# General Functions — LED and Beeper Indications

| INDICATION | DESCRIPTION | LED | BEEPER |
|---|---|---|---|
| Power-up Beep | The reader is in the process of powering-up. | | Reader beeps four times at highest frequency and volume upon power-up. |
| Good Read Beep | A label has been successfully scanned by the reader. | LED behavior for this indication is configurable via the feature "Good Read: When to Indicate" | The reader will beep once at current frequency, volume, mono/bi-tonal setting and duration upon a successful label scan. |
| ROM Failure | There is an error in the reader's software/programming | Flashes | Reader sounds one error beep at highest volume. |
| Limited Scanning Label Read | Indicates that a host connection is not established when the IBM or USB interface is enabled. | N/A | Reader 'chirps' six times at the highest frequency and current volume. |
| Reader Active Mode | The reader is active and ready to scan. | The LED is lit steadily[a] | N/A |
| Reader Disabled | The reader has been disabled by the host. | The LED blinks continuously | N/A |
| Green Spot is on continuously | While in Object Sense mode or Trigger Object Sense mode the green spot shall be on while in stand watch state. | N/A | N/A |
| Green Spot[a] flashes momentarily | Upon successful read of a label, the software shall turn the green spot on for the time specified by the configured value. | N/A | N/A |

**Programming Mode** - The following indications ONLY occur when the reader is in Programming Mode.

| | | | |
|---|---|---|---|
| Label Programming Mode Entry | A valid programming label has been scanned. | LED blinks continuously | Reader sounds four low frequency beeps. |
| Label Programming Mode Rejection of Label | A label has been rejected. | N/A | Reader sounds three times at lowest frequency & current volume. |
| Label Programming Mode Acceptance of Partial Label | In cases where multiple labels must be scanned to program one feature, this indication acknowledges each portion as it is successfully scanned. | N/A | Reader sounds one short beep at highest frequency & current volume. |
| Label Programming Mode Acceptance of Programming | Configuration option(s) have been successfully programmed via labels and the reader has exited Programming Mode. | N/A | Reader sounds one high frequency beep and 4 low frequency beeps followed by reset beeps. |
| Label Programming Mode Cancel Item Entry | Cancel label has been scanned. | N/A | Reader sounds two times at low frequency and current volume. |

a. Except when in sleep mode or when a Good Read LED Duration other than 00 is selected

# BT Beeper Indications

| Beep Type | Description | Behavior |
|---|---|---|
| Acknowledge (ACK) Label | A label has been sent to the Base Station, which has accepted the data and responded. Control via ACK NAK Options on page 57. | 1 beep. Duration, frequency and volume vary, since these are all configurable for this feature. |
| Label Rejected | Label data sent is rejected by the Base Station (responds with NAK). Control via ACK NAK Options on page 57. | 2 beeps at low frequency. |
| Transmission Error | A label has been sent to but not received by the Base Station (ACK timeout occurred). Control via Indicate Transmission Failure on page 67. | Beep will sound High-low-high-low. |
| Link Successful | The Linking process has completed successfully between a reader and Base Station (or PC). | Beep will sound Low-med-high. |
| Link Unsuccessful | The Linking process has completed (timed out) without connecting to a Base (or PC). | Beep will sound High-low-high-low. |
| Unlink | The reader has unlinked from the Base Station. | Beep will sound High-medium-low. |
| Paging | Base Station is paging the reader. | 5 beeps at high volume and currentGood Read Beep Frequency setting. |
| BT Reader FRU | The reader will sound this upon detecting aField Replaceable Unit (FRU) error at startup. | 1 long error tone[a]. |
| Disconnect | Sounds when the reader disconnects from the Base Station due to out of range, low power, etc. Control via Disconnect Beep on page 279. | Beep will sound High-medium-low. (Same as Unlink) |
| Good Read Disconnected | A label is read while disconnected, and BT Poll Rate on page 288 is disabled. | 1 long beep at low frequency. |
| Good Read Unlinked | A label is read while unlinked. | Beep will sound High-low-high-low. |
| Leash mode | The Handheld has disconnected, and BT Leash Alarm on page 280 is enabled. | Beep will sound at high volume, low frequency for the count specified in BT Leash Alarm on page 280. |
| Low Battery | The battery is getting low | 10 beeps at high frequency |
| Battery Shutdown | The battery has reached a critical low level and the handheld will shut down. | Beep will sound High-medium-low |

[a]. Upon hearing a long error tone at startup, press the trigger to hear the FRU error beep sequence described in Error Codes on page 317.

# BT LED Indications

| LED Indication | Behavior | Applies to: | |
|---|---|---|---|
| | | Base Station | Reader |
| Linking in progress | Yellow LED blinks at 2 Hz | YES | YES |
| Low battery | Green LED blinks 10 times after either of the following events occur:<br><br>-After every 10th trigger pull.<br><br>-After 30 seconds of idle time.<br><br>NOTE: Low battery LED indication coincides with the low battery beep. | NO | YES |
| Disconnected | LEDs off | YES | YES |
| Unlinked | LEDs off | YES | YES |
| BT transmission in progress | Flash yellow LED at 50 Hz while transmitting. | YES | YES |
| Paging | Yellow LED blinks at the same rate as the paging beep (1 hz) | YES | YES |
| BT Reader FRU indication | See the topic Error Codes on page 317. | NO | YES |
| BT Base Station FRU indication | See the topic Error Codes on page 317. | YES | NO |
| Disabled indication | Green LED blinks once a second while disabled | NO | YES |
| Battery charge in progress | Green LED blinks once a second while charging | YES | NO |
| Battery charge complete | Green LED stays ON when charge is complete and reader is seated in the Base Station. | YES | NO |
| Battery charge error | Yellow LED blinks 550mS on/1500mS off when there is a charge error and reader is seated in the Base Station. | YES | NO |

# Error Codes

Upon startup, if the reader sounds a long tone, this means the reader has not passed its automatic Selftest and has entered FRU[1] isolation mode. If the reader is reset, the sequence will be repeated. The following table describes the LED flashes/beep codes associated with an error found.

| NUMBER OF LED FLASHES/BEEPS | ERROR | CORRECTIVE ACTION |
|---|---|---|
| 1 | Configuration | Contact Helpdesk for assistance |
| 2 | Interface PCB | |
| 4 | Reader Module | |
| 5 | Laser Pointer (if so equipped) | |
| 6 | Digital PCB | |
| 14 | CPLD/Code Mismatch | |

1. Field Replaceable Unit (FRU)