AMERICAN INNOVATIONS

Bullhorn Terminal Upgrade Instructions September 2014

INTRODUCTION

This document details how to upgrade SkyWave terminals, currently operating on D+ service, to operate on the IsatM2M service. The SkyWave D+ service is scheduled to end by the end of 2014.

The following types of terminals are affected by this change:

Table 1-1. Affected Terminals

Model	Part Number	Firmware	Hardware	Bullhorn Terminal Installer Action
DMR-200F	SM200208			IsatM2M is not supported, replace terminal.
DMR-200D	SM200216	5.09 or 5.17	0x1D	Upgrade terminal firmware to 5.34 and update configuration.
DMR-800	SM200252	1.5.6	22	Update terminal configuration only.
DMR-800			24	Error msg, no change required, IsatM2M already used.

DMR-200F, P/N SM200208 – These terminals do not support IsatM2M and will be replaced. The provided upgrade interface cable does not mate with these terminals.

DMR-200D, P/N SM200216 – These terminals currently run v5.09 or v5.17 firmware on version 0x1D hardware. To operate these terminals on IsatM2M, upgrade the firmware to v5.34 and then configure the terminal for IsatM2M service. Use the Bullhorn Terminal Installer to upgrade the firmware as well as to reconfigure the terminal.

DMR-800, P/N SM200252 – These terminals are currently loaded with v1.5.6 firmware on version 22 hardware. Only a configuration change is required to change to IsatM2M operation. Use the Bullhorn Terminal Installer to reconfigure the terminal for IsatM2M service.

DMR-800, hardware 24 – No change is required for these terminals as they already operate on the IsatM2M service. Bullhorn Terminal Installer will display an error message if a field technician mistakenly attempts to install the upgrade on a DMR-800, hardware 24, unit.

Bullhorn Terminal Installer was developed by customizing the Terminal Installer application that was provided by SkyWave. Table 1-2 describes the files that were used to develop the Bullhorn Terminal Installer application.

Table 1-2.

File	Description
TerminalInstaller.cfx	Excel file to customize Terminal Installer, actions, and file links
DMR200D_Bullhorn_v3.dsd	Configuration data for firmware 5.34
DMR800D_156_Bullhorn_v3.dsd	Configuration data for firmware 1.5.6
V5.34_build721.s19	DMR200D firmware upgrade file
dmst-v1_5_6-build1352.s19	DMR800 firmware file for Terminal Installer, current firmware on terminal

UPGRADING A SKYWAVE TERMINAL

The process to upgrade your SkyWave terminal to be able to use the IsatM2M service includes the following steps:

1   Download and install the Bullhorn Terminal Installer application to your computer.

2   Connect the SkyWave terminal to your computer.

3   Run the Bullhorn Terminal Installer v3.0 application.

Installing the Bullhorn Terminal Installer Application

The procedures listed below explain how to upgrade the SkyWave terminal using the Bullhorn Terminal Installer application.

1   Install the Bullhorn Terminal Installer application:

a   Download and save the installer file, *Bullhorn Terminal Installer v3.exe*. to your computer. The executable file is available on the Bullhorn Asset Tracker website, under the Help menu.

b   Double-click on the installer file.

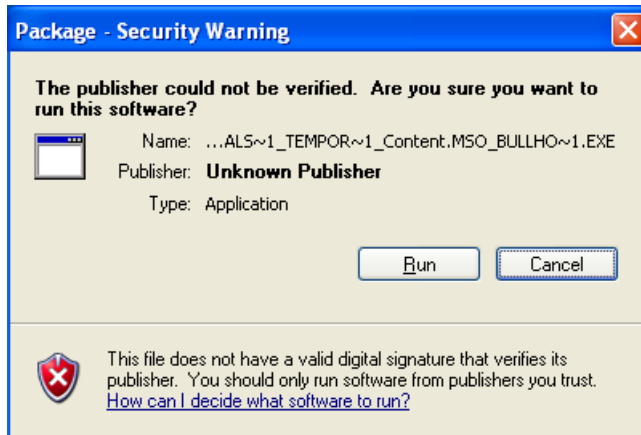**c**   When the installer window opens, click **Run**.

Figure 1. Run Application

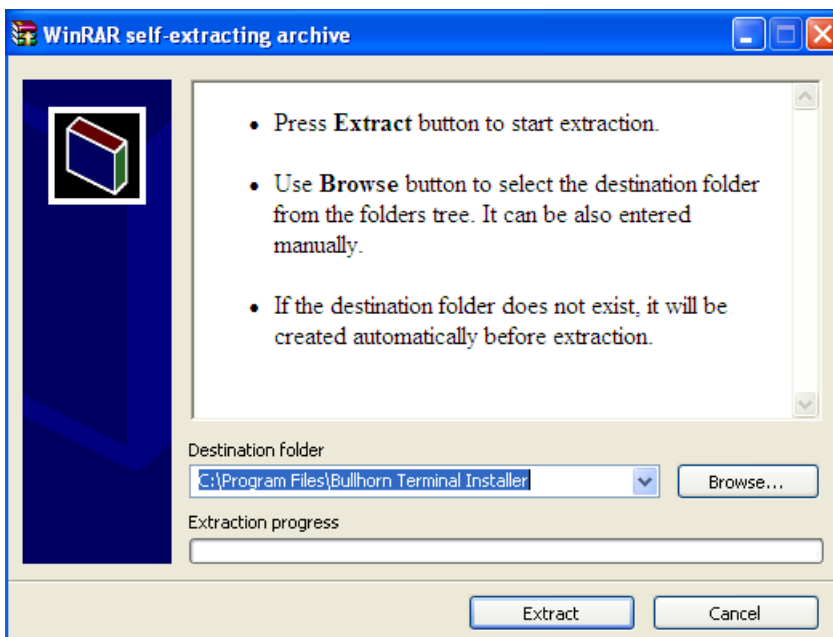**d**   On the self-extracting window, click **Extract** (Figure 2).

Figure 2. Extract Installer

When extraction completes, a Bullhorn Terminal Installer shortcut icon (Figure 3) displays on the desktop.
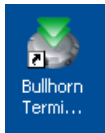
Figure 3. Bullhorn Terminal Installer Desktop Icon

2   Connect terminal to computer:

    a   Connect upgrade cable to SkyWave terminal, computer, and 12Vdc power supply (cigarette socket).

    b   If required, use a USB-to-serial port adapter (Figure 4). Install any required USB driver software.
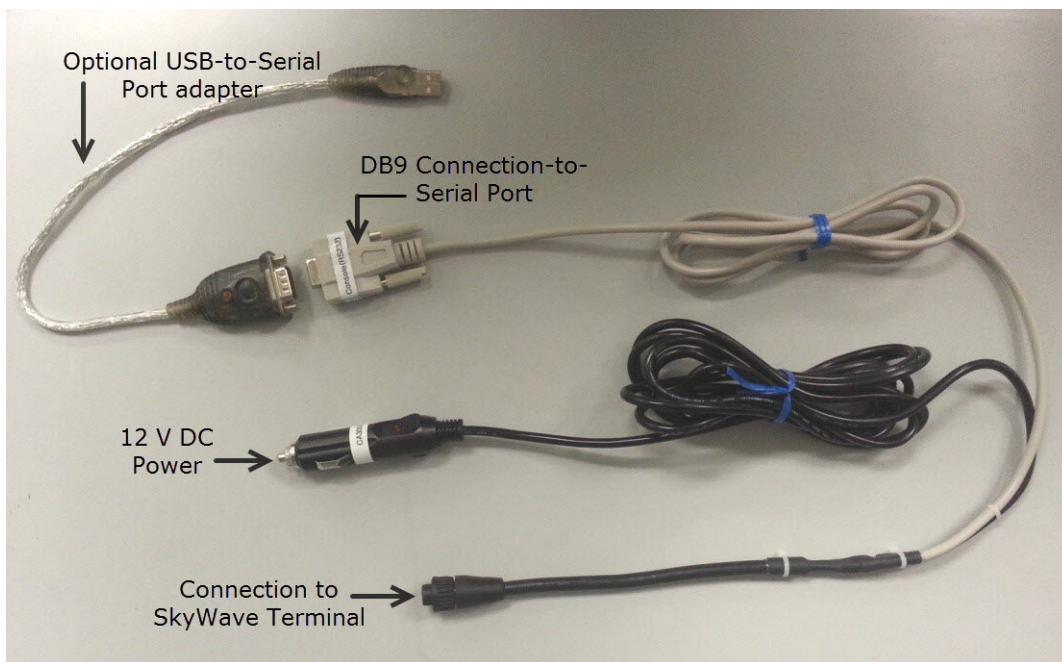

Figure 4. Adapters and Connectors

3   Launch Bullhorn Terminal Installer v3.0 application:

    a   Double-click the Bullhorn Terminal icon on desktop to launch application.
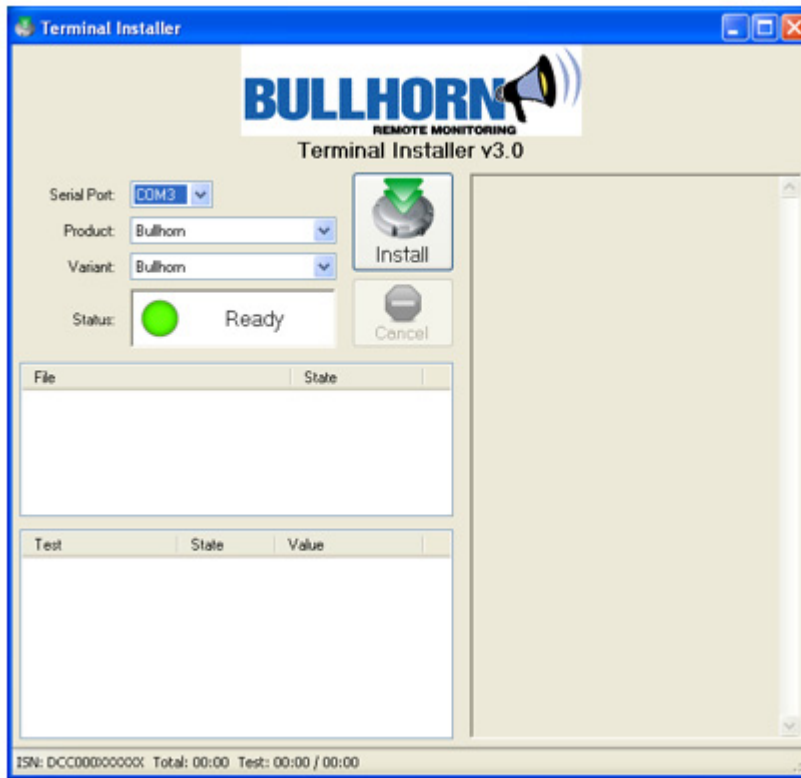
Figure 5. Main Window

b In the *Serial Port* field, select serial port used for connection to SkyWave terminal.

c In *Product* field, select **Bullhorn**.

d In *Variant* field, select **Bullhorn**.

e Click **Install** button to start upgrade process.

The installation process starts by checking terminal type. If required, the firmware is upgraded. The terminal configuration file is then loaded. The main window displays the process on the right side of the main window (Figure 6).

Figure 6. Main Window

When installation completes, all indicators should be green, and *Status* should read **Completed successfully** (Figure 7).
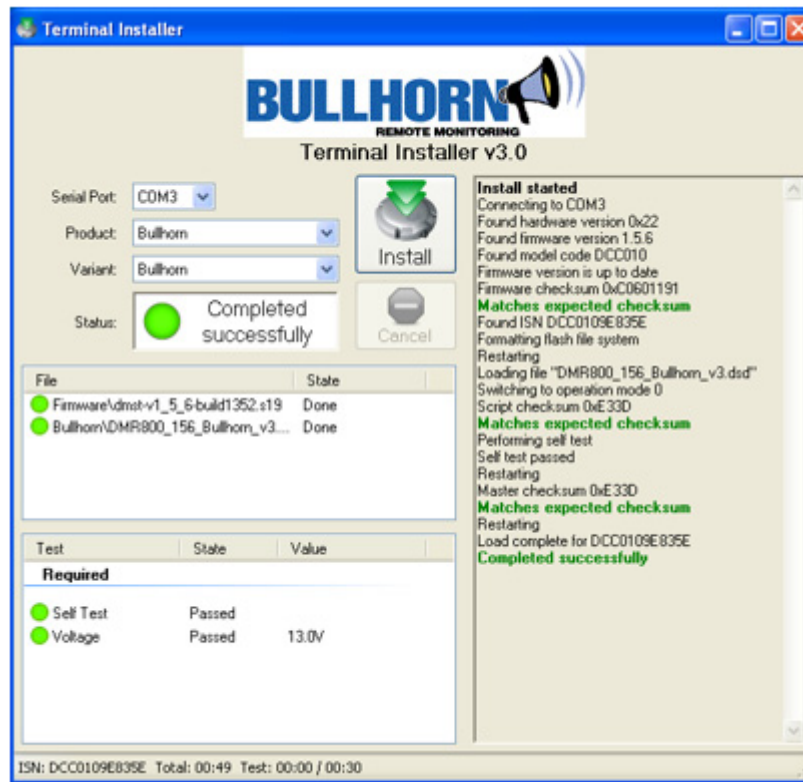
Figure 7. Installation Complete

The installation process will take a few minutes to complete on DMR800 terminals (no firmware update). For DMR200D terminals, the installation process may take up to 8 minutes (with firmware update).

The following error message (Figure 8) displays when attempting to upgrade a DMR800, hardware 24, unit. These types of terminals do not need to be upgraded, because they already operate on the IsatM2M service.
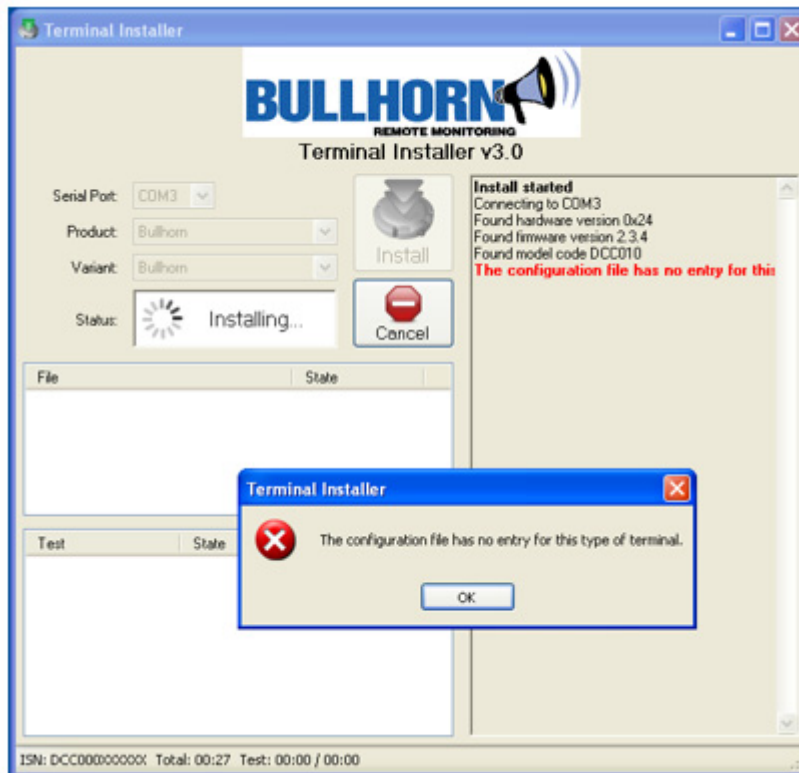
Figure 8. Error Message

TECHNICAL SUPPORT

If you have any questions or are in need of technical assistance, please use any of the following contact information to reach Bullhorn Technical Services:

Support Email:	bhtechservices@aiworldwide.com
Support Telephone:	1-800-229-3404
American Innovations:	http://www.aiworldwide.com/