

**SIEMENS**

**HawkEye™ 45T  
Display User Manual**

**Rev 1.0.1, December 2006**

EM-20889-1V101

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# Safety Guidelines

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This manual contains notices you have to observe in order to ensure your personal safety, as well as to prevent damage to property. The notices referring to your personal safety are highlighted in the manual by a safety alert symbol, notices referring to property damage only have no safety alert symbol. The notices shown below are graded according to the degree of danger.



## **Danger**

indicates that death or severe personal injury **will** result if proper precautions are not taken.



## **Warning**

indicates that death or severe personal injury **may** result if proper precautions are not taken.



## **Caution**

with a safety alert symbol indicates that minor personal injury can result if proper precautions are not taken.

## **Caution**

without a safety alert symbol indicates that property damage can result if proper precautions are not taken.

## **Notice**

indicates that an unintended result or situation can occur if the corresponding notice is not taken into account.

If more than one degree of danger is present, the warning notice representing the highest degree of danger will be used. A notice warning of injury to persons with a safety alert symbol may also include a warning relating to property damage.

## Qualified Personnel

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The device/system may only be set up and used in conjunction with this documentation. Commissioning and operation of a device/system may only be performed by **qualified personnel**. Within the context of the safety notices in this documentation qualified persons are defined as persons who are authorized to commission, ground and label devices, systems and circuits in accordance with established safety practices and standards.

## Prescribed Usage

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Note the following:



### **Warning**

This device and its components may only be used for the applications described in the catalog or the technical description, and only in connection with devices or components from other manufacturers which have been approved or recommended by Siemens. Correct, reliable operation of the product requires proper transport, storage, positioning and assembly as well as careful operation and maintenance.

## Trademarks

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All names identified by ® are registered trademarks of the Siemens AG.

The remaining trademarks in this publication may be trademarks whose use by third parties for their own purposes could violate the rights of the owner.

## Disclaimer of Liability

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We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

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## Contents



# Welcome!

## Purpose of This Manual

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The purpose of the manual is to get you up and running quickly and confidently with your reader.

## Laser Safety

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### **Caution**

Laser in the HE45T

LASER RADIATION - AVOID LONG TERM VIEWING OF DIRECT  
LASER RADIATION - LASER CLASS 2A

Wavelength 630 nm - Maximum radiant power: < 1mW

EN 60825-1:2003

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Note: LED Lighting

Light Emitting Diode Class 1 according to EN 60825-1:2003

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## Further Support

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If you have any questions concerning the use of products which are not answered in this manual, please contact your local Siemens partner at your Siemens office.

You can find your local partner at:

<http://www.siemens.com/automation/partner>

You can find a guide to the technical documentation on offer for the individual SIMATIC products and systems at:

<http://www.siemens.de/simatic-tech-doku-portal>

You can find the catalog and online ordering systems at:

<http://mall.automation.siemens.com/>

## Training Center

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### SITRAIN™ Siemens Training

Siemens Training (SITRAIN) offers a range of courses on Machine Vision and Symbology Reading. Training classes are conducted in Norcross, Georgia and at locations across the USA. SITRAIN also offers courses on PLC, Drives, Controls, HMI, NET, Process Control, Analyzers and Instrumentation, Electrical and Power, Safety and more. Details of current SITRAIN course offerings can be viewed at <http://www.automation.usa.siemens.com/sitrain/>

To view Machine Vision and Symbology course offerings, please click on the “Automation” link in the middle of the page and then the “Vision and Sensors” link from the list that is presented. Alternatively, please contact the Siemens Training Registrar at (800) 241-4453.

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## Technical Support

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How to reach technical support for all A&D products

- With the Support Request form on the Web:  
<http://www.siemens.de/automation/support-request>
- Telephone: + 49 180 5050 222
- Telephone: 800 333-7421 (USA)
- Fax: + 49 180 5050 223

Further information about our technical support is available in the Internet at  
<http://www.siemens.com/automation/service>

## Service & Support on the Internet

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The Siemens Service & Support team provides you with comprehensive additional information on SIMATIC products in its online Internet services.

<http://www.siemens.com/automation/service&support>

There you can find:

- Current product information and downloads which you may find useful for your product.
- The documents you require, using our Service & Support search engine.
- A forum where users and experts from all over the world exchange ideas.
- Your local partner for Automation & Drives.
- Information about onsite services, repairs, spare parts. Lots more is available to you on our “Service“ pages.

## Manual Conventions

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The following typographical conventions are used throughout this manual.

- Items emphasizing important information are **bolded**.
- Menu selections, menu items and entries in screen images are indicated as: Operation, Configure, etc.



# HE45T Display Overview

The HE45T Display has five major components:

- “LCD Screen” on page 1-1
- “Scan Buttons” on page 1-2
- “Soft Keys” on page 1-2
- “Arrow Keys and Enter Key” on page 1-3
- “Keypad” on page 1-3

## LCD Screen

The LCD screen provides feedback about what the HE45T is doing. The screen is divided into three sections, as shown in Figure 1–1.

**FIGURE 1–1. Sections of LCD Screen**



## Scan Buttons

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Press either of the two red buttons (Figure 1–2) to scan codes with the HE45T.

**FIGURE 1–2. Scan Button**

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## Soft Keys

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The HE45T Display software uses the left and right soft keys (Figure 1–3) to select commands shown on the bottom of the display.

**FIGURE 1–3. Soft Keys**

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- Pressing the **left** soft key executes the command listed on the lower left portion of the screen.
- Pressing the **right** soft key executes the command listed on the lower right portion of the screen. In most cases, the right soft key will be used to navigate back to a previous menu.

## Arrow Keys and Enter Key

Use the arrow keys to navigate through menus on the HE45T. Use the blue Enter key to enter data or to select an option listed on the screen. When data is stored in the HE45T’s memory, the default use of the left and right keys is to cycle through displaying stored data.

FIGURE 1-4. Navigation Buttons



## Keypad

The keypad uses standard cell phone T9 Mode to enter data. To type text in this mode, press the corresponding key until the correct letter, number, or symbol shows on the screen (in all modes except numeric mode). Table 1-1 explains the use of the keypad.






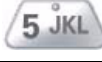
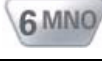

### Locking the Keypad

To lock the keypad from accidental key presses or entry of data, press the Shift key and the up arrow key at the same time. Only the keypad will be locked. The trigger (red) buttons will continue to function. To unlock the keypad, press the Shift key and the up arrow key at the same time again.

FIGURE 1-5. Locking the Keypad







**TABLE 1–1. Button Functions**

Key	Numeric Mode	Upper Case Text Mode	Lower Case Text Mode	Symbol Mode
	Toggles between numeric characters, upper case text, lower case text, and symbol character input	Toggles between numeric characters, upper case text, lower case text, and symbol character input	Toggles between numeric characters, upper case text, lower case text, and symbol character input	Toggles between numeric characters, upper case text, lower case text, and symbol character input
	1	Space, 1	Space, 1	Space ) < _
	2	A, B, C, 2	a, b, c, 2	! * = '
	3	D, E, F, 3	d, e, f, 3	" + > {
	4	G, H, I, 4	g, h, i, 4	# , ?
	5	J, K, L, 5	j, k, l, 5	\$ - @ }
	6	M, N, O, 6	m, n, o, 6	% . [ ~
	7	P, Q, R, S, 7	p, q, r, s, 7	& / \ Space



**TABLE 1–1. Button Functions (Continued)**

Key	Numeric Mode	Upper Case Text Mode	Lower Case Text Mode	Symbol Mode
	8	T, U, V, 8	t, u, v, 8	' : ] Space
	9	W, X, Y, Z, 9	w, x, y, z, 9	( ; ^ Space
	0	0	0	Toggles between 4 sets of symbols - when pressed, the current symbol set is displayed
	Backspace and clear messages	Backspace and clear messages	Backspace and clear messages	Backspace and clear messages

### Clear Key

You can use the CLEAR key as a backspace key and will also clear messages from the main screen. In the Ready/Status screen, messages can appear, such as the data from the last scan and configuration command status messages.






To clear the displayed message, press the CLEAR key.

### Icon Overview

Table 1–2 through Table 1–7 describe the icons used in the HE45T Display software.



## Power Icons

TABLE 1–2. Power Icons

Icon	Description
	50% to 100% capacity of battery
	20% to 50% capacity of battery
	0% to 20% capacity of battery – recharge battery as soon as possible
	Battery is recharging
	No icon is displayed when battery blank is used with a cabled reader





## Connection Icons

TABLE 1–3. Connection Icons

Icon	Description
	Reader is connected physically or wirelessly to a receiving device (computer, handheld, etc.) Note: Some RS232 configurations can not be detected
	No icon is displayed when the reader does not detect a connection







## Communication Mode Icons

TABLE 1-4. Communication Mode Icons

Icon	Description
	RS232 communication mode enabled
	PS2 communication mode enabled
	USB communication mode enabled
	Bluetooth communication mode enabled





## Packet Mode Icons

TABLE 1-5. Packet Mode Icons

Icon	Description
	One way mode – no acknowledgement required
	Two way mode – packetized, bidirectional communication between a HE45T and an application (may also indicate download mode)
	Downloader mode - reader ready for firmware upgrade
	Keyboard mode – can be used as either USB keyboard or PS/2 keyboard input mode
	Virtual COM Port 1 mode - data can be sent in one way mode
	Secure mode – data encryption mode enabled






## Memory Icons

TABLE 1–6. Memory Icons

Icon	Description
	No stored data
	Some stored data
	Memory is full - no available memory
	No batch mode – data will not be stored in the reader's memory if not connected

## Input Mode Icons

TABLE 1–7. Icons

Icon	Description
	Caps Lock – data entered manually on the keypad will be in capital letters
	Lower Case – data entered manually on the keypad will be in lower case letters
	Numeric – data entered manually on the keypad will be numeric
	Symbol – data entered manually on the keypad will be symbols
	Locked – buttons pushed on the reader's keypad will be ignored

Note: It may take up to 15 seconds to update icons after you change a setting.

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**CHAPTER 2**      **Basic Functions****Starting the HE45T**

To begin using the HE45T, power it up using either of the following methods:

- Insert a battery and press and hold a red scan button (or the optional handle's red trigger button) for at least 2 seconds
- Attach the HE45T by a USB cable, a PS/2 cable, or an RS232 cable with power supply to a computer

After you power up the HE45T, you will see the start-up screen shown in Figure 2-1.

**FIGURE 2-1. Start-up Screen**



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Note: The HE45T is programmed to shut off automatically after two hours of non-use. To turn it back on, simply press one of the red scan buttons.

---

## Scanning Codes

To begin scanning codes, simply press a red scan button. Your HE45T is ready to scan codes when you see the screen in Figure 2–2.

**FIGURE 2–2. Ready to Scan Screen**



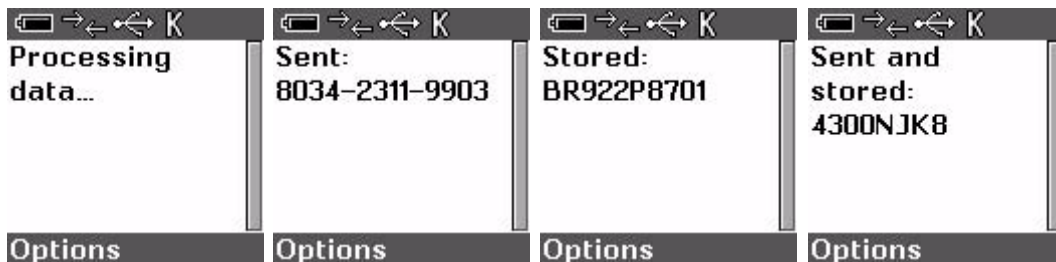
Press either red button (Figure 2–3) on the HE45T to scan a code (or the trigger on the optional handle).

**FIGURE 2–3. Scan a Code Buttons**



Information stored in the scanned code is processed by the HE45T, sent to a host computer and/or stored on the HE45T, and the data is also displayed on the screen, as shown in Figure 2–4.

**FIGURE 2–4. Scanned Information**



By default, the information scanned will be sent to a host computer (if the HE45T is connected to a host computer), and then erased from the HE45T's memory. If the HE45T does not detect an attached host computer, the data will be stored in its memory. See Chapter 4, "Send/Store Settings" for more information on send/store settings.

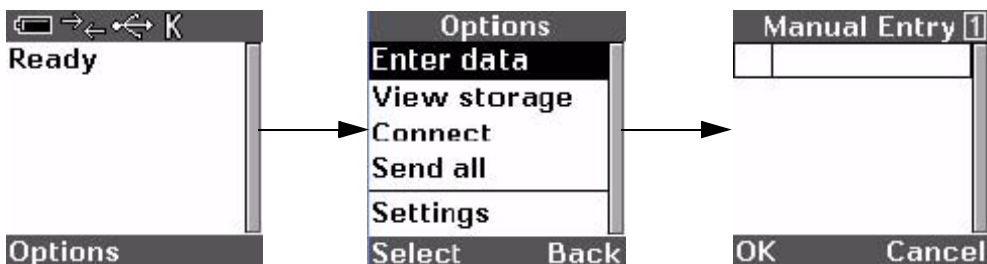
## Manually Entering Information

The HE45T Display software allows you to manually enter information. Use the instructions below for manually entering data.

### Access the Manual Entry Screen

1. Begin at the **Ready** prompt screen, as shown in Figure 2-5.
2. Select **Options**.
3. Select **Enter data**.

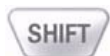
FIGURE 2-5. Accessing Manual Entry Screen



### Manually Enter Numbers, Text, and Symbols

In the manual entry screen, you can enter data in numeric, upper case text, lower case text, and symbol formats. By default, the HE45T is set to enter numeric characters when you use the keypad.

- To toggle between **numeric** and **upper case** text input, press the Shift key.



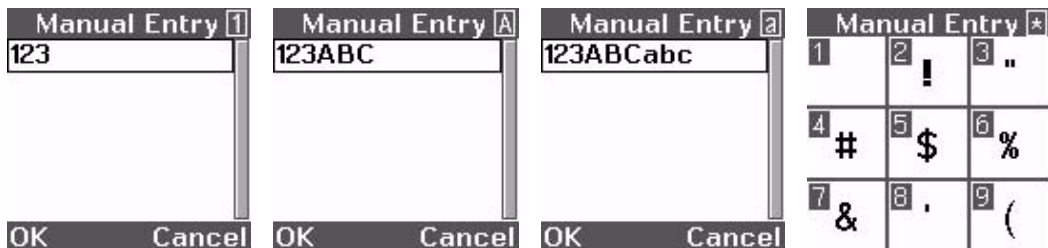
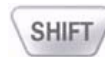
- To toggle between **upper case** and **lower case** text input, press the Shift key again.



- To toggle between **lower case** and **symbol** character input, press the Shift key again. Press the **0** key to toggle between different sets of symbols.



- To toggle back to **numeric** character input, press the Shift key again.



After entering data in the manual entry screen, press **OK** or the Enter key (Figure 2–6) to send and/or store the data.

**FIGURE 2–6. Enter Key**





A confirmation message will appear, as shown in Figure 2–7.

**FIGURE 2–7. Confirmation Message**



### Manual Numeric Data Entry Shortcut

At the Ready screen, simply begin using the keypad to enter numeric data. The manual entry screen will appear as soon as you start pressing the numeric keys on the keypad.

Hint: Press the 0 key (Figure 2–8) multiple times (in any entry mode except symbol) to cycle through all of the symbols one at a time.

**FIGURE 2–8. Press to Cycle Through Symbols**





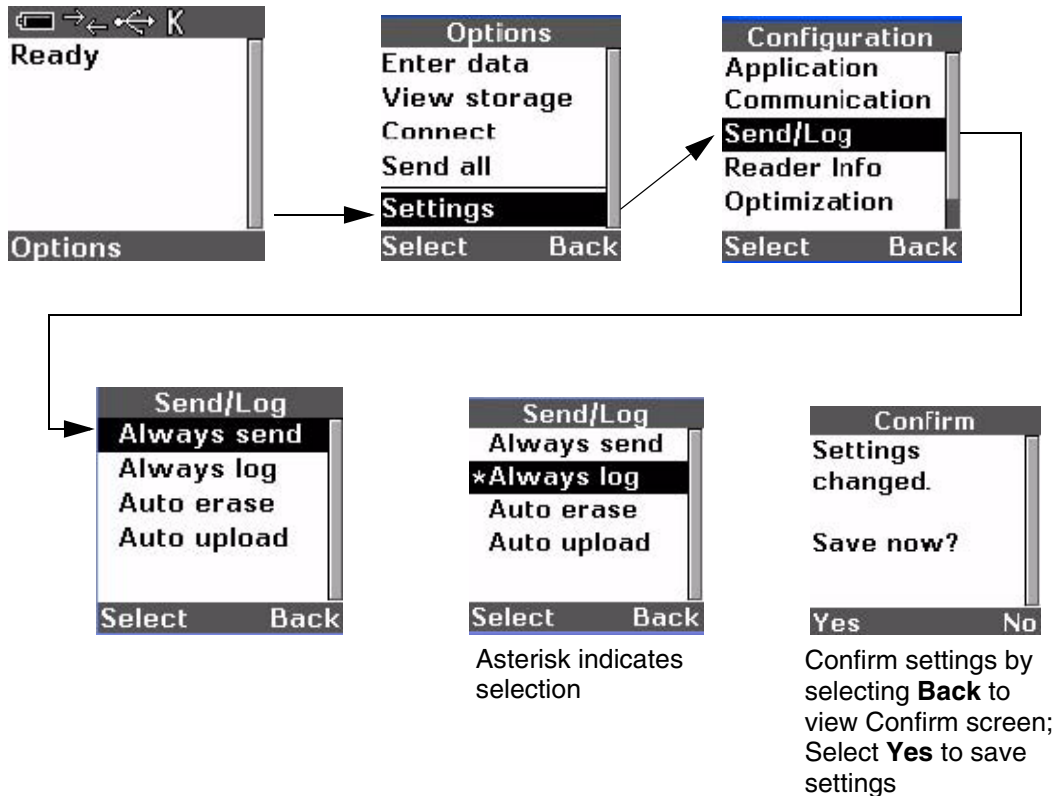
## Batch Mode

Data can be stored in the HE45T's memory and then sent to a host computer later. When the HE45T stores data in its memory, the term "batch mode data capture" or "batch mode" is used.

By default, batch mode is disabled. To use the HE45T in batch mode:

1. Begin at the **Ready** prompt screen, as shown in Figure 3-1.
2. Select **Options**.
3. Press the down arrow twice to highlight **Settings**.
4. Select **Settings**.
5. Select **Send/Log**.
6. Press the down arrow button to highlight **Always Log**.
7. Press the left soft key to select **Always Log**. An asterisk (\*) will appear before the **Always Log** to inform you that the option has been set.
8. Save settings by selecting **Back** to navigate to Confirm prompt and select **Yes**.

FIGURE 3-1. Batch Mode Send/Log



When you scan a code or manually enter information while in batch mode, you will get a confirmation message that the data has been stored (see Figure 3-2).

FIGURE 3-2. Confirmation Message That Data Has Been Stored



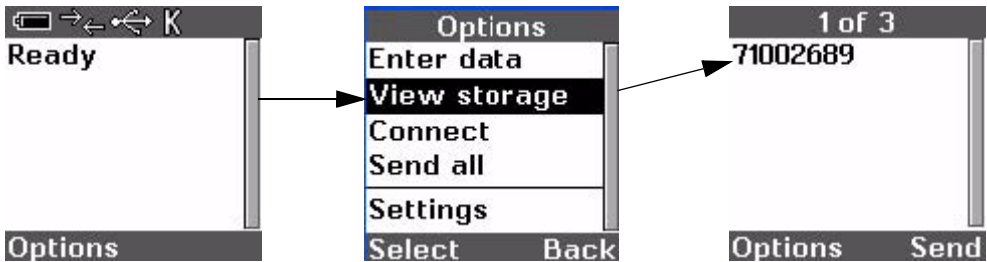
## Viewing Stored Data

To view data stored on the HE45T, use the following steps:

1. Begin at the **Ready** prompt screen, as shown in Figure 3–3.
2. Select **Options**.
3. Use the down arrow key to highlight **View storage**.
4. Select **View storage**.

The data is shown one entry at a time.

**FIGURE 3–3. Viewing Stored Data**



Use the right and left arrow buttons (Figure 3–4) to scroll through the stored data.

**FIGURE 3–4. Scrolling Through Stored Data**



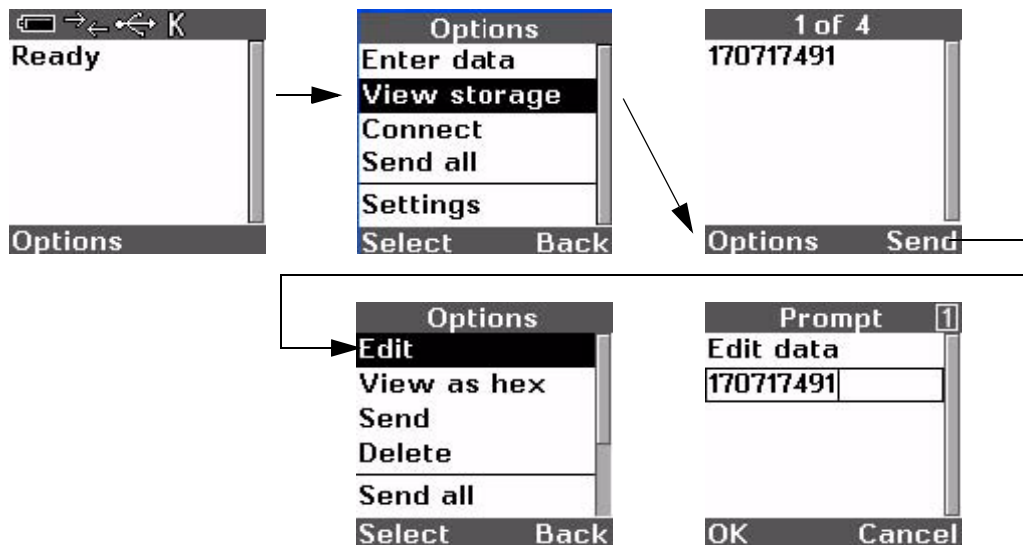
Shortcut: At the **Ready** prompt, simply press the right and left arrow buttons to scroll through stored data.

## Editing Stored Data

To edit data stored on the HE45T, use the following steps:

1. Begin at the **Ready** screen, as shown in Figure 3–5.
2. Select **Options**.
3. Press the down arrow to highlight **View storage**.
4. Select **View storage**.
5. Select **Options**.
6. Select **Edit**.
7. Edit the data.
8. Press the Enter key or select **OK** to complete the edit.

FIGURE 3–5. Editing Stored Data

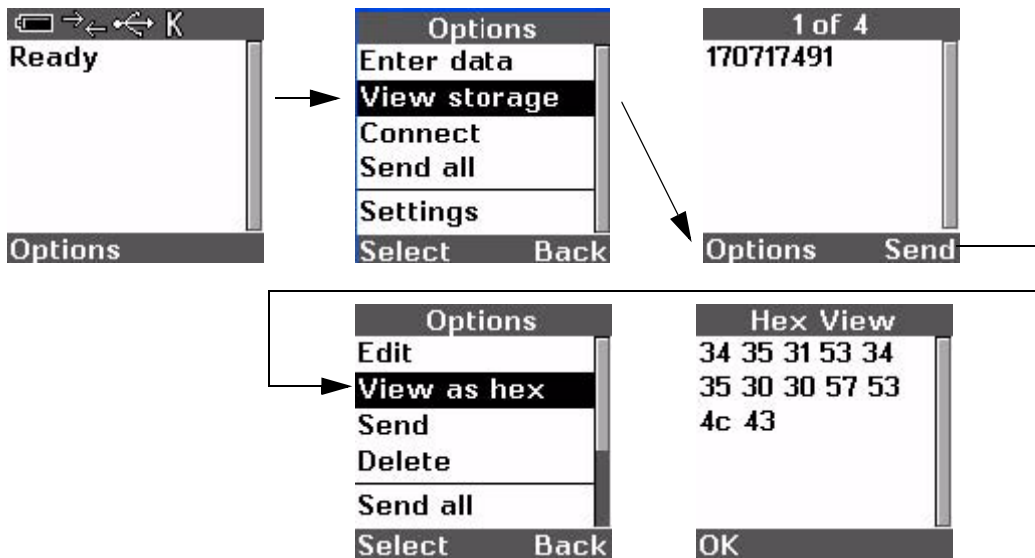


## Viewing Stored Data in Hexadecimal Format

To view data stored on the HE45T in hexadecimal format:

1. Begin at the **Ready** screen, as shown in Figure 3–6.
2. Select **Options**.
3. Press the down arrow to highlight **View storage**.
4. Select **View storage**.
5. Select **Options**.
6. Select **View as hex**.

FIGURE 3–6. Viewing Stored Data in Hex Format

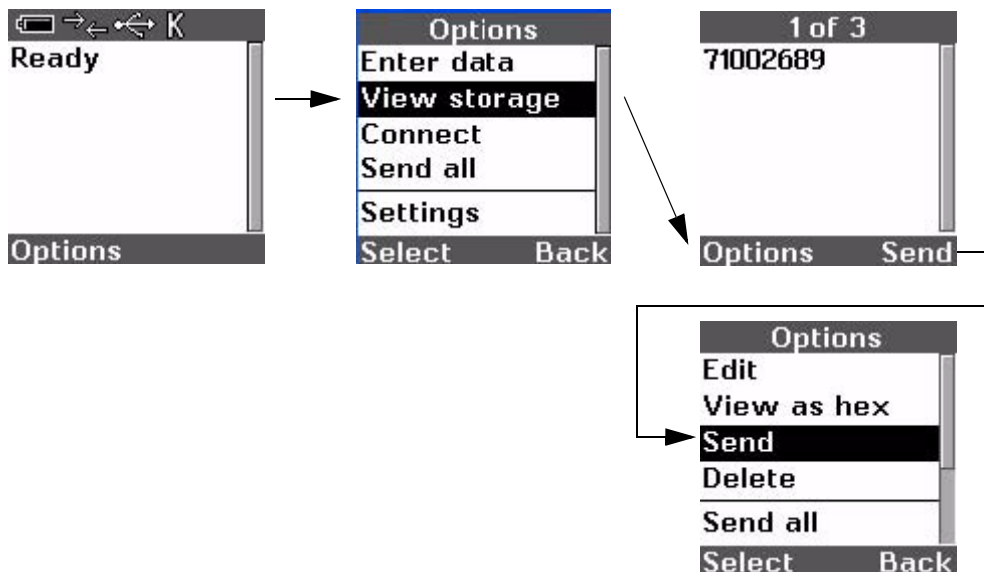


## Sending Stored Data

To send or upload the data stored on the HE45T to your computer:

1. Connect the HE45T physically or wirelessly to your computer.
2. Begin at the **Ready** screen, as shown in Figure 3–7.
3. Select **Options**.
4. Press the down arrow to highlight **View storage**.
5. Select **View storage**.
6. Select the **Send** option to send data one entry at a time (or select **Send** from the **Options** menu).  
-- or --  
Select **Options** and then select **Send all**.

FIGURE 3–7. Sending Stored Data



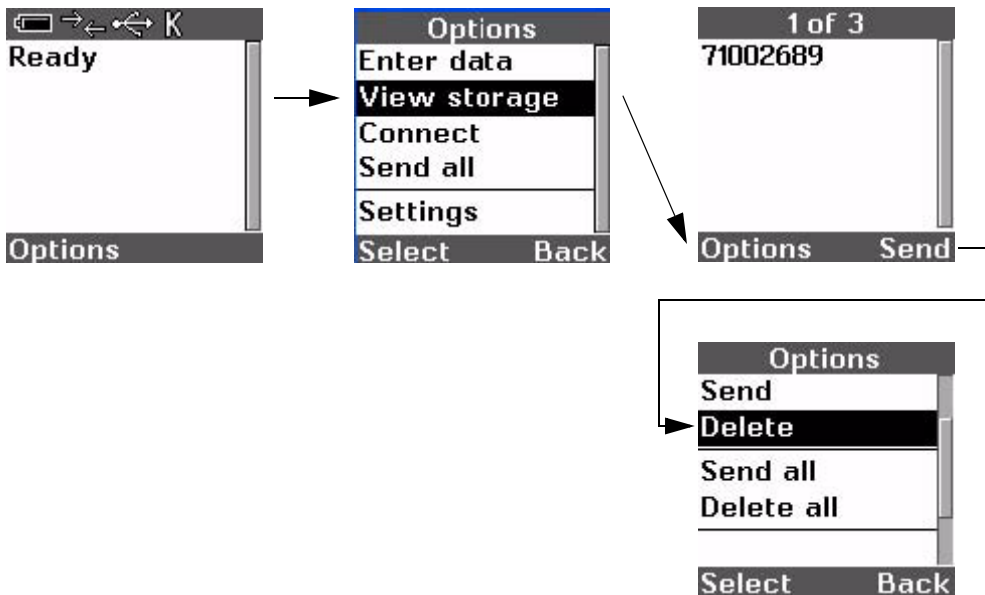


## Deleting Stored Data

To delete data stored on the HE45T:

1. Begin at the **Ready** screen, as shown in Figure 3–8.
2. Select **Options**.
3. Press the down arrow to highlight **View storage**.
4. Select **View storage**.
5. Select the **Delete** option to delete stored items one at a time.  
-- or --  
Select the **Delete all** option to delete all stored data.

FIGURE 3–8. Deleting Stored Data





## Send/Store Settings

This chapter describes the send and store settings of the HE45T.

**TABLE 4-1. Send & Store Settings**

<b>Setting</b>	<b>Description</b>
Always	When this option is set (has an asterisk in front of it), data will be sent immediately to a connected host computer. If the HE45T is not connected to a host computer, the data will automatically be stored.
Always Log only	When this option is set, data will be stored in the HE45T's memory and will not be sent to a host computer, even if the HE45T is connected to a host computer.
Always Send & Always Log	When both of these options are set, data will always be stored whether or not the HE45T is connected to a host computer, and data will automatically be sent to the host computer if it is connected.
Auto Upload	When selected, all previously batched data will be sent when a connection is established.

To access the Send/Store Settings:

1. Begin at the **Ready** prompt screen, as shown in Figure 4-1.
2. Select **Options**.
3. Use the down arrow key to highlight **Settings**.

4. Select **Send/Log**.

FIGURE 4-1. Accessing Send/Store Settings



## Always Send

FIGURE 4-2. Always Send



Select **Always send** to have the HE45T immediately send data after it has been scanned or manually entered to a host computer when the HE45T is connected physically or wirelessly to that host computer. Data will be sent whether or not **Always store** is selected if you are connected to a host computer. Selection is verified by the appearance of an asterisk:

**\*Always send**

## Always Log

FIGURE 4-3. Always Log



Select **Always Log** to have the HE45T store scanned/manually entered data. Data will be stored even if it has been sent to a host computer. Data will be stored in individual entries until erased. If the **Always Log** option is not set, data will still be stored in the HE45T's memory if it was not successfully sent to the host computer after being scanned/manually entered. Selection is verified by the appearance of an asterisk:

**\*Always log**

## Auto Erase

FIGURE 4-4. Always Erase



Select **Auto erase** to have the HE45T erase stored data as soon as it has been sent to a host computer. (Data is sent when **Send** or **Send All** is activated or when **Always send** is set.) When the **Auto erase** option is set, when data is sent, it means that the data is both sent to a host computer and erased from the HE45T's memory. Selection is verified by the appearance of an asterisk:

**\*Auto erase**

## Auto Upload

FIGURE 4-5. Auto Upload

---



Select **Auto upload** to send previously batched data immediately upon connection. This option is only used when HE45T is in batch mode. Selection is verified by the appearance of an asterisk:

**\*Auto upload**

## Send/Log Defaults

FIGURE 4-6. Send/Log Defaults

---



Default settings are:

- Always send
- Auto erase
- Auto upload

# Configuring Your HE45T

This chapter describes the process for configuring the HE45T.

Notes: All of the following configurations (and some not documented in this manual) can be set by scanning the programming codes found in the HE45T User Manual.

To configure the HE45T, follow these steps to access the configuration menu:

1. Begin at the **Ready** prompt screen, as shown in Figure 5-1.
2. Select **Options**.
3. Use the down arrow key to highlight **Settings**.
4. Select **Settings**. The **Configuration** menu will be displayed.

**FIGURE 5-1. Accessing Configuration Menu**



## Application Configuration

The HE45T comes with two standard JavaScript applications (CodeViewer.js and cr2.js) for the HE45T display to function properly. Siemens does not support custom JavaScript programming in the current software release.

---

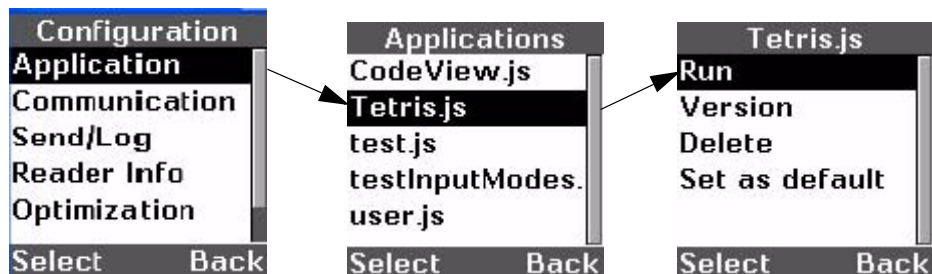
Notes: Do not change the current application configuration.

---

In future software releases, you will be able to create custom JavaScript applications with additional functionality. The Application menu can be used to run a JavaScript application, check its version number, delete, or set it as a default application. The following example shows how to select various custom JavaScript applications:

1. Select the **Application** menu, as shown in Figure 5–2.
2. Select a JavaScript application.
3. Run the application.
  - or --
  - Check the application's version number.
  - or --
  - Delete the selected application from the HE45T's memory.
  - or --
  - Set the application as the default application.

FIGURE 5-2. Selecting JavaScript Applications





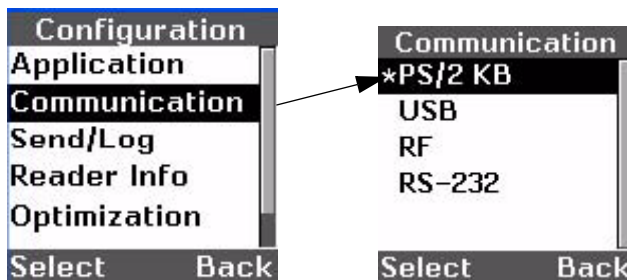
---

## Communication Interface Configuration

Use the Communication configuration menu to make changes to the HE45T's communication modes.

1. Select the **Communication** menu, as shown in Figure 5–3.
2. Select the type of communication interface to your computer that you want to use. You must have the correct cable if you use a cabled method.

**FIGURE 5–3. Changing the Communication Mode**



## PS/2 Keyboard Communication Interface

Use this communication interface if you want to use the HE45T with a PS/2 cable.

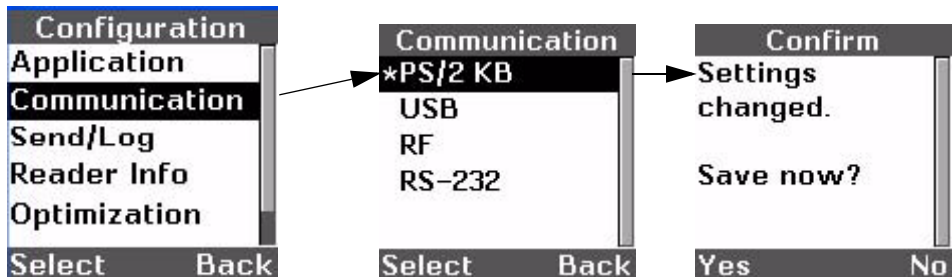
1. Select **PS/2 KB**, as shown in Figure 5–4. Selection is verified by the appearance of an asterisk.
2. Confirm the settings change by selecting **Yes**.

---

Notes: All changes you have made to the HE45T's configurations and settings will be saved to memory if you answer **Yes** at this prompt and will be in effect after the HE45T is powered off and powered back on. If you answer **No**, the changes to the HE45T's settings will be made temporarily and will only be in effect until the HE45T is powered off.

---

FIGURE 5–4. Setting Up to Use PS2



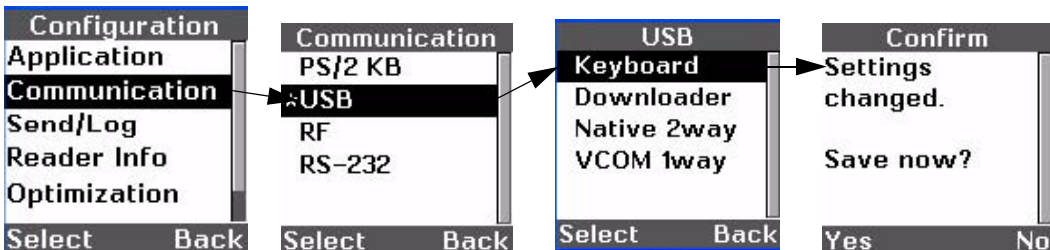
---

## USB Communication Interface

Use this communication interface if you want to use the HE45T with a USB cable.

1. Select the **USB** interface, as shown in Figure 5–5. Selection is verified by the appearance of an asterisk.

FIGURE 5–5. Setting Up to Use USB



2. Select **Keyboard** to use the HE45T in a keyboard mode with a USB cable.  
-- or --  
Select **Downloader** to use the HE45T in a download mode with a USB cable.  
-- or --  
Select **Native 2way** to use the HE45T in a bidirectional communication mode with a USB cable.  
-- or --  
Select **VCom 1way** to use the HE45T in a Virtual COM port mode with the USB connection simulating an RS232 connection.
3. Confirm the settings change by selecting **Yes**.

---

Notes: All changes you have made to the HE45T's configurations and settings will be saved to memory if you answer **Yes** at this prompt and will be in effect after the HE45T is powered off and powered back on. If you answer **No**, the changes to the HE45T's settings will be made temporarily and will only be in effect until the HE45T is powered off.

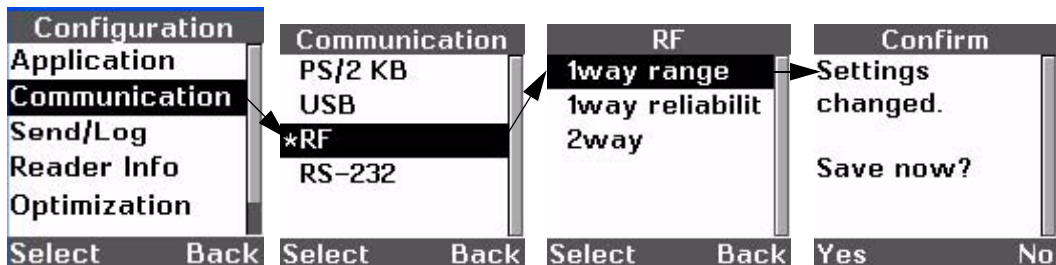
---

## RF – Bluetooth Communication Interface

If your reader has a Bluetooth radio installed, this option will appear. Use this communication interface if you want to use the HE45T with a Bluetooth radio connection.

1. Select the **RF** interface, as shown in Figure 5–6. Selection is verified by the appearance of an asterisk.
2. Select **1way range** to use the HE45T in a one way Bluetooth mode to get the maximum range.  
-- or --  
Select **1way reliability** to use the HE45T in a one way Bluetooth mode to get a higher degree of connection reliability with shorter distances from your computer.  
-- or --  
Select **2way** to use the HE45T in a two way Bluetooth mode to use bidirectional communication between the HE45T and the host computer.
3. Confirm the settings change by selecting **Yes**.

FIGURE 5–6. Setting Up to Use Bluetooth Radio



Notes: All changes you have made to the HE45T's configurations and settings will be saved to memory if you answer **Yes** at this prompt and will be in effect after the HE45T is powered off and powered back on. If you answer **No**, the changes to the HE45T's settings will be made temporarily and will only be in effect until the HE45T is powered off.

---

## RS-232 Communication Interface

Use this communication interface if you want to use the HE45T with an RS-232 cable.

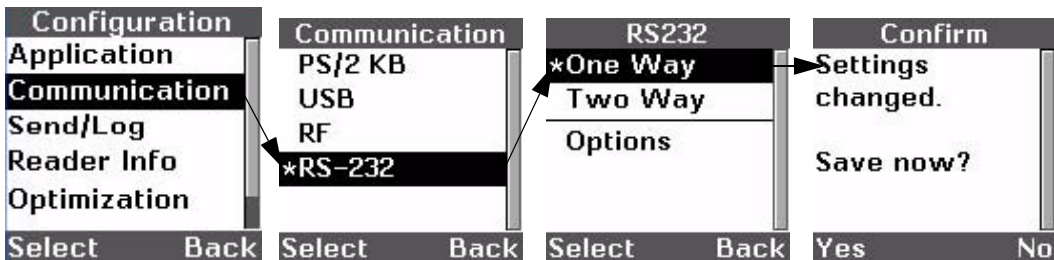
1. Select the **RS-232** interface, as shown in Figure 5–7. Selection is verified by the appearance of an asterisk.
2. Select **One way** to use the HE45T in a one way communication mode with the host computer.  
-- or --  
Select **Two way** to use the HE45T in a bidirectional communication mode with the host computer.
3. Confirm the settings change by selecting **Yes**.

---

Notes: All changes you have made to the HE45T's configurations and settings will be saved to memory if you answer **Yes** at this prompt and will be in effect after the HE45T is powered off and powered back on. If you answer **No**, the changes to the HE45T's settings will be made temporarily and will only be in effect until the HE45T is powered off.

---

FIGURE 5–7. Setting Up to Use RS-232



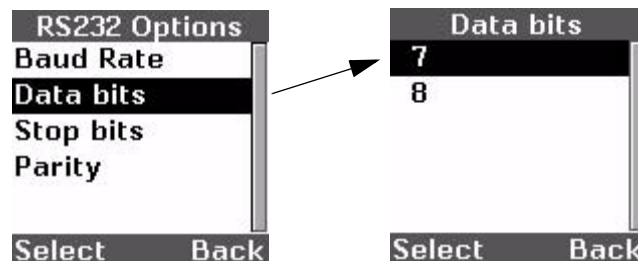
4. Set the RS-232 communication options.
  - a. Return to the RS-232 communication interface configuration menu and select **Options**.



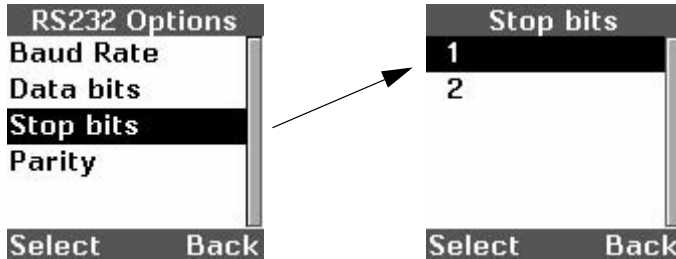
- b. Set the **Baud Rate** to match the baud rate of the host computer application.



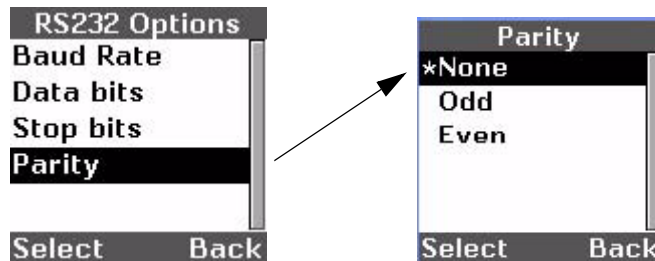
- c. Set the **Data bits** to match the data bits setting of the host computer application.



- d. Set the **Stop bits** to match the stop bits setting of the host computer application.



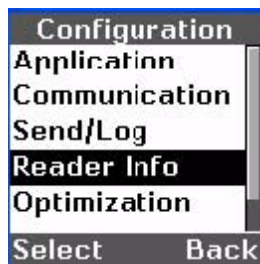
- e. Set the **Parity** to match the parity setting of the host computer application.



## HE45T Information

You can find information about the current configuration of the HE45T by accessing the **Reader Info** menu, as shown in Figure 5–8.

**FIGURE 5–8. Display Info Regarding Current Configuration**



## Firmware Version Number

The HE45T's current firmware (software stored in the reader's memory) version number can be displayed. This firmware version number may help technical support answer your questions more easily.

1. Access the **Reader Info** menu from the **Configuration** menu, as shown in Figure 5–9.
2. Select **Firmware Ver:**. The version numbers of the different firmware applications currently running on the HE45T are displayed.

FIGURE 5–9. Display the Firmware Version Number



## Reader Serial Number

The HE45T's serial number can be displayed.

1. Access the **Reader Info** menu from the **Configuration** menu, as shown in Figure 5–10.
2. Select **Reader Serial #**. The HE45T's serial number is displayed.

FIGURE 5–10. Displaying the Reader Serial Number





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## Displaying Date and Time

You can display the current date and time that is set on the HE45T. To change the date and time, see “System Configuration” on page 5-13.

1. Access the **Reader Info** menu from the **Configuration** menu, as shown in Figure 5-11.
2. Select **Date/Time**. The HE45T’s date and time setting is displayed.

**FIGURE 5-11. Displaying the Date & Time**



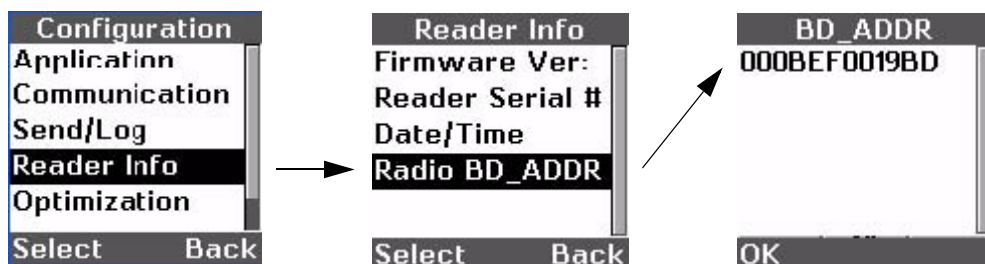
Notes: The time displayed on this screen will not be automatically updated. It will only show the time when the button is pressed.

## Bluetooth Address

If your reader has a Bluetooth Radio installed, this option will appear. You may need to know the Bluetooth address of the HE45T for applications that need to connect to and communicate with the HE45T.

1. Access the **Reader Info** menu from the **Configuration** menu, as shown in Figure 5-12.
2. Select **Radio BD\_ADDR**. The HE45T's Bluetooth address is displayed.

**FIGURE 5-12. Displaying the Bluetooth Address**



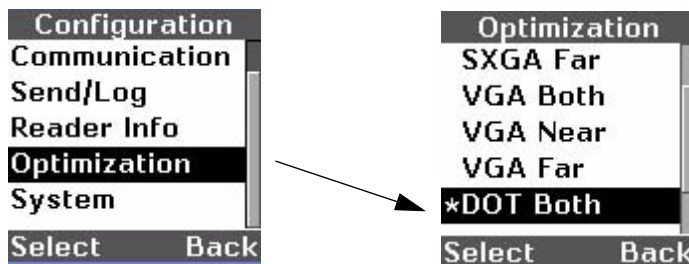
---

## Optimization Configuration

You can set the HE45T to be optimized for reading codes of varying sizes and varying densities. To understand what the different optimization settings are, please see Chapter 2 of the HE45T User Manual.

1. Access the **Optimization** menu from the **Configuration** menu, as shown in Figure 5–13.
2. Select an optimization mode. An asterisk will appear next to the selected option. See Chapter 2 of the HE45T User Manual for optimization setting explanations.

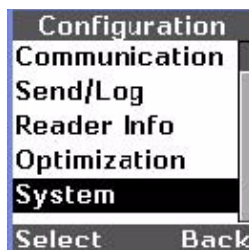
**FIGURE 5–13. Optimizing the HE45T to Read Codes With Different Sizes**



## System Configuration

Use the **System Configuration** menu to configure system settings, as shown in Figure 5–14.

**FIGURE 5–14. Configuring System Setting**



## Setting the Time the Backlight is On

Set the amount of time the HE45T's backlight stays on. This setting is in milliseconds.

---

Notes: Longer backlight times will cause the HE45T to use more battery power.

---

1. Access the **System** menu from the **Configuration** menu, as shown in Figure 5–15.
2. Select **Backlight time**.
3. Enter a new value for the time the backlight stays on in milliseconds (3000 milliseconds = 3 seconds).

**FIGURE 5–15. Setting the Time the Backlight is On**

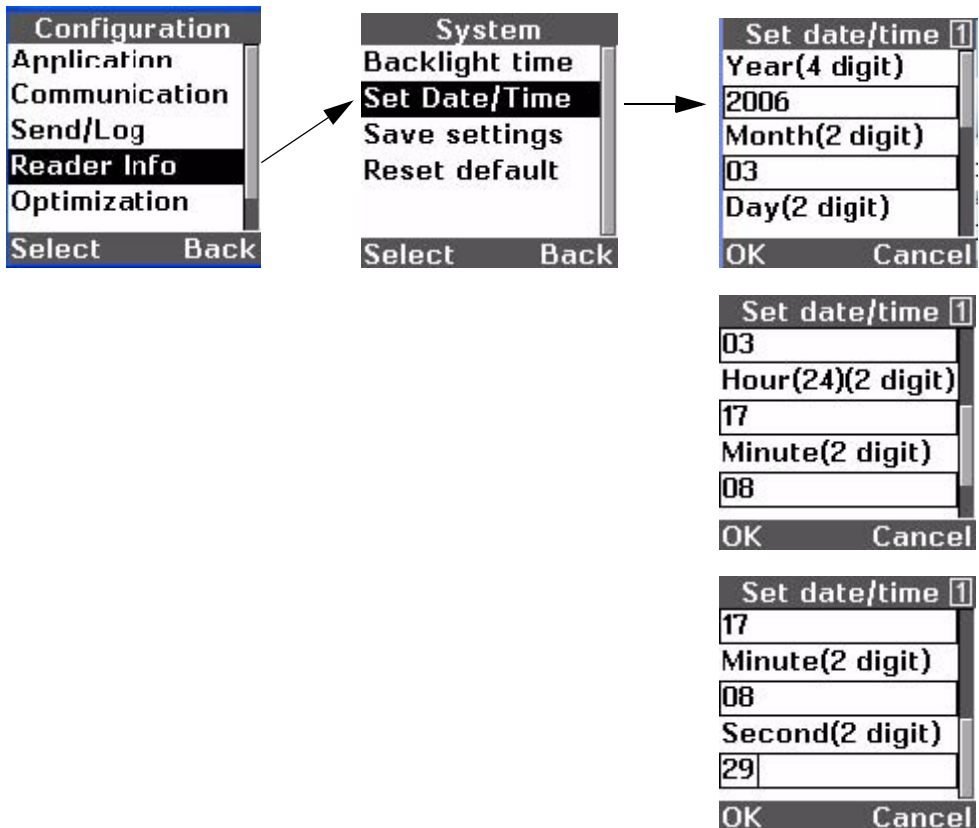


## Setting the Date & Time

Set the current date and time.

1. Access the **System** menu from the **Configuration** menu, as shown in Figure 5–16.
2. Select **Set Date/Time**.
3. Change the date and time in each of the fields by pressing the Clear key to delete the data. Enter corrected information in each field: the year in 4 digit format, the month in 2 digit format, the day in 2 digit format, the hour in 24 hour 2 digit format, the minute in 2 digit format, and the seconds in 2 digit format. Use the arrow keys to move from field to field.

FIGURE 5–16. Setting the Date & Time



You must enter the date and time in the format shown in Figure 5–16. You will get the error shown in Figure 5–17 if an incorrect format is used.

FIGURE 5–17. Date & Time Error Message

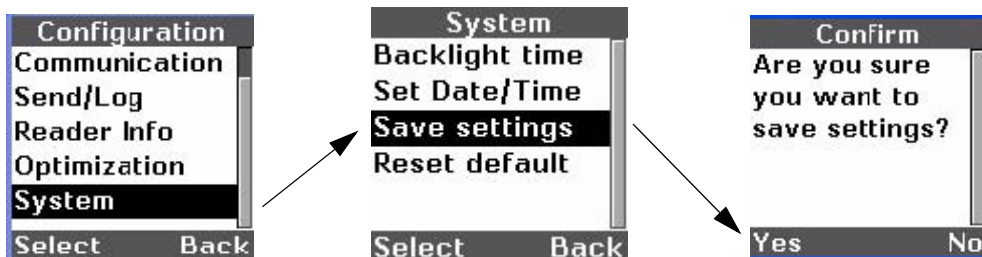


## Save Settings

Use this option to save HE45T configuration changes you have made. This option saves configuration settings to the HE45T's memory, so the next time you power on the HE45T, the settings will be available. Otherwise, the configuration changes you have made will be lost after you power off the HE45T.

1. Access the **System** menu from the **Configuration** menu, as shown in Figure 5–18.
2. Select **Save settings**.
3. Select **OK** to confirm that you want the configuration settings you have made to be stored in memory.

FIGURE 5–18. Saving Settings



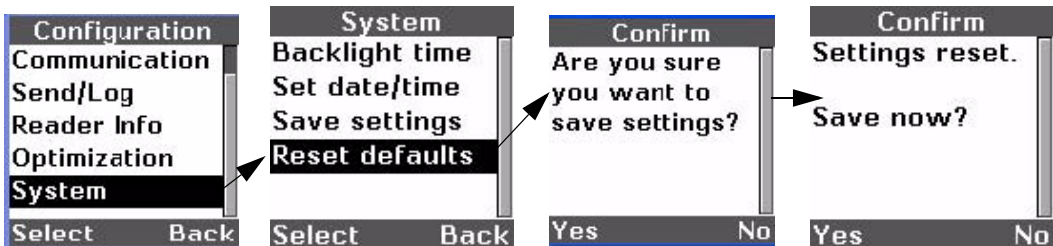
---

## Resetting the HE45T to Factory Defaults

If you need to reset the HE45T to its factory default settings, use this option.

1. Access the **System** menu from the **Configuration** menu, as shown in Figure 5–19.
2. Select **Reset defaults**.
3. Select **Yes** to confirm that you want to reset all of the HE45T's configuration settings back to the factory default settings or select **No** to cancel.
4. Confirm whether or not you want to save the settings to the HE45T's memory. Select **Yes** to save the factory default settings to memory so that they are in effect the next time the HE45T is powered on. Select **No** to have the setting changes made temporarily until the HE45T is powered off.

FIGURE 5–19. Resetting to Factory Defaults







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