Docking Station Troubleshooting Guide

Introduction

This document provides troubleshooting techniques to help resolve the most common problems encountered when using this product. Before attempting these tests, it's important to review the 'Preparations' and 'Start up Sequence' sections found in the '**Docking Station Quick Start Guide**'. This and related documents; '**Docking Station User's Guide**' and '**Fixed Station Terminal – Installer's Guide**' are also available for more detailed installation and operating information. These documents can be viewed or downloaded at www.ase-corp.com under the 'Product Help' section.

Precautions

Never connect an Iridium 9505 handset to a 9505A Docking Station or a 9505A handset to a 9505 Docking Station. These handsets contain different circuitry that can be damaged! See the label inside the Docking Station cradle to confirm the model type of your unit.

Booting the System

The proper way to boot the system is;

1. Verify Iridium handset PIN code is turned off and there is sufficient battery power.

2. Remove power from the Docking Station.

3. Install phone in Docking Station - be sure to align connector pins and press the antenna release button on the handset while docking for proper antenna connection.

4. Connect charger power cable (9505A only) and audio cable to handset.

5. Turn phone OFF.

6. Apply power to Docking Station - phone should turn ON automatically and attempt to register and sync with the Dock.

IMPORTANT: If the Dock cannot sync with the phone, the top LED will keep blinking and the Dock will eventually re-boot itself and try to sync again. When the top LED goes on solid, the phone will remain on and the Dock is ready for use. If the LED keeps blinking and the Dock continues to re-boot, most common problem is poor Iridium signal strength.

Checking Signal Strength

Follow these steps to check signal strength to the handset while installed in the Dock;

1. Remove power from the Docking Station.

2. Turn only Iridium handset ON while still in the Dock.

3. Verify the phone registers with Iridium network and signal strength shows at least 4 out of 5 bars on the display.

4. Place a call directly using the hanset's keypad and verify signal strength stays at 4 to 5 bars once call is connected. **Helpful Tip:** unplug the audio cable to hear audio on the handset when placing the call.

5. If signal strength drops below 4 bars during any of these tests, check antenna location for obstructions and/or confirm antenna cable length has not been exceeded. **Important:** each cable splice will reduce signal strength so it's important to keep splices to a minimum.

Antenna Cable Runs

The table below gives maximum cable runs for common LMR cable types. These maximum lengths are based on Iridium's specified max signal loss of 3db from antenna to handset, and assumes there are no splices or couplers in the cable run. **Helpful Tip:** Each connector/splice will reduce signal strength by approximately 0.5dB.

Type	Max Length
LMR-195	20 feet
LMR-240	30 feet
LMR-400	58 feet
LMR-600	90 feet
LMR-900	133 feet
LMR-1200	176 feet

Installation and Startup Troubleshooting

Symptom	Cause	Resolution
Power LED never stays on solid and continues to blink, system keeps re-booting	Docking Station is unable to synchronize with the handset and Iridium network	Re-seat the handset in the Dock, verify docked handset has the PIN code turned OFF, check antenna signal strength
Busy Signal present on RJ-11 analog phone	Another symptom that the Dock cannot sync with the Iridium network	Re-seat the handset in the Dock, verify docked handset has the PIN code turned OFF, check antenna signal strength
System will not sync even with known good signal strength	Dock cannot communicate with the handset. Connector pins in the Dock could possibly be bent or out of alignment	Remove handset from Dock and visually inspect connector pins. Pins can be adjusted (carefully) using needle-noose pliers
System re-boots every 24 hours	This is an automatic feature of the Dock which keeps the handset registered on the Iridium network for incoming calls	If this feature is not desired, it can be disabled by sending a command via the data port (see User's Manual)
Signal strength drops when a call is placed	Check antenna location for obstructions, a clear view of the sky is required for proper operation. Antenna cable length exceeded or there are too many splices in cable run	Re-position antenna away from obstructions, verify cable length has not been exceeded, eliminate unnecessary cable splices

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