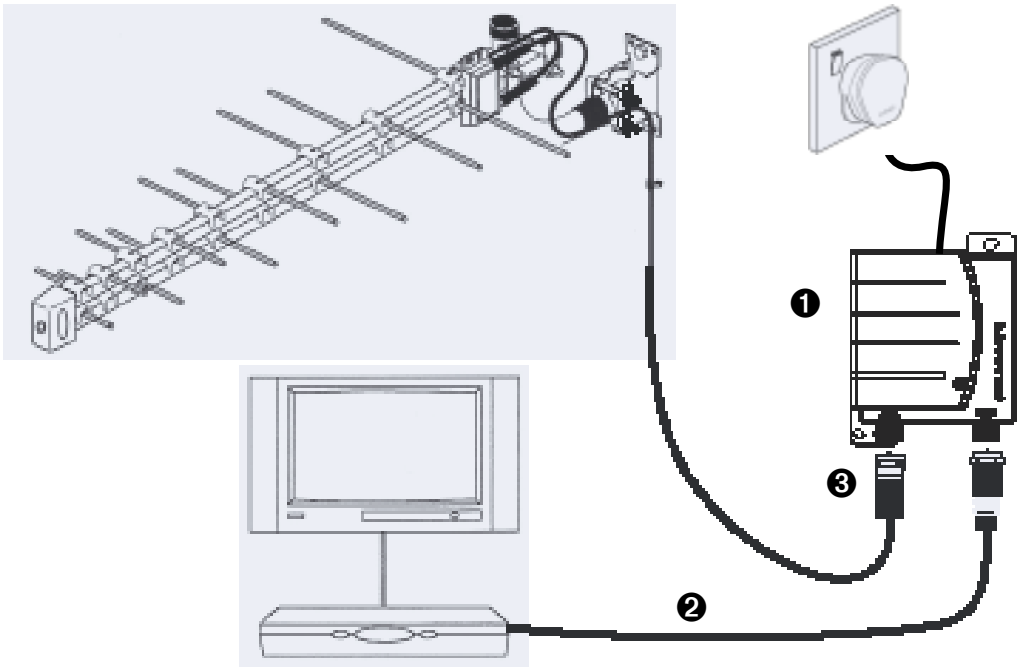
First connect the 'F' lead from the aerial to the IN socket on the booster, remove the dust cap from the booster right hand socket. Offer up the cable, with 'F' plug attached, ensuring that its inner wire enters the socket's centre contact. Screw the nut part of the plug onto the connector body and tighten very gently with a spanner (11mm). Do not leave the connection finger tight. Finally, slide the waterproof sleeve (boot) as far as it will go over the connector body, so that it butts up against the booster housing. Repeat this process with the previously prepared downlead.

Fig.6



Now run and clip the cables tidily from the aerial to your TV location. The first part of the cable runs can be secured to the mounting pole with PVC insulating tape (not supplied) providing you avoid sharp bends in the cable run and avoid running the cable near to mains wiring. If drilling through walls use a 6mm drill bit and be careful to avoid pipes and other cables.

Fig. 7



Install and connect the power unit

The power unit provides 12VDC power for the aerial's amplifier, choose a location within 1.5m of the TV/VCR or Freeview™ receiver location, so that the flylead supplied will reach the relevant aerial socket and within approx. 80cms of a 3 pin 13Amp mains socket.

PLEASE NOTE ***the following safety precautions before installation and use:***

- ***A ventilation gap of at least 25mm should be left around the front and all sides of the unit***
- ***Do not leave the power unit resting on a carpet***
- ***Do not leave the power unit where it may be smothered with curtains or other fabrics, etc.,***
- ***The unit is not waterproof and should not be exposed to dripping or splashing water.***
- ***Objects containing liquids should not be placed on or near the unit.***
- ***To prevent the risk of fire do not expose unit or wiring to excessive heat or naked flames.***

Fix the power unit ❶ to a wall, skirting board or similar hard surface in the location you have chosen. Wire one of the F connectors supplied ❸ to the end of the aerial downlead and connect to the 'IN' socket of the power unit. Use the flylead ❷ supplied to connect the TV socket of the power unit to the coax aerial input of your receiving equipment. 'F' connectors should be tightened gently with a spanner (11mm).

Testing and adjustment

Plug the power unit's supply lead into a mains socket and switch on. Your 'Megaboost' aerial system should now be working. Check reception on all analogue and digital channels. Final adjustment to the aerial alignment can now be made.

Most digital receivers have a signal strength and quality display screen, this can be used (with the aid of a helper) to align the aerial for best reception. On completion, fully tighten the nuts on the aerial mast clamp and ensure that all fixings are secure.

Reception hints and troubleshooting

See also the recommendations in "Select Mounting Position" on page 1.
If you receive no channels first check all connections. If you can view some but not all the available channels, try moving the aerial to a different part of the building. Height is usually the single greatest factor affecting the strength of signal received by an aerial. Some areas are covered by two or more transmitters. Experiment to find which gives you best reception. Digital reception can be affected by interference from sparking switches and thermostats etc. To eliminate this mount the aerial outdoors and always use CAI approved cable, or a cable of equivalent quality. If a wall outlet is used it should be fully screened.

Power Unit - Safety Precautions

Follow the safety advice on page 2 in "Install and connect the power unit" regarding positioning and ventilation required for power unit.

If you need to replace the fuse in the fitted plug a 3Amp ASTA or BSI approved fuse must be used.

If the fitted mains plug is not suitable for your socket outlet, it should be cut off and replaced with a new appropriate plug. When rewiring follow suppliers wiring instructions and ensure that a 3Amp fuse is fitted. Always dispose of safely and preferably destroy the old plug since it would be dangerous if plugged into a live socket.

Technical data

Antenna		Power Unit	
Operating freq. range	470 - 790MHz	Signal frequency range	44 - 790MHz
Antenna gain	6dB approx.	DC output	12VDC at 100mA max.
Amplifier noise figure	< 2dB	Signal insertion loss	0.5dB
Amplifier gain	16dB	Mains power required	230VAC~50Hz at 3W
Output connector	F type	Power indicator	Green LED
Amp. power required	5 - 12VDC at 25mA	Operating temp. range	0 - 40˚C

N.B. Labgear reserves the right to modify their designs or specifications, in the light of future developments, without prior notice. Performance figures quoted are typical and subject to normal manufacturing tolerances.

Reception Advice Services
To check coverage or find out where your nearest transmitter is visit:
http://www.digitaluk.co.uk/coveragechecker/
and enter your postcode and house number. Check the detailed view box to find out the distance to your nearest transmitter and it's compass bearing.

Contents of kit
1 x Aerial with fitted signal booster
1 x 12VDC power supply for signal booster
2 x F connectors & 1 x Rubber boot
1 x Mast clamp
1 x L pole with cap
1 x Mounting bracket inc fixing screws and plugs
10m RG6 Coax cable
10 x Cable clips
1.5m Flylead - coax plug to F plug

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For further information or any queries please contact our
Customer Careline: 08457 573 479 (Local rate – UK only)
Technical Support: www.philex.com/support

Waste electrical and electronic products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority for recycling advice.

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