



HIGH PERFORMANCE UHF ANTENNA (For Home Use)

ch. E21~E58

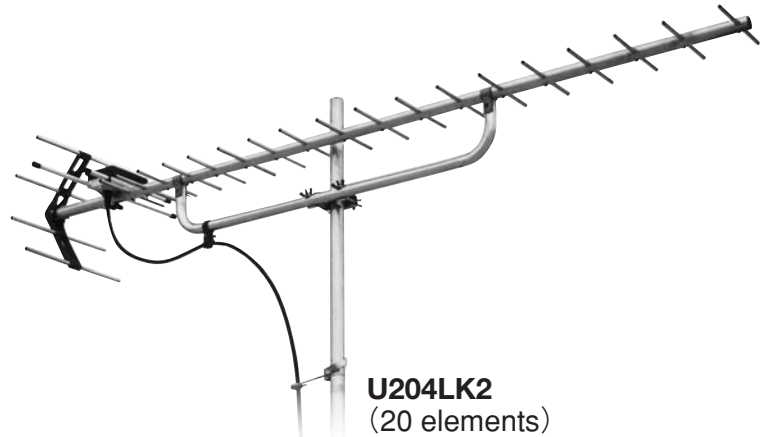
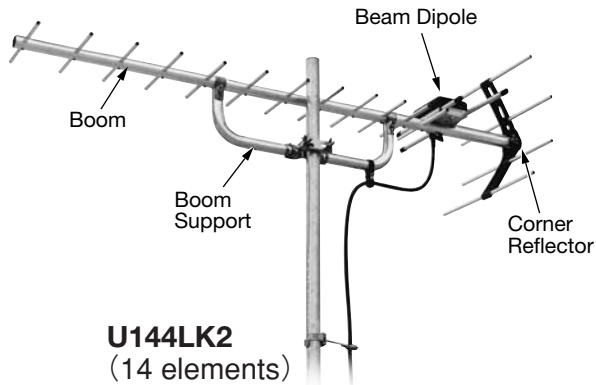
U144LK2

U204LK2

Instruction Manual

For Horizontal Polarization

75 Ω



Corner Reflector

MASPRO UHF antenna with corner reflector reduces double images, and make clear pictures.

Aluminum Double Boom

Double structured aluminum boom and boom support are light yet sturdy.

Beam Dipole

MASPRO's original beam dipole with built-in phase shifter provides excellent gain and VSWR over the wide band.

NOTE

Skills and experience are required to install antennas on roofs or other elevated locations. Make sure to consult your dealer concerning installation.

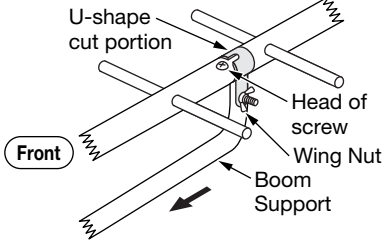
Antenna Installation Precautions

- Be very careful to install antenna at the safest spot possible, so that parts of the antenna will not cause injury or property damage if they fall.
- To prevent electric shock accidents, install the antenna as far away as possible from wires (powerlines, high voltage wires, telephone lines) so that it will not come into contact with the wires even if it falls.
- Never attempt installation on rainy or windy days. Be extremely careful also when working under a scorching sun in summer, as the roof can become very hot.
- Take necessary safety measures before installing antenna, e.g. binding the antenna, mounting brackets, and tools to prevent them from dropping.
- Working at elevated locations is extremely dangerous. Take all safety measures possible before installation. When you are on the roof, you may experience vertigo or experience an exaggerated sense of height, your feet may become shaky and your footing unstable. Take special care to avoid slipping.
- Make sure to remove TV and/or Tuner AC plugs from AC wall outlets when you connect 75 Ω coaxial cable from TV and/or Tuner. If plugs remain in outlets, electric shock may occur.
- Do not install the antenna and guy wire by yourself. Make sure that someone, or preferably two or more people, are present to assist you.
- Reception level of the TV signals may differ depending on where you install the TV antenna. During installation, try to adjust the position, height and direction of the antenna for optimum reception.
- After a typhoon or heavy snow, check the antenna, mounting brackets, mast, roof mount, and guy wires for any signs of trouble or loosened bolts and nuts. Replace damaged or bent antenna with a new one. If you neglect damaged antenna or leave them without proper maintenance, parts of the antenna and mounting brackets may become damaged and drop, causing physical injury or property damage.
- Be careful not to use a rusty or corroded antenna and mounting bracket. Weak or damaged equipment may loosen and drop, resulting in physical injury or property damage.

ASSEMBLY U144LK2 (Same assembling for U204LK2)

Check the direction of boom and elements carefully and firmly tighten wing bolt and wing nuts.

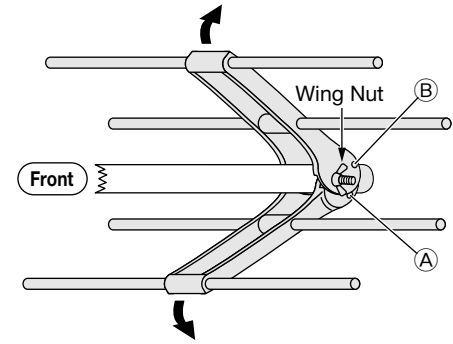
Boom Support Fixing Bracket



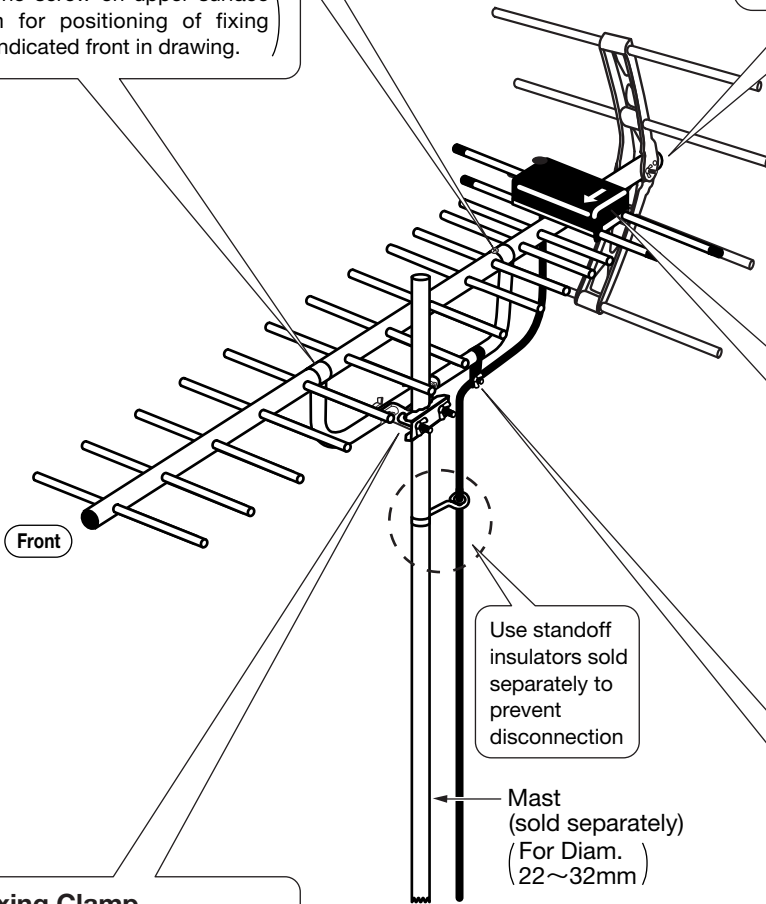
Put screw head in U-shaped carved portion of fixing bracket, tighten wing-nut firmly.

(There is no screw on upper surface of boom for positioning of fixing bracket indicated front in drawing.)

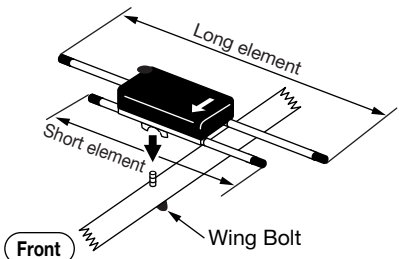
Corner Reflector



- ① Open folded corner reflector till knobby boss of point A fits into hole of point B, then do not open any more.
- ② Tighten wing nut up.

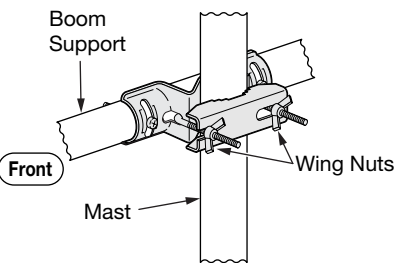


Beam Dipole



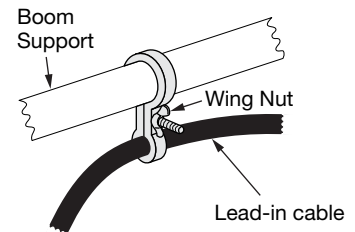
After installing beam dipole with exposing short element to the front direction, then tighten wing bolt up.

Mast Fixing Clamp



Loosen wing nuts, put the clamp through mast, and firmly tighten the nuts again.

Cable Holder

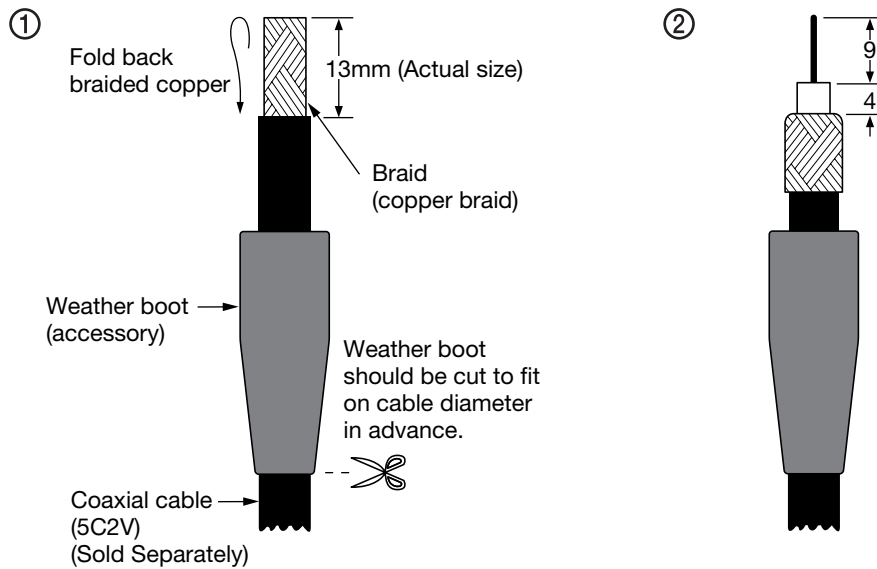


Loosen wing nut, put lead-in cable through the cable, and firmly tighten the nut again.

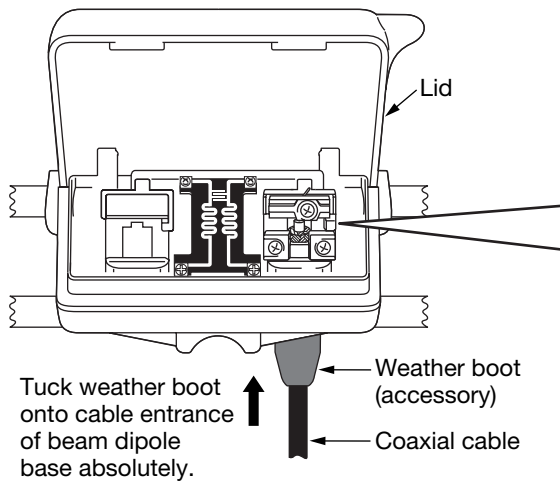
HOW TO INSTALL THE CABLE

Cable processing

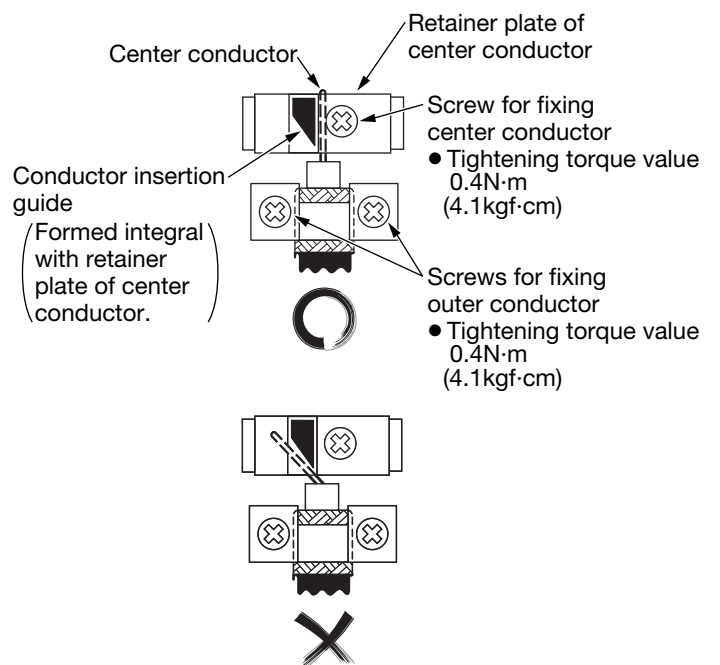
- If possible, use 5C2V coaxial cable, or other cable which has either equaling or surpassing performance.
- Process cable tip after getting cable through weather boot.



Connection to Beam Dipole



- ① Insert center conductor between conductor insertion guide section and screw for fixing center conductor.
- ② Fix the folded outer conductor (braided copper wire) with screw for fixing outer conductor, and tighten it at torque value below.
- ③ Fix the center conductor of cable with screw for fixing center conductor at the torque below.



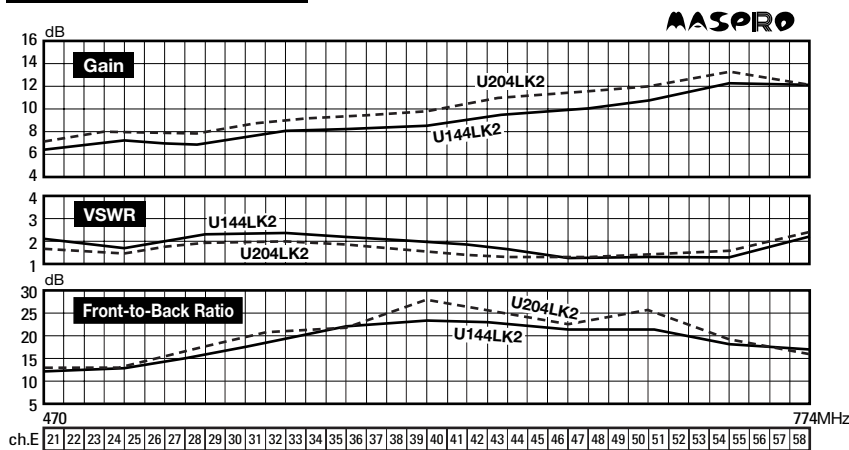
Shut the lid of beam dipole with a snap after connecting cable.

SPECIFICATIONS

MASPRO

Items	Specification	
	U144LK2	U204LK2
Reception Channels	ch.E21~E58	
Number of Elements	14	20
Impedance	75 Ω	
Gain	6~12.7dB	6.8~13.8dB
VSWR (Voltage Standing Wave Ratio)	2.8 or less	
Front-to-Back Ratio	9~26dB	10~30dB
Half Power Beam Width	31~61°	26~56°
Adaptable Mast Diameter	22~32mm	
Dimensions	1020(L)×380(W)×250(H) mm	1465(L)×380(W)×250(H) mm

PERFORMANCE



DIRECTIVITY

Directivity is indicated by front-to-back ratio and beam width.

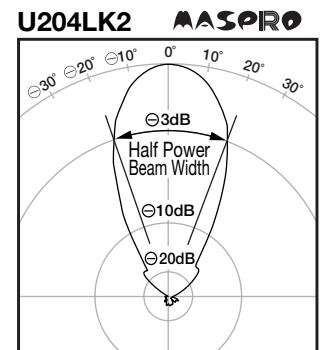
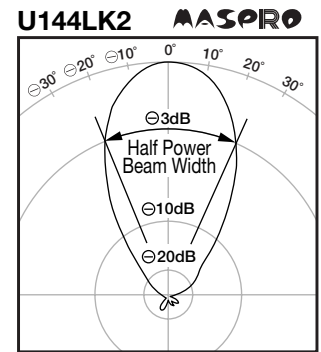
Front-to-Back Ratio

Front-to-back ratio is the ratio of the forward and backward sensitivity in dB. The larger the front-to-back ratio, the less likely it is that the antenna will generate interference through reflected signals from the back.

Half Power Beam Width

The narrower the beam width,

- The less likely it is that the antenna will generate interference through reflected signals from the front.
- The higher the actual gain produced.



VSWR (Voltage Standing Wave Ratio)

VSWR is the degree of matching impedance. An antenna with a VSWR of 3 or lower (the closer to 1, the better) is excellent.

VSWR	Matching Loss (gain loss)
1	No loss with complete matching
1.5	0.2 dB (loss)
2	0.5 dB (loss)
3	1.2 dB (loss)

All graphs are produced using MASPRO's original, fully-automatic antenna measuring device. MASPRO's performance data is obtained with painstaking honesty and is completely reliable. MASPRO guarantees the accuracy of its performance data.

ACCESSORY

Weather boot × 1pc.

Specifications and external design are subject to change for further improvements.

Agent in Sri Lanka

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FEB., 2009