2016

RVDataSat 840 Operation Manual

RV DataSat 840 Operation Manual

Mobil Satellite Technologies

1/27/2016

Table of Contents

Table of Figures

System Specifications

RV DataSat 840 Antenna Mechanical Information

Azimuth

Total Travel 374 degrees
Total Travel Time 59 seconds
Degrees per second 6.4 degrees/second
Counts per degree 11.1790909
Total Travel Counts 4166 counts

Elevation

Total Travel 159.3 degrees
Total Travel Time 45 seconds
Degrees per second 3.5 degrees/second
Counts per degree 18.61818167
Total Travel Counts 2966 counts
Max Travel Elevation 84 degrees – Sat Look Angle
Stowed Position -75.3 degrees – Sat Look Angle

Skew

Total Travel 122 degrees (+/- 61 degrees from zero)
Total Travel Time 12.5 seconds
Degrees per second 9.76 degrees/second
Counts per degree 6.6432683
Total Travel Counts 817 counts

RV DataSat 840 Antenna Electrical Information

Power Consumption

Off = .06 Amps
Idle = .10 - .12 Amps
Searching = .20 - 43 Amps

Evolution X5 Satellite Router Information

Interfaces

SatCom Interfaces	TX Out: Type-F, 950–1700 MHz, +7dBm/-35dBm RX In: Type-F, 950–2150 MHz, -5dBm (max) composite/ -125+10*log(Fsym)dBm (min) single carrier
	Software controllable 10 MHz reference on TX Out and TX In ports
BUC IFL Interface	+24V, max. 70W, (120W PSU) (please refer to X5 Installation Manual for full list of supported BUCs)
LNB IFL Interface	+19V (Nominal), 500mA max DiSEqC (Voltage 14V/19V + 22KHz tone)
Data Interfaces	LAN: Single 10/100, 802.1q VLAN RS-232: RJ45 (Console connection)
Protocols Supported	TCP, UDP, ACL, ICMP, IGMP, RIP Ver2, Static Routes, NAT, DHCP, DHCP Helper, Local DNS Caching, OpenAMIP, cRTP and GRE
Traffic Engineering	Group QoS, QoS (Priority Queuing and CBWFQ), Strict Priority Queuing, Application Based QoS, Minimum CIR, CIR (Static and Dynamic), Rate Limiting
Other Features	Built-in Automatic Uplink Power, Frequency and Timing Control, Authentication, Spread Spectrum** , Antenna Control Interface (OpenAMIP)

Mechanical/Environmental

Size	W 11.5 in (29.2 cm) x D 9.9 in (25.1 cm) x H 2 in (5.1cm)
Weight	4.4 lbs (1.99 Kg)
Operating Temperature	0˚ to +50˚C (32˚ to +122˚F) at Sea Level with temperature gradient of 1˚C per 1 min
	0˚ to +45˚C (32˚ to +113˚F) at 10,000 Feet with temperature gradient of 1˚C per 1 min
	For ODU power consumption <70W (please refer to X5 Installation Manual for details)
Humidity Max	90% non-condensing humidity
Input Voltage	100–240 VAC Universal Input, 2A, 50–60 Hz
Radio Standards	EN 301-428 v1.3.1 — Ku-Band System Level Specification EN 301-443 v1.3.1 — C-Band System Level Specification
Safety Standards	Complies with IEC 60950, EN 60950-1, UL 60950-1, CSA C22.2 No.60950-1-03
Emission Standard	Complies with EN 55022 Class B, FCC Part 15 Class B, CISPR 22 Class B, EN 61000-3-2, EN 61000-3-3
EMC/Immunity Standard	Complies with EN 55024, EN 301-489-1, EN 301-489-12, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-11
Certification	FCC, CE, and RoHS Compliant

*Not supported for use with DVB-S2 outbound in iDX 3.0 and above

Safety Instructions

Figure 1 - Caution Symbol - Denotes a potential hazard

- Do not stand in front of the antenna during operation. This area is considered a Radio Frequency Hazard. It is highly recommended you post a RF Hazard sign such as the one below.

Figure 2 - RF Hazard Caution Sign - Sample

- If using a generator be sure that it is stable and full of fuel prior to connecting the satellite electronics.
- Prevent access to the area occupied by the antenna with hazard cones and safety tape to prevent personnel from running into the exposed boom.
- Power must be disconnected or unplugged prior to disconnecting or connecting any cables.
- Follow all recommended shipping requirements to prevent equipment damage.
- All electronic equipment is susceptible to breakage from power surges. We recommend you install a battery backup with a line conditioner applicable to your vehicle.
- While transporting equipment on rough terrain move slow to prevent excessive vibration or shock to mounted electronic equipment.
- Do not ship the equipment upside down as damage will occur.

WARNING: Damage resulting from a failure to observe any of the Safety Instructions listed in this manual is NOT covered under warranty.

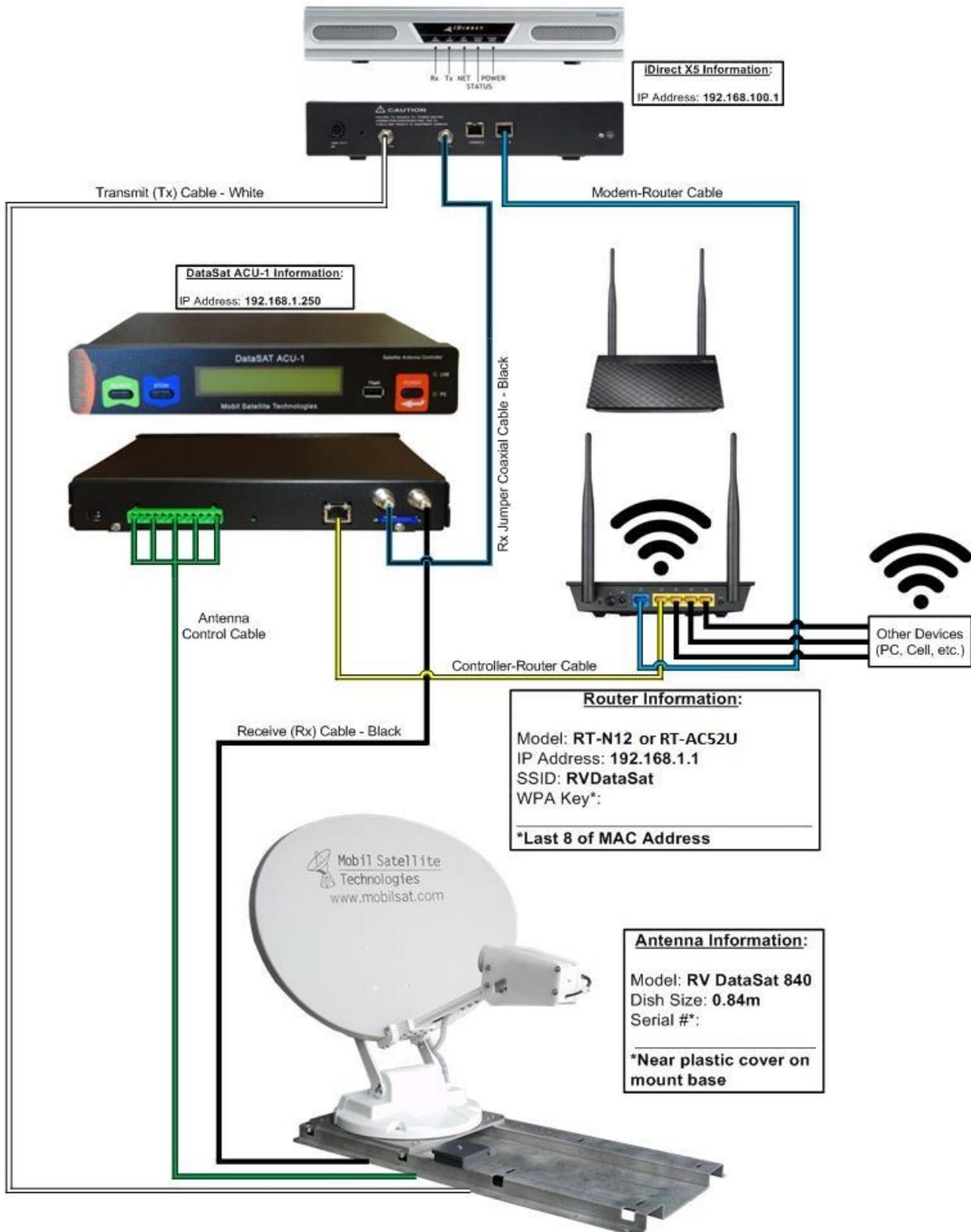# System Overall Connection Diagram

Figure 3 - System Connection Diagram

Installation

A professional installation is always recommended. If you choose to self install the antenna or use local labor the following information applies.

NOTE: This guide is not meant to replace a professional installer and in no way represents a definitive guide on system installation. Other steps may be necessary to successfully complete the installation of your satellite antenna at your chosen location. Proceed at your own risk.

Site Survey

1. Identify where the electronics will be stored inside the vehicle.

    ⚠️ **Caution: The electronics cabinet needs to be well ventilated. We recommend a louvered door or open cabinet.**

    ⚠️ **Caution: Be careful to ensure that power is available or can be run to the selected location.**

2. Identify the location where you will drill a hole to pass wiring from inside to outside of your vehicle.

    ⚠️ **Caution: Vehicle construction varies greatly. If you are unsure of how to safely drill through your vehicle roof or cap obtain a professional installation.**

3. Identify where the antenna will be mounted on the roof.

    ⚠️ **Caution: All interconnecting cables come standard at 30 feet long. Ensure no more than 25 feet between the electronics and the antenna on the roof. This will allow for a required 3 to 5 foot long service loop. CABLES CANNOT BE CUT OR EXTENDED without rendering your system non operational. Excess cable should be stored and securely fastened where it will not be damaged.**

4. Prior to installing the antenna system verify there is sufficient operating space. The antenna rotates in a 360 degree circle projecting 40 inches from the center of the circular antenna base as shown in Figure 4.

    ⚠️ **Caution: Pay particular attention to protrusions from the roof such as air conditioning units, rack structures or other antennas.**

Figure 4 - Antenna Clearance

5. If the surface where the antenna is to be installed is weak or flexible, metal sheeting must be installed to stiffen the roof and prevent the antenna from flexing.

⚠ **Caution: A mounting surface that flexes will cause the mounting screws to work loose potentially causing the antenna to break free.**

6. If the surface where the antenna is to be installed is not flat, a flat supporting structure must be built.

⚠ **Caution: A mounting surface that is not flat will cause undue stress on the mounting screws potentially causing the antenna to break free.**

7. Antenna weight should be distributed over support or cross beams. If you are unable to distribute weight then plating should be placed under the entire frame, drill holes through the

mount plate as needed to secure the antenna to the roof. Ensure bolts penetrate the support beams under the mount plate.

⚠ **Caution: A mounting surface that is not strong enough to support the weight of the antenna may cause structural damage to your vehicle.**

Tools and Supplies

Materials Provided
1. RV DataSat Antenna
2. Mounted 3 wire connector box
3. Pre-configured RV DataSat Antenna Control Unit 1 (ACU-1) with power supply
4. Pre-loaded SD card for ACU-1
5. Pre-terminated control cable for ACU-1
6. Pre-configured iDirect X5 modem with power supply
7. Pre-configured ASUS RT-N12 Wireless N300 Router with power supply
8. Pre-terminated White Coax 30 feet long
9. Pre-terminated Black Coax 30 feet long
10. Pre-terminated Black Coax jumper 18 inches long
11. Pre-terminated Yellow Ethernet cable 3 foot long
12. Pre-terminated Blue Ethernet cable 3 foot long

Materials Not Provided
1. 9 Volt DC battery
2. 7/16" wrench
3. 1/4 inch nut driver
4. Small diameter drill bit long enough to go through the ceiling of your coach
5. Small standard (jewelers) screwdriver
6. 1" hole saw
7. 1 power strip or Uninterruptible Power Supply (UPS) suitable for your application.
8. Mounting screws (The proper size for your application is up to you) examples include #14 1 inch self tapping screws for metal plate or #12 pan head screws for most RV applications. Stainless Steel is recommended both for strength and to limit corrosion.
9. Appropriate bit for the mounting screws selected
10. 1 – 2 tubes of DICOR self-leveling sealer   Dicor Products – Elkhart, Indiana 465141 – 800-837-2059 - www.dicor.com (available at most RV dealerships)
11. 1 tube of dielectric compound   Boss Products Accumetric, LLC - Elizabethtown KY 42701 - 800-928-2677 www.bossproducts.com

12. 1 tube clear silicone #315   Boss Products Accumetric, LLC - Elizabethtown KY 42701 - 800-928-2677 www.bossproducts.com or similar.
13. Approximately 20 – 25 Black wire ties.
14. Approximately 20 Black wire clips P/N GCD12BLK or similar

⚠ **Caution: Do not use white clips or wire ties externally as they become brittle when exposed to UV light.**

15. Split Loom cable wrap

⚠ **Caution: Legacy antennas, built before 11/30/2015, have a known issue with the controller and RF cabling developing significant wear due to regular usage during azimuth rotation. If your antenna was built before this time, a Split Loom cable wrap should be installed over the Controller and RF cable assemblies, where they are fed up through the mount and make contact during rotation.**

System Installation

1. If you would like to test your satellite system prior to installation, do so now.

⚠️ **Caution: Failure to test the antenna system prior to completing this install may result in significant rework time.**

⚠️ **Caution: If you choose to test the dish prior to install, ensure that it is securely fastened to a pallet or other structure to prevent it from tipping over while operating.**

2. Clear out the cabinet location(s) where the electronics will be housed and where the pass through hole to the roof will be cut.
3. At the installation location identified during the site survey, verify the area clean and clear of debris.

⚠️ **Caution: Mounting surface must be clean for the antenna to properly seal to the roof. This will help prevent water penetration and allow the antenna to sit level.**

Lift the antenna system into place.

⚠️ **Caution: The antenna base must be oriented toward the front of the vehicle (which will place the reflector toward the rear) to prevent damage to the antenna system due to wind forces while the vehicle is in motion.**

⚠️ **Caution: The antenna is heavy and should be lifted carefully into place. TWO MAN LIFT IS RECOMMENDED to prevent injury to personnel.**

Figure 5 - Antenna Aligned

4. Verify the rail edges are over support beams.

⚠ **Caution: A mounting surface that is not strong enough to support the weight of the antenna may cause structural damage to your vehicle.**

5. Inspect the interior structure for existing wires or tubing where the screws will penetrate the roof of your vehicle.

⚠ **Caution: Screws that penetrate any existing wires or tubing in your vehicle may cause damage to existing equipment or be a hazard to personnel.**

6. Raise the antenna using a 9 Volt DC battery in accordance with the "Emergency Operation" instructions in this manual.
7. Trace all holes you will put a screw in.

⚠ **Caution: As a bare minimum you must put a screw in all pre-drilled holes on the mount plate. In the event the pre-drilled holes do not align with your support structure it is highly desirable that you drill extra holes as needed prior to using Dicor sealer.**

Figure 6 - Under Antenna Sealer

8. Lift the mount plate and put Dicor sealer over the locations where the antenna screws will penetrate the mounting surface (including any extra screw locations you drilled).

9. Lower the mount plate gently onto the mounting surface.
10. Secure the mount plate to the roof using the mounting screws you selected.

⚠️ **Caution: Screws that are too long may penetrate the interior roof structure of your vehicle.**

⚠️ **Caution: Screws that are too short may not be adequate to hold the antenna on the roof.**

Figure 7 - Antenna Screws Installed

11. Liberally coat the screw heads with Dicor to prevent water penetration.
12. Using a small diameter drill bit make a small pilot hole in the roof where the cabling will pass through.
13. Drill the larger 1 inch hole using the 1 inch drill bit or hole saw.

⚠️ **Caution: Proceed slowly, 1 layer at a time, verifying after each layer is removed that no cables or other critical components will be damaged by the hole.**

14. Look into the hole and verify no cabling or other obstructions are in the way.
15. Remove the green molex connector from the control cable using the small flat screwdriver.
16. Pass the control, white coaxial and black coaxial cables through the hole.
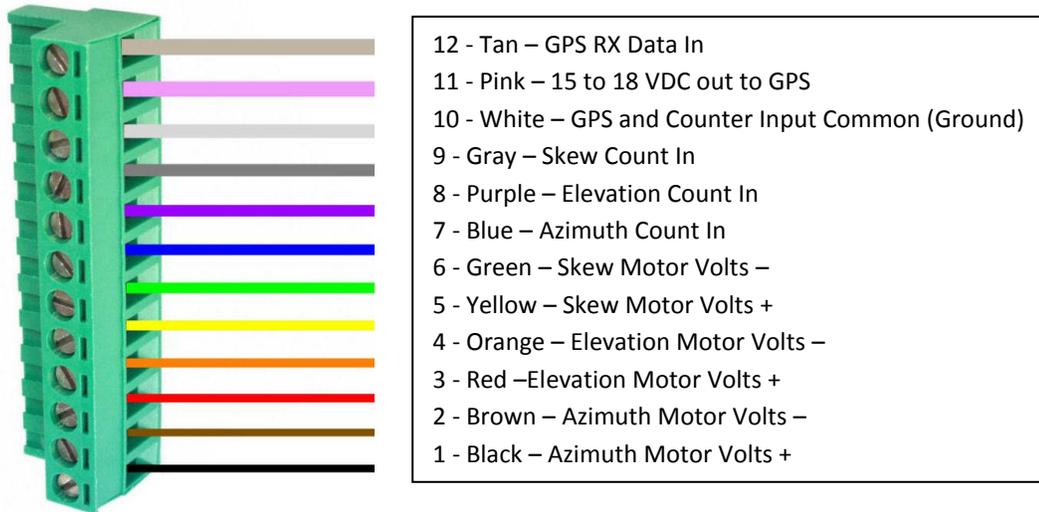17. Reinstall the green molex connector back onto the control cable.

12 - Tan – GPS RX Data In
11 - Pink – 15 to 18 VDC out to GPS
10 - White – GPS and Counter Input Common (Ground)
9 - Gray – Skew Count In
8 - Purple – Elevation Count In
7 - Blue – Azimuth Count In
6 - Green – Skew Motor Volts –
5 - Yellow – Skew Motor Volts +
4 - Orange – Elevation Motor Volts –
3 - Red –Elevation Motor Volts +
2 - Brown – Azimuth Motor Volts –
1 - Black – Azimuth Motor Volts +

Figure 8 - Control Cable Wiring Diagram

⚠️ **Caution: The wires for the control cable should be stripped back to ¼" from the end.**

Figure 9 - Control Cable Stripped length

⚠️ **Caution: When the control cable is reattached to the green Molex connector, be careful of the wire placement. If the wires are placed too far into the connector, it will clamp down on the outer shielding, and will not make a good connection to the wire causing erratic behavior of the antenna. The connections on the Molex connector will appear as in Figure 10 below.**
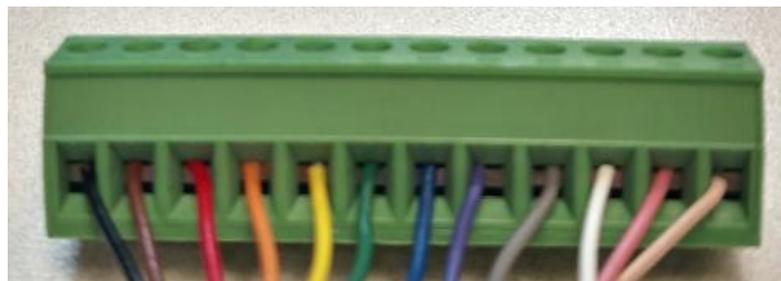

Figure 10 - Proper condition of Molex connections

⚠️ **Caution: Ensure electrical connections are restored properly or damage to electronic equipment may occur.**

18. Put Dielectric compound in both exterior coaxial cable connections.
19. Secure wires starting from the antenna junction box and working toward the roof penetration using wire clips.

Figure 11 - Antenna Junction Box

20. Carefully tie the 3 wires together to create a "service loop" of approximately 2 - 3 feet.
21. Secure the service loop to the roof using wire clips.
22. Working toward the roof penetration secure the cables to the roof approximately every 10 - 12 inches until you reach the roof penetration.

⚠️ **Caution: Place a wire fastener close to the roof penetration to help prevent cable movement while Dicor is curing.**

23. Put Dicor over all screws to prevent water leakage.
24. Push all excess cable down into the hole until wires are dressed nicely.

⚠️ **Caution: Ensure wires will not rub against the sharp edges of the hole in order to prevent electrical shorts or open cables. Use a file as necessary to blunt sharp edges.**

⚠️ **Caution: It is advisable to place the open end of the clamshell toward the rear end of the vehicle to prevent pressure on the opening while driving in the rain.**

25. Put silicone in the hole to fill the void and help prevent water penetration.

⚠️ **Caution: Do not use Dicor for this purpose, it is self leveling and will simply drain through the hole into your vehicle.**

26. Once the silicone has set use Dicor around the Silicone to water seal the cable penetration area.
27. Fill the clam shell with Dicor and put a bead of Dicor around the seating surface of the clam shell.
28. Screw the clamshell to the roof.
29. Apply Dicor over the clam shell mounting screws and around the outside seam. Pay particular attention to the cable entry point.

Clamshell sealed with DICOR

Figure 12 - Clamshell

30. Inside the electronics cabinet, carefully wrap excess cable into a coil and secure to the back of the cabinet.
31. Securely fasten the electronics into the selected storage location.

⚠️ **Caution: Do not stack electronics equipment as it will cause excessive heat buildup and potentially damage some or all of your equipment.**

⚠️ **Caution: Do NOT stack the control unit on top of the modem.   Doing so will cause the controller to overheat and lock up.   Make sure you leave at least a 1.5" air gap between all components**

⚠️ **Caution: Failure to thoroughly secure the equipment in the cabinet may cause danger to the electronics or personnel during travel.**

32. Connect the equipment in accordance with the overall system drawing (Figure 3).
    a. Black control cable from ACU to the antenna junction box.
    b. Black coaxial cable from ACU "LNB In" to the antenna junction box.
       Note: Use dielectric grease on the external coaxial connection.
    c. White coaxial cable from modem "TX out" to the antenna junction box TX.
       Note: Use dielectric grease on the external coaxial connection.
    d. Black jumper cable from ACU "RX In" to the modem "RX IN"
    e. Yellow Ethernet cable from ACU "LAN port" to the Router Port 1 (yellow).
    f. Blue Ethernet cable from Router WAN port (blue) to the modem "Lan A" port.
    g. Power cable Router to power strip.
    h. Power cable Modem to power strip.
    i. Power cable ACU to power strip.
    j. Power strip to AC power source.
33. Power on all electronic equipment including the RV DataSat ACU-1, ASUS Router and iDirect X5 Modem.
34. Test operate the RV DataSat system using the normal operation section of this manual.

⚠️ **Caution: If you encounter any problems with normal operation of the system contact MobilSat Technical Support prior to continuing this installation.**

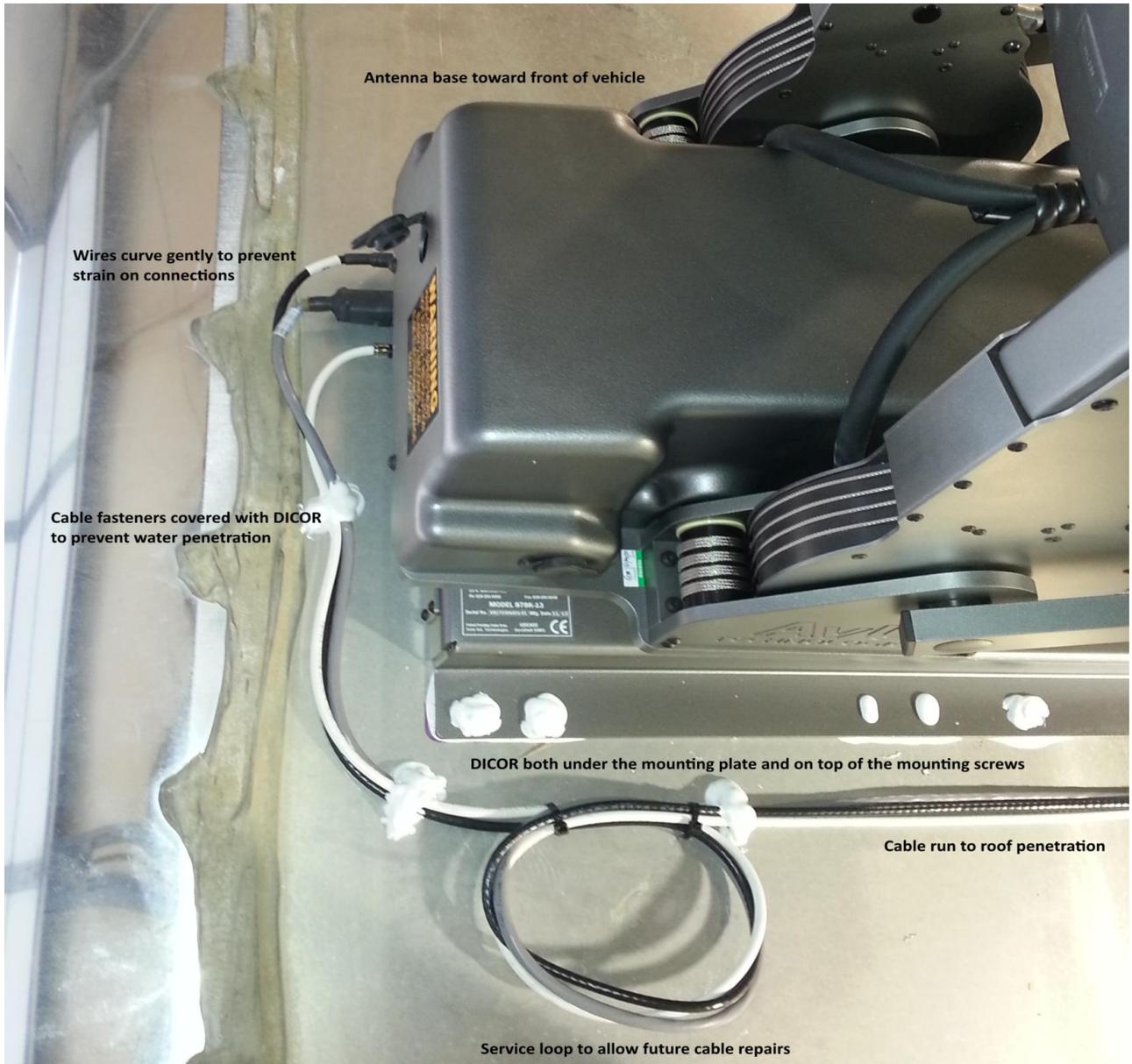35. The system is ready for normal use.

Antenna base toward front of vehicle

Wires curve gently to prevent strain on connections

Cable fasteners covered with DICOR to prevent water penetration

DICOR both under the mounting plate and on top of the mounting screws

Cable run to roof penetration

Service loop to allow future cable repairs

Figure 13 – Sample Antenna Install Picture

Normal Operation

Site Survey

1. Prior to operating the antenna system, verify there are no trees, buildings or power lines obstructing your view to the southern sky.
2. Elevated locations are recommended.
3. Do not place the dish with a pedestrian crossing or highway immediately to the south.

System Operation

Satellite Aquisition

1. Power on your electronics equipment.
   a. iDirect X5 Modem – Plug into power strip/UPS.
   b. DataSAT ACU-1 – Plug into power strip/UPS, Press the front panel "Power" button.

Figure 14 - DataSAT ACU-1

   c. ASUS wireless router – Plug into power strip/UPS, Press the back panel power button.
   d. Apply power to your power strip/UPS as appropriate.
2. Allow 2 to 3 minutes for a normal boot process.
   a. The iDirect X5 modem is booted up normally when the Rx and Net lights are solid amber.
   b. The ACU-1 controller is booted up normally when the display shows as follows

   c. The ASUS router will display a blue power and wireless light approximately 15 seconds after a normal start.
3. Press the green "Search" button on the front of the ACU-1.
4. Wait for the search to complete (approximately 3 to 15 minutes).
5. Allow 2 minutes for the modem to enter the network. All 5 lights on the front panel will be solid green once that is complete.
6. Browse to any web page. If this is your first attempt to use the system or your service plan has expired, you will be redirected to the service sign up page. The latest detailed instructions can be found at http://www.mobilsat.com/Insta-Sat/

Stowing the system for travel

1. Press the "Stow" button on the front panel of the ACU-1.
2. Verify the system stowed by physically inspecting it.

⚠ **Caution: It is critical to physically inspect the dish prior to moving the vehicle as traveling with the dish up will result in total destruction of the antenna.**

Bandwidth Sign Up.

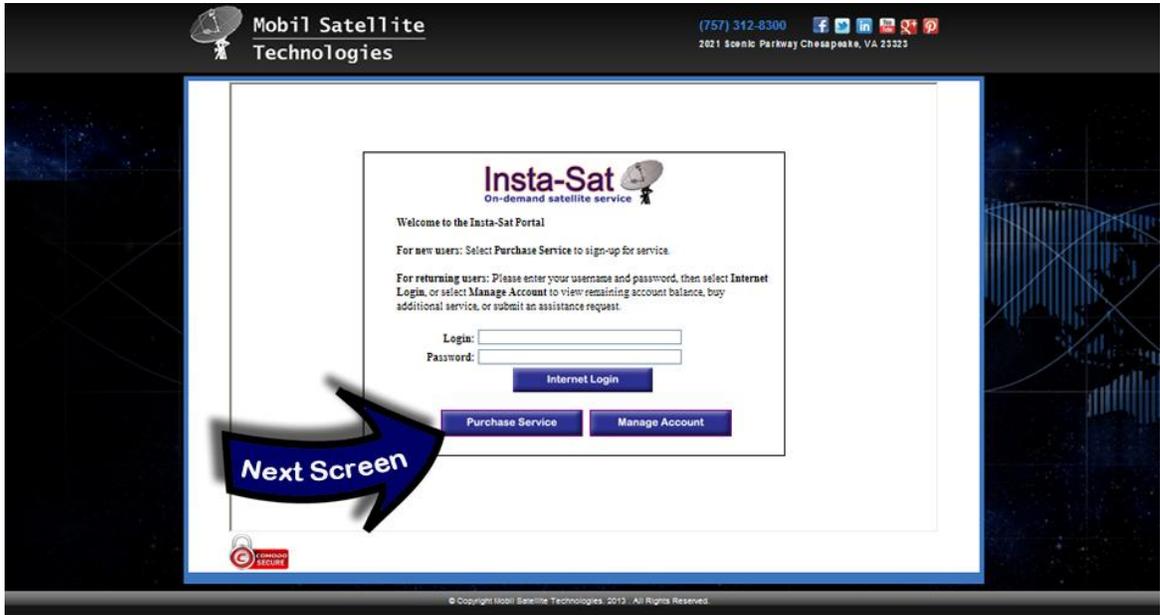1. The landing page. Enter or create a login.

Figure 15 - Insta-Sat 1

2. Read and acknowledge the subscriber agreement

Figure 16 - Insta-Sat 2

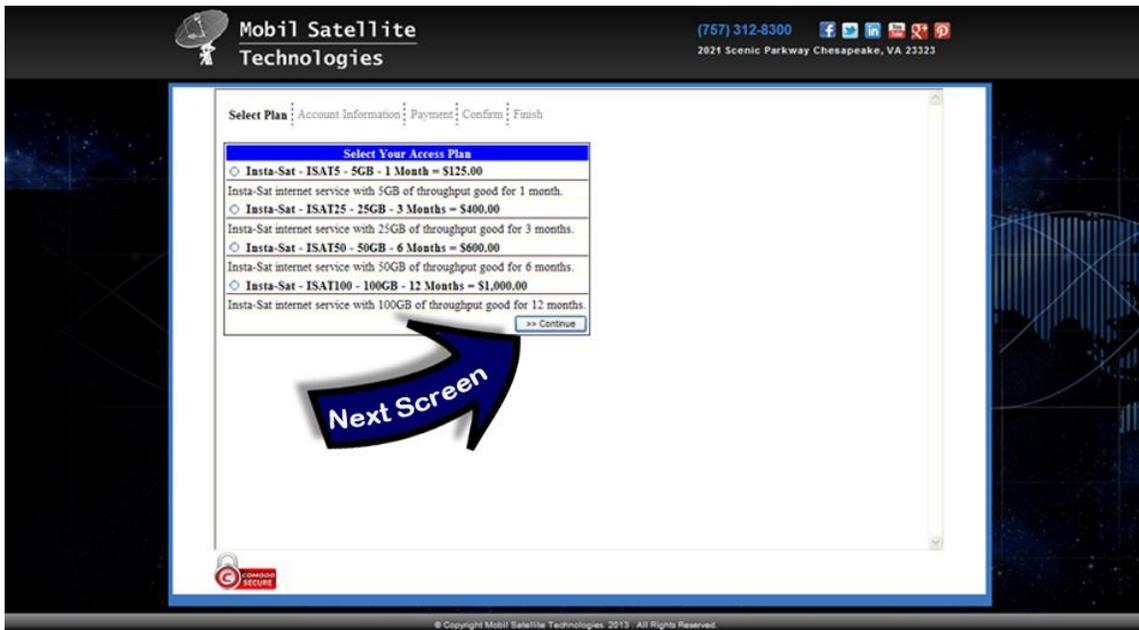3. Select your desired service plan and select "Continue"

Figure 17 - Insta-Sat 3

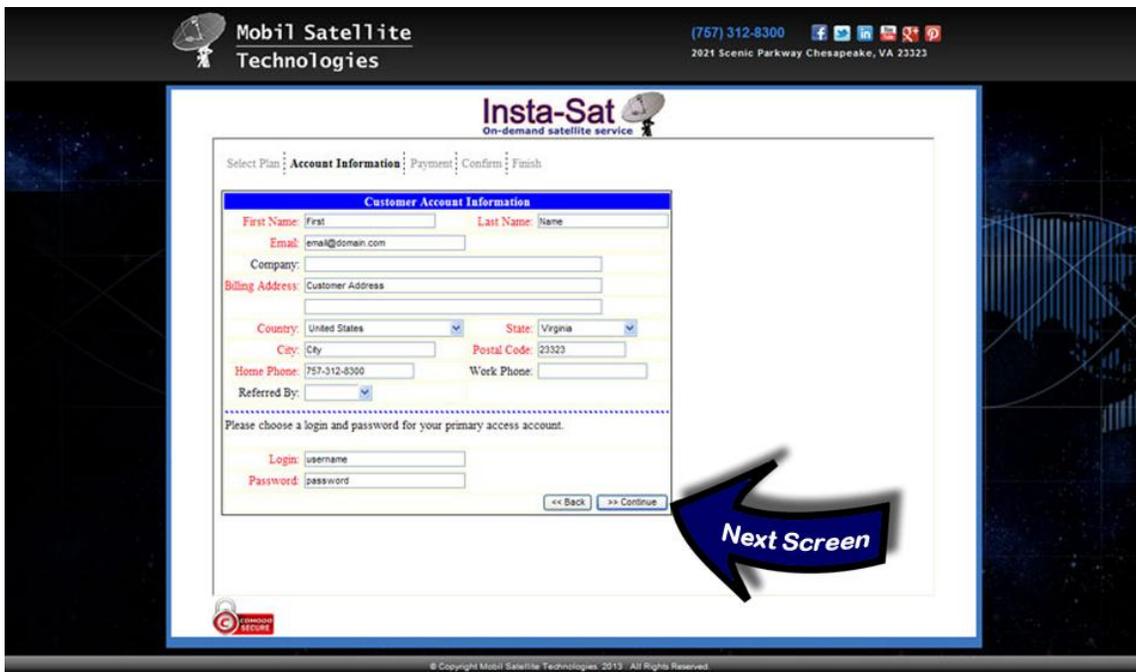4. Enter your account information and select "Continue"

Figure 18 - Insta-Sat 4

5. Enter you payment information and select "Continue"

Figure 19 - Insta-Sat 5

6. Verify all information is correct and select "Sign-Up"
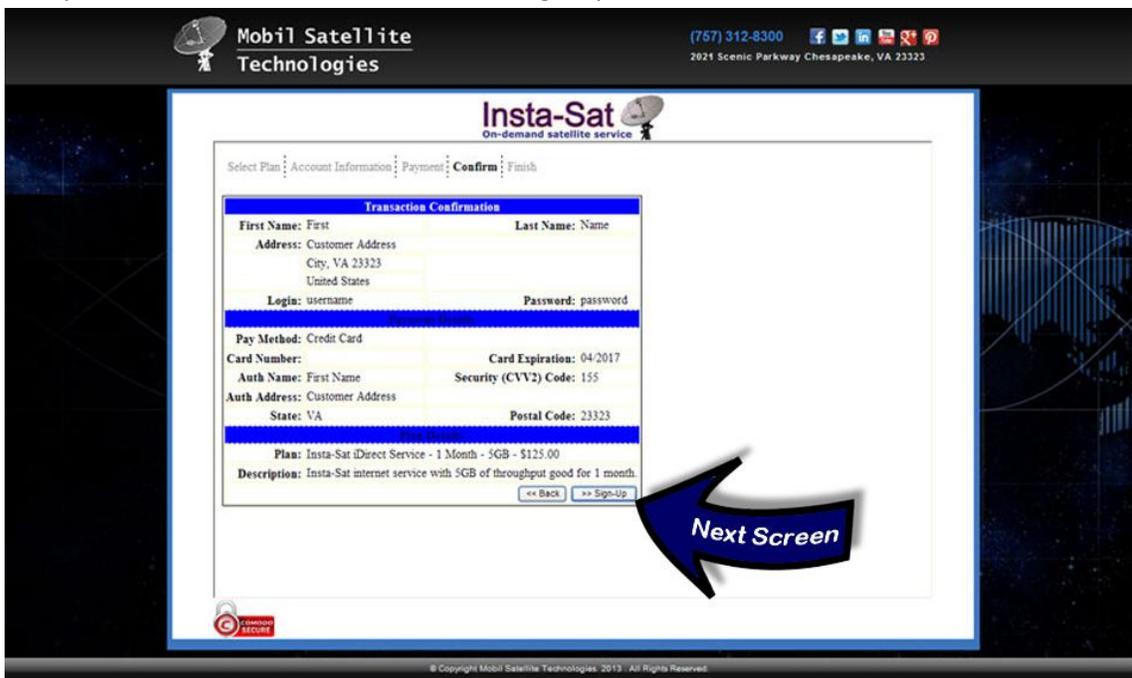

Figure 20 - Insta-Sat 6

7. Click the link to access the login page

Figure 21 - Insta-Sat 7

8. Log into your account

Figure 22 - Insta-Sat 8

9. Select "Internet Login" to begin browsing the internet or select "Manage Account" to view remaining account balance etc.

Controller Configuration

DataSAT ACU-1 Satellite Antenna Controller Setup

The ACU comes pre- configured. In the event your configuration is lost or at the direction of a technician you may need to access the configuration screens.

Turn on the ACU-1 Controller Power located on the front right side of the controller. The LCD should power on as shown below.

Figure 23 - ACU-1 Controller Initial Screen

Open a Web Browser.

Figure 24 - Compatible Web Browsers

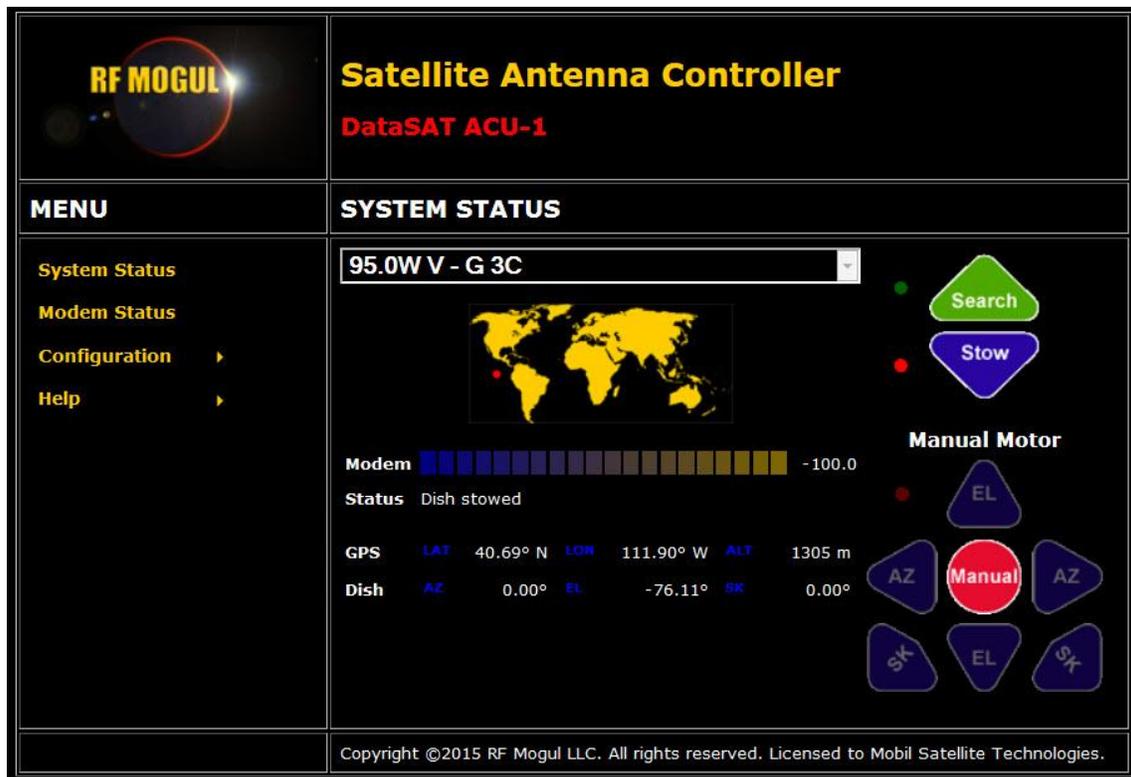Enter the Controller IP Address. Default is 192.168.1.250.

Figure 25 - Controller Front Page

Confirming the ACU IP address

If the ACU-1 HTML page does not come up you can confirm the controller IP address by using the Front Panel Menu commands. These are the *Power/Menu*, *Search/Up*, and *Stow/Down* buttons. Pressing the Power one time when the Controller is already on will enter the Menu Mode.

Using The Down button keep stepping the command until MENU 9: is displayed.

Figure 26 - Controller Front Panel - IP

Press the Power/Menu button one more time to see the Controller IP Address.

Figure 27 - Controller Front Panel - IP

Network Settings

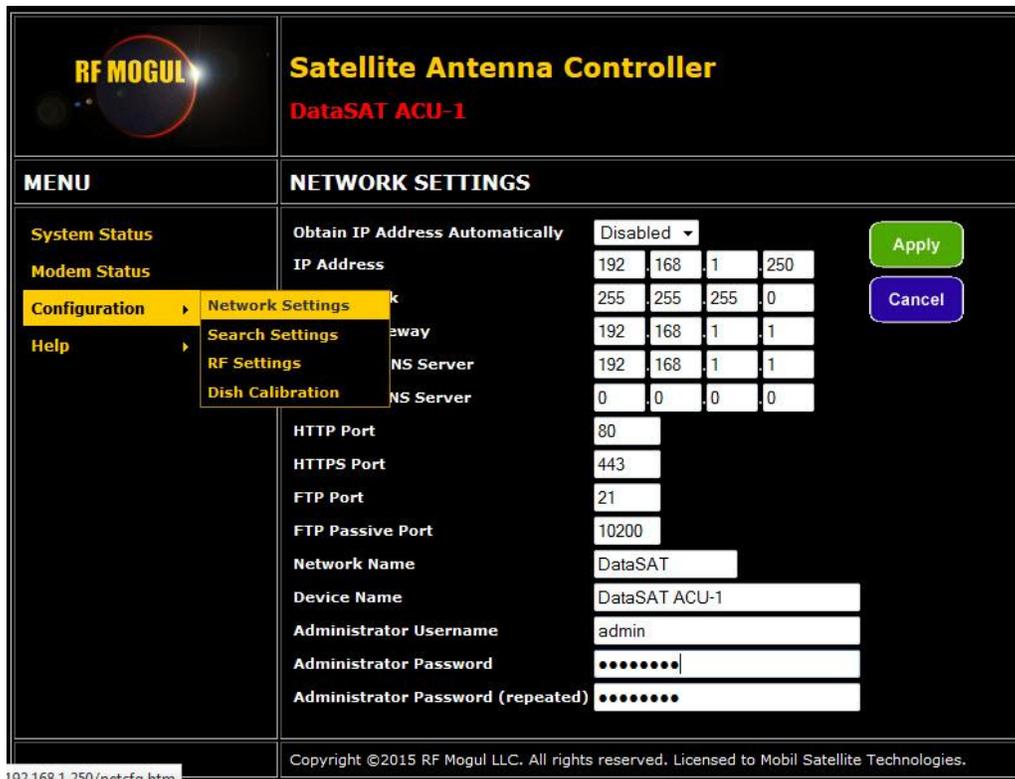Move the mouse to highlight **Configuration** then select **Network Settings**.

Figure 28 - Controller Network Settings

28

Confirm the Subnet Mask, Modem Gateway, and Primary DNS Server are as shown above.

RF Settings

Move the mouse to highlight **Configuration** then select **RF Settings**.
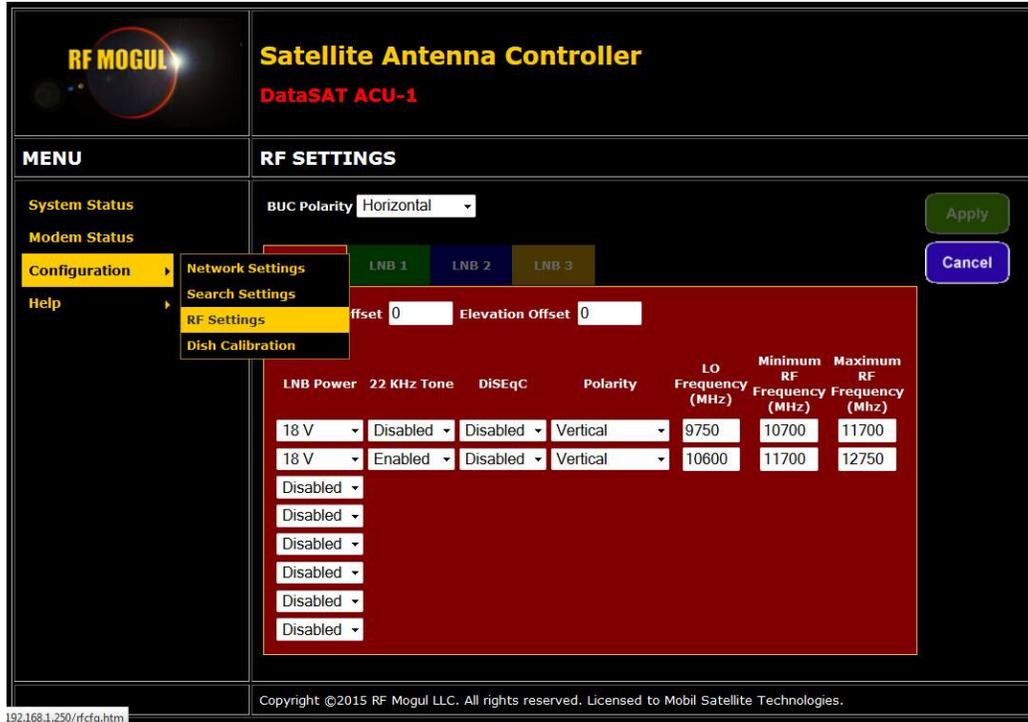
Confirm the LNB settings are correct as shown above. Any errors on this page will result in the Antenna Controller not finding the correct satellite or the Modem not getting an RX Lock.

Dish Calibration

Move the mouse to highlight **Configuration** then select **Dish Calibration**.

Figure 30 - Controller - Calibration

Select Start. A Dish Calibration is required one time to complete installation and configuration. Once completed the System is ready for use.
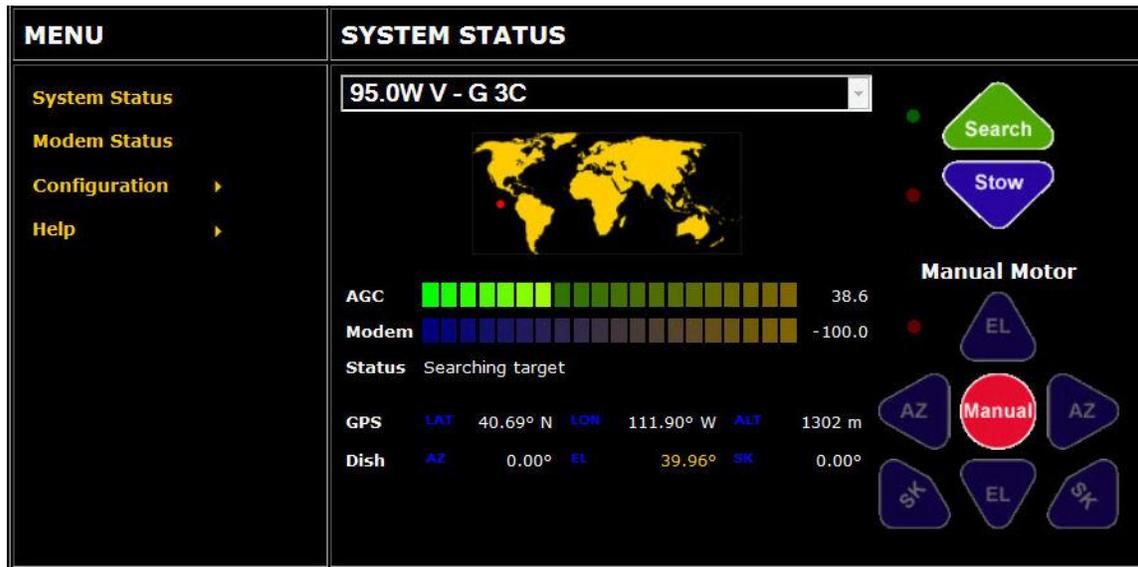
Press Search to begin.

Figure 31 - Controller - Searching
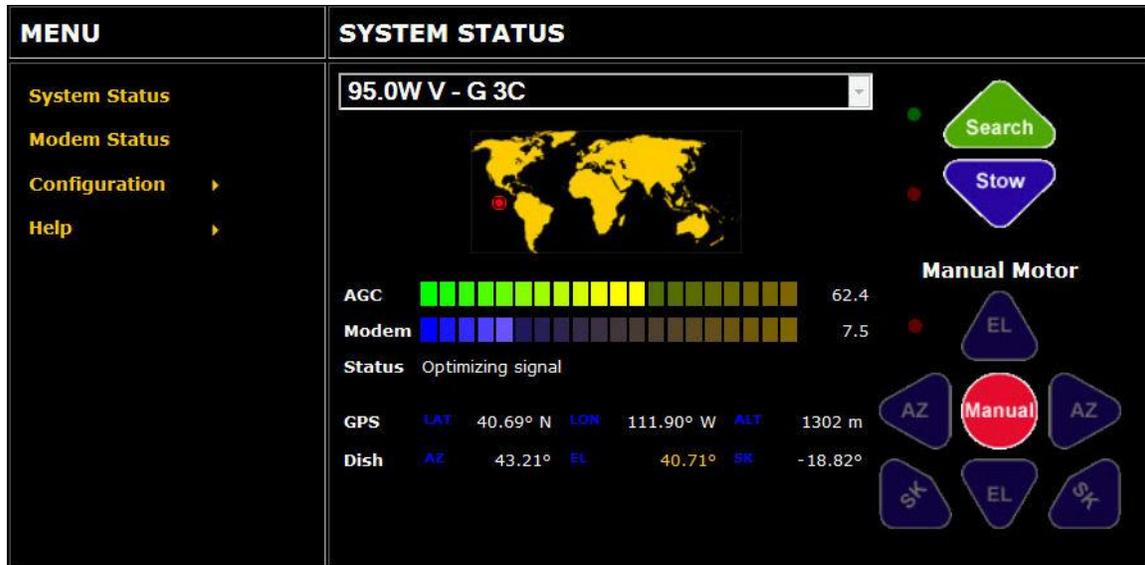
Controller will peak and Optimize.
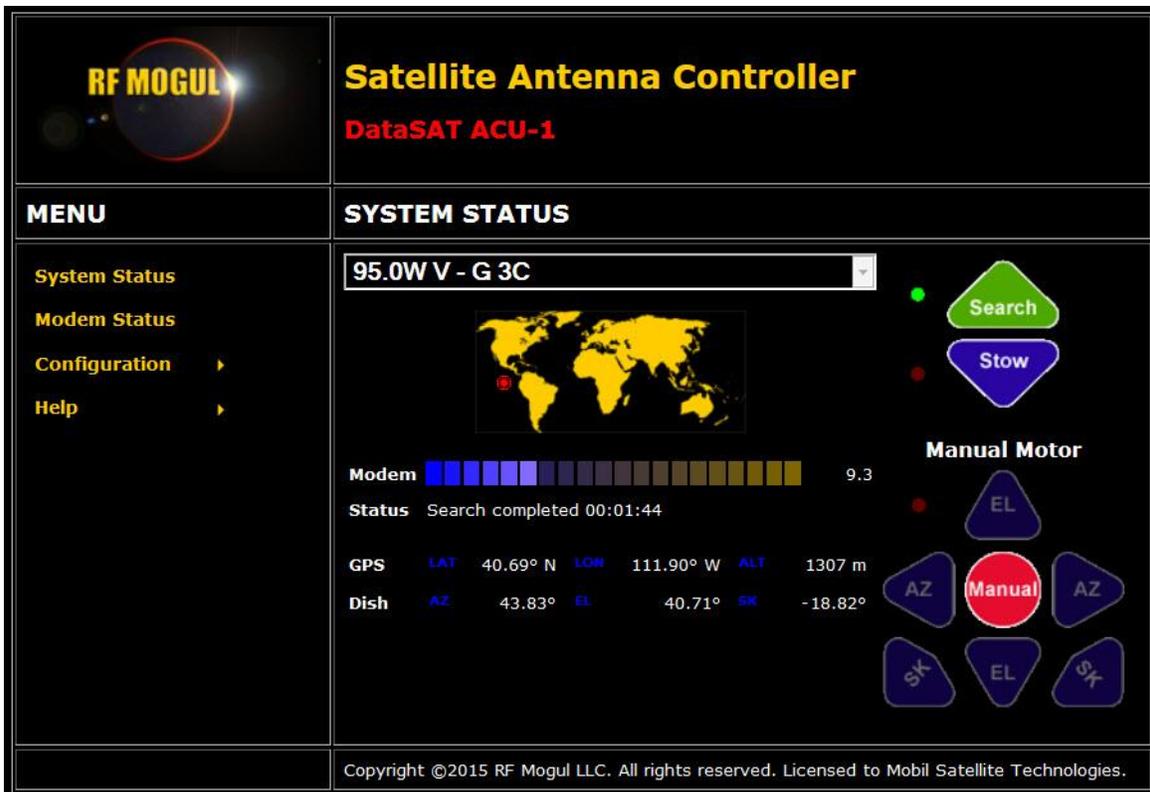
Figure 32 - Controller - Optimizing

Search Complete.

Figure 33 - Controller - Complete

Toubleshooting

Azimuth Overcurrent

In the event that you receive an Azimuth Overcurrent error, then it is possible that the heading of the antenna matches the Azimuth look angle, causing the antenna not to peak on the satellite signal.

1. The issue is caused by a Blind Spot on the antenna. Try to move your vehicle, so as to change the heading of the antenna.   This will only need to be changed by a couple of degrees.
2. After moving vehicle, verify if problem re-occurs.   If problem re-occurs, please contact tech support at the number listed below.

Incorrect or blank GPS values

In the event that the controller does not have any GPS or is showing the incorrect GPS location, try to power off your equipment and start over. If the issue persists, follow the steps below.

Inside the RV

1. Check the 12 Position Green Terminal Connector is snapped in securely to the ACU

   ⚠ **Caution: Failure to power off the electronics prior to unplugging any cable may result in damage to the electronics or their associated power supplies.**

2. The last 3 wires on the right end of connector are for the GPS. Check the White (10), Pink (11), and Tan (12) wires are properly stripped and secured in the Green connector.
3. With a voltmeter, check for 15-18 VDC between position 10 (White) and 11 (Pink)

On the Antenna

1. Stow dish
2. Remove the skew cover on the back side of the dish.
3. Check if the power LED (Blue) lit or blinking?
4. Verify that the white connector on the right side of the GPS module fully connected?
5. Are the 3 leads of the GPS +5VDC module secured with terminal screws?
6. Check the Red, Orange and White wires are properly stripped and secured in the terminal connector.
7. With a Voltmeter, check for 15-18VDC between position 5 (White) and 7 (Red)
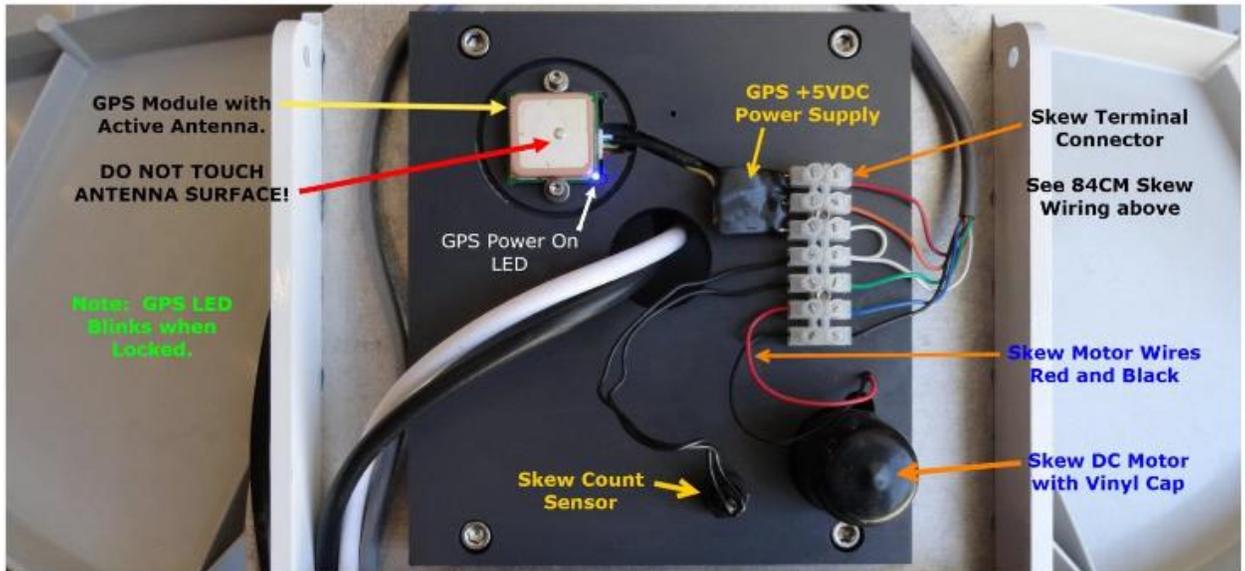
Figure 34 - GPS Connections

⚠️ **Caution: If all wiring and voltages are correct, contact tech support to replace the GPS Module and GPS Power Supply.**

Emergency Operation

In the event that you are unable to operate the system electronically, a 9 volt DC battery can be used to move the system.

1. Power off all electronics.

⚠️ **Caution: Failure to power off the electronics prior to unplugging any cable may result in damage to the electronics or their associated power supplies.**

2. Remove the green molex connector from the back of the ACU-1.
3. Using a small standard screw driver remove wires 1-6 (Black, Brown, Red, Orange, Yellow and Green) from the molex connector.

⚠️ **Caution: Failure to raise the antenna in Elevation sufficiently to raise the arm off of the stow plate will result in damage to your antenna and your vehicle.**

4. Connect the wires to the terminals on the 9 Volt battery to move the antenna. All movements are relative to standing behind the dish.

Elevation

    a. Red to Positive (+), Orange to Negative (-) = Elevation UP
    b. Red to Negative (-), Orange to Positive (+) = Elevation DOWN

Azimuth

    c. Black to Positive (+), Brown to Negative (-) = Azimuth Clockwise
    d. Black to Negative (-), Brown to Positive (+) = Azimuth Counter-Clockwise

Skew

    e. Yellow to Positive (+), Green to Negative (-) = Skew Counter-Clockwise
    f. Yellow to Negative (-), Green to Positive (+) = Skew Clockwise

5. Restore all wires to the appropriate slot in the molex connector.
6. Reseat the molex connecter into the ACU-1.

Support and Assistance

Mobil Satellite Technologies business location

- 2021 Scenic Parkway Chesapeake, VA. 23323

Assistance Options available

- For sales requests call 757-312-8300 x1 or email sales@mobilsat.com
- For technical assistance call 757-312-8300 x2 or email support@mobilsat.com
- For shipping requests call 757-312-8300 x3 or email install@mobilsat.com
- For service requests call 757-312-8300 x4 or email install@mobilsat.com
- For billing requests call 757-312-8300 x5 or email billing@mobilsat.com
- Fax any documentation to 757-282-7702

Technical Support hours of operation

- 8:30am to 9pm 7 days per week except holidays.

Technical Support assistance process

- When calling for support please be at the satellite equipment and have the serial number of the iDirect modem ready. Technical support will take your contact information and create a case to track your issue.
- The warranty for most products is 1 year and requires the customer deliver the affected equipment to the manufacturer.