Thuraya IP Commander

Operating Instructions

Version 4.0

THURAYA

SRT Wireless, LLC, Davie, FL 33314

Published 2015

Printed in the United States of America

Technical Support: support@srtrl.com

Version	Date	Change Description
1.0	12/1/2014	Initial Release
2.0	10/13/2015	Update logos, update user interface

Table of Contents

List of Figures

List of Tables

Safety Information

For your safety and protection, read this entire user guide before you attempt to use the Thuraya IP Commander. In particular, read this safety section carefully. Keep this safety information where you can refer to if necessary.

Warning Symbols

This section introduces the various types of warnings used in this document to alert you to possible safety hazards.

WARNING: *Potential radio frequency (RF) hazard. Where you see this alert symbol and WARNING heading, strictly follow the warning instructions to avoid injury to eyes or other personal injury.*

WARNING: *Where you see this alert symbol and WARNING heading, strictly follow the warning instructions to avoid personal injury or damage equipment.*

DANGER: *Electric shock hazard: Where you see this alert symbol and DANGER heading, strictly follow the warning instructions to avoid electric shock injury or death.*

Warnings for the Thuraya IP Commander and Antenna

WARNING: ***Do not stand at the side or top of the Antenna***

This device emits radio frequency energy when in the transmit mode. To avoid injury, do not place head or other body parts at the side or top of the Thuraya antenna when system is operational. Maintain a distance of one meter away from those areas of the Thuraya antenna when energized.

WARNING: ***In the vicinity of blasting work and in explosive environments***

Never use the Thuraya IP Commander where blasting work is in progress. Observe all restrictions and follow any regulations or rules. Areas with a potentially explosive environment are often, but not always, clearly marked. Do not use the Thuraya IP Commander while at a fuel filling station. Do not use near fuel or chemicals.

WARNING: Antenna

The antenna cable carries DC power. Always power the IP Commander down prior to connecting or disconnecting the antenna cable from either the Thuraya antenna or the IP Commander. Do not bend or kink the antenna cable.

Keep a clear line-of-sight to the satellite. Preferably, avoid all obstructions within three meters of the Thuraya antenna. Obstructions less than 150 mm (six inches) in diameter can be ignored beyond this distance.

Do not locate the antenna close to interfering signal sources or receivers. It is recommended that no other antennas be located within three meters of the Thuraya antenna. If there is other equipment installed near the Thuraya IP Commander, it is recommended to operate all equipment simultaneously and verify there is no co-interference.

Install and use the antenna with care. SRT Wireless LLC assumes no liability for any damage caused by the antenna falling off the vehicle or stressing the mounting base. It is the responsibility of the customer to ensure a safe and correct installation of the antenna. The instructions in the Installation manual are only guidelines.

Under normal driving circumstances the magnetic force of the magnetic mount kit for the antenna should be sufficient to hold the antenna. However, the magnets may not be able to hold the antenna in place, if:

- *the vehicle is involved in an accident,*
- *the magnets are not mounted properly,*
- *the roof is not plain (smooth) or made of a material that will not stick properly to the magnets,*
- *the speed of the vehicle is too high and/or*
- *the road is very bumpy.*

WARNING: General

Handle your Thuraya IP Commander device with care. The Thuraya antenna is weather resistant per IEC 60529 IP56; however, do not submerge the unit. Avoid exposing the Thuraya IP Commander to extreme hot or cold temperatures outside the range -25 ºC to +55 ºC.

Avoid placing the IP Commander device close to open flames or any source of heat.

Changes or modifications to the IP Commander device not expressly approved by SRT Wireless, LLC could void your authority to operate this equipment.

Only use a soft damp cloth to clean the IP Commander device.

To avoid impaired performance, please ensure the unit's Thuraya antenna is not damaged or covered with foreign material like paint or labeling.

WARNING: Service

User access to the interior of the system units is prohibited. Only a technician authorized by SRT Wireless, LLC may perform service - failure to comply with this rule will void the warranty.

Do not service or adjust alone. Do not attempt internal service or adjustments unless another person, capable of rendering first aid resuscitation, is present.

Operating personnel must not remove equipment covers. Component replacement and internal adjustment must be made by qualified maintenance personnel. Do not replace components with the power cable connected. Under certain conditions, dangerous voltages may exist even with the power cable removed. To avoid injuries, always disconnect power and discharge circuits before touching them.

Do not attempt to disassemble the Thuraya antenna or IP Commander device. The unit does not contain consumer-serviceable components. Only qualified service personnel may install or repair equipment.

WARNING: Accessories

Use SRT Wireless LLC approved accessories only. Use of non-approved accessories may result in loss of performance, damage to the IP Commander, fire, electric shock or injury.

WARNING: Connecting Devices

Never connect incompatible devices to the Thuraya IP Commander. When connecting the Thuraya IP Commander to any other device, read this User Manual for detailed safety instructions.

DANGER: Pacemakers

The various brands and models of cardiac pacemakers available exhibit a wide range of immunity levels to radio signals. Therefore, people who wear a cardiac pacemaker and who want to use the Thuraya IP Commander should seek the advice of their cardiologist. If, as a pacemaker user, you are still concerned about interaction with the Thuraya IP Commander, we suggest you follow these guidelines:

- *Maintain a distance of 20 cm from the Wi-Fi antenna and your pacemaker;*
- *Maintain a distance of one meter from the Thuraya antenna front and sides and your pacemaker;*
- *Refer to your pacemaker product literature for information on your particular device.*

If you have any reason to suspect that interference is taking place, turn off your Thuraya IP Commander immediately.

DANGER: Hearing Aids

Most new models of hearing aids are immune to radio frequency interference from satellite terminals that are more than 2 meters away. Many types of older hearing aids may be susceptible to interference, making it very difficult to use them near a terminal. Should interference be experienced, maintain additional separation between you and the IP Commander.

DANGER: Electrical Storms

Operation of the Thuraya IP Commander during electrical storms may result in severe personal injury or death.

This page is intentionally blank

1. Introduction

Thank you for purchasing the **Thuraya® IP Commander** terminal, a product of **SRT Wireless, LLC**, and hereinafter referred to as the **IP Commander**. The **IP Commander** gives you instant access to the Internet anywhere you can "see" a **Thuraya** satellite. With the addition of a multi-port switch, you can use your **IP Commander** to set up a small network for wired devices, as well as wireless connections through its standard Wi-Fi® system.

This guide provides instructions for installing the **IP Commander** device and its antenna Instructions for the operation of the **IP Commander** device are found in the **Quick Start Guide** (SRTW part number 920-00276), which has been provided in printed form, and the **User Guide** (SRTW part number 920-00275), which has been provided on the supplied Document-Media CD.

Computer and Local Area Network Configuration

Your 10/100 MB/sec local area network (LAN) can be set up for wired, wireless, or both. Without going into great detail, local area network setup is exactly the same as with a wired/wireless router. Along with full 802.11 b, g, and n Wi-Fi support, wired networks are supported with DHCP (dynamic host control protocol) services. In other words, as long as your PC is set up to connect to a network using DHCP, you can connect hubs, switches, and up to 254 peripherals (printers, other PCs, etc.) to the network, beginning with the Ethernet port on the **IP Commander**.

Network Configuration

In basic terms, the **IP Commander** can connect to a network in one of two ways:

- Direct connection between the Laptop PC and the **IP Commander** (single user). See Figure 1.

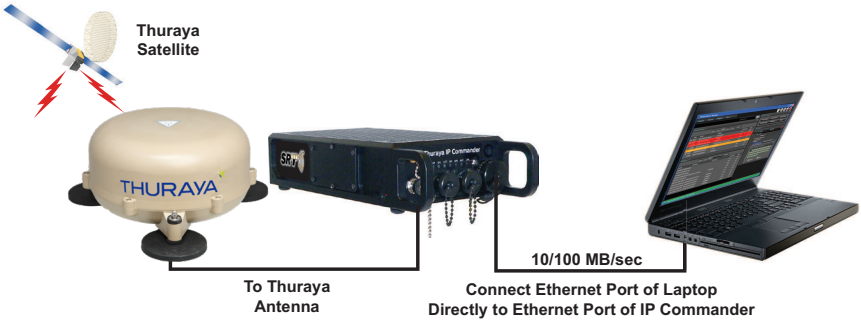


Figure 1: Direct Connection of Laptop and IP Commander

- Connect the **IP Commander** and Laptop PC through an Ethernet hub or switch (multiple users). See Figure 2.

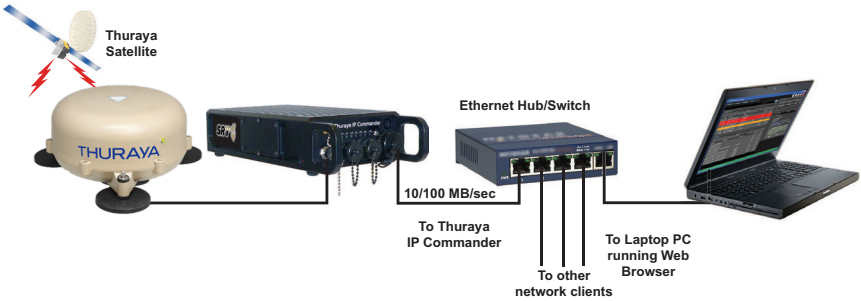


Figure 2: Connecting Laptop and IP Commander through an Ethernet Hub/Switch

Ethernet Switches and Hubs

By connecting the designated input port of a five-port Ethernet hub or switch to the Ethernet (RJ-45) connector on the **IP Commander** front panel, four TCP/IP compatible network devices, such as switches, printers, and computers, can be added to the local area network. If required, the devices should configure themselves using the **IP Commander** DHCP server functions.

> ***NOTE:*** *Bandwidth on the **IP Commander** satellite link is limited to a maximum of 384 kbps uplink and 444 kbps downlink. Please avoid streaming large files (movies, etc.) through the satellite, as the connection will quickly saturate, slowing down the network for you, and any other users that may be sharing your satellite connection via the local area network.*

Computers

In order to communicate with the **IP Commander**, and to become a member of the **IP Commander** network, computers must be set up to be able to receive network configuration information from the DHCP server on the **IP Commander** device. There are some differences in configuration between Microsoft® Windows XP and Windows 7 (Windows Vista setup is very similar to that of Windows 7), which are outlined below.

Microsoft Windows 7

> ***NOTE:*** *The only web browsers that have been tested are Microsoft Internet Explorer®, versions 7 and newer, and recent versions of the Mozilla® Firefox® web browser. Other browsers may work, but have not been tested or certified by SRT Wireless.*

1. Connect an Ethernet cable between the computer and the Ethernet port on the **IP Commander** (or through an Ethernet switch, which in turn is connected to the **IP Commander**).

2. Click the *Start* button and then the *Control Panel* icon. Click the *Network and Sharing Center* icon. Then click the *Local Area Connection* icon.

3. Click the *Properties* icon in the Local Area Connection Status window. This opens the Local Area Connection Properties window.

4. Make sure the box next to Internet Protocol Version 4 (TCP/IPv4) is checked. Highlight *Internet Protocol (TCP/IPv4)*, and click the *Properties* button.

5. Select *Obtain an IP address automatically*. Once the new window appears, click the *OK* button. Click *the OK* button again to complete the PC configuration.

6. Power-up the **IP Commander** and link with the **Thuraya** satellite.

7. Launch your preferred web browser and enter the URL `http://www.192.168.1.254`. You should see a login screen to the **IP Commander**. The default username is `admin`, and the default password is `admin`.

8. If this screen displays within a reasonable amount of time, the network connection has been successfully established, and no network configuration settings need to be changed.

Microsoft Windows XP

> ***NOTE:*** *Microsoft ceased support for Windows XP in on 8 April 2014. Microsoft has stated that they are not providing any security patches, bug fixes, or support beyond 8 April 2014. If you are still running Windows XP, you are encouraged to upgrade to Microsoft Windows 7 at your earliest convenience. At the time this manual was published, Microsoft Windows 8 has not been tested or certified by SRT Wireless.*

1. Connect an Ethernet cable between the computer and the Ethernet port on the **IP Commander** (or through an Ethernet switch, which in turn is connected to the **IP Commander**).

2. Click the *Start* button and then the *Control Panel* icon. Click the *Network and Internet Connections* icon. Then click the *Network Connections* icon.

3. Select the *Local Area Connection* icon for the applicable Ethernet adapter (usually it is the first Local Area Connection listed). Double-click the *Local Area Connection*. Click the *Properties* button.

4. Make sure the box next to Internet Protocol (TCP/IP) is checked. Highlight *Internet Protocol (TCP/IP)*, and click the *Properties* button.

5. Select *Obtain an IP address automatically*. Once the new window appears, click the *OK* button. Click *the OK* button again to complete the PC configuration.

6. Power-up the **IP Commander** and link with the **Thuraya** satellite.

7. Launch your preferred web browser and enter the URL `http://www.192.168.1.254`. The default username is `admin`, and the default password is `admin`.

8. You should see a login screen to the **IP Commander**. If this screen displays within a reasonable amount of time, the network connection has been successfully established, and no network configuration settings need to be changed.

Apple® OS X® (vers. 10.6.8 and newer)

> ***NOTE:*** *While this configuration has not been tested by SRT Wireless, there is no obvious reason why web browsers, such as Apple Safari®, Mozilla Firefox, or Google Chrome™ should not function properly on Apple Macintosh® computer hardware.*

Unless you have changed your Apple computer's default network settings to use a static IP address, the Mac OS X default network configuration is DHCP, which is the preferred setting for communicating with the **IP Commander**.

1. Connect an Ethernet cable between the computer and the Ethernet port on the **IP Commander** (or through an Ethernet switch, which in turn is connected to the **IP Commander**).

2. Power-up the **IP Commander** and link with the **Thuraya** satellite.

3. Launch your preferred web browser and enter the URL `http://www.192.168.1.254`. The default username is `admin`, and the default password is `admin`.

4. You should see a login screen to the **IP Commander**. If this screen displays within a reasonable amount of time, the network connection has been successfully established, and no network configuration settings need to be changed.

Other Computing Hardware

Web browsers running on computing devices using other operating systems, such as Linux®, or web browsers running on many popular tablet devices should also work correctly, but have not been tested or certified by SRT Wireless.

2. Install Your New IP Commander System

Open the packing case. Review the packing diagram located in the indentation in the lid of the packing case to confirm the contents. See Figure 3 below.

Figure 3: Thuraya® IP Commander System Packing Case

The system is shipped in a custom shipping box, which contains a **Thuraya IP Commander** radio, a SpaceCom® antenna with a 10-foot (3 meter) RF cable, a wired **Thuraya** handset, two Wi-Fi antennas, Ethernet (RJ-45) cable, a DC power cable, an AC power supply, and documentation/product licensing media.

A ruggedized Pelican® case (optional at extra cost, shown above) makes it easy for mobile users to safely transport their **IP Commander** system wherever it needs to go.

Front Panel Controls

Figure 4: Thuraya IP Commander Terminal

Item	Description
1 **Wi-Fi Antenna Port (SMA)**	Connect a **Wi-Fi** antenna to permit use as a wireless access point.
2 **SpaceCom Antenna Port**	Connects the **SpaceCom** satellite antenna to the **Thuraya IP Commander**.
3 **Handset Connector**	Connects a specially-configured **Thuraya** telephone handset for making calls from the **IP Commander**, and performs basic controls on the **IP Commander**.
4 **Power Input**	Connects to AC-to-DC Power Supply, or a vehicular power cable.
5 **RJ-45 (Ethernet) Connector**	Connects the **IP Commander** to a 10/100 MB/sec local area network.
6 **Status Indicator Panel**	Seven indicator lights show system status. **SUP**: Power supply is connected **ON**: IP Commander is powered on **ACT**: Activity on the satellite link **SAT**: Satellite antenna status **GPS**: GPS status **ANT**: Transmit antenna status **LAN**: Local Area Network status
7 **Power/Reset Button**	Quickly press and release to power up the **Thuraya IP Commander**. Press and hold for several seconds to reboot or completely power-down the unit.

Table 1: Thuraya IP Commander Terminal Connections

Equipment Setup

1. Carefully attach the "rubber duck" whip antenna to the SMA connector (item ❶). The antenna is hinged, which permits you to orient it vertically.

> ***CAUTION:*** *The SMA connector is very fragile. Tighten connector "finger tight." Do not use tools to tighten.*

2. Uncoil the 10-foot (3-meter) RF cable. Connect one side to the TNC connector on the **Thuraya IP Commander** (item ❷ above). Connect the other side to the TNC connector on the **Thuraya SpaceCom** antenna. Place the antenna outside with a full view of the sky.

3. Connect the handset (cable removed from photo for clarity) to the handset port on the **Thuraya IP Commander** (item ❸ above).

4. Connect the locking end of the RJ-45 Ethernet cable to the **Thuraya IP Commander** (item ❺ above), and the other to your network (switch, router, or a computer).

5. Connect the locking end of the power supply to the **Thuraya IP Commander** (item ❹ above). Connect the AC power cord (removed from photo for clarity) to the power supply and plug into a standard wall outlet (100-240 VAC, 50/60 Hz).[1]

6. Briefly press the power button (item ❼ above) to power up the unit.

[1] An automotive-style DC power cord is also provided with the **Thuraya IP Commander**. It has the same locking connector as the AC/DC power supply.

Figure 5: Hook-up Diagram (numbering same as above)

Physical Placement of the IP Commander Enclosure

> ***CAUTION:*** *The **Thuraya IP Commander** and its accessories should be secured whenever the vehicle is moving to prevent damage to the vehicle or harm to its occupants in the event of a sudden stop or collision. When operating from a fixed location, the **Thuraya IP Commander** device can be placed almost anywhere, but should be kept away from direct sunlight. Space should be provided around the unit in order to more effectively exhaust heat generated from within the device.*

For permanent installations, the **Thuraya IP Commander** may be small enough to be mounted under the dashboard or center console of some vehicles. Mounting hardware (screws, bolts, brackets) are not provided.

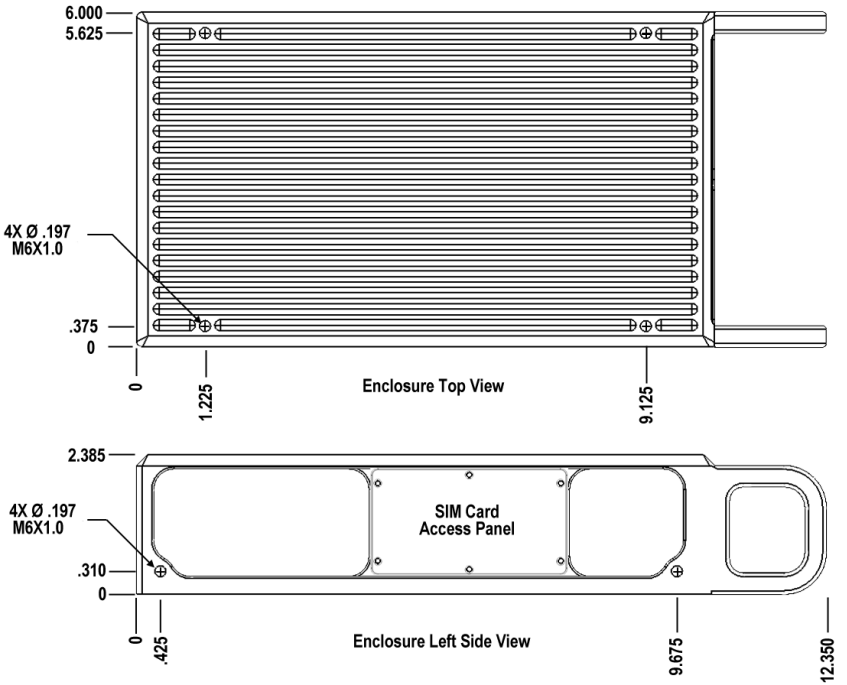
Four threaded mounting points are provided on the top of the enclosure, and two additional mounting points are provided on the left and right sides of the enclosure. Hardware is M6X1.0. This permits you to fabricate a mounting bracket for more permanent install-

ations. A dimensioned drawing (Figure 6) is provided to assist you in fabricating a mounting bracket.

> ***NOTE:*** *The M6X1.0 bolts used to attach mounting hardware to the* ***Thuraya IP Commander*** *enclosure need to be short enough so that after taking into account the thickness of the bracket and any washers, the maximum permissible length going into the threaded hole is 0.160 inches (about 3/16 inch).*
>
> *The enclosure is aluminum; do not overtighten the bolts, as it may strip the threads.*

Because of its small size, and ability to be controlled with a web browser, the **Thuraya IP Commander** enclosure can be mounted almost anywhere, in plain sight, or stashed away, out of sight. The only physical control is the *Power/Reset* button. If you need to reboot the device, take the **Thuraya** handset that is wired to the **IP Commander** and enter `###7` on the handset's keypad.

As stated in the previous section, care must be taken to route the rf coaxial cable so that it either does not go through a vehicle's door or hatch (being crushed by the door seals), or if there is no alternative, ensure that the cable goes across the softest and most flexible part of the seal.



Materials Required:

Bolts: Up to 8 M6X1.0 (6 mm dia., 1 mm thread pitch), max length of bolt into socket after brackets, washers, etc. should be no more than .160 in. Maximum depth of threaded mounting holes is .210 in (.050 clearance).

Mounting Bracket, washers, hardware not supplied. All dimensions other than M6 bolts are in inches.

Figure 6: IP Commander Mounting Details

Install SIM Card

Your **Thuraya IP Commander** has two SIM card slots, one designated as *Primary* and the other as *Secondary*. Both are installed into slots behind a metal plate on the left side of the **Thuraya IP Commander** enclosure, though only the *Primary* SIM card is used at this time. Below are the instructions for installing the SIM card.

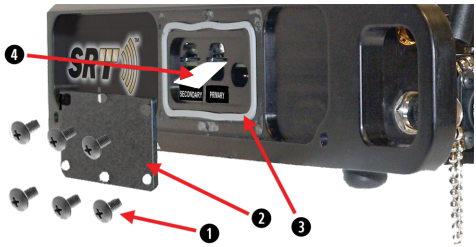


Figure 7: Steps to Install SIM Card

	Item	Procedure
❶	**Remove six screws from access panel**	See Figure 7. Using a cross-point screwdriver, remove the six screws holding the side access panel in place.
❷	**Remove access panel**	Remove panel and put in a safe place.
❸	**Remove gasket (opt.)**	If the gasket remains completely in place, don't remove it. If it does come loose, set aside.
❹	**Install Primary SIM card**	With the access panel removed, there are three openings on the side of the **Thuraya IP Commander** enclosure. The *Primary* SIM card goes into the socket in the center opening. The SIM card is spring-loaded. Push until you feel it lock into place. To remove, press until you feel the card unlock.

Table 2: Open Access Panel and Install Voice and IP SIM Cards

	Item	Procedure
❸	**Replace gasket**	See Figure 7. Carefully place gasket into the slot from which it was removed. Gasket must completely fill the slot with no overhang.
❷	**Replace access panel**	Place the access panel over the area from which it was removed. Align the screw holes in the panel with the ones on the enclosure.
❶	**Insert and tighten screws**	Insert the six screws into their holes. Tighten hand tight to ensure the plate is properly aligned. Tighten the rest of the way down with a cross-point screwdriver. Do not over-tighten!

Table 3: Close and Seal the Access Panel

Antenna Installation Guidelines

Always install the antenna so that it is in a horizontal position, even if the surface on which it is installed e.g. roof of a vehicle, is not horizontal.

The antenna is powered by the **IP Commander** device via the radio frequency coaxial cable. Prevent kinking and other damage to the cable. Never disconnect the coaxial cable from either the antenna side or the **IP Commander** side if the **IP Commander** is powered-up, as damage to the **IP Commander** or the antenna could occur.

Magnetic Mount Antenna Installation Instructions

The magnet mount consists of three individual high-intensity magnets with rubber coating. Each magnet has a stainless steel center bolt. These magnets are pre-drilled for securing to the antenna, and are designed to withstand 100 mph wind force when properly installed on a flat *metal* surface such as a vehicle's roof. The hardware that holds the magnetic pads in place can be adjusted to ensure the antenna is as horizontal as possible.

> ***NOTE:*** *Some motor vehicles have either fully or partially fiberglass, plastic, or aluminum bodywork, often using this material on the vehicle's roof. The antenna's magnets cannot adhere to non-ferrous metals or plastics. If this is the vehicle you need to use, consider either mounting the antenna to the hood/bonnet (if steel or other ferrous metal), or if you intend to use this vehicle permanently as a platform for the Thuraya antenna, drill mounting holes in the roof to bolt and secure the antenna to that surface, or if available, install roof rails and bolt the assembly to the rails.*

1. Please review the instructions that came with the antenna.

2. If this has not already been done, attach the magnets to the antenna. There are three "legs" on the antenna where the magnets are placed. Note the position of the two rubber washers just below and above each antenna "leg," the stainless steel washer above the upper rubber washer, and the protective nut on top.

3. Place the antenna with magnets on the roof of the vehicle. When installing the antenna cable, protect against moisture by using self-amalgamating tape (Scotch® Rubber Splicing Tape 23 or equivalent), wrapped around the coaxial connector. Using nylon cable ties, secure the RF cable at short intervals to prevent movement and stress.

4. To remove the antenna, use your hand to pry underneath the antenna near one of the magnets and lift. The other two magnets should come free.

Other Mounting Options

There are two other methods of mounting the antenna to your vehicle, though each is more destructive than using the magnetic mount system, and are not supported by SRTW:

- Attach mounting brackets between the antenna and roof rails (not available from SRTW). Brackets and hardware are available or may be included with the antenna that are designed to attach the antenna to a vehicular roof rack. Drilling is limited to the roof rack and not the vehicle's body.
- Drill holes in the vehicle's roof and attach the antenna. Hardware is provided for this type of installation which should only be done if the intent is to permanently attach the antenna to the vehicle's roof. Make sure you use grommets and RTV (or equivalent) silicon sealant to protect the hardware and seal the roof from water entry.

Coaxial Cable Bending Radius

Please observe the maximum bending radius for the 10 foot (3 meter) rf coaxial cable. A single bend radius can be no more than 25 mm, and multiple bends cannot exceed 50 mm. Bending the cable beyond these limitations can damage the cable, severely reducing performance, and in extreme cases, the cable could short to the grounding braid, possibly damaging the **IP Commander**.

Avoid routing the coaxial cable inside the vehicle by running through a trunk (boot) or liftgate seal, as this could distort and damage the coaxial cable. If this is the only way to get the rf coaxial cable into the vehicle (and it is often the only way, short of drilling holes through your vehicle), close the door or hatch very gently to avoid damaging the cable. Try to find the softest and thickest area of the rubber seals, and route the rf coaxial cable across those seals.

Coaxial Cable Protection

Use self-amalgamating tape (Scotch® Rubber Splicing Tape 23 or equivalent) to prevent moisture intrusion into the cable or connector. Also, secure the antenna cable with cable ties or similar material, at short intervals, to prevent movement and stress.

Servicing the Antenna Enclosure

Three holes in the dome (plastic enclosure) bottom are used to drain rain water or condensation that might form. The holes are made so that water e.g. solid drops is not likely to enter the dome and simultaneously water that has entered the dome or moisture condensed in the dome is drained out simply by gravity. Correct function of the drainage system is ensured by following the correct installation requirements. Check the drain holes at least

every six months, or more often if operating in a high humidity locale, to ensure they are not obstructed by dirt, mold, or other foreign material.

Secure the Transmission Line and Attach to the Antenna and the IP Commander

Once the antenna enclosure and the **IP Commander** are connected via the rf coaxial cable, secure the cable to fixed objects on the vehicle, such as a roof rack, using nylon cable ties. This prevents unwanted movement of the cable, and may help to prevent damage to the finish of your vehicle.

Thuraya Handset Operation

Figure 8: Thuraya Handset Configured for Use With IP Commander

A **Thuraya-compatible** handset is provided. It is designed to plug into the **Thuraya IP Commander** front panel (item ❸ in Figure 4). In order to make calls, the **Thuraya IP Commander** must be configured for voice operation.

Other than being plugged into the **Thuraya IP Commander**, this handset operates exactly the same as any other basic **Thuraya-compatible** handset.

Use the Handset to Control the Modem

You can also use the **Thuraya** handset to perform some basic operations on the **Thuraya IP Commander**. With the handset connected to the handset connector (item ❸ in Figure

4), press one of the keypad combinations as shown below, followed by presing the *Send* (OK) button. For example, to reboot the **Thuraya IP Commander**, press the # key three times, followed by the number *7*, or *###7*, and *Send* (OK).

Command	Function
General Function	
###V (###8 on keypad)	Switch from **IP Mode** to **Voice Mode**
###G (###4 on keypad)	Enter **GmPRS Mode** (not currently available)
###D (###3 on keypad)	Switch from **Voice Mode** to **Data, Standard Mode, Auto Connect** (IP Mode)
###R (###7 on keypad)	Reboot **Thuraya IP Commander**
Change Modes (Quick Boot)	
###3	Data Standard Mode
###31	Data Profile 1
###32	Data Profile 2
###33	Data Profile 3
###34	Data Profile 4
Start and Stop PDP context (billable data)	
###2	Toggle activate/deactivate
###20	Deactivate
###21	Activate

Table 4: Remote Control Thuraya IP Commander from Handset

Handset Status Display

Profile and Status (+ active/- inactive/* streaming)

E.g. *UAE-D1+* indicates profile 1 is active and it is not streaming

E.g. *UAE-D3** indicates profile 3 is active and it is streaming

E.g. *UAE-D4-* indicates profile 4 is selected but it is not active