



ELLIPTICAL ANTENNA

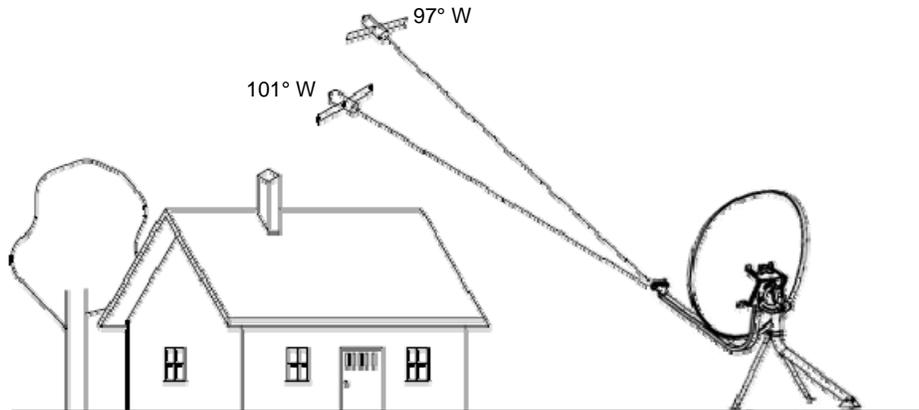
E0851B11

INSTALLATION GUIDE

Step 1:

Finding a suitable antenna site

A suitable antenna site requires an unobstructed view and a stable antenna mounting surface. There should be no trees, leaves or buildings that can obstruct the line-of-sight between the antenna and the satellites. If you are replacing your current antenna with a dual beam satellite, be sure to check the required 10° of span clearance, if you don't have the required clearance you should choose different location.



Step 2:

Installing the mast (45° pipe)

Now you are ready to install the antenna mast at the location you have chosen in step 1.

1. Use a compass for more precise starting point. Fix the pipe mount fixer with the anchor bolt. Connect the 45° pipe to the pipe mount fixer with one M8*65 W/SW/W hex-head screw.
2. Connect the clamp to the 45° pipe and assemble the side supporting rods and the clamp with one M8*65 W/SW/W hex-head screw. Don't tight the screw.
3. Once the mast is mounted in a location, loose the two mast M8 flange nuts, then move the clamp up/down until the mast is perpendicular to the ground and the two side supporting rods touch the ground. Tight the screws to fix the mast. See the figure at the bottom.

Step 3:

Assembling the antenna

1. Assemble the dish bracket to the reflector with 4 M8*16 round flat-head square screws. Connect the dish bracket to the tilting Az/EI bracket set with 3 M8*16 round flat-head square screws.
2. Assemble the LNB arm (there are 4 screws with stop washer preassembled on the arm) to the dish bracket with 4 M6 flange nuts. Put the multi-LNBF clamp set on the end of the LNB arm with 2 M5*18 hex-head screws.

Step 4:

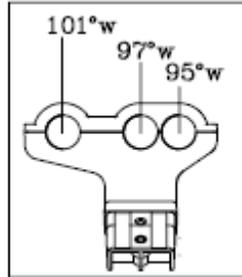
Tighten all the nuts, but not completely

This is a preliminary adjustment, which you may have to fine-tune later on.

Step 5:

Loose the clamp's M8 flange nut

Attach the antenna to the mast. Slide the back of the antenna into the top of the mast until it stops and then tight slightly the 2 M8 flange nuts on the clamp.



Step 6:

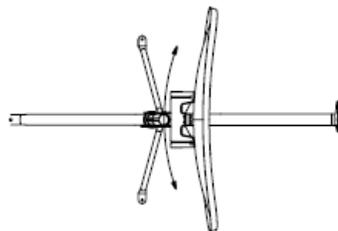
When you are finished with step 1 to 5 you can attach the LNBFs to the multi-LNBF clamp with 3 M5x18 hex-head screws.

Step 7: (See Step 8 for suggestions on how to connect the DiSEqC switch)

Fine-tune the antenna

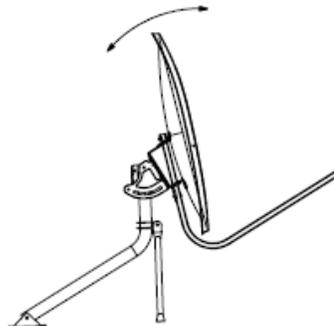
When you fine tune the antenna to one satellite, the other satellite will be aligned automatically (or you may need to slightly rotate the dish for tuning the second satellite.)

1. Align the Azimuth
Point the antenna to a generally southern direction for a more precise starting point. Very slowly rotate the antenna around the mast a few degrees to find the satellite signal peak in the signal strength meter.



Azimuth (horizontal side-side)

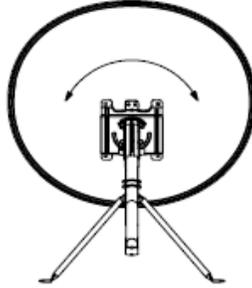
2. Fine-tune the Elevation
Slightly loose the 2 elevation nuts. Move slightly the reflector up and down and observe the signal strength meter. Find the peak and tighten the 2 elevation nuts.



Elevation (vertical up/down)

3. Fine-tune the Tilt

Adjust first by $+3^\circ$ and then -3° . Tilt is optimized when you see one signal reading essentially unchanged and the other signal strength improved by several points. Set tilt to the optimal point and tight the tilt nuts.



Tilt (dish reflector rotation)

Step 8:

Connecting the DiSEqC switch to the LNBFs

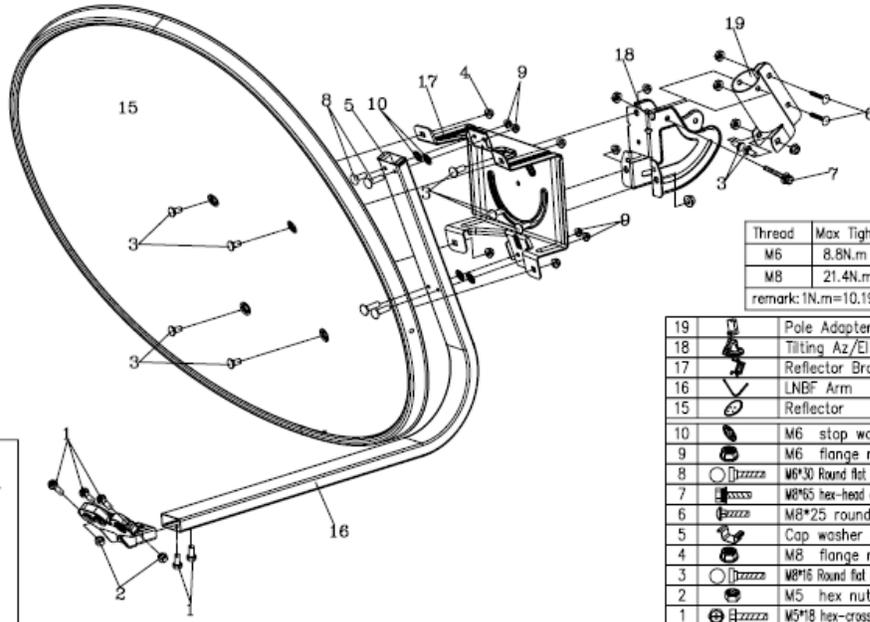
1. Connect the LNB for the AMC-4 directly to the receiver. (If you are behind of the dish, it is the LNB on the left)
2. By adjusting the dish, as described in Step 7, make sure you get good signal from AMC-4 and confirm that you can see the channels on the TV.
3. Switch the cable and connect the other LNB (G-25) to the receiver.
4. By rotating the dish slightly repeat the step 8.2 for the G-25 channels.
5. Switch back to AMC-4 LNB and make sure that you still have good signal.
6. Connect the DiSEqC switch.
 - a. L1 to AMC-4 LNB
 - b. L2 to G-25 LNB
 - c. L3 & L4 not connected
 - d. Output of the switch goes to the receiver input (output port of the switch is between L1 and L2 input ports)

Step 9:

Check and make sure you see all the channels from both satellites.

If you don't see all the channels you may want to set the receiver to the factory default settings to make sure all the settings are ok.

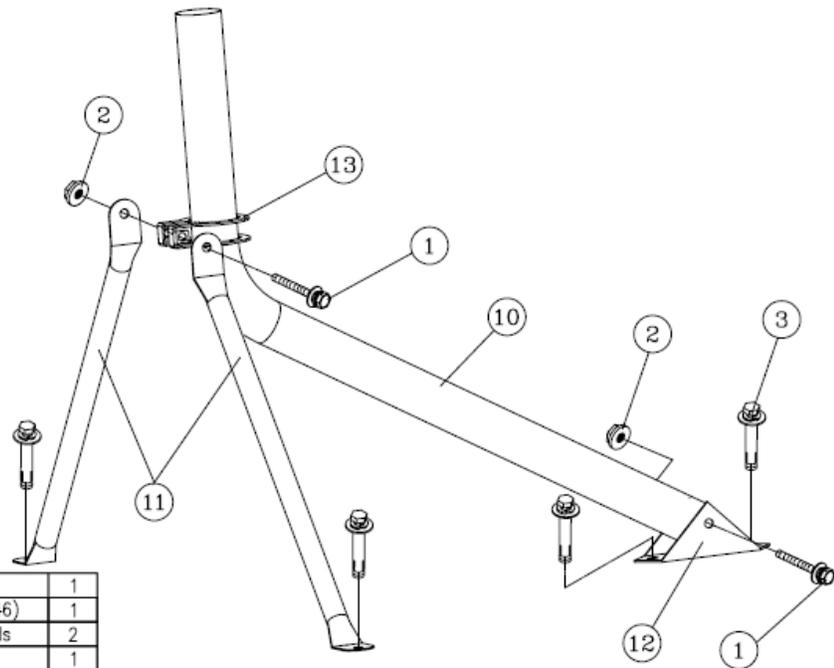
MODEL: E0851B11



Thread	Max Tightening torques
M6	8.8N.m 90Kgf.cm
M8	21.4N.m 220Kgf.cm

remark: 1N.m=10.197Kgf.cm

19		Pole Adapter	1
18		Tilting Az/EI Bracket	1
17		Reflector Bracket	1
16		LNB Arm	1
15		Reflector	1
10		M6 stop washer	4
9		M6 flange nut	4
8		M6*30 Round flat head Square screw	4
7		M8*65 hex-head cap screw w/w/sw	1
6		M8*25 round-head screw	2
5		Cap washer	1
4		M8 flange nut	12
3		M8*16 Round flat head Square screw	9
2		M5 hex nut	2
1		M5*18 hex-cross-head cap screw	5
NO.	ITEM	DESCRIPTION	Q'TY



13		Clamp	1
12		Pipe Mount Fixer(W46)	1
11		Side Supporting Rods	2
10		45 45 Pipe	1
3		1/4*1-1/2 anchor bolt	4
2		M8 hex flange nut	2
1		M8*65 hex-head cap screw w/w/sw	2
NO.	ITEM	DESCRIPTION	Q'TY