

27895K4

# Digidome Amplified Aerial USER GUIDE



#### Introduction

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

The Digidome aerial is ideal for outdoor or loft installation mounted on to masonry/brickwork or wood using the bracket supplied.

This aerial is suitable for use in most areas of the UK, with the exception of areas with very low or 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.

## General Safety

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

- Wood and masonry surfaces vary considerably the coach screws and wall plugs supplied may not be suitable for fixing the aerial to the surface you have chosen. If in doubt consult a qualified installer or seek advice from your local DIY/hardware store.
- When fixing to walls screws/bolts should be fixed into bricks/stone not into mortar courses.
- 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 electrical connections switch the 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 (not supplied)

First measure the cable run and cut the cable to fit with a bit to spare.

Slide the weather boot over the aerial end of the cable. Prepare the aerial end 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 connector provided to the aerial end. The inner wire of the cable should protrude about 2 mm beyond the nut end of the plug. Connect the second F connector to the other end of the aerial downlead in the same way.

WARNING: To avoid a short circuit you must make absolutely sure that no braid or foil can come into contact with the inner wire - this applies to both F connectors and coax plugs.



# Preparing aerial and bracket

- 1. Slide the three small nuts supplied into the slots in the neck of the aerial. Thread the three bolts through the nuts as shown in Fig. 3.
- 2. Slide the right angled pole into the wall bracket (Fig. 4).
- 3. Line up the holes in the pole and bracket and slide in the long bolt provided from the top (Fig. 5) and use the nut provided to fix the pole securely in position (Fig. 6).

# Fixing the bracket to a wall

The mounting bracket should be fixed to a suitable vertical surface such as a masonry wall, fascia board or loft timber facing in the direction of the nearest transmitter. The aerial should always be mounted in the vertical position (whatever the polarity of the transmitter) with the flat part of the dome facing upwards. If in doubt about the direction of your local transmitter, look at aerials on neighbouring roofs or find a compass bearing for your local transmitter on one of the websites listed on the back of this guide.

To mount the bracket choose fixings suitable for your type of mounting surface, these are not provided as they will vary according to the surface. Offer up the assembled bracket to mark a minimum of four holes for drilling and fixing. Always drill and plug bricks, not the mortar courses if you are mounting on a brick wall.

# Aerial assembly

- Lower the Digidome aerial onto the pole until it rests in a level position (Fig. 7) with either one of the black arrows on the side of the aerial pointing in the direction of the transmitter.
   N.B. The best signal will be received when the aerial is mounted with one of the black arrows on the side of the aerial pointing at the TV transmitter. You can fine tune the aerial direction once you have made all connections.
- 4. Tighten the three aerial fastening bolts until they hold the aerial centered on the pole. Use a cross headed screwdriver or spanner to finish tightening the bolts to hold the aerial securely in position (Fig. 7).

# Connecting and running cables

Offer up the previously prepared downlead cable, with 'F' plug attached, ensuring that its inner wire enters the socket's centre contact (Fig. 9). 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 plastic body of the aerial (Fig. 10).

Now run and clip the cable tidily from the aerial to your TV location. When you have finished fine tuning the aerial direction, the first part of the cable run can be secured to the mounting pole with a couple of turns of PVC insulating tape (not supplied) (Fig. 10). When running the cable avoid sharp bends in the cable and keep the cable run clear of mains wiring. If drilling through walls use a 7mm drill bit and be careful to avoid pipes and other cables.





#### Install and connect the power supply

The power supply provides 12VDC power for the aerial's amplifier, choose a location close to your TV/VCR/PVR or Freeview<sup>™</sup> receiver location, so that a flylead (not 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 of the power supply:

- 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 to a wall, skirting board or similar hard surface in the location you have chosen. If not previously prepared, wire a coax plug O to the end of the aerial downlead O and connect to the 'IN' socket of the power unit. Use a standard coax plug to plug aerial flylead (not supplied) to connect the TV socket of the power unit to the coax aerial input of your receiving equipment (see Fig. 11).

If you want to use more than one of the three frequencies received, use a diplexer or triplexer fitted between the Power unit and your equipment to split the signal into the required frequencies.

Plug the power supply into a mains socket. Your Digidome aerial system should now be working and if all connections are correct the red LED on the aerial will also be lit, see Fig. 3.

#### Fine tuning your aerial

To find the best signal align the aerial first with one of the black arrows on the side of the aerial pointing at the TV transmitter, and then with the other arrow pointing at the TV transmitter (Fig. 7-9).

One of these two positions will give you optimum signal strength. Check reception on all frequencies you are using. Final fine adjustment to the aerial alignment can now be made by rotating the aerial by small increments clockwise and anticlockwise. When you have found the best position tighten the aerial fastening bolts securely. **Please Note:** If you are confident that the arrow is pointing directly towards the nearest transmitter then any major adjustment may slightly improve the reception of one frequency but this will be at the expense of one or both the other frequencies.

#### Freeview<sup>™</sup> Reception

Please note that the aerial will receive digital TV signals but will require a suitable set top box to view Freeview<sup>™</sup> channels (unless your TV has a built-in Freeview<sup>™</sup> digital tuner).

## Reception hints and troubleshooting

See also the recommendations in "Select Mounting Position" on page 1.

If you receive no signal first check all connections.

#### If you are getting some signal but it is weak or breaking up.

1. There are only two positions, indicated by the black arrows, at which you will get full signal strength on all frequencies. Loosen the aerial fastening bolts and make sure one of the arrows is pointing towards the nearest transmitter, rotate the aerial on its pole by small increments clockwise and anticlockwise to find the optimum signal. If you cannot find a clear signal reposition the aerial so that the other arrow is pointing towards the nearest transmitter and make small adjustments to either side to find the optimum signal.

## Power Supply - Safety Precautions

Follow the safety advice on page 3 in "Install and connect the power supply"

If you need to replace the power supply make sure that the replacement has the same rating - 12VDC 100mA.

## Technical data

Aerial	
Operating freq. range	470 - 790MHz
Gain	20dB approx.
Output connector	F type
Amp. power required	9 - 12VDC at 100mA

Power Supply	
DC output	12VDC/100mA max.
Signal insertion loss	0.5dB
Power required under load	<3W at 230V~50Hz
Power required standby	<0.3W at 240V~50Hz
Operating temp. range	0 - 40°C

N.B. Philex Electronic Limited 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.

#### For further information or any queries please contact 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. 2. Try moving the aerial to a different part of the building.

If the green LED on the power supply does not light up. 1. Check/replace the 3 Amp fuse in the plug. If the red LED on the aerial does not light up.

1. Check connections between power supply and aerial.

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.



#### Contents:

1 x Aerial with built in signal booster
1 x 12VDC power supply
1 x Rubber weather boot
1 x Wall bracket
4 x Coach screws
4 x Wall plugs
2 x Coax plugs
10m Coax cable
10 x Cable clips

#### **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.