

Trakker Antares Firmware Version 6.15 Instruction Sheet

This instruction sheet contains the latest information about Trakker Antares® firmware version 6.15. With this firmware upgrade, several significant changes were made to the hardware and software for Trakker Antares 24XX terminals. These changes include:

- PDF 417 support for 241X and 242X terminals
- WEP 128 support
- 95XX terminal emulation (EM9560.BIN) enhancements
- Interleaved 2 of 5 (I 2 of 5) enhancements

The information in this instruction sheet applies to the Trakker Antares 241X, 242X, 2455, 246X, and 248X terminals. To learn about your Trakker Antares terminal, use this instruction sheet in conjunction with other Trakker Antares documentation.

If you have an earlier version of firmware, you can download version 6.15 at no charge from the Intermec Product Support Web site. For help, contact your local Intermec service representative. If you are not going to upgrade to version 6.15, use your Trakker Antares user's manual and disregard this instruction sheet.

PDF 417 Support for 241X and 242X Terminals

If you have a 241X or a 242X terminal with firmware version 6.15, you can scan PDF 417 bar code labels using a tethered scanner.

To scan PDF 417 bar code labels with your 241X, you need the following accessories:

- Sabre™ 1551E hand-held scanner (Part No. 1551E0808)
- 1551E cable to 241X (Part No. 3-606032-02)

To scan PDF 417 bar code labels with your 242X, you need the following accessories:

- 10-pin serial module (Part No. 067313)
- Sabre 1551E hand-held scanner (Part No. 1551E0808)
- 1551E cable to 242X (Part No. 3-606034-01)

For more information about ordering these accessories, contact your Intermec sales representative.

To learn how to configure your terminal and scan PDF 417 bar code labels, continue with the next sections. For more information about the PDF 417 symbology, see “PDF 417 Symbology” on page 3.

Configuring the Terminal for PDF 417

1. Press **Ⓞ** to turn off the terminal.
2. Connect the scanner to the terminal.
 - If you have a 241X, connect the 1551E cable to the 1551E scanner. Connect the other end of the cable to the terminal.
 - If you have a 242X, install the serial module. For help, see the documentation that came with the serial module. Connect the 1551E cable to the 1551E scanner, and then connect the other end of the cable to the serial module.
3. Configure the terminal to use the 1551E scanner.
 - a. Press **Ⓞ** to turn on the terminal. The scanner may beep when you turn on the terminal.
 - b. Access the TRAKKER Antares 2400 Menu System.
 - c. From the Main Menu, choose Configuration Menu, Terminal Menu, and then Scanner.
 - d. Make sure that the Scanner Selection command is set to Intermec 1551E.
 - e. Exit the TRAKKER Antares 2400 Menu System and save all changes. The terminal boots and the scanner is initialized.
4. Use the 1551E scanner to scan the following bar code label and enable the PDF 417 symbology.

Enable PDF 417



\$+CQ1

5. Use the 1551E scanner to scan the following bar code label and save the configuration in flash memory.

Save Configuration in Flash Memory

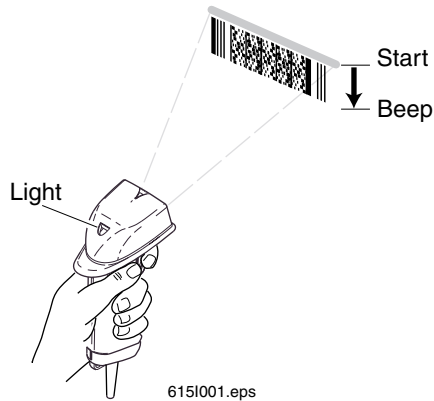


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Scanning a PDF 417 Bar Code Label

1. Hold the scanner at a distance of 15 cm to 32 cm (6 in to 12.5 in) from the bar code.
2. Point the scanner slightly above or below the bar code label, and press the trigger.



3. Pass the scanner's laser beam over the bar code label in a steady sweeping motion, making sure that the beam covers every bar and space on the label.

The scanner emits a single beep, and the scanner light flashes to indicate that the bar code has been successfully read.

PDF 417 Symbology

Purpose: The PDF 417 symbology is a stacked two-dimensional (2D) symbology that allows you to scan across rows of code. Each row consists of start/stop characters, row identifiers, and symbol characters, which consist of four bars and four spaces each and contain the actual data. This symbology uses error correction symbol characters appended at the end to recover lost data.

Syntax: CQdata

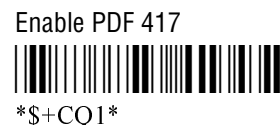
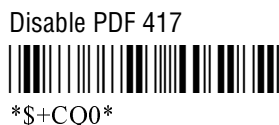
Acceptable values for *data* are:

- 0 Disabled
- 1 Enabled

Default: Enabled

Menu System: From the Main Menu, choose Configuration Menu and then Symbologies Menu.

Scan: One of these bar codes:



WEP 128 Support

Wired Equivalent Privacy (WEP) is a data encryption algorithm for wireless communications. Previous firmware versions supported WEP 64, however, firmware version 6.15 supports WEP 128 on 2415, 2425, 2455, and 2485/6 terminals with IEEE 802.11B High Rate (HR) radios.

Although both WEP 64 and WEP 128 protect transmitted data using the RC4 encryption algorithm, WEP 64 uses a 64-bit seed key while WEP 128 uses a 128-bit seed key. To use WEP 128 in your wireless network, you must

- make sure the radio on your terminal has firmware version 4.00/6.04 or higher.
- configure the WEP commands.

Detailed instructions for performing these steps are included in the next sections.

Upgrading the Radio Firmware

You can use the Access Point diagnostic to determine the radio firmware version. For help, see the “Running Diagnostics” chapter in your user’s manual. If you do not have radio firmware version 4.00/6.04 or higher, you must upgrade the radio firmware.

To upgrade the radio firmware

1. Download the latest Trakker Antares firmware upgrade at no charge from the Intermec Product Support Web site.
2. Load the L80211FW.BIN file that comes with the firmware upgrade onto your terminal and run the application. For help loading files and running an application, see your Trakker Antares user’s manual.



Note: This procedure only upgrades the radio firmware. To use WEP 128, you must also upgrade the terminal firmware to version 6.15 or higher.

Configuring the WEP Commands

Once your radio has radio firmware version 4.00/6.04 or higher installed and your terminal has firmware version 6.15 installed, the WEP commands must be configured to use WEP 128:

- WEP Encryption must be enabled.
- The WEP Key command must be set for WEP 128 using 13 ASCII characters, printable or nonprintable, or 13 hex pairs. Note that WEP 64 only requires 5 ASCII characters or hex pairs.
- The WEP Transmit Key command must be set.

For help configuring the WEP commands, see the *Trakker Antares 24XX Terminal User’s Manual Addendum* (Part No. 070451) or the “Configuration Command Reference” chapter in your user’s manual.



95XX Terminal Emulation Enhancements

Trakker Antares 24XX terminals ship with the EM9560.BIN application. With this application, the terminal operates like a 95XX in Data Entry mode with no application running.

Using Message Length Headers

If you have a 24XX terminal with firmware version 6.15 and higher, you can use the EM9560.BIN application to add message headers that indicate the length of the message. When you send or receive a message, the application pre-appends a header to the message. If the message being received already has a header, the application strips the existing header and pre-appends the new message length header.

You can create a two-byte binary header, a four-byte ASCII header, or a mixed mode header. A mixed mode header pre-appends a four-byte ASCII header to received messages and a two-byte binary header to sent messages.



Note: The EM9560.BIN application must be running on your terminal before you can use message length headers.

Syntax: NH*data*

Acceptable values for *data* are:

- 0 No header
- 1 Two-byte binary header on messages sent and received
- 2 Four-byte ASCII header on messages sent and received
- 3 Four-byte ASCII header on messages sent and two-byte binary header on messages received

Default: No header

Scan: One of these bar codes:

No Header



\$+NH0

Two-Byte Binary Header



\$+NH1

Four-Byte ASCII Header



\$+NH2

Four-Byte ASCII / Two-Byte Binary Header



\$+NH3

Interleaved 2 of 5 Enhancements

This section lists additional options for the Interleaved 2 of 5 (I 2 of 5) configuration command.

Purpose: Interleaved 2 of 5 (I 2 of 5) is a high-density, self-checking, continuous numeric symbology. With firmware version 6.15, you can now set two additional parameters.

Syntax: *CAdata*

Additional values for *data* are:

- 95 Case code (6 or 14) with check digit verified but discarded
- 96 Variable length with check digit verified but discarded

Existing values for *data* are 0, 2-32, 97, 98, and 99. Only the new values for *data* are described in this section. For more information about the existing values, see your user's manual.

Default: Disabled

Menu System: From the Main Menu, choose Configuration Menu, then Symbologies Menu, and then 2 of 5/I 2 of 5.

Scan: One of these bar codes:

Enable Case Code With Check Digit
Verified But Discarded



\$+CA95

Enable Variable Length With Check Digit
Verified But Discarded



\$+CA96

Part No. 071388-001



071388-001

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