

Navigator Telemetry Quick Start Guide

For use with 8.11.2 or higher software

Introduction

This document explains the installation method, and assignment process to permit acceptance of credit card payments, and to enable telemetry when using the Navigator telemetry device, when combined with a variety of cashless bezels which permit the use of credit cards. This guide assumes that the operator has completed the onboarding process required to establish a banking relationship with one of our available credit card processors.

The software present in the Navigator permits us to associate the device to a specific customer before it leaves our facility. Once the physical installation in the machine is completed, on initial power up, the Navigator will automatically contact the Streamware Connect Device Management Service (DMS) to complete the assignment process ensuring that any cashless transactions are properly credited to the operator. This software version is referred to as the Ease of Installation (EOI) software, and in addition to the improved assignment process, also includes Diagnostic and Un-Assign tools.

For customers using VendMAX, you must continue to install and assign your Navigators using the VIX handheld program in order to properly assign the device to the POS in VendMAX. Although many of the tests are already performed within the VIX program, the Diagnostic Mode described herein is available for use by all customers.

The Navigator is shipped completely assembled, except for the addition of one of the cashless bezels. See page 6 for details on these bezels and their harnesses.

There are multiple kits available which permit the use of three different cellular radio providers, which are interchangeable, dependent upon the signal strength available in your area. Verifying signal strength can be done in the Diagnostics mode.

A list of the components of the 3 standard kits is on Page 2 of this document. You should verify that all the components are present before beginning installation. An illustration of a typical kit is on Page 3 to assist in identifying components.

We do not recommend the use of Navigators with energy saving devices that interrupt power to the machine, because Navigators should be powered on and communicating 100% of the time.

For additional details about components and all other processes, download a copy of the Navigator/Media Telemetry Technical Manual from: <http://www.cranems.com/partsService/techPubs/CmsManualsCurrent.cfm> Other pertinent documents are also available from this site, including a Machine Matrix that details the requirements for installation for other manufacturer's machines.

For live technical assistance during business hours (8am to 5pm ET), please contact our Support team at 800-628-8363.

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Kit Contents

Kits available:

P/N 5900916 – Navigator with AT&T (GSM-3G) Radio

P/N 5900740 – Navigator with Verizon (CDMA) Radio

P/N 5900741 – Navigator with Sprint (CDMA) Radio

Item #	P/N	Quantity per kit			Description (common)
		5900916	5900740	5900741	
1	CR0006673	1	1	1	Navigator Unit w/enclosure
2	CR0021322	1			Atlas Radio Module GSM 3G WAN
3	CR0006824	1			Atlas T GSM Radio SIM Card
4	CR0010542		1		Atlas Radio Module WAN CDMA Verizon
5	CR0020705			1	Atlas Radio Module WAN CDMA Sprint
6	CR0006929	1	1	1	Internal WAN Antenna Magnetic Base
7	1679056	1	1	1	DEX Pass-through Cable
8	CR0006669	2	2	2	Velcro Fastener (Pair)
9	CR0006822	1	1	1	USB Cable Type A to B 6'
10	CR0006635	1	1	1	MDB/DEX Cable – 3'
11	2204513	4	4	4	Wire tie – 5.5 in
12	5900732	1	1	1	Instructions, Quick Start Guide, Navigator (this document)

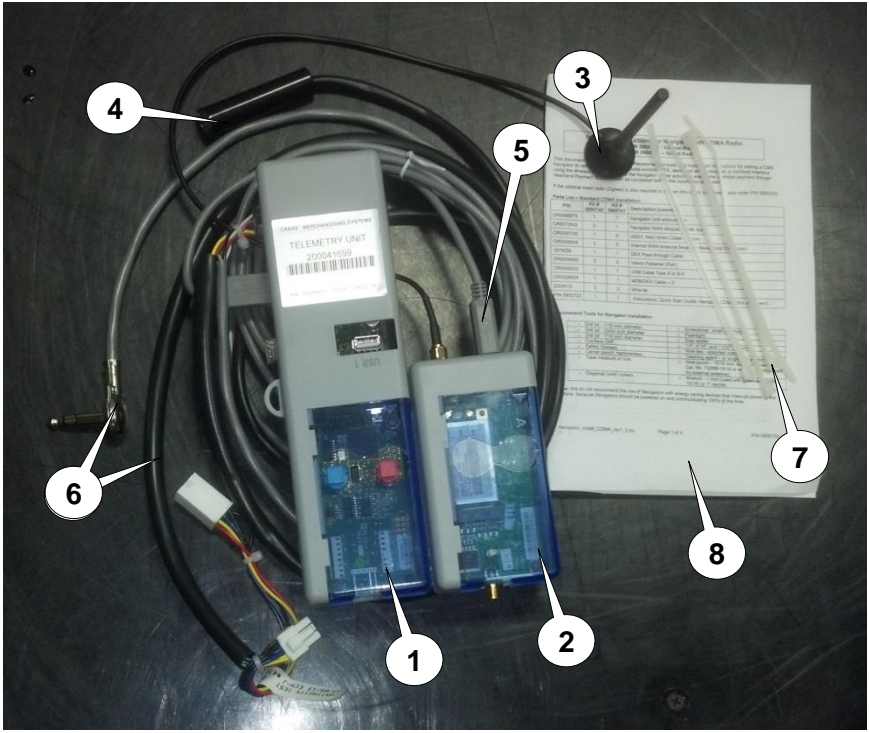
Available Accessories (Must be ordered separately)

Item	P/N	Description
13	SWCAN0000004	External Cellular and Mesh antenna
14	CR0006098	Mesh Radio Module
15	CR0006929	Mesh Radio Antenna
16	5900738	Kit, Currenza Cashless retro-fit bezel (replaces existing bezel on US validator and Recyclers) Includes Item # 18 + decals
17	5900763	Kit, Currenza Cashless retro-fit bezel – surface mount or POS window Includes Item # 18 + decals
18	5900678	Harness – Currenza Cashless bezel to Navigator
19	5900891	Kit, CPI (MEi) 3 in 1 bezel (Fits 2500 & 2700 Series Validators and 2700VNR recyclers only) includes Item 21 + decals
20	5900890	Kit, CPI (MEi) 4 in 1+ bezel (Fits 2500 & 2700 Series Validators and 2700VNR recyclers only)) includes Item 21 + decals
21	CR0013093	Harness – CPI bezel to Navigator
22	5900737	VivoTech Swipe 'n Tap Bezel - kit
23	CR0014477	Harness – Vivotech Bezel to Navigator – 36 inches (included in item # 22)
24	CR0014989	Harness – Vivotech Bezel to Navigator – 120 inches (used when controller is in cabinet and reader is mounted on exterior of door
25	CR0007575	Shielded DEX/MDB harness – used on all Vendo models – replaces Item 10 above.

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Contents of typical Navigator package and parts identification



Item #	P/N	Description (common)
1	CR0006673	Navigator Unit w/enclosure
2	CR0010542	Atlas Radio Module WAN CDMA Verizon
3	CR0006929	Internal WAN Antenna Magnetic Base
4	1679056	DEX Pass-through Cable
5	CR0006822	USB Cable Type A to B 6'
6	CR0006635	MDB/DEX Cable – 3'
7	2204513	Wire tie – 5.5 in
8	5900732	Instructions, Quick Start Guide, Navigator (this document)

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Installation Instructions

1. Turn power off to the machine.
2. Identify location in machine where Navigator and radio are to be installed.

There should not be any interference with motion of components of the machine with the cables, nor should movement cause harnesses to flex excessively. Visually identify the area for location of the Navigator and the antennas, and ensure the antennas are placed as far as possible from sources of interference such as ballasts and transformers. Where possible an antenna should be placed in an area where metal structure is limited.

3. Remove any dirt or dust from the location where the 2 modules will be installed, and remove the release tape from the Velcro on the rear of the devices, and firmly press the modules in place.

If required, the two modules can be separated for installation. If due to space limitations, it is not required that the Radio Module be attached to the Navigator, but the supplied 72" USB cable is the maximum length recommended. It may be easier to connect all the harnesses and review the routing of the harnesses before determining the final location for the Navigator and Radio Modules.

4. Locate the MDB harness from the validator to the control board (VMC), and separate the 2 MDB connectors, and connect the MDB harness from the Navigator to both of the connectors.

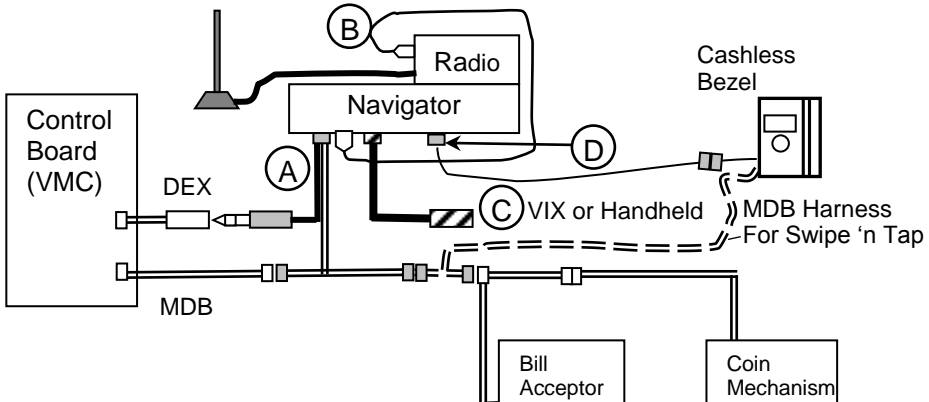
Connect all the harnesses as shown in the diagram on Page 5. The connection for the MDB harness to the Vending Machine Controller (VMC) must be the first one in line (closest to the board) and all other MDB peripherals after that, ending with the coin mechanism

5. Locate the DEX socket coming from the VMC, and plug the male DEX plug from the Navigator to this connector.
6. Connect the harness from the cashless bezel to the connector marked EXP1 on the side of the Navigator.
7. Dress the harnesses so that there is no stress placed on any of the connections, and secure with a tywrap. Do not tighten tywrap until unit is installed in machine. Adding a service loop to the harnesses near the connections will reduce the stress on the connectors.
8. Dress the balance of the harnesses and secure them in place with the additional tywraps.
9. Restore power to the machine and allow at least 2 minutes for the Navigator to complete the assignment process. This can be monitored on the cashless bezel display. See Page 7 for the messages that will appear during a successful assignment.

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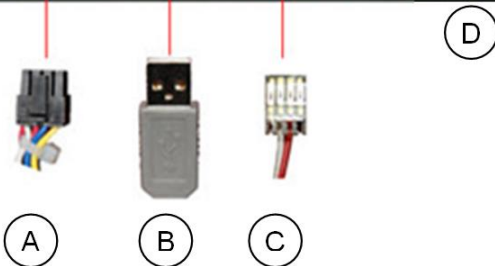
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Block diagram of connections



Navigator Connections

- (A) MBD and DEX to VMC
- (B) USB to Radio (WAN-lower USB)
- (C) Handheld (DEX) connection
- (D) Cashless Bezel (EXP1)



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Cashless Bezel Information

CPI (MEi) 3 in 1 Bezel



Accepts:	Bills, Coupons, Mag stripe cards
Used on:	Fits 2500 & 2700 Series Validators and 2700VNR recyclers only
Features:	When used on a VN2700 family devices, has denomination lights indicating what bills are currently accepted (\$1, \$5, \$10, \$20), Attract LEDs.
Harness P/N:	CR0013093

CPI (MEi) 4 in 1+ Bezel



Accepts	Bills, Coupons, Mag stripe & contactless cards (NFC)
Used on:	Fits 2500 & 2700 Series Validators and 2700VNR recyclers only
Features:	Has Yes/No/Cancel buttons for interactive customer interface. Does not have denomination lights, Attract LEDs
Harness P/N:	CR0013093

Currenza Swipe 'n Tap Bezel



Accepts:	Mag stripe & contactless cards (NFC)
Used on:	Retrofit application – either standard NAMA bill opening or surface mount.
Features:	Has NFC target & logo and cancel button, attract LEDs, END button
Harness P/N:	CR0014989 (36")

Currenza Validator Bezel



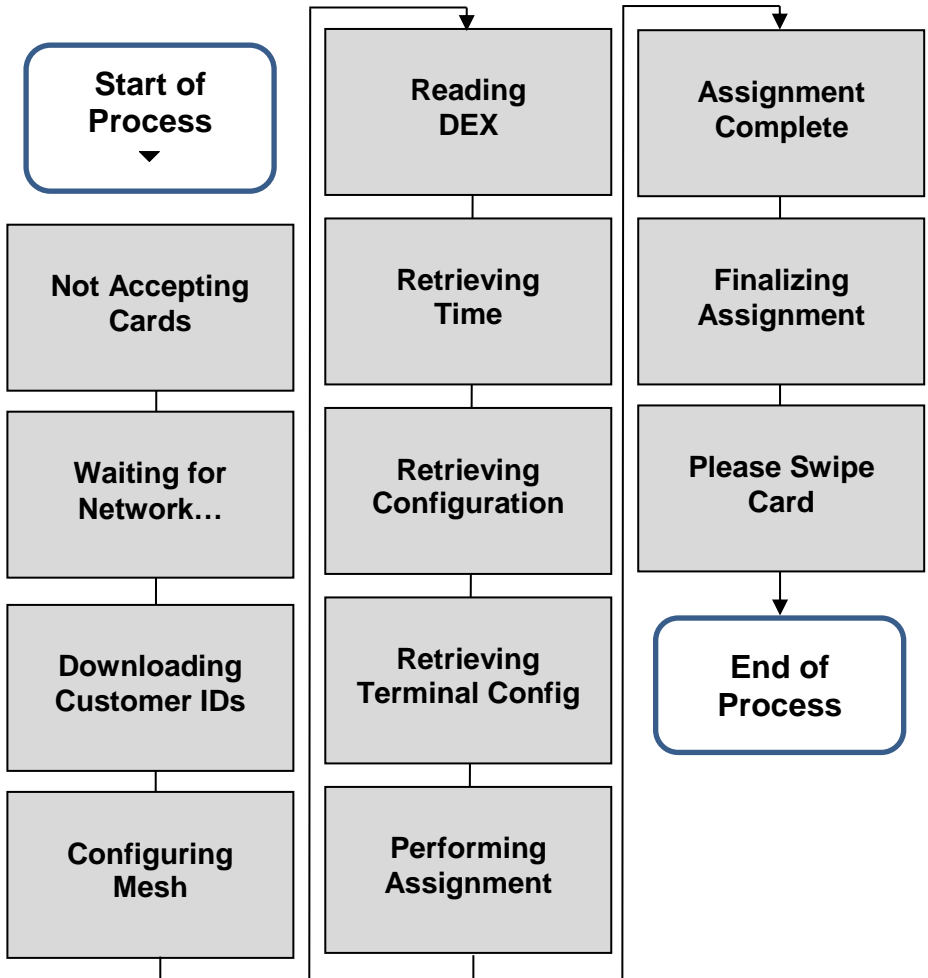
Accepts:	Bills, Coupons, Mag stripe cards
Used on:	Fixed width (USA) bill acceptors and recyclers in a standard NAMA bill opening
Features:	Cancel button, attract LEDs, END button
Harness P/N:	5900678

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Assignment Messages

During the Assignment Process, the Navigator contacts the DMS, and during the communication session, is assigned a Terminal ID. The messages below indicate the status of the process, and are shown on the display of the card reader. If the sequence shown is aborted or ends with an error message, using the Diagnostic Mode will assist you in determining what the next step required will be. After the Assignment Complete message is received, the Navigator will reboot. Please wait for the display to show "Please Swipe Card" before performing any additional testing (about 2 minutes).



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Diagnostic Mode & Messages

To access the diagnostic mode, press the blue button on the Navigator five times, about 1 second apart. Have a card with a magnetic stripe available to test when the display indicates to swipe a card. An actual credit card is not required for this step. Three of the key messages to observe are the RSSI (Relative Signal Strength Indicator) and Customer IDs and Comms Status. RSSI indicates the strength of the cellular signal. The range of acceptable RSSI is -55dbm to -95dbm, and the closer the value is to -55dbm, the better the signal is available. Customer IDs will show the Vending Company Code (VCC) and the customer's Crane account number. Comms Status reports the status of communication with DMS, and the payment portal. All available messages will repeat ten times before the device returns to the normal Operate mode. The Diagnostics mode can be cancelled by pressing the "End" button on the credit card bezel at any time.

