



Bluestar Installation and Operation Manual



The Easy To Use *Fully* Automatic Satellite TV System

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(Abbreviated)

Vansat Bluestar Series III Specifications

Power – DC 12 > 24V

Current – Typical 1 amp during normal operation at rest and 4 amp temporary for search (search time varies but is normally 1 > 2 minutes after power on)

LNB Type – KU Band, High Gain with Dual Polarity (V/H) and Automatic Skewing

LNB Frq – 10700Mhz (10.7Ghz)

Reflector (Dish) – Offset 85cm Powder Coated

Gear Box – All Steel Construction

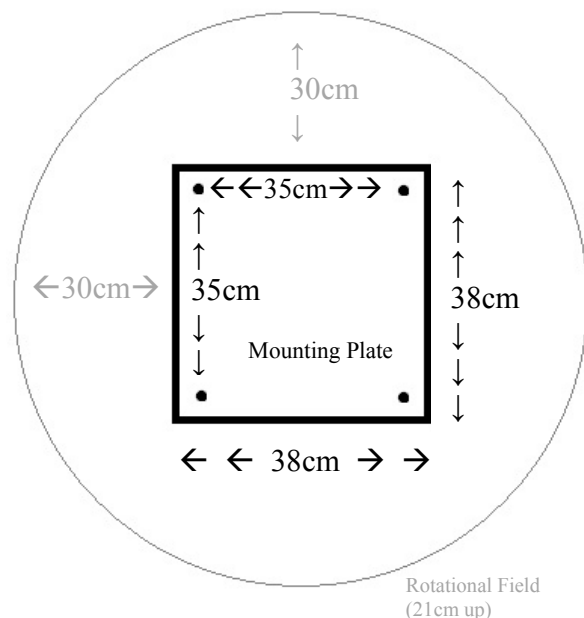
Wiring Loom – 8 Meter Length with pre-fitted connectors

Control Box – Multi Satellite with Adaptive Search. Upgradable Firmware

Elevation Range – 30 > 70 Degrees (Australia Wide Coverage)

Mounting Plate – Aluminium. 38cm Square (each side), bolts holes 35cm apart (side to side)

Roof Space Required – Refer to the Below Figure. To Calculate for Maximum Elevation (how far back the dish will pivot at the northern tip of Queensland) measure outwards a distance of 30cm from each side of the Mounting plate. From this point measure upwards 21cm. This point in space will be the maximum angle the rear of the dish will ever go back.



Mounting Plate 38cm Square.
Mounting Holes 35cm Apart.
The Grey Circle shows the Rotational Field of the Dish. This field Pattern is measured at 30cm from the outside frame of the base starting at a Height of 21cm. You must ensure you have clear space **ABOVE** 21cm at a distance of 30cm from all sides of the Base Plate. Obstacles **BELOW** 21cm at a distance of 30cm from the Base Plate **WILL NOT** be of concern.

Should you not have the necessary rotational area to fit the system, simply “pad” the base plate the unit sits on to give it more height and therefore more clearance to suit your installation.

Origin of Manufacture – Europe (final assembly and testing in Australia)

Warranty – Three (3) Years

ROOFTOP MECHANISM INSTALLATION

Pick an area on the roof of your mobile home that will allow the unit to be mounted as flat and level as possible with good support that will permit the dish, once fitted and raised, to have a full 360 degree rotation and elevation range. Thoroughly clean the area where the base of the assembly will be affixed of all dirt, debris and wax using methylated spirits. The mechanism preferably should be fitted so that the dish is pointing rearward on the vehicle. If however space dictates that this is not feasible, the unit can be mounted across the vehicle.



Front End of Vehicle

Rear of Vehicle

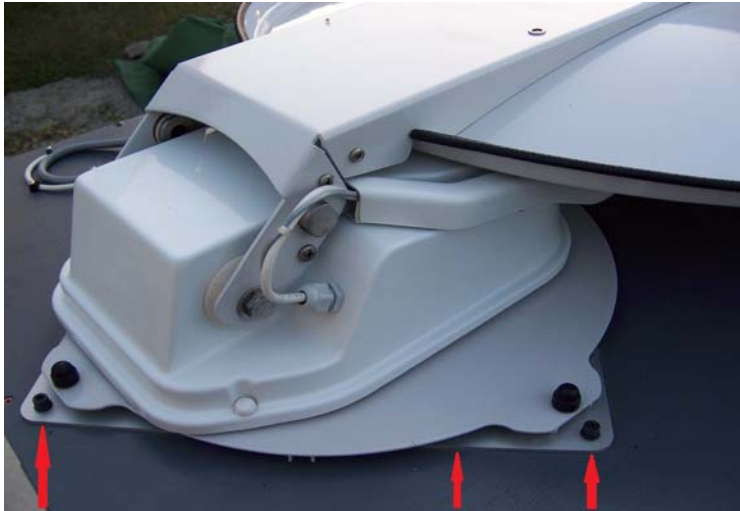
If the dish is packed separately to the mechanism you will be able to attach it after you install the rotating mechanism. At first power-on, the arm will lift (after approx 10 seconds). When the mechanism begins to rotate you can simply press the PAUSE button on the remote to stop the rotation and fit the dish – firmly tighten the four stainless screws.

Carefully transport the rooftop mechanism to the roof supporting it by its base only.



IMPORTANT – Support the mechanism by slipping your hands under either side of the stainless base. (see arrows on left picture)

Mark and drill the four bolt holes. The assembly should be positioned over ceiling battens. Apply a generous amount of the supplied adhesive to the underside of the base, remembering to also apply in and around the bolt holes. You have two options of attaching the unit. (1) You can simply affix using coach screws directly into the battens or (2) using the four supplied affixing bolts (ensure loading distributing washers and nuts are fitted inside if using the bolt method). Any excess bolt length can be trimmed. Apply adhesive to the bolt heads to prevent water ingress. Either method is acceptable as long as the unit is secure!!



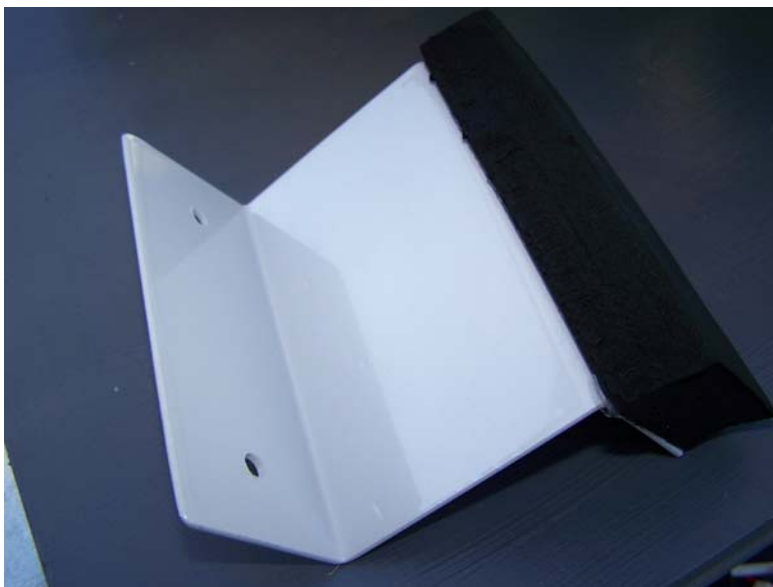
BOLT

GLUE

BOLT

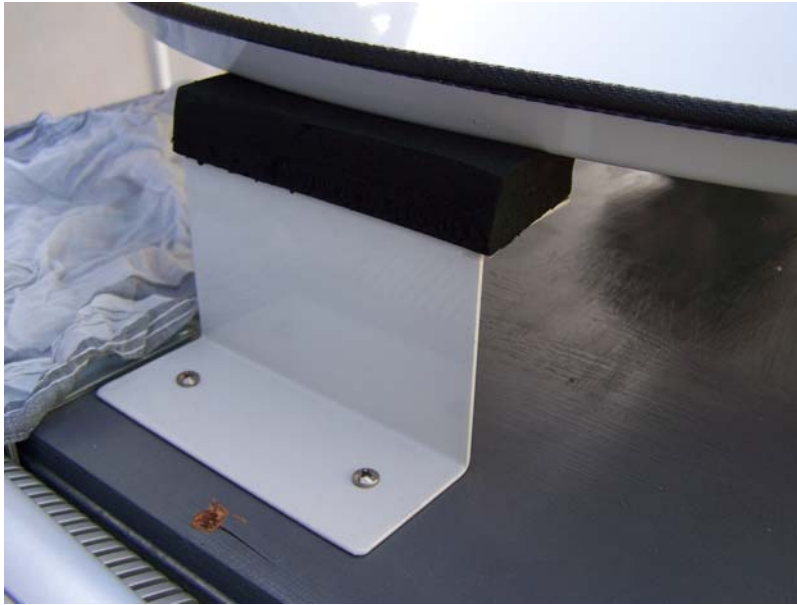
Base of Unit mounted. Note that only two of the mounting bolts are visible in the picture. Your unit will be affixed with four (4) coach screws (or four bolts) and Adhesive (Glue) under the steel Base plate.

The bump stop should now be installed. This device stops the dish “flogging around” if the vehicle is driven on rough terrain.



Bump Stop

Apply adhesive to bottom of the stop and affix to the roof using the supplied stainless screws (cover the tops of the screws also with adhesive).



Bump Stop fitted at the end (top) of the satellite dish

If your dish was loose (unattached) skip this page and continue installing the Control Unit and cabling as described on the following pages. Once that it done you can jump back to this page and install the dish to the mechanism.

Attaching the Dish

Power the Control Unit on. Once the white lift arm begins to raise and unit starts to rotate, press the “PAUSE” button on the remote to stop the units movement. When fitting the dish note that there are **TWO** sizes of white nylon spacers. The longer two **MUST** go at the bottom as indicated below.

The two longer nylon spacers go at the bottom as indicated with the red arrows. Now, holding the dish to the lift arm FIRMLY tighten the four stainless screws.



The completed job should resemble the below (except yours will have adhesive on the bolts and screw heads of course).



Cable Entry and Wiring Configuration

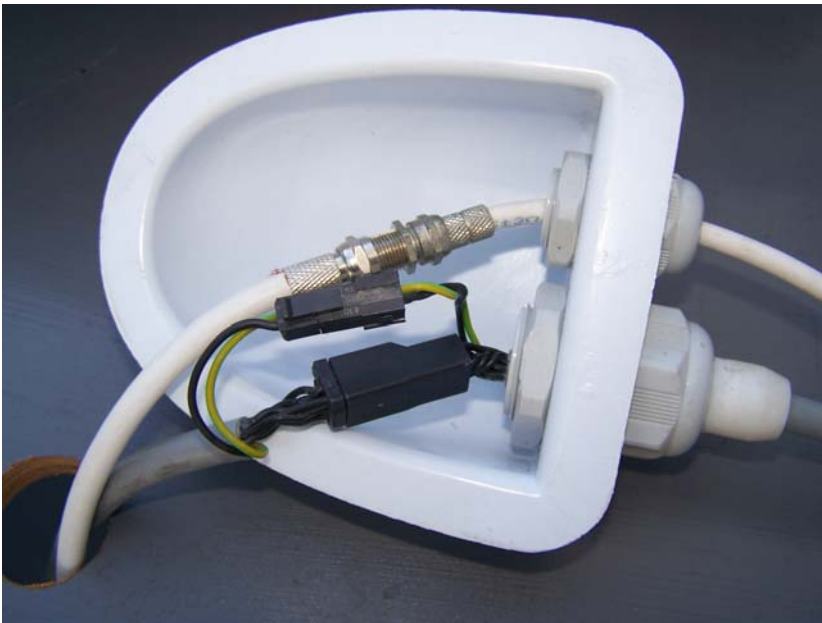
Position the Junction box as far away from the revolving mechanism as the cable will allow. Some thought should be given to positioning the box over an internal cavity like a cupboard.



Drill a 1inch hole to allow easy insertion of the wiring loom and signal cables.



Feed the wiring looms from inside the vehicle through to the roof.



Click the two black connectors together in the junction box. For the white coaxial signal connectors (white cable), gently tighten **BOTH PLUGS** with pliers holding the joiner and plug at the same time.

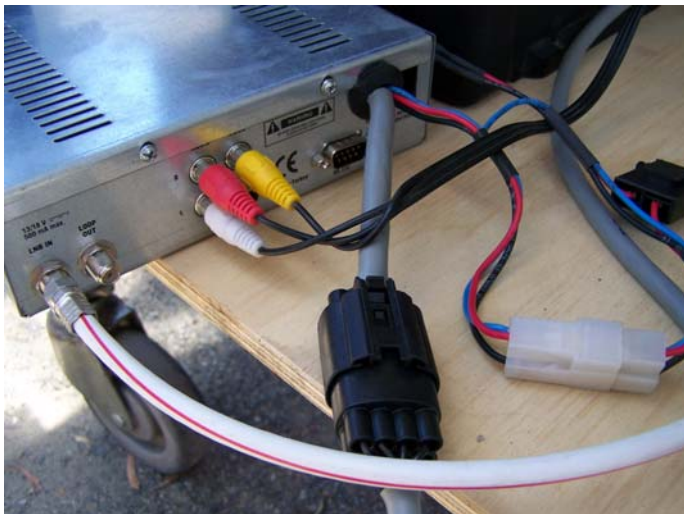
The junction box can now be secured (using the supplied stainless screws) and glued to the roof of the vehicle.



The Junction Box fully assembled and fitted to the vehicle roof (adhesive not shown)

INTERNAL CONTROL UNIT INSTALLATION

The control unit can either be flush mounted to a cupboard wall or simply left free standing. Screw the white signal cable to the rear of the receiver at the point marked LNB IN. The other connectors can then be attached.



Control Unit with wiring looms shown. On the left you will see a connection labeled “Loop Out”. This is where the external decoder will be connected in later.

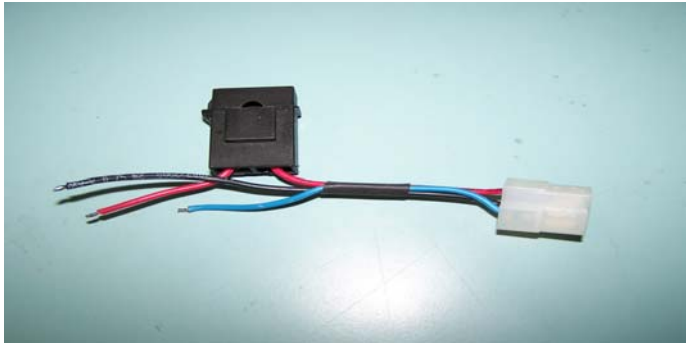
Power is via 12V/24V DC only (a 240V adapter is available as an option from us for mains operation). Wire the power connector as follows:-

RED : +12/24 DC Volts

BLACK : Ground (or Negative)

BLUE : Vehicle/Car Ignition (**IMPORTANT** – while the unit will fully function without this wire connected, the system will not auto-close on vehicle startup)

RED/WHITE/YELLOW RCA Cable : To AV Input on TV



The system Power Loom.

Do not bypass or leave out the fuse on the lead.

Use thick cable for the positive and negative connections.

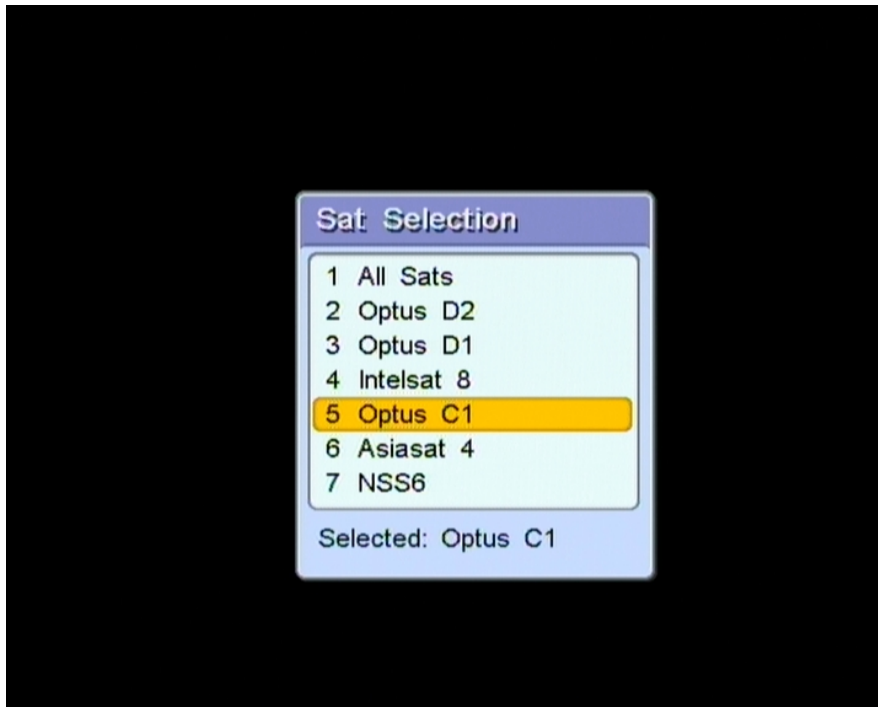
OPERATING INSTRUCTIONS

Before powering on the control unit ensure that the dish has clearance above and around it – ie no obstacles in its path of travel.

Switch your television on and change the input on it to AV (maybe called composite) using the “Source” or “AV” button. Fit batteries to the control unit remote and press the RED power (standby) button at the top. The dish will begin to lift and perform a search.



Pressing the SAT button will allow you to specify which satellite you wish to view (hint – 99% of people want C1/D3 for VAST/Aurora & PayTV):



Reception of the following FOUR Satellites is possible in most areas of Australia:

Optus C1/D3 (VAST / Aurora FTA & PayTV)
Optus D1 (some ABC/SBS channels)
Optus D2 (foreign language and Christian channels)
Intelsat 8 (various programming)

The following two satellites may only be visible over the eastern side of Australia and reception will be difficult in many areas:-

Asiasat 4
NSS6

(channels, satellites, products and services available now and in the future are beyond the control of VANSAT)

The unit is adaptive. It will begin the next search using the last successful search as the starting point. This way if you travel from point A to point B, the system will start using the location information from point A as a quick start. For the initial "out of the box" search it will use point A, which of course was our factory in Mackay!!

ADDING THE EXTERNAL DECODER

To access the full suite of channels available you will need to connect an external decoder. In most cases this will be either a VAST or PayTV decoder (paytv subscribers should read the disclaimer further down).

Below is an example of the rear of a VAST Decoder. Connect the “SAT IN” port to the rear of the VANSAT Control unit (LOOP OUT) using the supplied patch cable (short cable with a screw fitting on either end).



Connection to your TV can be made via the YELLOW/WHITE/RED cable OR preferably a HDMI cable (not supplied). The HDMI connection will give you superior picture & sound quality so if your decoder & TV both have this fitting we would recommend purchasing a HDMI cable. This will also have the benefit that it will free up an AV port on the TV. Many modern TV’s only have the one AV port which would be taken up with the connection to the VANSAT control box. Switch your TV to HDMI (or AV) to watch the external decoder.

SETTING THE CORRECT CONTROL UNIT CHANNEL

Which decoder you use (ie VAST or PayTV) will dictate which channel the control unit should be set to. For VAST, set the control unit to channel 2:



Control Unit to Channel 2 to watch VAST on an External decoder. (if the VAST decoder displays “No Services Found – Please Rescan” simply hold the reset button on the front Panel of the VAST Decoder for 2 seconds to reset it.

For PayTV set the control unit to channel 1 (the default channel):



Control Unit to Channel 1 to watch PayTV on an External decoder

CLOSING THE SYSTEM DOWN

Pressing the power (standby) button on the remote will cause the dish to rotate home and lower. Before travelling, the dish should be visually checked to confirm this has taken place. **DO NOT rely solely on the ignition signal as a guarantee that the dish has lowered.**

PAYTV DISCLAIMER

Using Your Satellite Pay TV Service With The VANSAT System May Violate Your Providers Terms and Conditions. Aardvark Electronics (Producers of the VANSAT System) encourages Pay TV subscribers that are considering travelling with their service to contact their provider to check the OK regarding the use of their equipment and service outside of the place it was installed into.

UNDOCUMENTED FEATURES (good bits we've added)

Viewing the Mechanical & Electronic positioning – while the system is searching if you press INFO on the remote it will show you the mechanical (and electronic) values the system is currently searching. The Skew value is the LNB twist.

System Default to Factory Settings – someone had a play with the remote and muddled up the channel list or altered the search settings? You can restore to factory default. Press Menu and then the left arrow to SYSTEM – Press OK, go down to Service – Press OK. Here you can RESTORE the system to the out of the box settings using the RESTORE feature. **DO NOT** backup your own settings (with the BACKUP option) as you will overwrite our factory programmed settings and you may render your system unstable ☹.

Pause Rotation – to pause the mechanical operation during the search press the “PAUSE” button on the remote. Pressing it again will resume the search sequence. For normal TV viewing the pause button will “freeze” the picture.

Arcade Action! – ok, everyone complains that there is never anything good on tv. We've added some retro style games to relieve the boredom. You will find them in the Menu Options under “Games”.

Please note this is an abbreviated version of the full manual and doesn't contain the full operation instructions. It is subject to change and should only be used as a guide to what to expect if self-installing.

Typical Installation Time – 2 Hours

