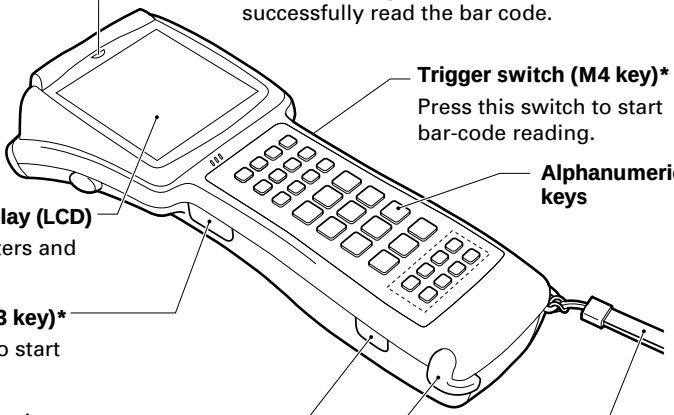
Components and Functions



Indicator LED

Illuminates in green when the BHT has successfully read the bar code.

Trigger switch (M4 key)*

Press this switch to start bar-code reading.

Alphanumeric keys

Liquid crystal display (LCD)

Shows the characters and graphic patterns.

Trigger switch (M3 key)*

Press this switch to start bar-code reading.

Optical interface port

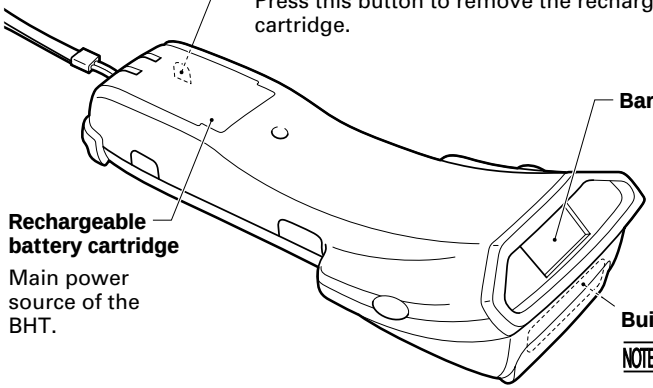
Used to exchange data/ programs with the host computer via its integrated IR port or via the optical communication unit CU-7000.

Connector cover

Inside this cover is the direct-connect interface port.

Hand strap

Be sure to put your hand through this strap to prevent you from dropping the BHT accidentally.



Release button

Press this button to remove the rechargeable battery cartridge.

Bar-code reading window

Rechargeable battery cartridge

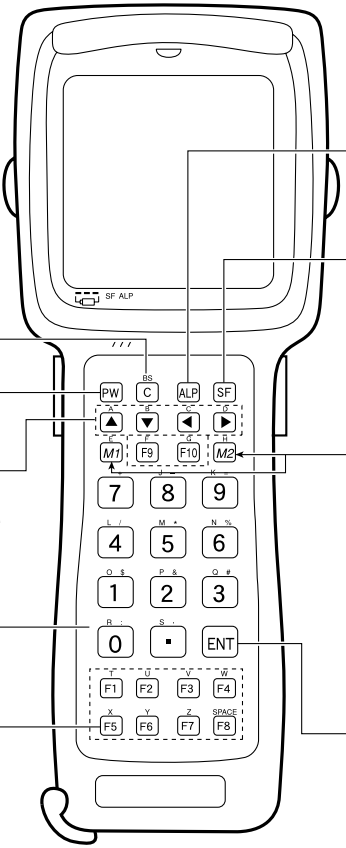
Main power source of the BHT.

Built-in antenna

NOTE Do not cover this antenna section with metal-evaporated tape or by hand. Doing so may result in communications failure.

* The tirgger switch function is assigned to both of the M3 and M4 keys by default.

The functions of the keys may be set by user programs. Shown below is a set of sample functions.



C (Clear) key
Clears the last inputted data or returns to the original screen. If pressed together with SF key, this C key works as a backspace key.

PW (Power) key
Turns the BHT on or off.

Cursor keys
Used to move up to the preceding line, down to the next line, to the preceding character, and to the next character.

Numerical keys
Used for numerical input.

Function keys
Used for choosing functions.

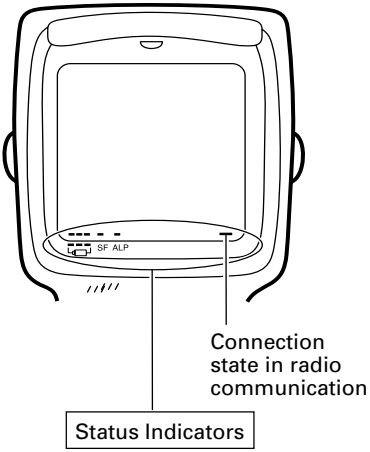
ALP (Alphabet) key
Switches the keypad to alphabet entry.

SF (Shift) key
Used in combination with numerical keys for special input procedures.

M1/M2 (Magic) keys
Used as any of the trigger switch (default), ENT key, SF key, and backlight function on/off key depending upon definition in System Mode or in user programs. These keys can be also assigned string data.

ENT (Enter) key
Finalizes the inputted data or operations, and starts the corresponding processing.

About Status Indicators



Battery voltage level

Shows the current battery voltage level.

If the voltage level is high, three bars appear; if low, a single bar appears.

NOTE The displayed battery level shows the terminal voltage of the battery cartridge, not how much power is left.

The battery voltage level varies depending upon the operation of the BHT, so the displayed level also may vary .

Keypad shift state

SF Shows a bar when the keypad is shifted.

Alphabet input

ALP Shows a bar when the alphabet input function is activated.

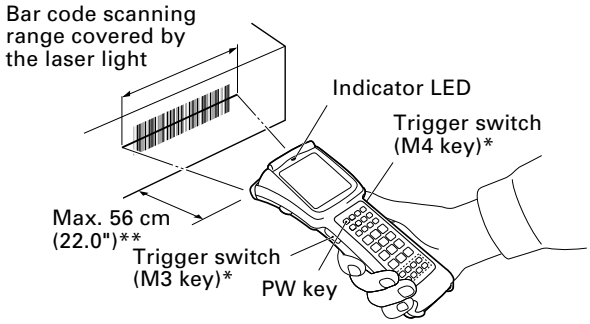
Connection state in radio communication

Shows a bar when the BHT is synchronized with an access point.

Reading Bar Codes

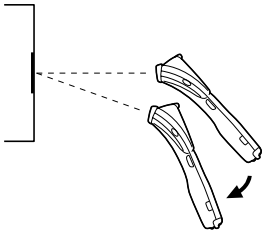
Turn on the BHT power, bring the bar-code reading window to the bar code to be scanned, and press the trigger switch. The BHT emits a laser light to scan the bar code.

When the BHT has read the bar code successfully, the indicator LED will illuminate in green.



* The trigger switch function is assigned to both of the M3 and M4 keys by default.

- If the BHT fails to read due to specular effects or other factors, change the scanning angle of the reading window or the distance from codes as shown at right, and try it again. (Specular effects occur when the reflection of the light from the bar code becomes excessively strong. This can easily happen when the reflecting surface is polished or covered with vinyl.)



- Keep the BHT at a distance from a target bar code so that the bar code comes within approx. 90% of the laser scanning range (line length).
- The BHT can read bar codes at a maximum distance of 56 cm (22.0")** from the bar-code reading window.

  **Under the following conditions:
  - Ambient illuminance: 500 ℓx (Xenon lamp)
  - Code 39
  - Reflection intensity: 85% min. for white and 5% max. for black
  - Minimum narrow bar width: 1.4 mm min. (55.1 mils min.)

- The bar code reading procedure may differ depending upon the application used, so follow the application's manual.

NOTE

- Before reading bar codes, clean those labels if stained.
- Avoid using the BHT in direct sunlight. The BHT might fail to read correctly.
- To read bar codes on curved surfaces, apply the BHT to the target bar code so that the code comes to the center of the scanning range indicated by the laser beam.
- When you pull the bar-code reading window away from bar codes, the actual scanning range will become narrower than the range covered by the laser beam.

Using Radio Link

- If there are too many communications errors, first make sure that the BHT points directly at an access point because the 2.4-GHz band requires a more or less straight line path. Note also that the low-power radio waves have trouble passing through human bodies and other obstacles along that path.
- This link will not operate properly in the vicinity of microwave ovens, industrial heaters, high-frequency medical equipment, and other sources of radio waves in the 2.4-GHz band.
- Electromagnetic noise from personal computers, refrigerators, and other home appliances can also interfere with link operation.
- Environmental factors that can also interfere with link operation include large metallic objects, metallic dust, or metallic walls in the vicinity of the path and vibration at either end.

NOTE To System Designers:

- Before developing the application, make sure that the intended environment is free of the interference factors above and thus actually capable of supporting link operation.
- Assume that there will be communications failures requiring robust retry capabilities in the software.