# Labgear Tri-Boom Ulita High-Gain LAB450K TV Aerial Grp. K 

## User Guide

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. The aerial is of particularly robust construction to ensure a long operating life.

- Ideal for fringe reception areas
- Tilting mast clamp for easy adjustment
- Tuned to prevent interference from 4G/5G mobile signals
- Easy dipole assembly
- Unique compact folding design
- Electronic $75 \Omega$ balun
- Connection: F type


## General Safety Precautions

Do not undertake work outdoors at height unless you are competent in the use of ladders and other access equipment. Always use correct equipment, observe appropriate safety precautions and follow manufacturers instructions. If in doubt consult a professional installer.
Before starting installation check structure is sound and check for hidden wiring or plumbing.
When working on an installation outside, beware of overhead 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. To avoid injury always route cables or wiring carefully. Ensure cable is correctly routed before fixing into position, taking care not to overtighten cable clips.
This kit contains small parts - keep out of reach of children.
After installation make regular maintenance checks for wear and tear.


Box Contents




1. Triboom x 1
2. UHF Reflector clamps $\times 2$
(inc. bolt \& wing nut)
3. Dipole x 1 (inc. wing nut x 1 )
4. UHF Reflectors $\times 2$

## Aerial assembly


(B)

Fasten the balun to the underside of the main boom as shown in Fig. 5. Make sure the balun is the right way round as shown in Fig. 4 and 8.




## Installation

For best results the aerial should be 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.


## Troubleshooting

No picture:
Check all the connections from aerial to TV.
Poor picture:
Check all the 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.

For further information, please contact:
Customer careline: 08457573479 (Local Rate - UK Only)
Technical Support: www.philex.com/support/

## Other Useful Websites for Digital Advice:

*To find out what DTT channels should be available locally and to find out where your nearest transmitter is (distance and compass bearing) visit: http://www.wolfbane.net/cgi-bin/tvd.exe
(E) Attach the assembled aerial and clamp to the mast

F. Thread the cable through the weather boot
G.Fold the braid back over the outer sheath*. Tear off or cut away exposed foil. Screw the F plug (I) on to the cable. Trim inner wire, leaving 2 mm exposed.
*To prevent short circuits ensure that no braid touches the inner conductor.

J) Adjust the tilt and direction of the mast clamp (5) to tune for optimum reception. For best results mount the aerial on an outdoor aerial mast pointed at 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 unsure of the direction
 the aerial should be pointing in,
5. Mast Clamp or the orientation of the aerial (horizontal for a main transmitter, vertical for a relay transmitter) check your neighbours' aerials. When adjusting the tilt angle of the aerial, aim for horizontal or very slightly tilted upwards. Tighten the nuts on the tilting mast bracket (7) when the position is correct.
To help you align your aerial, ask someone to watch a connected TV while you make adjustments.
You can also use a signal strength meter (not included) to align your aerial for optimum reception.

| Specifications |  |
| :--- | :--- |
| Frequency Range MHz | $470-694$ |
| TV Channels | $21-48$ |
| Forward Gain dBi | 13.5 |
| Front/Back Ratio dB | $>16$ |
| Beam Width + /-deg. | $\mathrm{H} 32^{\circ} / \mathrm{V} 40^{\circ}$ |
| Connector | F-Type |
| Length | 1100 mm |
| Width | 600 mm |

## Additional technical information

| $y$ | WEEE symbol. Waste electrical and electronic products should not be <br> disposed of with household waste. Please recycle where facilities exist. <br> Check with your Local Authority or local store for recycling advice. |
| :---: | :--- |
| $y \mathbf{W x x}$ | Manufacturing date code: yy = year of production (21yy) <br> Wxx = week of production (01 to 52) |

## UK Distributor

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