



Assembly Instructions for JBX Aerials

Step 1: List of contents

- 1 x Boom section with director elements only (folded).
- 1 x Boom section with director elements (folded), holes for mounting dipole and attached arrow plates for connection of reflector sections.
- 2 x Reflector sections.
- 1 x Cradle with T plates and Clamp.
- 1 x Dipole with cap and washer/wing nut.
- 1 x Instruction set.

NOTE: One of the boom sections will have a coupler attached; this coupler is for connecting the two boom sections together and must be tightened securely.

Step 2: Connecting the boom sections

Connect two boom sections together ensuring same orientation of elements. When two boom sections are secured there should be a coloured end cap at each end of the aerial. Once the two boom sections are secured unfold all the director elements (these should click into place when unfolded)

Step 3: Positioning the Dipole

Remove the cap and the washer/wing nut from the dipole, under the cap will be a small printed circuit board with a brass centre connection and an outer clamp connection that has two small screws holding it down.

Pass the threaded post, protruding from underneath the dipole, through the holes that appear in front of the attached arrow plates, ensuring that the outer connection on the printed circuit board is facing the arrow plates at the rear of the aerial.

Step 4: Inserting the Reflector Sections

Slightly untighten the arrow plates and insert the reflector elements, locate the arrow plate lugs inside the punched holes of the reflector sections.

When both reflector sections are in place, lock them into place with the washer/wing nut.

Step 5: Attaching the Cradle Mount

Connect the cradle mount with the couplers found already attached to the cradle; the cradle will need to be positioned in a central area of the aerial to allow for weight distribution.

NOTE: the cradle can be mounted on any side of the aerial, though the preferred location is the underneath of the aerial.

The clamp that is attached to the cradle can be adjusted for positioning the aerial horizontal or vertical on the mast.

Step 6: Connecting the Coaxial Cable

Pass the coax cable through the watertight hole in the dipoles cap. Remove at least 25mm of the plastic outer from the end of the coax that is to be connected.

Fold back all of the copper braid and screen exposing a centre plastic insulator (usually white or clear plastic).

Remove at least 8-10mm of this centre insulator exposing a central second copper wire.

Unscrew the brass centre connection and the silver braid connection clamp on the dipoles printed circuit board balun plate. Attach the centre copper wire to the brass centre connection and lock in position with brass terminal screw. Then tighten silver braid connection onto the outer copper braid and screen with the two screws.

Step 7: What to do if no picture is obtained

A: Check all cable connections from television/digibox to the aerial. Always ensure that there are no severe bends in the aerials downlead and try not to run cable close to other electrical appliances other than the television/receiver.

B: Check that the coax cable is connected to the aerial's PCB balun plate as per Step 6. Ensure that all the braid of the coax cable is tidily clamped to the silver braid clamp and that no braid is touching any other part of the PCB balun plate, also ensure that the centre copper wire is connected only to the centre brass terminal post and not to any other part of the PCB balun plate. There should be a minimum of 5mm of the centre white insulator separating the braid from the centre copper wire, this centre insulator is to prevent the braid and the centre copper wire from making an electrical connection with each other. Notice that the PCB balun plate is constructed so that the braid and the centre copper wire cannot touch.

C: Check that the aerial is pointed in the direction of the transmitter and that the aerial is of the correct polarisation. Main transmitters are horizontally polarised and relay transmitters are vertically polarised. If in doubt consult a local aerial installer or connect the aerial horizontally (most common) and point towards the local transmitter if no quality reception is obtained turn the aerial 90 degrees so that the aerial is vertically polarised, if a quality reception is obtained, lock the aerial in that position. **NOTE:** clamping arrangement will have to be altered to accommodate both types of polarisation. If no quality picture is obtained using this method it may be possible that the wrong transmitter has been chosen, in this case, point the aerial in the direction of another local transmitter and follow step 7C once again. **NOTE:** it is only possible to switch to another transmitter if a Wide Band aerial is being used. A specific grouped aerial may only work on that transmitter, pointing the aerial at another transmitter may not solve the problem. In this case a different aerial may be required.

D: If a picture has been obtained but the quality is poor, a popular method that works with all aerials is to slightly tilt the aerial back or forward by a few degrees or moving the aerial up and down the mast section; these methods may bring the quality of the picture to the required standard.

E: Alternatively, if this method does not work the aerial may need locating elsewhere on the building. Often simply moving the location of the aerial is the best solution.

F: If the aerial has been assembled correctly and the above procedures have been followed and there is still no picture it may be necessary to contact a local aerial installer.

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