Thank you for purchasing the RoamSat from RPM, Inc.

For new Starlink users please go to www.Starlink.com/activate and enter the Starlink SN "KITXXXXXXXX" provided with your RoamSat unit. Enter your information, select a monthly plan and activate your dish. Note: Typically only takes 15-30 minutes to become active. For existing Starlink users, make sure your Starlink plan is active. Once activated there is NO setup or configuration required. We have already done that for you with the user specific credentials listed below on your instructions. While the Starlink app is a nice feature it is not required to connect to your unit. Simply turn the Roamsat power on, open your device and connect to the WiFi. From there you should be online and able to perform a speed test via the Starlink app or something like SpeedTest.net

NOTE: In order to use your RoamSat, the device must be outdoors free of any obstructions and obstacles facing directly up towards the sky. Do not attempt to operate indoors!

CUSTOMER: Your Name Here

KIT NUMBER: ____KITXXXXXXXXX_____

Sample QR code below

WiFi Name: RoamSat
Password: 87651234

Operation:

Your RoamSat unit comes with a 30ah Lifepo4 battery providing 8-10 hours of use on a single charge (Gen2 Antenna). The unit ships with only a partial charge (enough to test, etc) but should be fully charged before operation. To turn the unit "ON" using battery power, simply turn the main battery switch on. For charging the switch should remain "OFF" unless you are actively using the unit and it is placed outside with a clear view of the sky. The 12v DC cables (bare, cigarette plug, jumper, Hubbell plug), as well as the 110v Power Supply cables all "bypass" the onboard battery and will automatically power the unit when connected to 12v even with the switch in the "Off" position. The power switch should remain "OFF" when connected to any of the auxiliary cables. Keep in mind, when using the auxiliary cables, the RoamSat will remain on unless disconnected from your 12v power source.

The front battery display will be illuminated whenever the unit is powered on, regardless of chosen power source. This confirms the unit is "ON" and has power going into the dish and access point. Go to your Wi-Fi settings (this takes just over 2 minutes to boot up and show your network in the Wi-Fi list). Select your specific network name and enter your unique password / QR code. From there it should be saved and automatically connect to known devices for future use. The Starlink app is not needed to access the internet, however it will function normally to change service plans, perform speed tests, view your account info, etc. The network tab will not be accessible, due to the 3rd party router used with the Roamsat.

The main ways to power the RoamSat are as follows:

Onboard battery	110/220v AC	12v DC	Solar Panel

Option 1 - Battery Power. Your Gen2 RoamSat comes with a 30ah Lifepo4 battery providing 8-10 hours of use on a single charge. The RoamSat features a battery voltage gauge which corresponds with the voltage chart below do determine your battery percentage. Unfortunately, the percentage bars on the display should be ignored as they are not accurate. Your battery will charge with 14.6v and rest at 13.5v when fully charged. Upon powering up, it is common to drop to 13.0-13.1 for quite some time. Most of your operating will be from 13.1v to about 12.5v. To power on, simply rotate the battery On/Off switch, and the unit will power "ON"

12V 30Ah lifepo4 battery pack		
Voltage	Capacity(Ah)	Percentage
13.5V	30	100%
13V	29.92	99.70%
12.9V	29.83	99.40%
12.8V	21.24	71%
12.7V	15.04	50%
12.6V	9.09	30%
12.5V	5.87	20%
12.4V	3.88	13%
12.3V	2.23	7%
12.2V	0.99	3%
12.1V	0.33	1%
12V	0.2	0

Voltage MUST be above 12.0 volts or your Starlink will not boot up. WiFi will connect with 11.X volts but you will not have internet connection.

Option 2 - **110/220v Satiator smart charger / power supply**. Plug in the cycle satiator into the wall and insert the XLR charging plug into the RoamSat charging port. Note: the cord only goes in one way so gently twist to align the plug and do not force it! To power the RoamSat using 110/220v power, the On/off switch on the RoamSat unit must be turned "ON" and have a small amount of battery charge to initiate connection. If only charging the battery, make sure the battery switch is positioned "OFF" (will prevent overheating if the unit is placed indoors without signal).

Your cycle satiator charger comes pre- programmed with a 5 amp default setting for "Pass through" operation and standard charging (enough to power your unit and charge simultaneously). This is the correct setting when wanting to power the device for extended periods of time using 110/220 AC power. If the unit is powered off, it will take 6 hours to fully charge from a completely dead state. The second setting is the 8 amp "supercharge" setting. Supercharging will take ~3.5 hours when the battery is completely dead.

To scroll through the charging options, hold the top arrow on the charger to enter the profile list. Then use the up or down arrows to select the charge profile desired. The charger should automatically connect if the battery voltage is above 11.5 volts, however if the battery is completely drained it may be required to **Press and hold the down arrow to start charging if necessary (i.e Force Start)**. It is recommended to only supercharge when needed as it does generate significantly more heat both on the charger itself and inside the battery. Inherently supercharging constantly will reduce battery life over time. During either charge profile you may operate your unit while charging provided your dish is outside and able to receive signal.

Option 3 – **12v DC auxiliary cord** for use with a Car, Marine, Rv batteries (AGM/Lead Acid/etc) This option bypasses the RoamSat Lifepo4 battery, so you DO NOT need to turn on the RoamSat battery switch. When 12v is applied and the auxiliary cord is connected to the Roamsat, your unit will automatically turn on and the display will be illuminated. For this option your power source should be capable of at least 10 amps. It is recommended to use a 15A fuse and switched "on/off" power source**. Ensure you have MINIMUM 12.0v on the screen or the Starlink dish will NOT boot up** (eventhough your wifi still appears)

Option 4 - **Optional Solar Panel** (sold separately) The solar panel is essentially a charger for your Lifepo4 battery. When sunlight is present the solar panel will generate enough electricity to power your unit and slowly charge your battery at the same time (Gen2) and help maintain charge on the Gen3 due to increased power consumption. For charging purposes, simply connect the solar panel via the charge controller cable. In order to use the RoamSat while connected to the solar panel you must switch the RoamSat power switch to the "On" position. If you would like to use your existing solar panel, make sure you have the correct charge controller for a 12v Lifepo4 battery. Additionally it should be limited to 10 charging amps.

Option 5- Optional 110v Power Supply This is for extended use (i.e. residential use) and BYPASSES the battery. Good for traveling on commercial airlines when the battery must be removed or when using for months at a time, so as to not be constantly feeding power through your battery. You will need to plug

in the auxiliary cable with cigarette adapter into the 110v power supply. For all other times when the battery is installed, you can power with the provided 110/220v Satiator charger.

Option 6: **Optional 12v Charger** This optional charger allows you to charge your RoamSat battery with 12v DC power (another battery), whereas the standard charger is only110-240v AC power. The RoamSat can be used while charging, however the power switch must be turned "ON" as this device does not bypass the battery like the other 12v accessory options. It is charging and powering through the battery! For charging only, the power switch should remain "OFF".

Mounting the unit

In order to acquire satellites, the unit must face directly at the sky, perpendicular to the ground. Mounting it at an angle or under obstructions will affect performance, internet service, and potentially overheat the unit.

Vacuum Mounts - Ensure the surface is smooth and free of any dirt, debris, etc. Adding water to the face of the vacuum mounts helps to adhere them and create the suction. Apply a small amount of downward pressure and pump up the plunger(s) until the orange indicator band disappears. When proper suction is created, the orange band will be depressed and only begin to appear when the unit is loosing suction. Typically if a solid suction is not created, you will start to see the orange band reappear after only a few seconds. To remove, lift up on the tabs.

Magnets – Simply lay the RoamSat on any ferromagnetic surface and that's it. This option will not work for plastic, aluminum, fiberglass, most stainless steels, etc.

Semi-Permanent – Use the ¼-20 threaded rubber isolator bushings to attach to your mounting bracket, chassis, etc.

Switching between Magnets and Vacuum Mounts- The ¼-20 rubber isolator bushings must be installed into the RoamSat housing. Studded magnets can be threaded directly into the bushings. In order to use the vacuum mounts, (4) ¼-20 x 5/8" long set screws must be inserted into the suction cups and threaded into the rubber bushings. You can then spin the vacuum mounts until they are tight or until the plungers are in a usable position. Note: You may not be able to fully tighten and properly rotate each vacuum mount using this method . Simply screw the vacuum mounts as much as you can and eliminate any slop between the vacuum mount and the bushing. Once in place the set screw has nowhere to go and your unit will be secure. The only way to properly clock and fully tighten the suction cups is from inside the unit using the correct screws / bolts.

Basic Trouble Shooting:

In the event you need to do some basic troubleshooting on your own, here are some suggestions.

The most common FAQ we receive is "My unit will not charge even though the cable is plugged in, it says "Connect to Battery". Your battery is likely completely drained and you must hold the down button on the Satiator charger for a few seconds to force start. The charger will only automatically connect and start to charge if there is adequate voltage (typically 11.5v or more)

The battery display on the front of the unit is illuminated when powered on and MUST SHOW A MINIMUM OF 12.0 volts. This ensures either your internal battery is charged sufficiently or the provided DC power source through auxilary cable is adequate. Your Wi-Fi will work with 11.0v but for the Starlink antenna to go online it must show minimum 12.0V!

Step one when trouble shooting would be to ensure the battery is charged and / or the power supply is connected and actively charging. The unit should turn on and work with 12.0v. If your display will not power on with the on/off switch you can try connecting the 12v auxiliary power cable. If the display turns on, there is a problem with the battery or switch. If the display still does not turn on, the gauge could have failed, or your 12v source is not adequate (try various outlets or direct to a known good battery) or there is a problem inside the unit. Please call for further assistance.

It should be understood the Wi-Fi and internet connection are two separate issues. The Wi-Fi should show up and be connected after 2 ½ minutes regardless of internet connection or the Starlink antenna working. If there is power, your WiFi should work! If the battery display turns on and you don't have Wi-Fi after 3 minutes, there is a problem with the Router or you are out of WiFi range. If you are able to connect to Wi-Fi, but don't have internet connection, there is likely inadequate voltage to your unit (below 12.0 volts) Try a different power source. Next step would be to make sure your Starlink is active, has the appropriate plan (ie mobile priority data for maritime use, etc) and is free of all obstructions.

If you are in need of removing the white lid for inspection please note the network cable connecting the Roamsat unit to the dish is short and fragile. You MUST use extreme caution when separating the two pieces and disconnect the connector to the Starlink antenna before lifting up.

Please follow Starlink terms and conditions for the correct service plan. If you intend to use your Roamsat both on land and offshore we recommend the "Roam" plan (unlimited data on land) and toggle to the "priority mobile data" in the Starlink app only when using the RoamSat in the ocean. This allows the unit to be used anywhere in the world at $2/gb but switched on/off to take advantage of the unlimited data on land.

We are available during normal business hours and often after hours via email.

877-887-2611 or info@roamsat.com