



# USER'S MANUAL



Multi-Purpose Device for Retail



**Datalogic S.r.l.**

Via S. Vitalino, 13

40012 Calderara di Reno (BO)

Italy

Tel. +39 051 3147011

Fax +39 051 3147205

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**Patents**

See [www.patents.datalogic.com](http://www.patents.datalogic.com) for patent list.

# TABLE OF CONTENTS

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<b>INTRODUCTION</b>	<b>1</b>
<b>Conventions</b>	<b>1</b>
<b>Product Overview</b>	<b>1</b>
<b>Available Models</b>	<b>3</b>
<b>Out of the Box</b>	<b>4</b>
<b>General View</b>	<b>5</b>
Top View	5
Front View	5
Side View	6
Handheld Models	6
Pistol Grip Models	6
Back View	6
<b>Accessories</b>	<b>7</b>
<b>CHARGING INSTRUCTIONS</b>	<b>9</b>
<b>Charge with the Single Slot Dock Locking</b>	<b>9</b>
Single Slot Dock Locking LED Indicators	10
<b>Charge with the Single Slot Dock Charge Only</b>	<b>11</b>
<b>Charge with the 3-Slot Cradle</b>	<b>12</b>
Fast Charge	12
Standard Charge	12
3-Slot Cradle LED Indicators	14
<b>Charge with USB</b>	<b>15</b>
<b>Battery Information</b>	<b>16</b>
<b>Battery Safety Guidelines</b>	<b>17</b>
<b>GETTING STARTED</b>	<b>19</b>
<b>Turn on the Device</b>	<b>19</b>
<b>Home Screen</b>	<b>19</b>
Home Screen Items	19
Status Bar Icons	20
<b>Setup Wizard</b>	<b>21</b>
Device Owner Mode	21
Android Enterprise QR Code Generator	21
<b>Power Menu</b>	<b>22</b>
Suspend	22
Power	23
Ship Mode	23
Screenshot	23
Adjust Volume	23
<b>Applications</b>	<b>24</b>
Datalogic Applications	24
Android Applications	25
<b>Touch Gestures</b>	<b>26</b>
<b>Reset the Device</b>	<b>27</b>
Configuration Reset	27
Reset Wi-Fi & Bluetooth	27
Reset App Preferences	27
Factory Reset	28
Enterprise Reset	28

- Device Reset ..... 29
  - Soft Reset ..... 29
  - Hard Reset ..... 29
- LED Indicators ..... 30**
- SETTINGS ..... 31**
  - Overview ..... 31**
  - Datalogic Settings ..... 32**
    - Scanner & Decoder ..... 32
      - Notification ..... 33
      - Good Read ..... 34
      - Formatting ..... 35
      - Scanner Options ..... 38
      - Wedge ..... 42
      - Symbology Settings ..... 44
      - Scan Engine Information ..... 46
      - Configuration ..... 46
    - Power & Sources ..... 47
      - Suspend Timeout ..... 47
      - Charging Policies ..... 48
      - Wake-Up Policies ..... 48
    - Keyboard & Triggers ..... 49
      - Lock Keyboard Input ..... 49
      - Key Remapping ..... 49
      - View All Remapped Keys ..... 51
      - Triggers ..... 51
      - Advanced Keyboard Settings ..... 52
    - Dock & Cradle ..... 52
    - Wi-Fi ..... 53
      - Wi-Fi Scan ..... 53
      - Wi-Fi Module ..... 53
      - Wi-Fi Roaming ..... 54
    - USB ..... 55
    - Touch Mode ..... 55
    - System Update ..... 56
      - Local Upgrade ..... 56
    - Device Information ..... 58
  - Network & Internet ..... 59**
    - Connect to Wi-Fi Network ..... 59
    - Add a Wi-Fi Network ..... 60
  - Connected Devices ..... 61**
    - Bluetooth Settings ..... 61
      - Enable Bluetooth® ..... 61
      - Connect to Other Bluetooth® Devices ..... 61
      - Configure, Rename or Unpair Bluetooth® Devices ..... 62
  - Display ..... 63**
    - Brightness Level ..... 63
    - Dark Theme ..... 63
    - Night Light ..... 63
    - Wallpaper ..... 63
    - Screen Timeout ..... 63
    - Auto-Rotate Screen ..... 63
    - Font Size ..... 63
    - Display Size ..... 64
    - Screen Saver ..... 64
    - Lock Screen Display ..... 64
  - Touch Mode ..... 64**
  - Recovery Mode ..... 65**
- DATALOGIC APPLICATIONS ..... 66**
  - Scan2Deploy ..... 66

<b>Datalogic Launcher</b> .....	<b>66</b>
<b>SoftSpot™</b> .....	<b>67</b>
SoftSpot .....	67
Enable SoftSpot on boot .....	67
Swipe to hide .....	68
Vibrator .....	68
Auto-transparency .....	68
Transparency Range .....	68
Speed of transparency .....	68
Actions .....	68
Images .....	69
Enable Continuous Scan on Double Tap .....	70
Enable Release Scan .....	70
<b>Datalogic Enterprise Browser</b> .....	<b>71</b>
.....	<b>71</b>
<b>Dock Manager</b> .....	<b>72</b>
Settings .....	73
Unlock Notification .....	73
Wrong Insertion Timeout .....	73
Favourite Cradle Firmware .....	74
Unlock Timeout .....	74
Standby LED .....	74
Safer WLC inhibition .....	74
.....	<b>74</b>
<b>Battery Manager</b> .....	<b>75</b>
Battery Info .....	76
Battery Info - Realtime .....	76
Battery Info - Lifetime .....	77
Battery Info - Manufacturer .....	78
Charging Profile .....	79
Charging Profile - Setup .....	79
Data Logging .....	80
Setup .....	80
Graphs .....	80
Logs .....	80
Manage .....	81
Application .....	82
Settings .....	82
Info .....	82
<b>DL Ringtone Editor</b> .....	<b>83</b>
Effects .....	83
Note auto-increment .....	84
Clear notes .....	84
Set as Good Read .....	84
Save .....	84
Load .....	84
<b>Datalogic Logger</b> .....	<b>85</b>
<b>TOOLS</b> .....	<b>86</b>
<b>USB ADB Driver</b> .....	<b>86</b>
<b>SDK Add-on</b> .....	<b>86</b>
Install ADB Driver .....	86
Create a New Application based on Datalogic SDK Add-on with Android Studio .....	87
<b>Datalogic SDK</b> .....	<b>87</b>
<b>Datalogic OEMConfig</b> .....	<b>87</b>
<b>Wi-Fi QR Code Generator</b> .....	<b>87</b>
<b>DATA CAPTURE</b> .....	<b>88</b>
<b>Imager Data Capture</b> .....	<b>88</b>
<b>CONNECTIONS</b> .....	<b>89</b>
<b>USB Connection</b> .....	<b>89</b>
USB Direct Connection .....	89

<b>Wi-Fi Connection</b> .....	<b>90</b>
<b>Bluetooth® Serial Connection</b> .....	<b>91</b>
<b>Wireless and Radio Frequencies Warnings</b> .....	<b>92</b>
<b>TECHNICAL FEATURES</b> .....	<b>93</b>
<b>Technical Data</b> .....	<b>93</b>
<b>TEST CODES</b> .....	<b>96</b>
<b>MAINTENANCE</b> .....	<b>100</b>
<b>Cleaning</b> .....	<b>100</b>
<b>Ergonomic Recommendations</b> .....	<b>100</b>
<b>SAFETY AND REGULATORY INFORMATION</b> .....	<b>101</b>
<b>General Safety Rules</b> .....	<b>101</b>
<b>TECHNICAL SUPPORT</b> .....	<b>102</b>
<b>Support Through the Website</b> .....	<b>102</b>
Reseller Technical Support .....	102
<b>Reference Documentation</b> .....	<b>102</b>
<b>Warranty Terms and Conditions</b> .....	<b>102</b>
<b>GLOSSARY</b> .....	<b>104</b>

# INTRODUCTION

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## CONVENTIONS

This manual uses the following conventions:

"Device" and "Joya Touch 22" refer to the Joya Touch 22.

"Dock" refers to the Joya Touch Single Slot Dock Locking.

"3-Slot Cradle" refers to the Joya Touch 3-Slot Cradle.

The label artworks may be only a draft. Refer to the product labels for more precise information.

## PRODUCT OVERVIEW

Datalogic, the pioneer for more than 15 years in delivering self-scanning solutions, is pleased to announce Joya Touch 22, the ultimate self-shopping companion. The new device delivers top class performance powered by the industry-leading Qualcomm® processor with enhanced self-scanning capabilities allowing consumers to scan and pack items faster, leading to queue busting at the checkout while offering a comfortable and unique shopping experience.

The new Joya Touch 22 is perfectly designed for the retail environment, is not only ideal for running customer facing applications such as Self-Shopping, Queue Busting and Gift Registry, but also for in-store applications such as Shelf Replenishment, Inventory Control, Mark Downs, Price Checks and more, while delivering cost savings and ensuring backwards compatibility with all Joya™ Touch and Memor™ 1 accessories, providing the following benefits:

- Android™ operating system running Google Mobile Services (GMS) with a friendly and intuitive interface.
- Powered by industry leading Qualcomm® SDA660 platform running at 2.2 GHz, and a memory configuration of 4 GB RAM and 32 GB Flash storage, designed to meet the needs of the most demanding applications.
- Guaranteed major OS upgrades and quarterly security patches with Datalogic Shield.
- Large 4.3-inch color optimized display, ideal for in-store lighting conditions, improving readability during operations.
- Advanced MegaPixel imager, ideal for all types of 1D/2D codes on printed material or displayed on screens.
- Datalogic's 'Green Spot' technology for visual good-read feedback and 'SoftSpot' technology for innovative triggering through the touch display for a novel and ergonomic data capture experience.
- Unique Wireless Charging technology in the self-shopping market, eliminates 100% down time due to damaged pins, and the Boost Recharge feature ensures quick recharging, optimizing the number of devices needed per store. Give your

customers, your staff, and your budget a break with a device that delivers the best value.

- Maximum power advantage and control from six charging profiles available, to let the users decide which profile better suits their needs.
- Available in standard or personalized colors in two form factors: pistol-grip and handheld versions. A tailored solution with a customer-centric approach.
- Delivers on the spot help using an integrated microphone and speaker in the device which supports phone calls via Wi-Fi network (VoIP) or voice search commands.
- Enables precise indoor location with Quuppa Intelligent Locating System™, real-time positioning using Quuppa AI and Bluetooth® interoperability.

In terms of connectivity, the new Joya Touch 22 takes the lead with outstanding performance, optimized for indoor retail environments where wireless networks are affected by various types of interference and obstacles. Wi-Fi, featuring 2x2 Multi-user, multiple-input, multiple-output technology, better known as MU-MIMO which increases the capacity, range, and efficiency. This allows the Joya Touch 22 to handle Wi-Fi intensive activities with multiple devices connected simultaneously, dramatically reducing the time each device waits for a signal and delivering near instant application response times.

Bluetooth v5.1, class 2 with Bluetooth Low Energy (BLE) technology, allows users to improve connection stability, reduces power consumption, and provides real-time data, including location and proximity sensing.

In addition, Joya Touch 22 features a rugged design to ensure everyday reliable operations, built to support a wide range of operating temperatures, withstands repeated drops onto steel or concrete surfaces from 1.2 m / 4.0 ft. It is tested under 1,000 0.5 m / 1.64 ft tumbles to deliver formidable operational life proof. The 4.3-inch full touch TFT-LCD panel protected with Corning® Gorilla Glass 3 screen, ensures top class scratch resistance and shatter proofing for everyday use.

Product availability dates are reported at the end of this document.



## AVAILABLE MODELS

The Joya Touch 22 is available in different models depending on the features it is equipped with. All options are listed below:

- 911400001 JOYA TOUCH 22 PISTOL-GRIP, 802.11 A/B/G/N/AC, BT 5.1, 2D MEGAPIXEL IMAGER W/ WHITE ILLUM. & GREEN SPOT, 4.3" FULL TOUCH, VOIP, PRESENTATION MODE, ANDROID 11, GMS, 4GB RAM/32 GB FLASH, GREY/BLUE/BLUE, FCC & CE
- 911400002 JOYA TOUCH 22 HANDHELD, 802.11 A/B/G/N/AC, BT 5.1, 2D MEGAPIXEL IMAGER W/ WHITE ILLUM. & GREEN SPOT, 4.3" FULL TOUCH, VOIP, PRESENTATION MODE, ANDROID 11, GMS, 4GB RAM/32 GB FLASH, GREY/BLUE, FCC & CE
- 911400003 JOYA TOUCH 22 PISTOL-GRIP, 802.11 A/B/G/N/AC, BT 5.1, 2D MEGAPIXEL IMAGER W/ WHITE ILLUM. & GREEN SPOT, 4.3" FULL TOUCH, VOIP, PRESENTATION MODE, ANDROID 11, GMS, 4GB RAM/32 GB FLASH, BLACK/BLACK/BLACK, FCC & CE
- 911400004 JOYA TOUCH 22 HANDHELD, 802.11 A/B/G/N/AC, BT 5.1, 2D MEGAPIXEL IMAGER W/ WHITE ILLUM. & GREEN SPOT, 4.3" FULL TOUCH, VOIP, PRESENTATION MODE, ANDROID 11, GMS, 4GB RAM/32 GB FLASH, BLACK/BLACK, FCC & CE
- 911400005 JOYA TOUCH 22 PISTOL-GRIP, 802.11 A/B/G/N/AC, BT 5.1, 2D MEGAPIXEL IMAGER W/ RED ILLUM. & GREEN SPOT, 4.3" FULL TOUCH, VOIP, PRESENTATION MODE, ANDROID 11, GMS, 4GB RAM/32 GB FLASH, GREY/BLUE/BLUE, FCC & CE
- 911400006 JOYA TOUCH 22 HANDHELD, 802.11 A/B/G/N/AC, BT 5.1, 2D MEGAPIXEL IMAGER W/ RED ILLUM. & GREEN SPOT, 4.3" FULL TOUCH, VOIP, PRESENTATION MODE, ANDROID 11, GMS, 4GB RAM/32 GB FLASH, GREY/BLUE, FCC & CE
- 911400010 JOYA TOUCH 22 PISTOL-GRIP, 802.11 A/B/G/N/AC, BT 5.1, 2D MEGAPIXEL IMAGER W/ WHITE ILLUM. & GREEN SPOT, 4.3" FULL TOUCH, VOIP, PRESENTATION MODE, ANDROID 11, GMS, 4GB RAM/32 GB FLASH, GREY/GREEN/GREEN, FCC & CE
- 911400012 JOYA TOUCH 22 PISTOL-GRIP, 802.11 A/B/G/N/AC, BT 5.1, 2D MEGAPIXEL IMAGER W/ WHITE ILLUM. & GREEN SPOT, 4.3" FULL TOUCH, VOIP, PRESENTATION MODE, ANDROID 11, GMS, 4GB RAM/32 GB FLASH, DARK GREY/ORANGE/ORANGE, FCC & CE

For further details about the Joya Touch 22 models refer to the web site:

<http://www.datalogic.com>.

For further information regarding Android refer to the website: [www.android.com](http://www.android.com).

## OUT OF THE BOX

The Joya Touch 22 package contains:

- Joya Touch 22 (device with battery included)
- Quick Start Guide
- Safety & Regulatory Addendum

Remove all the components from their packaging; check their integrity and compare them with all the packing documents.



**CAUTION: Keep the original packaging for use when sending products to the technical assistance center. Damage caused by improper packaging is not covered under the warranty.**

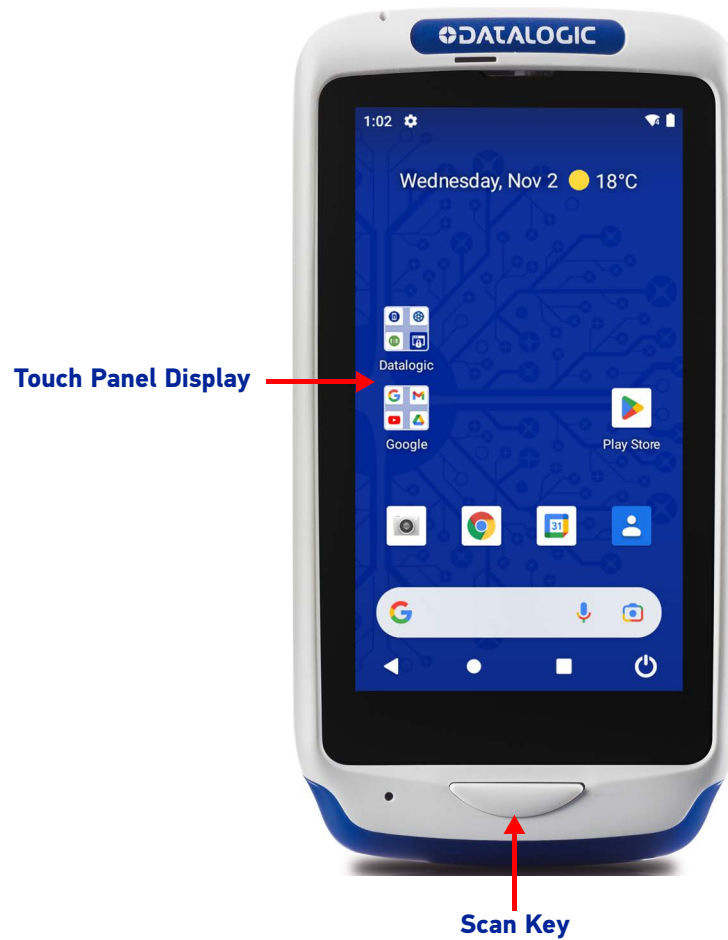
## GENERAL VIEW

### Top View



**Data Capture Window**

### Front View



**Touch Panel Display**

**Scan Key**

## Side View

Handheld Models

Pistol Grip Models



## Back View



## ACCESSORIES

### Cradles

91ACC0043	Joya Touch 3-Slot Cradle for Wall Mounting. Requires power supply, line cord and wall bracket
91ACC0096	Joya Touch 3-Slot Cradle, without user lights, for wall mounting. requires power supply, line cord and wall bracket
91ACC0069	Joya Touch Retail 3-Slot Cradle for general purpose; it contains 1 unlocking key and 1 pair of desktop feet. Requires power supply and line cord
91ACC0072	Joya Touch Single Slot Cradle, Locking (light gray); it requires a PS (91ACC0048) and line cord
91ACC0073	Joya Touch Single Slot Cradle, Charge Only (light gray); PS with regional plugs included
91ACC0083	Joya Touch Single Slot Cradle, Locking (dark gray); it requires a PS (91ACC0048) and line cord
91ACC0087	Joya Touch Single Slot Cradle, Charge Only (dark gray); PS with regional plugs included
94ACC0206	Memor 1 3-Slot Dock for general purpose, black; requires PS (91ACC0048) and line cord
94ACC0207	Memor 1 Single Slot Dock, Locking, black; requires PS (91ACC0048) and line cord
94ACC0208	Memor 1 Single Slot Dock, Charge Only, black; PS with regional plugs included

### Miscellaneous

91ACC0045	Cradle Unlock Key (5 pcs)
91ACC0068	3-Slot Cradle Desktop Feet (1 pair to retrofit wall mount cradle)
91ACC0079	Handheld Rubber Boot (blue)
91ACC0085	Pistol Grip Rubber Boot (blue)
91ACC0080	Joya Touch Belt Holster
91ACC0049	Joya Touch 3-Slot Cradle Power Jumper to connect a second 3-slot cradle to a single power supply (5 pcs)
91ACC0050	Joya Touch 3-Slot Cradle Wall Bracket; Supports both Mounting Orientations
91ACC0047	Joya Touch Trolley Holder (60 pcs) – for both handheld and pistol grip
91ACC0086	Joya Touch Trolley Holder (60 pcs) – pistol grip only: display orientation 45 degrees
94ACC0333	Battery For Joya Touch A6 & Memor 1 (model BY-04)
91ACC0046	Joya Touch Screen Protectors, Anti-Fingerprint, Transparent Border (5 pcs)
91ACC0036	Lanyard, Joya Touch (5 pcs)
94ACC0209	Handheld rubber boot (black)
94ACC0210	Pistol grip rubber boot (black)

### Back Covers Accessories

91ACC0056	Joya Touch Handheld Back Cover Yellow (5 pcs)
91ACC0057	Joya Touch Handheld Back Cover Red (5 pcs)
91ACC0058	Joya Touch Handheld Back Cover Grey (5 pcs)
91ACC0059	Joya Touch Handheld Back Cover Blue (5 pcs)
91ACC0060	Joya Touch Handheld Back Cover Orange (5 pcs)
91ACC0061	Joya Touch Handheld Back Cover Green (5 pcs)
91ACC0062	Joya Touch Pistol-grip Back Cover Yellow (5 pcs)
91ACC0063	Joya Touch Pistol-grip Back Cover Red (5 pcs)
91ACC0064	Joya Touch Pistol-grip Back Cover Grey (5 pcs)
91ACC0065	Joya Touch Pistol-grip Back Cover Blue (5 pcs)
91ACC0066	Joya Touch Pistol-grip Back Cover Orange (5 pcs)
91ACC0067	Joya Touch Pistol-grip Back Cover Green (5 pcs)

### Cables and Power Supplies

91ACC0048	Memor 1/Joya Touch 3-Slot Dock/Cradle and Single Slot Dock Power Supply. Requires line cord. For 3-slot dock powers up to 2 docks in Standard Charge mode and 1 dock in Fast Charge mode
91ACC0049	Memor 1/Joya Touch 3-Slot Cradle/Dock Power Jumper to connect a second 3-slot cradle/dock to a single power supply (5 pcs)
95ACC1113	Power cord, 3-PIN IEC C13, USA
95ACC1213	Power cord, 3-PIN IEC C13, UK
95A051041	Power cord, 3-PIN IEC C13, EU
95ACC1215	Power cord, 3-PIN IEC C13, Australia
94ACC0329	USB-Type C Wall Adapter
94ACC1150	Power Cord EU 3-PIN (5 PCS)
95ACC1212	Power Cord, IEC, Japan, ROHS
95ACC1284	Power Cord, IEC C13, Black Argentina, ROHS
94ACC0327	Cable, USB Type-A to USB Type-C



**NOTE: Use only Datalogic-approved power supply and cables. Use of an alternative power supply will invalidate any approval given to this device and may be dangerous.**

# CHARGING INSTRUCTIONS

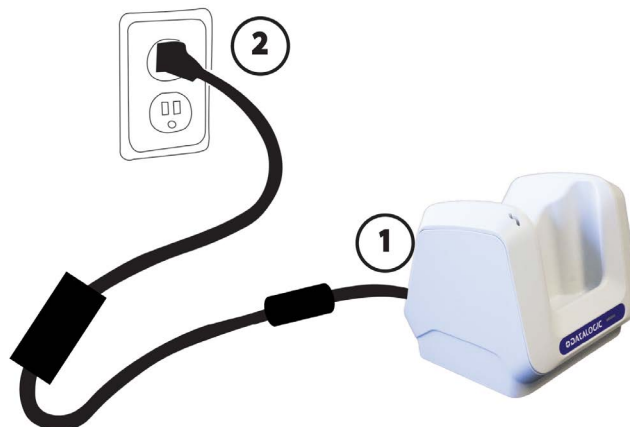
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The Joya Touch 22 is provided with the battery pack already installed and configured in Ship Mode at the factory. To wake the device from Ship Mode, connect it to a power supply or insert it into a dock (for more information, see the Getting Started section of the Joya Touch 22 User's Manual).

The battery pack is initially not fully charged. Before using the device, charge the battery with the single slot dock locking, the single slot dock charge only, the 3-slot cradle or the Datalogic USB-C type power supply.

## CHARGE WITH THE SINGLE SLOT DOCK LOCKING

First plug the power cord into the power connector on the back of the dock, then connect the power cord to the power supply.



**CAUTION:** Use only the Datalogic power supply 91ACC0048 to power the Joya Touch Single Slot Dock Locking.

The Single Slot Dock Locking cannot be daisy-chained to a Joya Touch 3-Slot Cradle.



**NOTE:** Insert the device into the dock with the screen facing front and the head facing down.

The Single Slot Dock Locking can be unlocked using the unlock key provided with the cradle or by software sending an unlock command from the inserted device.

For further information on the Joya Touch Single Slot Dock Locking, refer to the Single Slot Dock Locking Quick Start Guide, included in the dock's box.

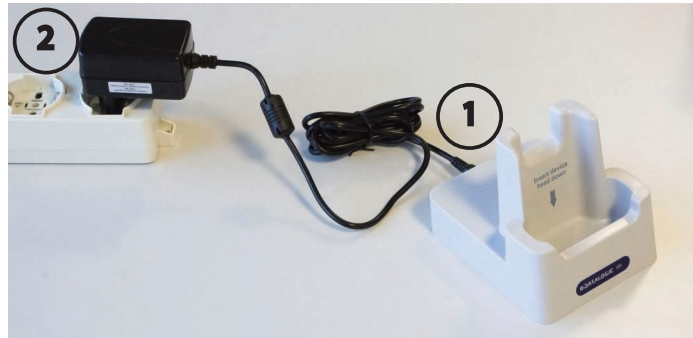
## Single Slot Dock Locking LED Indicators

LED	Status
<b>Power On (Green LED)</b>	
Solid green for 3 seconds	Dock bootstrap: cradle application started.
Short blink every few seconds	Dock standby (if the standby LED is enabled): the dock is powered and ready, no device inserted. You can enable/disable the standby LED feature from DL Cradle Manager.
Off	Dock standby (if the standby LED is disabled): the dock is powered and ready, no device inserted. You can enable/disable the standby LED feature from DL Cradle Manager.
<b>Battery Charger LED (Bicolor Green/Red LED)</b>	
Off	Device not charging or not inserted (see above).
Solid red	Device is charging.
Solid green	Device charging completed.
<b>Maintenance LED (Red LED)</b>	
Blink red, 1 quick pulse	Cradle not calibrated. Solution: perform an "auto calibration" from DL Cradle Manager. Ensure that levers are free to move.
Blink red, 2 quick pulses	Lever wrong position. It is open but it should be closed or vice versa. Solution: restore the lever position (e.g.remove the mechanical key from the slot).
Blink red, 3 quick pulses	FOD (Foreign Object Detection). It's a WLC error related to metallic parts between transmitter and receiver coils. The power transfer is suspended. Solution: remove the device from the cradle, then remove the metallic part causing the problem.
Blink red, 4 quick pulses	EOC (end of charge) timeout error. The WLC EOC signal has been kept enabled by the terminal for too much time. Typically, it is caused by a bug in the terminal firmware. The power transfer is disabled.
Blink red, 5 quick pulses	WLC generic error. The WLC system seems unstable and unable to setup a stable power transfer within a reasonable time. The power transfer is suspended. Solution: try to extract the device from the cradle and to re-insert it again.
Blink red, 6 quick pulses	Device charging error.
Solid red	Firmware upgrade.



## CHARGE WITH THE SINGLE SLOT DOCK CHARGE ONLY

First plug the power supply into the power jack on the back of the dock, then plug the power supply into a power outlet.



You can also use the Type-A/Type-C cable (p/n 94ACC0327) to charge the Joya Touch 22 from any self-powered USB hub or USB port on a computer.



**CAUTION:** Use only the Datalogic power supply 91ACC0048 to power the Joya Touch Single Slot Dock Charge Only.



**NOTE:** Insert the device into the dock with the screen facing front and the head facing down.

## CHARGE WITH THE 3-SLOT CRADLE

There are two options to connect the cradle to the power supply: fast charge and standard charge.

### Fast Charge

The fast charge connection allows to power one cradle with one power supply.

Plug the power supply cable into the power connector on the back of the cradle, then plug the power supply into the AC/DC plug using a Datalogic power cable. Please see below an example of how to insert the power supply cable through the wall mounting metal bracket.



High Visibility



High Density

### Standard Charge

The standard charge connection allows to power two cradles with one power supply.

To connect a second cradle use the Joya Touch Cradle Power Jumper, available as optional accessory (P/N 91ACC0049).

1. Connect the first cradle to the second cradle using the power jumper.
2. Connect the power supply to the first cradle.
3. Plug the power supply into the AC/DC plug using a Datalogic power cable.



**CAUTION: Use only the Datalogic power supply 91ACC0048 to power the Joya Touch 3-Slot Cradle.**



**NOTE:** Insert the device into the dock with the screen facing front and the head facing down.

The Joya Touch 3-Slot Cradle can be unlocked using the unlock key provided with the cradle or by software sending an unlock command from the inserted device.

Under the same conditions, the fast charge connection can charge the battery up to twice as fast as the standard charge connection.

For further information on the Joya Touch 3-Slot Cradle, refer to the Joya Touch 3-Slot Cradle Quick Start Guide, included in the cradle's box, and to the Joya Touch 3-Slot Cradle Installation Guide, downloadable from our website [www.datalogic.com](http://www.datalogic.com).



**CAUTION:** Do not put any foreign object such as, but not limited to, coins, paper clips, stickers inside the slot of any of the docks (see the examples below).



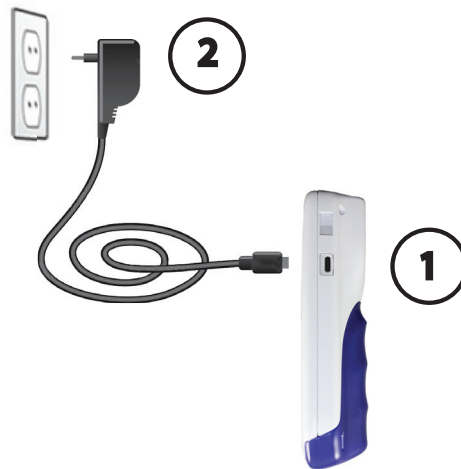
### 3-Slot Cradle LED Indicators

LED	Status
<b>Power On (Blue LED)</b>	
Solid blue	Dock is powered.
<b>User LED (Green LED)*</b>	
Green dimming animation (all slots in sequence)	Cradle application start.
Flash green for 300 ms (single slot)	Device properly locked in.
Solid green (single slot)	Could notify that the slot is unlocked (if programmed to use green led to notify unlock status) or it could be controlled by software using our SDK.
<b>Maintenance LED (Red LED)</b>	
Blink red, 1 quick pulse (single slot)	Cradle not calibrated. Usually it is notified simultaneously on all slots. Solution: perform an "auto calibration" from DL Cradle Manager. Ensure that levers are free to move.
Blink red, 2 quick pulses (single slot)	Lever wrong position. It is open but it should be closed or vice versa. Solution: restore the lever position (e.g.remove the mechanical key from the slot).
<b>Maintenance LED (Red LED)</b>	
Blink red, 3 quick pulses (single slot)	FOD (Foreign Object Detection). It's a WLC error related to metallic parts between transmitter and receiver coils. The power transfer is suspended. Solution: remove the device from the cradle, then remove the metallic part causing the problem.
Blink red, 4 quick pulses (single slot)	EOC (end of charge) timeout error. The WLC EOC signal has been kept enabled by the terminal for too much time. Typically, it is caused by a bug in the terminal firmware. The power transfer is disabled.
Blink red, 5 quick pulses (single slot)	WLC generic error. The WLC system seems unstable and unable to setup a stable power transfer within a reasonable time. The power transfer is suspended. Solution: try to extract the device from the cradle and to re-insert it again.
Blink red, 6 quick pulses (single slot)	Device charging error.
Blink red, 7 quick pulses (single slot)	Wrong daisy chain configuration error. More than two cradles are connected in daisy chain. Solution: remove exceeding cradles from the chain.
Solid red (middle slot only)	Firmware upgrade.

\*. Available depending on 3-Slot Cradle model.

## CHARGE WITH USB

Use the Datalogic USB-C type power supply (sold separately, p/n 94ACC0329) to charge the device from a power outlet.



## BATTERY INFORMATION



**CAUTION: Do not incinerate, disassemble, short terminals, or expose to high temperature. Risk of fire and explosion. Use specified charger only. Risk of explosion if the battery is replaced by an incorrect type. Dispose of batteries as required by local authorities.**

By default, the main battery pack is disconnected at the factory to avoid damage due to excessive draining.

Rechargeable battery pack is less than half of full charge when delivered. Charge the battery pack as indicated in the Quick Start Guide or in the User Manual, before using the Joya Touch 22 device.

The battery pack autonomy varies according to many factors, such as the frequency of barcode scanning, RF usage, battery life, storage, environmental conditions, etc.

Close to the limits of the working temperature, some battery performance degradation may occur.

The Joya Touch 22 should be charged at an ambient temperature between 5 - 35° C (41 to 95°F) to achieve the maximum charging rate.

Never charge the device battery in a closed space where excessive heat can build up.

As a safety precaution, the battery may stop charging to avoid overheating.

The Joya Touch 22 gets warm during charging; this is normal and does not mean a malfunction.

Even if the storage temperature range is wider, it is recommended to store the terminal and the batteries at environmental temperature, in order to achieve the longest battery life.



**CAUTION: Avoid storing batteries for long periods in a state of full charge or very low charge.**

**We recommend charging the battery pack every two to three months to keep its charge at a moderate level to maximize battery life.**

**Annual replacement of rechargeable battery pack avoids possible risks or abnormalities and ensures maximum performance.**



**WARNING: Use only Datalogic approved batteries and accessories for battery charging.**

**Risk of explosion if battery is replaced by an incorrect type.**

**Dispose of used batteries according to the instructions.**

**Il y a risque d'explosion si la batterie est remplacée par une batterie de type incorrect.**

**Mettre au rebut les batteries usagées conformément aux instructions.**

## BATTERY SAFETY GUIDELINES



**WARNING:** Installing, charging and/or any other action should be done by authorized personnel and following this manual.

The battery pack may get hot, explode, ignite, and/or cause serious injury if exposed to abusive conditions.

If the battery pack is replaced with an improper type, there is risk of explosion.

Do not place the battery pack in or near a fire or other heat source; do not place the battery pack in direct sunlight, or use or store the battery pack inside unventilated areas in hot weather; do not place the battery pack in microwave ovens, in clothes dryers, in high pressure containers, on induction cook surfaces or similar devices. Doing so may cause the battery pack to generate heat, explode or ignite. Using the battery pack in this manner may also result in a loss of performance and a shortened life expectancy.

To power the cradle, use only a Datalogic approved power supply. The use of an alternative power supply will void the product warranty, may cause product damage and may cause heat, an explosion, or fire.

The area in which the units are charged should be clear of debris and combustible materials or chemicals.

Do not use the battery pack of this terminal to power devices other than this device.

Immediately discontinue use of the battery pack if, while using, charging or storing the battery pack, the battery pack emits an unusual smell, feels hot, changes colour or shape, or appears abnormal in any other way.

Do not short-circuit the battery pack contacts connecting the positive terminal and negative terminal. This might happen, for example, when you carry a spare battery pack in your pocket or purse; accidental short-circuiting can occur when a metallic object such as a coin, clip, or pen causes direct connection of the contacts of the battery pack (these look like metal strips on the battery pack). Short-circuiting the terminals may damage the battery pack or the connecting object.

Do not apply voltages to the battery pack contacts.

Do not pierce the battery pack with nails, strike it with a hammer, step on it or otherwise subject it to strong impacts, pressures, or shocks.

Do not disassemble or modify (i.e. bend, crush or deform) the battery pack. The battery pack contains safety and protection devices, which, if damaged, may cause the battery pack to generate heat, explode or ignite.

In case of leakage of liquid from the battery, avoid contact with liquid the skin or eyes. If the contact occurs, immediately wash the affected area with water and consult a doctor.

Do not solder directly onto the battery pack.

Do not expose the battery pack to liquids.

Avoid any knocks or excessive vibrations. If the device or the battery is dropped, especially on a hard surface, you should take it to the nearest Authorised Repair Centre for inspection before continuing to use it.

If your device stops working for any reason, do not use its battery on other electronic devices without a prior check and approval by an Authorised Repair Centre.



**WARNING: Do not replace the battery pack when the device is turned on.**  
**Do not remove or damage the battery pack's label.**  
**Do not use the battery pack if it is damaged in any part.**  
**Battery pack usage by children should be supervised.**

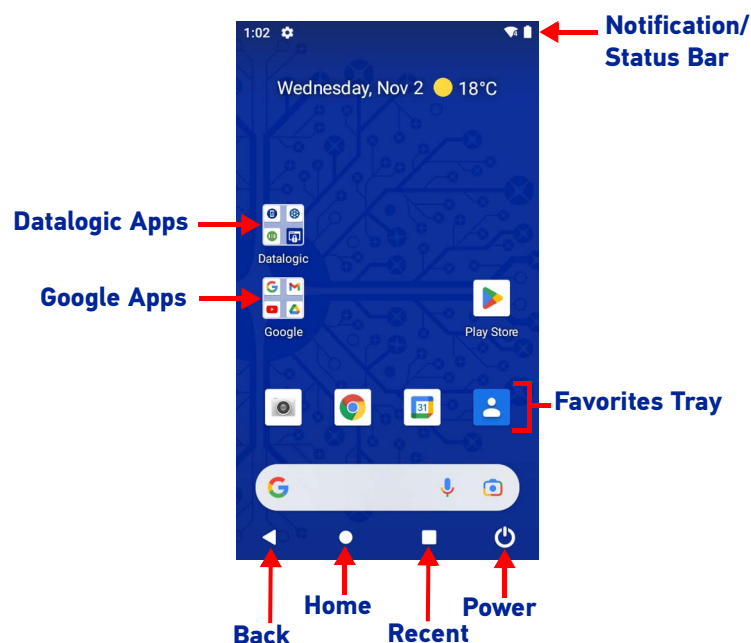


# GETTING STARTED

## TURN ON THE DEVICE

To turn on the Joya Touch 22, press and hold the Scan Key or the Scan Trigger (for Pistol Grip models) for at least 4 seconds.











## HOME SCREEN



## Home Screen Items

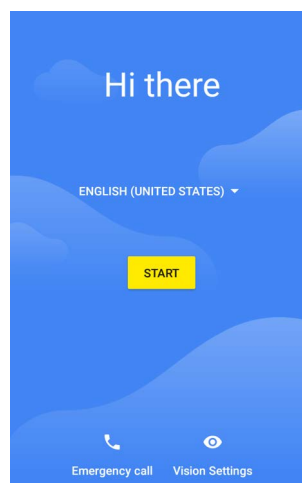
Notification/Status Bar	Displays the time, status icons (right side), and notification icons (left side).
Favorites Tray	It is like a dock for your home screen. By default, it includes commonly used apps, but you can customize it.
Datalogic Apps	Shortcut to Datalogic's native applications and settings: Battery Manager, Dock Manager, Scan2Deploy, Scan Demo, SoftSpot, Datalogic Settings.
Google Apps	Shortcut to Google's native applications: Google, Gmail, Maps, YouTube, Drive, YT Music, Play Movies, Duo, Photos.

## Status Bar Icons

	Wi-Fi is on.		Battery is low.
	Wi-Fi not connected.		External power source is connected.
	Connected to a Wi-Fi network. The side number refers to the WiFi standard type.		Battery is full.
	Wi-Fi connected no internet.		Battery is partially drained.
	Bluetooth is on.		Airplane mode.

## SETUP WIZARD

After the first boot or a factory reset, the start dialog of the Setup Wizard is displayed, with initial settings for you to configure.



## Device Owner Mode

The Device Owner is an app that controls local device policies and system applications on devices. In case of Corporate-owned devices, provisioning the devices as Device Owner ensures the organization has full control of the device and provides more features to ensure the device and the confidential data in the device are secure and away from any unauthorized access.

The Device Owner can enable or disable hardware functions and software functions, configure a password policy, configure user accounts on the device, configure network parameters, CA certificates and VPN information, wipe the device or contents on external storage and set global settings, like airplane mode, GPS, Bluetooth, roaming etc.

Scan the Device Owner (DO) QR code with the front SCAN key (or the SCAN trigger) to activate the Device Owner mode for Android Enterprise.

## Android Enterprise QR Code Generator

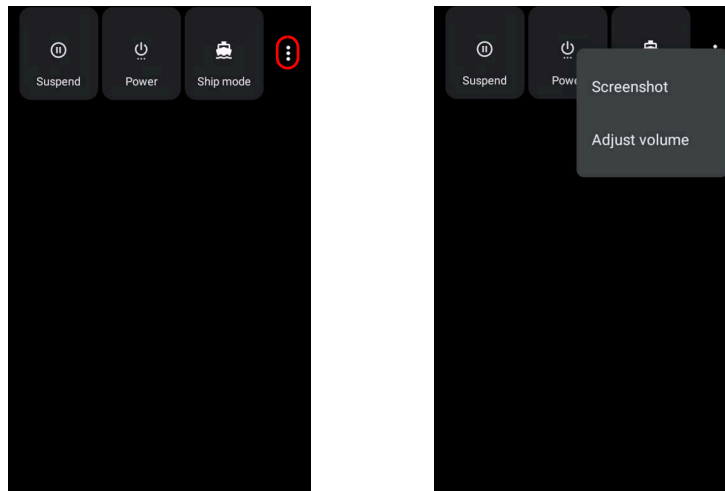
The Android Enterprise QR Code Generator creates a standard Android Enterprise Enrollment QR code that can be used to provision any Android device.

For Datalogic devices, the enrollment process has been enhanced to include additional properties in the QR code and the option to encrypt the QR code. These Datalogic specific options can be configured using the Android Enterprise QR Code Generator.

For details, refer to <https://datalogic.github.io/aeqrdoc/overview/>.

## POWER MENU

Tap the **Power** button on the Navigation Bar to display the Power Menu. Tap the menu icon to expand.



Alternatively, you can access the Power Menu by pressing the power key on the back of the device with a metallic clip:

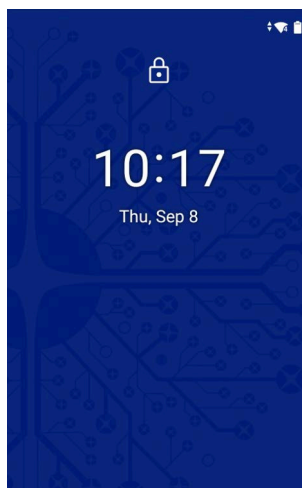


## Suspend

Tap **Suspend** to turn the screen off and lock the terminal in order to save battery power. Also, the Joya Touch 22 automatically enters suspend mode when inactive for a programmed period of time. To set the timeout limit, see "[Suspend Timeout](#)" on [page 47](#).

To wake the device from suspend, press the Scan Key or the Scan Trigger (for Pistol Grip models).

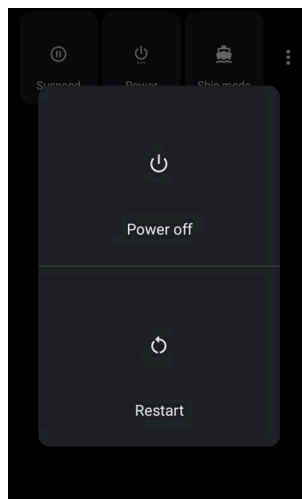
To unlock the home screen, tap anywhere on the screen, drag your finger upward and enter the PIN/Password/Pattern/Swipe set at the device start up.



## Power

Tap **Power** to turn off or restart the terminal. When you turn off the terminal, the session you are working on expires and it won't be possible to restore it.

Alternatively, you can shut down the device by pressing and holding the power key with a metallic clip for about 10 seconds.



## Ship Mode

Tap **Ship Mode** to perform a complete shutdown of the device, after which the battery will be detached.

In the battery pack, undesired current consumption is reduced during a shipping period to extend the charge keeping time of the battery pack.

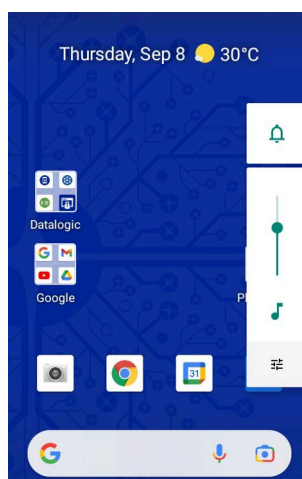
To restart the device, connect it to a power supply or insert it into a dock.

## Screenshot

Tap **Screenshot** to capture a screenshot of the current screen.

## Adjust Volume













Tap **Adjust Volume** to set the volume.



















## APPLICATIONS






The **All Apps** screen displays icons for all installed applications. The tables below list the default applications installed on the Joya Touch 22.

### Datalogic Applications

Icon	Description
	Scan2Deploy - Configuration tool (see " <a href="#">DL Ringtone Editor</a> " on page 83).
	Datalogic Settings - See " <a href="#">Datalogic Settings</a> " on page 32.
	Launcher - Android application that locks down the device to launch only allowed applications (see " <a href="#">Datalogic Launcher</a> " on page 66).
	SoftSpot - A configurable application meant to provide easy access to frequently used functionalities, as well as activating the scan engine of the device (see " <a href="#">DL Ringtone Editor</a> " on page 83).
	Browser - Android application for web browsing to only allowed sites and to expose JavaScript access to the scanner (see " <a href="#">Datalogic Enterprise Browser</a> " on page 71).
	Dock Manager - Provides information on the dock and allows unlocking the docked devices (see " <a href="#">DL Ringtone Editor</a> " on page 83).
	Battery Manager - Provides information on the battery type, charge, status and temperature, allows to set the charging profile and to log battery data (see " <a href="#">Scan2Deploy</a> " on page 66)
	Scan Demo – Enables data capture (see " <a href="#">Data Capture</a> " on page 88).
	WiFi Guard - Network scanner that runs through your network at set intervals and reports immediately if it has found any unrecognised connected devices that could possibly belong to an intruder.
	DL Ringtone Editor - Allows to create your own ringtones and notifications.
	Logger - Android application that collects device logs for further analysis (see " <a href="#">Datalogic Logger</a> " on page 85).
	DXU Agent - Needed to guarantee backward compatibility.

## Android Applications

Icon	Description
	Calculator - Provides the basic and scientific arithmetic functions.
	Calendar - Lets you manage events and appointments.
	Chrome - Google's own web browser. Use it to access the Internet or intranet.
	Clock - Lets you schedule alarms for appointments or as a wake-up.
	Contacts - Allows you to manage contacts information.
	Drive - Google's own file storage and synchronization service. Use it to safely store, synchronize and share your photos, videos, files and more in the cloud.
	Duo - Google's own video chat mobile. Use it to make video calls in high definition.
	Files - Lets you manage files and folders.
	Gmail - Use it to send and receive email.
	Google - Google's own web search engine.
	Google TV - Google's own online video on demand service. It offers movies and television shows for purchase or rental, depending on availability.
	Keep Notes - Note-taking service developed by Google. It offers a variety of tools for taking notes, including text, lists, images, and audio.
	Maps - Google's own mapping mobile app.
	Photos - Google's own photo sharing and storage service.
	Play Store - Google's own digital distribution service. It serves as the official app store for the Android operating system and as a digital media store.
	Scanner Camera - Use it to take photos.

Icon	Description
	Settings - Use it to configure the Joya Touch 22 (see "Settings" on page 31).
	Sound Recorder - Tool for recording the sound and editing the saved recordings.
	Wallpaper - Use it to select wallpapers.
	Youtube - Google's own video-sharing website
	YT Music - Music streaming service from YouTube

## TOUCH GESTURES

<b>Tap</b>	Tap the screen with your finger or with a stylus to open items and select options.
<b>Drag</b>	Hold your finger or a stylus on the screen and drag across the screen to scroll or pan. Drag in a list to select multiple items.
<b>Tap-and-hold</b>	Tap and hold your finger or a stylus on an item to see a list of actions available for that item. On the pop-up menu that appears, tap the action you want to perform.



# RESET THE DEVICE

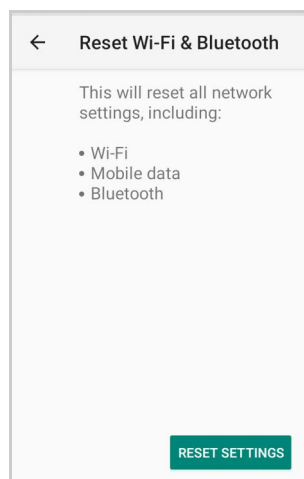
## Configuration Reset

Configuration reset sets the configuration of the device (all its settings) to a known status: the factory status or an enterprise-user-defined status.

### Reset Wi-Fi & Bluetooth

Resets all network settings.

1. Tap **Settings > System > Advanced > Reset options > Reset Wi-Fi & Bluetooth**.

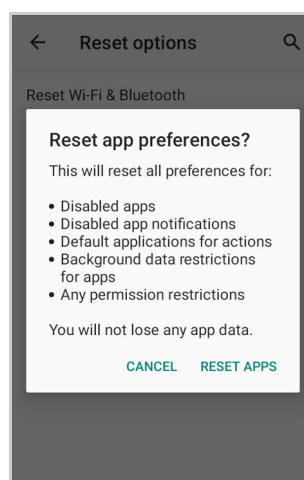


2. Tap **RESET SETTINGS**.

### Reset App Preferences

Resets all preferences for disabled apps, disabled app notifications, default applications for actions, background data restrictions for apps, any permission restrictions.

1. Tap **Settings > System > Advanced > Reset options > Reset app preferences**.

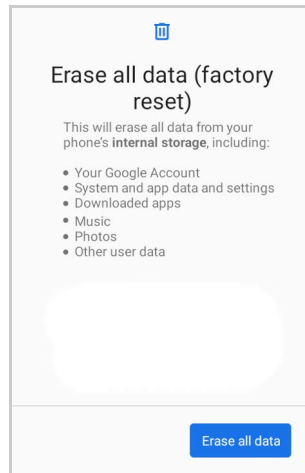


2. Tap **RESET APPS**.

## Factory Reset

Brings the device to the default configuration, clearing all user-customized settings.

1. Tap **Settings > System > Advanced > Reset options > Erase all data (factory reset)**.



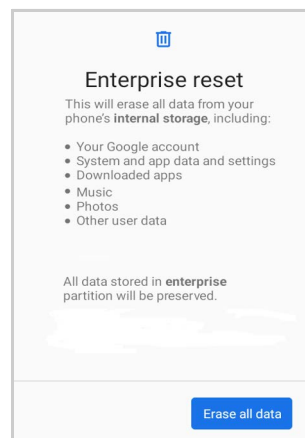
2. Tap **Erase all data**.

## Enterprise Reset

Enterprise Reset brings the device to an enterprise-user-defined configuration, clearing all data and settings except the ones persisted by the enterprise system applications in the **enterprise** flash partition and in the **splash** flash partition.

The Enterprise folder is a file system storage that is used for deployment and device-unique data. It is persistent and maintains data after an Enterprise reset. Applications and custom settings (i.e. custom boot animation and wallpaper) can persist data after an Enterprise Reset by saving them to the enterprise folder.

1. Tap **Settings > System > Advanced > Reset options > Enterprise reset**.



2. Tap **Erase all data**.

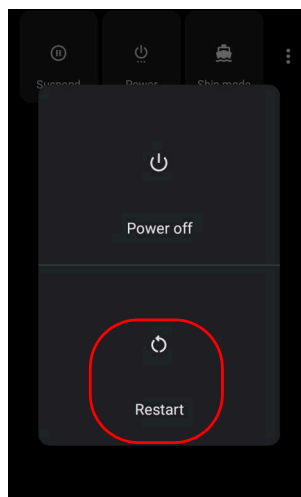
## Device Reset

Device reset restarts the device.

### Soft Reset

Restarts Android Operative System through an Android API function. It is generally used when some applications stop responding, or it is automatically issued by Android after a Configuration reset.

1. Press the **Power** button > **Power** > **Restart**.



2. The device shuts down and then reboots.

### Hard Reset

Restarts the device resetting all the hardware components. This procedure guarantees the safe reboot of the device in any condition, without causing damage to the device and without data loss. It is generally used when the device stops responding or after a critical failure that compromises its usability.

To perform a hard reset, do the following steps:



1. Perform a full shutdown by pressing and holding the power key with a metallic clip for about 15 seconds.



2. Press the Scan Key or the Scan Trigger to restart the device.

## LED INDICATORS

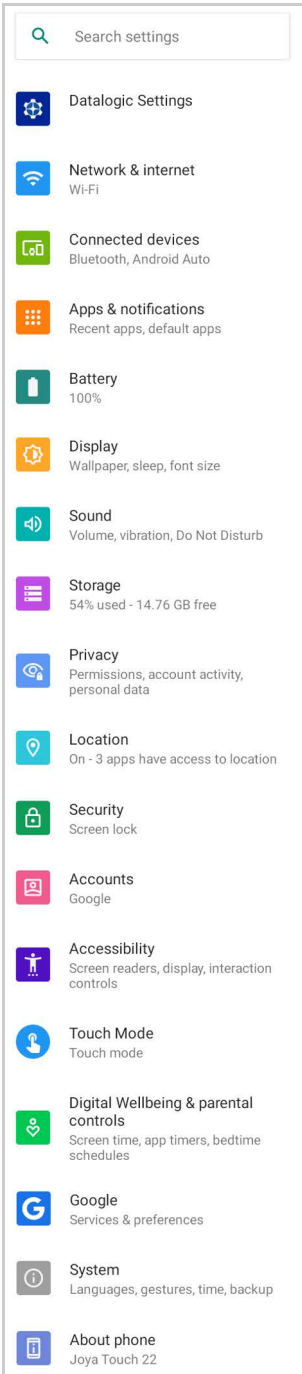
The LEDs illuminate to indicate various functions or errors on the device. The following table lists the default indications. The good read LED indicator is programmable, and may or may not be enabled ("[Scanner & Decoder](#)" on page 32 for more details). The Charging LED is configurable via SDK.

LED	Default Status
Left and Right LEDs 	The two LEDs blink alternately in case of critical charge (the device is charging, but the battery level is too low to turn on). The two LEDs blink once simultaneously after a full shutdown.
Bottom LED (Good Read) 	Illuminates when a good decode is completed.

# SETTINGS

## OVERVIEW

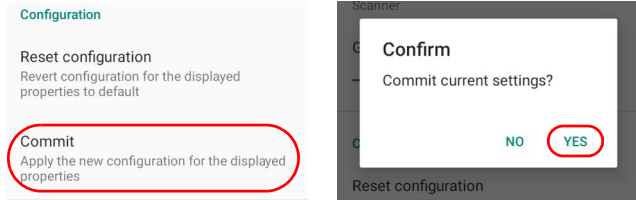
The **Settings** app allows you to check or set system parameters to customize your device. To open the **Settings** screen, tap the **Settings** icons on the **All Apps** screen.



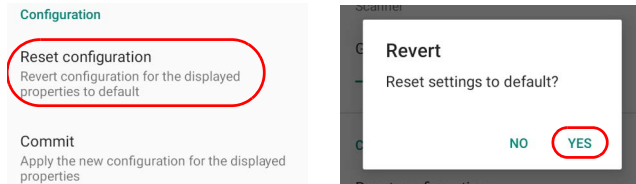
# DATALOGIC SETTINGS

The **Datalogic Settings** app allows you to configure scanner and decoder, control power and source behaviour, configure keyboard, trigger and mappings, set cradle behaviour and policies, WiFi roaming and channel, configure USB data and features, touch mode settings, NTP server address status and navigation bar, update device firmware and display device information.

Any change in the settings must be confirmed. Tap **Commit** to confirm the new configuration:



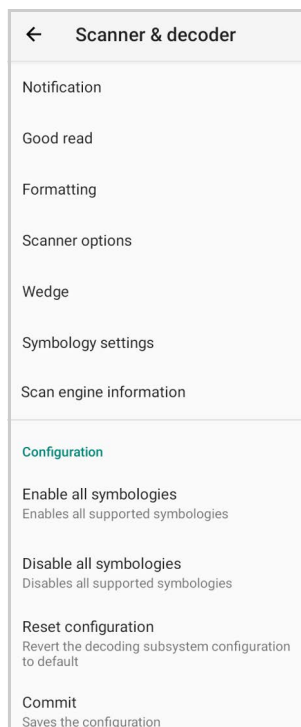
Tap **Reset configuration** to reset configuration to default:



## Scanner & Decoder

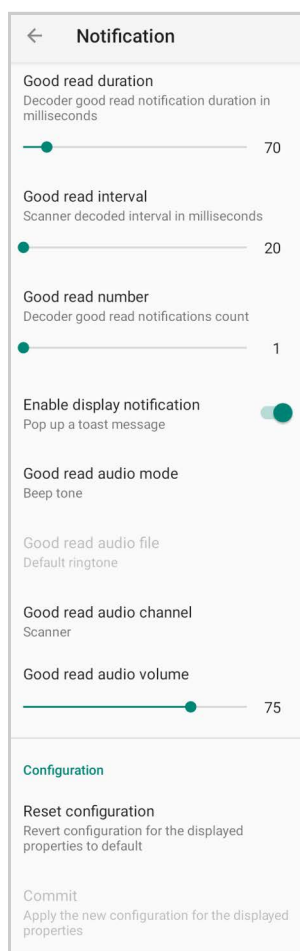
Before you start reading barcodes, use the **Settings** app to view and configure all settings for the scanner.

From the applications menu, tap **Settings > Datalogic Settings > Scanner & decoder**. Select the desired configuration from the following options:



## Notification

Use it to configure the good read tone and display notification:



### Good Read Duration

Sets the duration of the notification (LED, green spot or beep) the scanner emits on a good read.

### Good Read Interval

Sets the interval between each notification (LED, green spot or beep) the scanner emits on a good read.

### Good Read Number

Sets the number of notifications (LED, green spot or beep) the scanner emits on a good read.

### Enable Display Notification

Enables display notifications (toasts). If cleared, the scanner is disabled until you launch a scanner listener application developed using the Datalogic SDK or enable a keyboard/intent wedge.

### Good Read Audio Mode

Sets the audio tone to:

- None
- Beep tone
- Audio file

- Viper beep
- Baroque beep

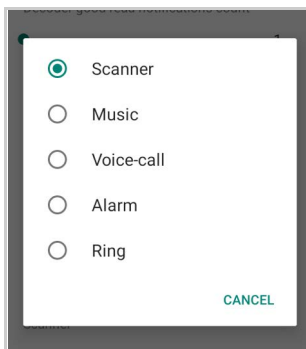
If **Audio file** is selected, the option **Good read audio file** displays. Tap it to select the file you want to use as good read ringtone.



**NOTE: The Notification settings do not apply to an audio file.**

### Good Read Audio Channel

Allows to select the audio channel to be used for scanner notifications.

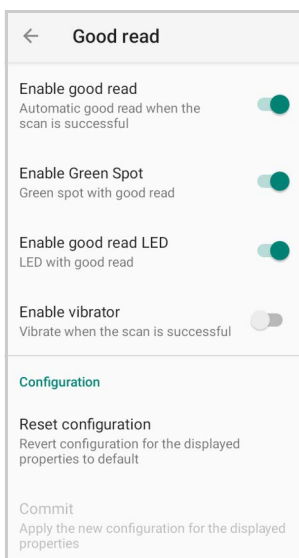


### Good Read Audio Volume

Sets the volume of beep tone or audio file (if enabled).

### Good Read

Use it to enable good read notifications (LED, Green Spot, vibrator):



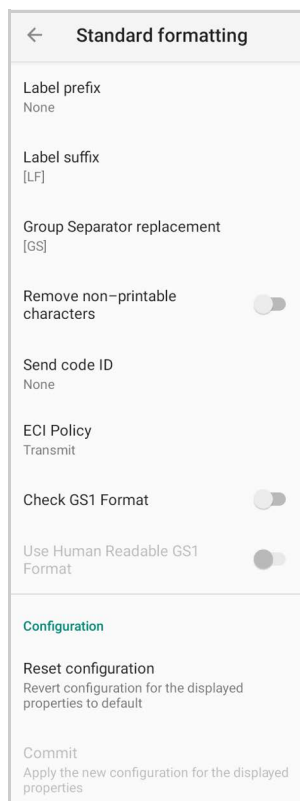
Tap **Enable good read** to enable/disable notifications (main enabler), then select the notification you want to use.



## Formatting

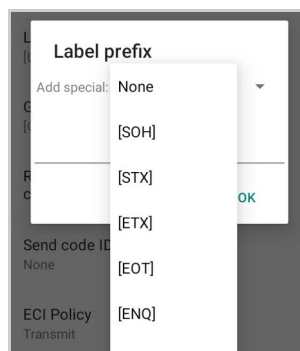
### Standard Formatting

Allows to format the barcode text by enabling and configuring the use of prefix, suffix, group separator and code identifier:



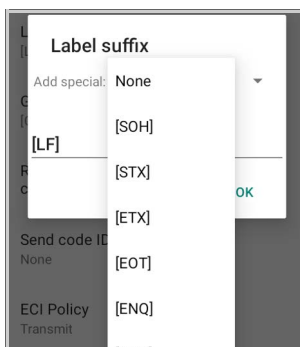
### Label Prefix

Tap **Label prefix** to enter the characters you will be using as prefix. Tap **Add special** to select a special character to be added in the current cursor position:



### Label Suffix

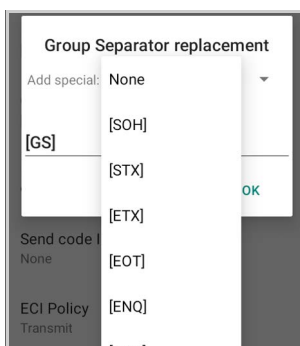
Tap **Label suffix** to enter the characters you will be using as suffix. Tap **Add special** to select a special character to be added in the current cursor position:



**Group Separator Replacement**

The Group Separator replacement is a non printable data separator character (ASCII code 1D hex). Tap **Group Separator replacement** to enter a string that will be used as GS data separator substituting the standard GS character.

Tap **Add special** to select a special character to be added in the current cursor position:

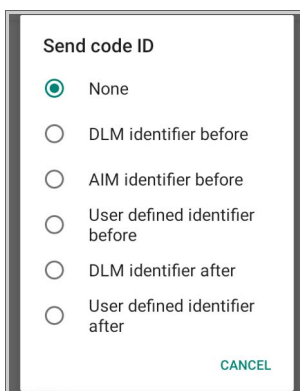


**Remove Non-Printable Characters**

Enable it to remove non-printable characters from a unicode string.

**Send Code ID**

Tap **Send code ID** to add a code identifier prefix or suffix to the barcode string:



The AIM ID (Association for Automatic Identification and Mobility) is an international barcode identifier. When **AIM identifier before** is enabled, the AIM ID is inserted at the beginning of the decoded barcode.

**DLM identifier** is a Datalogic specific character identifier.

**User defined identifier** is a user specific character identifier you can set in the related symbology settings menu.

### ECI Policy

Extended Channel Interpretation (ECI) is an extension to the communication protocol that is used to transmit data from a bar code reader to a host when a bar code symbol is scanned. It enables the application software to receive additional information about the intended interpretation of the message contained within the barcode symbol and even details about the scan itself.

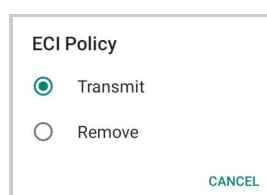
There are two reference models for data interchange in bar coding systems:

The Basic Channel Model (BCM) describes the functional components that co-operate to convey a message via a traditional bar coding system.

The Extended Channel Model (ECM) adds a processing layer to the front and back ends of the Basic Channel, to enable ECI-capable data carriers to convey both the message and information about that message.

Select **Transmit** to set the data interface in "Extended Channel Mode".

Select **Remove** to set the data interface in "Basic Channel Mode".



### Check GS1 Format

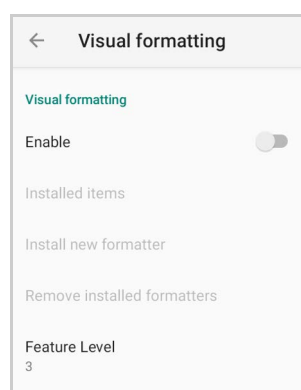
Enables the check for the GS1 format (applicable to GS1-128, GS1 Databar, GS1 DataMatrix, GS1, QR Code, etc.).

### Use Human Readable GS1 Format

Enables conversion of GS1 barcodes to the readable GS1 string format when the barcode is compliant with GS1 format.

### Visual Formatting

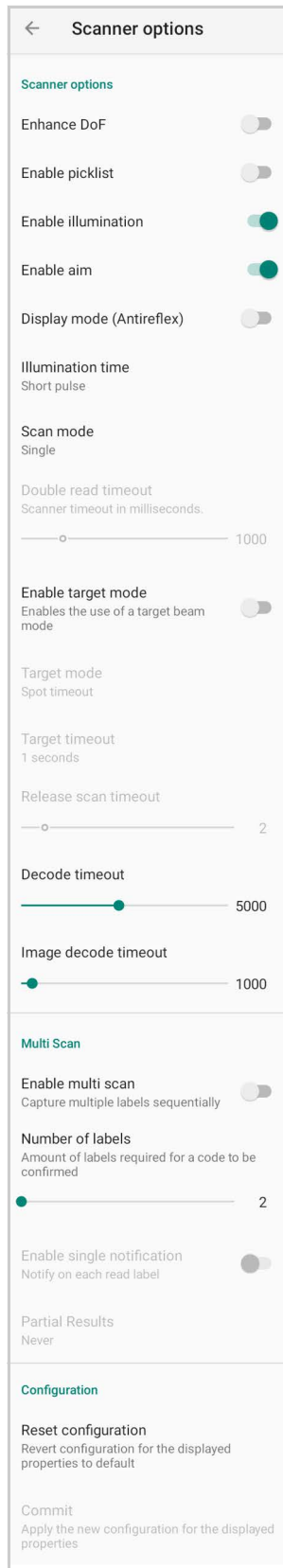
Enable to set up barcode visual formatting.



For more details, refer to <https://datalogic.github.io/scan2deploy/visual-formatter-basic-concepts>.

## Scanner Options

Tap **Scanner Options** to customize the Joya Touch 22 scanning behavior.



### Enhance DoF

If enabled, allows to enhance the maximum reading distance.

### Enable Picklist

If enabled, it allows you to pick and decode a barcode from multiple barcodes printed close together, when the scan illumination intersects more than one barcode. Only the targeted barcode will be returned.

### Enable Illumination

If enabled, it causes the scanner to turn on the illumination to aid decoding.

### Enable Aim

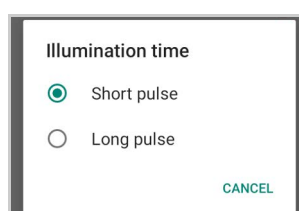
Enables the laser aim.

### Display Mode (Antireflex)

Optimizes the reading of a barcode from a screen.

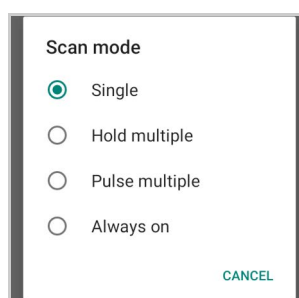
### Illumination Time

Allows to set the illumination time while the scanner attempts to read.



### Scan Mode

Selects the scan operating mode for the reader.



#### *Single*

When the trigger is pulled, scanning is activated until one of the following occurs:

- a label has been read
- the trigger is released
- the decode timeout has elapsed.

#### *Hold Multiple*

When the trigger is pulled, the device scans barcodes until the trigger is released or the decode timeout has elapsed.

#### *Pulse Multiple*

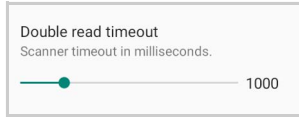
When the trigger is pulled, continuous scanning is activated until the decode timeout has elapsed or the trigger has been released and pulled again.

#### *Always On*

No trigger pull is required to read a bar code. Scanning is continually on.

### Double Read Timeout

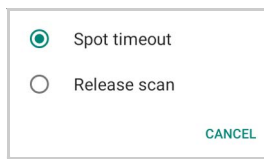
To prevent a double read of the same label, the **Double Read Timeout** sets the minimum time allowed between reads of labels of the same symbology and data. If the unit reads a label and sees the same label again within the **Double Read Timeout**, the second read of the label will be ignored. **Double Read Timeout** does not apply to **Single scan mode**.



### Enable Target Mode

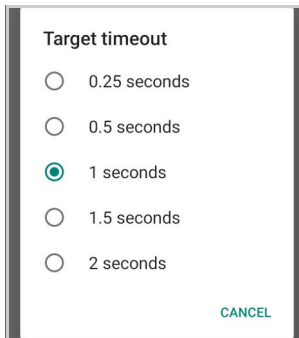
If enabled, when the scan button is pressed, the scanner will project an aiming pattern to assist in centering over the barcode before scanning.

Tap **Target mode** to select the desired targeting behavior:



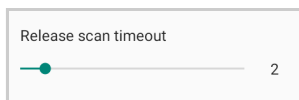
### Spot Timeout

Scanning takes place after a programmable time upon pressing the scan button. Tap **Target timeout** to set the duration of the spot:



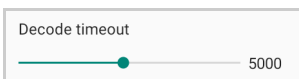
### Release Scan

Scanning takes place after the scan button is released. Drag the **Release scan timeout** slider to set the scanning timeout after releasing the scan button:



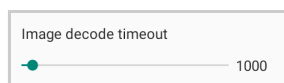
### Decode Timeout

Drag the **Decode timeout** slider to set the maximum amount of time the scanner attempts to decode after target timeout:



### Image Decode Timeout

You can share any image (picture, jpg/png, etc.) with the Datalogic Service to try to decode it. Drag the **Image decode timeout** slider to set the decode timeout applied with image decoding.



### Enable Multi Scan

If selected, the scanner captures multiple labels sequentially.

### Number of Labels

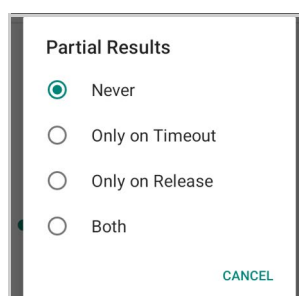
Drag the slider to indicate the amount of labels required for a code to be confirmed.

### Enable Single Notification

If selected, it enables indicators for each label, in order to get an intermediate notification for each label decoded.

### Partial Results

When multi scan mode is enabled, it selects the behaviour when partial results are present.



#### *Never*

The decoding session is ended successfully and all the collected labels are returned together, only if the **Number of Labels** is reached.

#### *Only on Timeout*

The decoding session is ended successfully and all the collected labels are returned together, only if the decode timeout has elapsed.

#### *Only on Release*

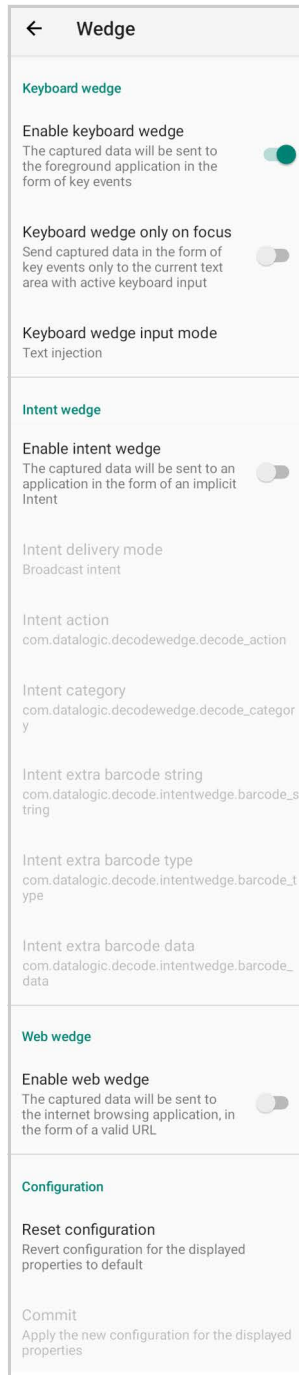
The decoding session is ended successfully and all the collected labels are returned together, only if the trigger is released.

#### *Both*

The decoding session is ended successfully and all the collected labels are returned together if the trigger is released or the decode timeout has elapsed.

## Wedge

Use it to enable or disable the keyboard wedge and the intent wedge:



### Enable Keyboard Wedge

Enables/disables the keyboard wedge mode.

### Keyboard Wedge Only on Focus

If selected, the scanner is enabled whenever a text area is in focus and can receive text.

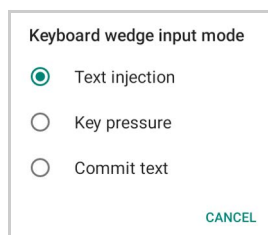
It provides a safer way to input keystrokes into the foreground application, allowing to send captured data in the form of key events only to the current text area with active keyboard input.

If this setting is not enabled, keystrokes will always be dispatched to the foreground application.



## Keyboard Wedge Input Mode

Allows to select the scanned data input mode.



### *Text Injection*

The scanned barcode is injected into the text area.

### *Key Pressure*

The scanned barcode is translated into keyboard strokes.

### *Commit Text*

The printable characters are injected into the text area, emulating the pressure of keyboard keys for non-printable keys.

## Enable Intent Wedge

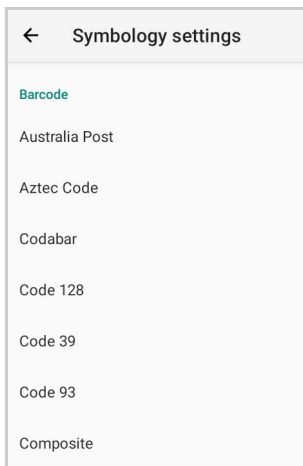
Enables the broadcast of specific intents to the listening applications. The broadcasted intent can have its custom Action, Category and extra content fields. The scanner is enabled whenever the intent option is flagged.

## Enable Web Wedge

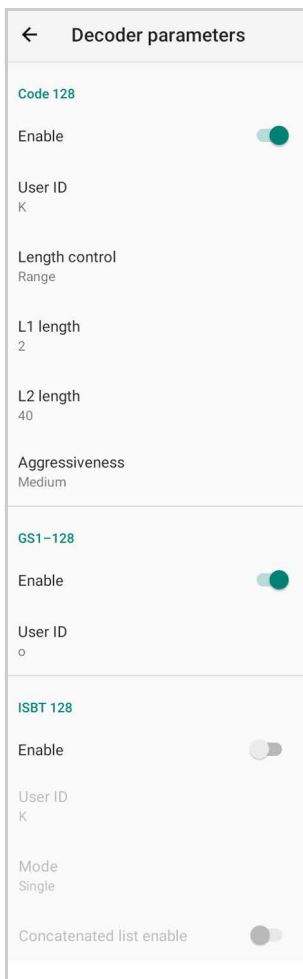
Enables direct data input into internet browsing applications, in the form of a valid URL.

## Symbology Settings

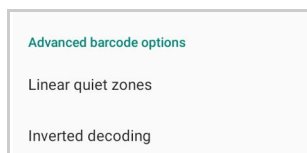
Each barcode symbology can be customized with additional settings that may affect that specific barcode decoding. Tap **Symbology settings** to configure symbology decoding options:



Refer to the sample symbology control panels for examples of the types of fields and options you can modify. The example below shows the settings of a Code 128 barcode symbology:

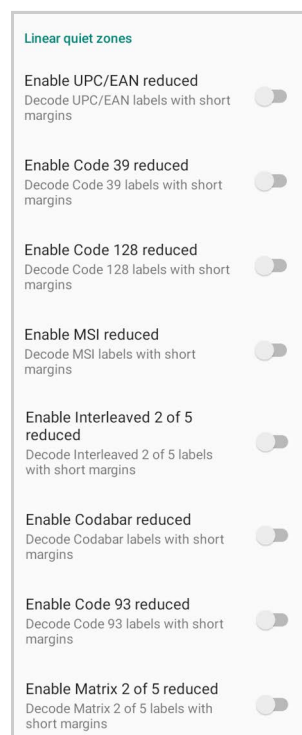


## Advanced Barcode Options



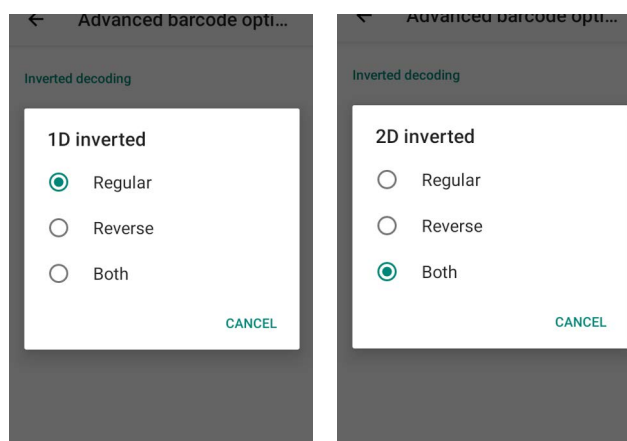
### Linear Quiet Zones

Tap **Linear quiet zones** to reduce the blank margin on either side of a linear barcode.



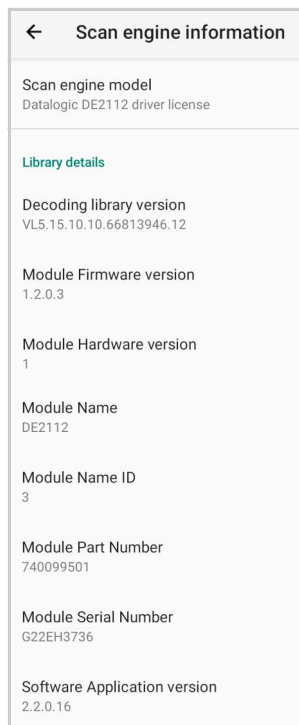
### Inverted Decoding

Defines the decoding mode for regular/reverse barcodes for both 1D and 2D barcodes:



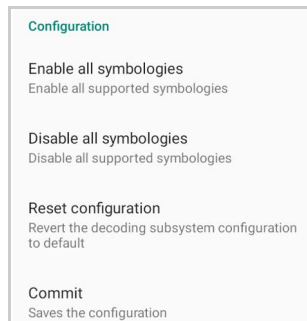
## Scan Engine Information

Provides information on the scan engine.



## Configuration

Use this section to change symbologies settings globally and to persist them.



### Enable All Symbologies

Enables all barcode symbologies.

### Disable All Symbologies

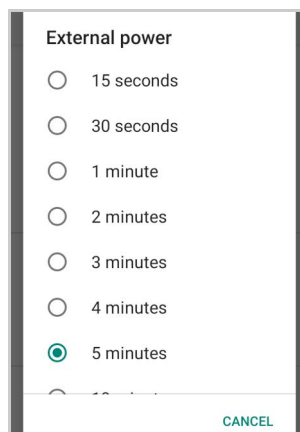
Disables all barcode symbologies.

## Power & Sources

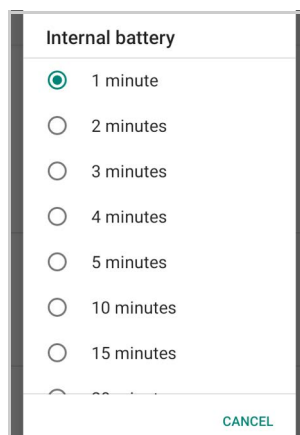
### Suspend Timeout

You have two options to set the suspend timeout (see "Suspend" on page 22 for more information on Suspend Mode):

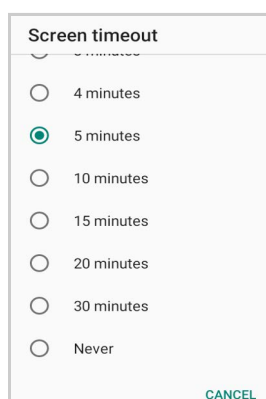
1. Tap **Settings > Datalogic Settings > Power & sources:**
  - **External power** sets the number of seconds without user input activity before the system is suspended while running on external power.



- **Internal battery** sets the number of seconds without user input activity before the system is suspended while running on battery power.



2. Tap **Settings > Display > Screen timeout** to set the number of seconds without user input activity before the system is suspended while running on either battery power or external power.



If you use the **Screen timeout** page to set the auto-suspend timeouts, the **Display** page will display the **Suspend on internal battery** timeout if no external power is connected; if the device is connected to an external power source (USB or dock), it will display the **Suspend on external power** timeout.

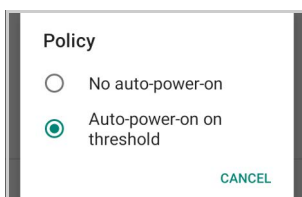
## Charging Policies

### Off-Mode Charge

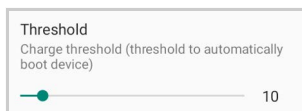
Controls how the charge behaves when the device is powered off.

#### Policy

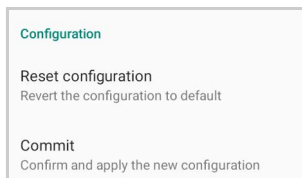
Tap **Policy** to enable/disable auto power on.



Drag the **Threshold** slider to set the threshold for automatic start.



#### Configuration

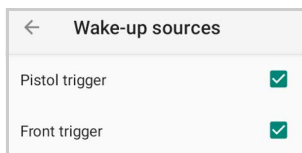


Tap **Reset configuration** to reset the settings to default.

Tap **Commit** to confirm the new configuration.

## Wake-Up Policies

The default wake-up sources are the front trigger and the pistol trigger. Tap **Settings > Datalogic Settings > Power & sources > Wake-up sources** to enable/disable wake-up sources.



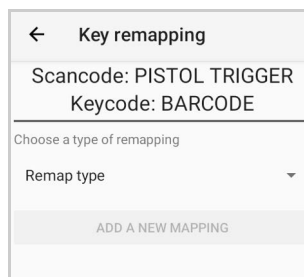
## Keyboard & Triggers

### Lock Keyboard Input

If enabled, it locks user input from the keyboard.

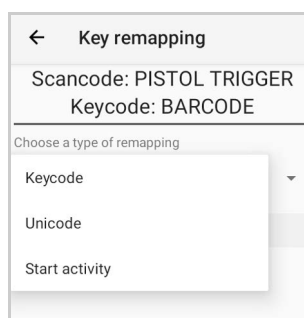
### Key Remapping

Tap **Key remapping** to remap an input key, then press the key you want to remap. The following window displays on screen:



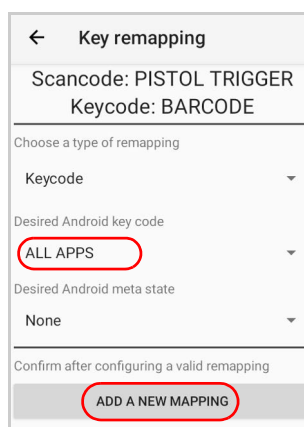
- **Scancode** represents the physical location of a keyboard key.
- **Keycode** represents the value that is mapped to a specific key.

Tap **Remap type** to select the remapping type:



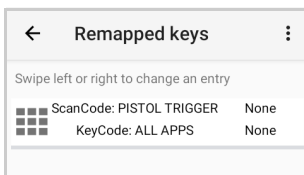
### Keycode

Select **Keycode** to map the selected key to a new function:



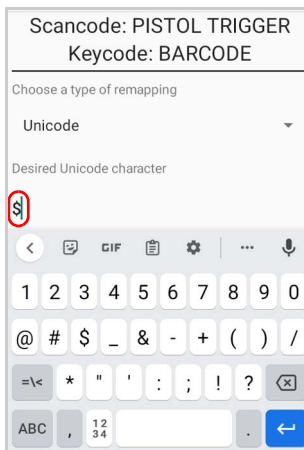
- Tap the second menu (default = **DISABLE KEY**) to select the new function you want to assign to the selected key.
- Tap the last menu (default = **None**) to add a modifier key (such as **Ctrl**, **Shift** or **Alt**).

Tap **ADD A NEW MAPPING**. A window displays showing the new keymap.

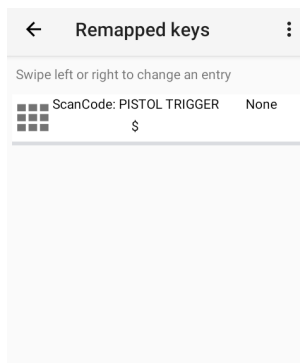
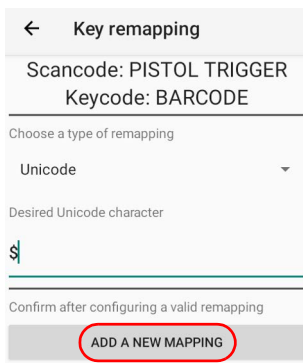


### Unicode

Select **Unicode** to remap a key to display Unicode characters (such as symbol "\$"):

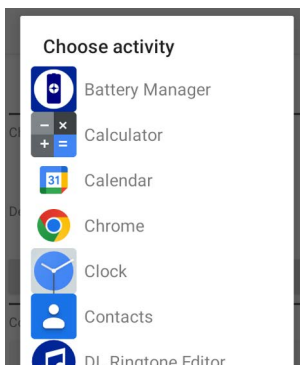
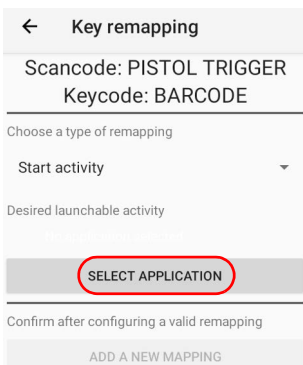


Press the Back Button on the navigation bar and then tap **ADD A NEW MAPPING**. A window displays showing the new keymap:



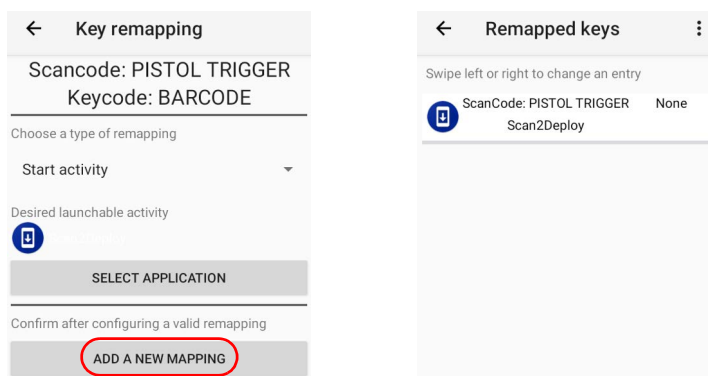
### Start Activity

Select **Start activity** to remap a key to launch an application loaded on your device. Tap **SELECT APPLICATION**:





Select the desired application and then tap **ADD A NEW MAPPING**. A window displays showing the new keymap:

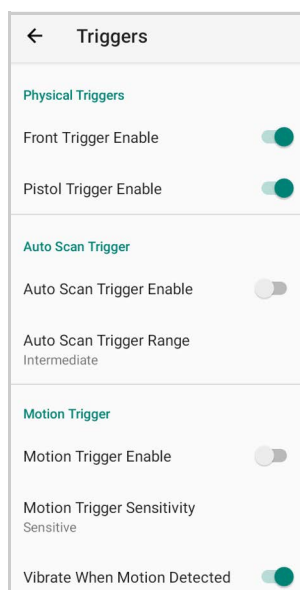


### View All Remapped Keys

Tap View all remapped keys to display all remapped keys. Swipe left to edit an entry. Swipe right to remove an entry and reset the key mapping back to default.

### Triggers

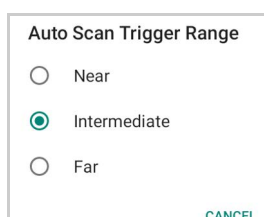
Tap **Triggers** to enable/disable the trigger keys. The physical triggers are enabled by default.



### Auto Scan Trigger

The Joya Touch 22 has a proximity sensor able to detect the presence of nearby objects without any physical contact. If enabled, **Auto Scan Trigger Enable** allows to automatically read barcodes without pressing the trigger button.

Tap **Auto Scan Trigger Range** to select the maximum distance at which the device will automatically start scanning barcodes.

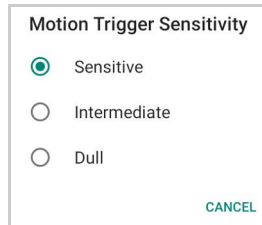


### Motion Trigger

If **Motion Trigger Enable** is selected, the scan engine will be enabled as vigorous motion is detected.

A vibration notifies you that the scan engine is enabled and ready to scan a barcode. Select/clear the **Vibrate When Motion Detected** check box to enable/disable this notification.

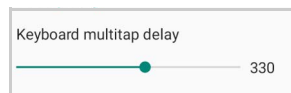
Tap **Motion Trigger Sensitivity** to configure the motion detector's sensitivity:



### Advanced Keyboard Settings

#### Multitap Delay

The numeric keypad uses a multitap ABC input mode. **Multitap Delay** defines after how much time from the first key press the associated character will be submitted to the user interface.



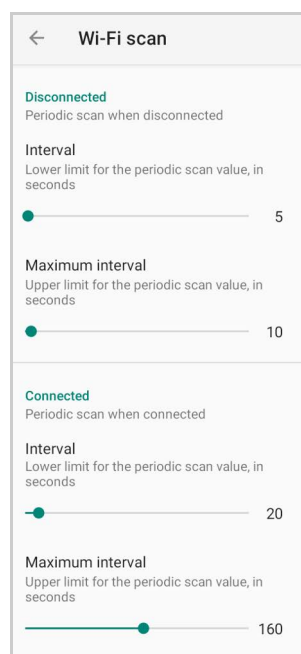
### Dock & Cradle

Allows you to manage the dock's firmware update through the **Dock Manager** application (see "[DL Ringtone Editor](#)" on page 83).

## Wi-Fi

### Wi-Fi Scan

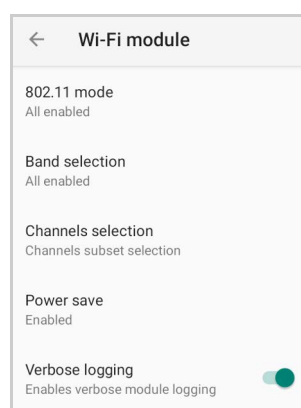
Use the **Wi-Fi scan** Settings to set the interval between scans when the device is connected and when it is disconnected.



### Wi-Fi Module

Use the **Wi-Fi module** settings to select the 802.11 mode and the band, and to enable/disable power save and the verbose Wi-Fi module logging.

If enabled, the verbose Wi-Fi module logging increases the Wi-Fi logging level for each wireless network (SSID) you connect to according to its relative received signal strength (RSSI).

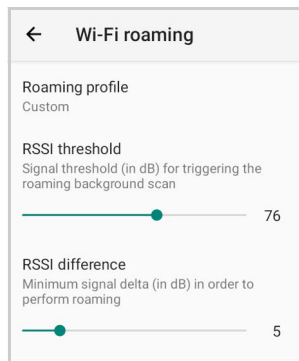


## Wi-Fi Roaming

The roaming RSSI threshold is a CPS configurable parameter, that controls the signal strength a radio needs to see before searching for another site.

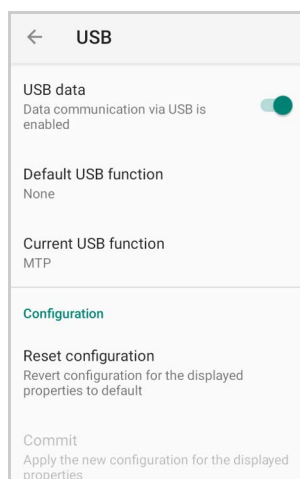
The roaming RSSI difference controls the signal difference between the current access point the device is connected to and the target access point the device wants to roam to. If the target AP signal is higher than the current by at least the value of this parameter, the device will roam.

Use the **Wi-Fi Roaming** settings to configure the roaming RSSI threshold and the roaming RSSI difference.



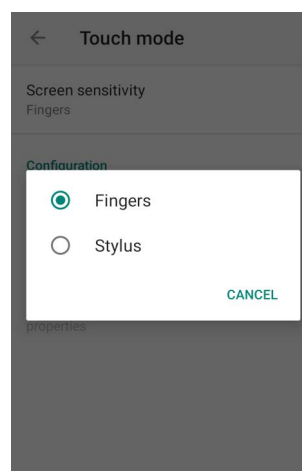
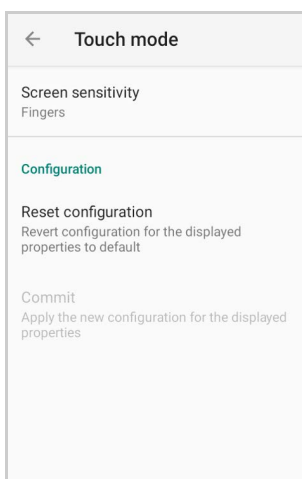
## USB

Use the **USB** settings to set the USB function (None, MTP, PTP, MIDI).



## Touch Mode

Use the **Touch Mode** settings to adjust touch-screen sensitivity for input with a bare, a gloved finger or a stylus.



## System Update

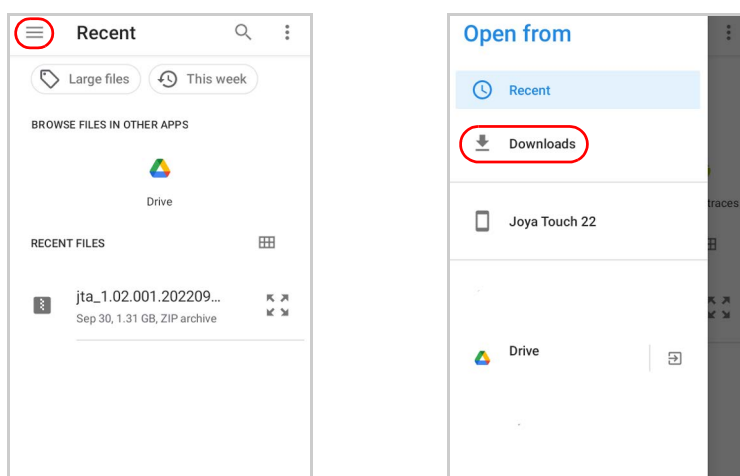
The A/B system update ensures a workable booting system remains on the disk during an over-the-air (OTA) update. OTA updates can occur while the system is running, without interrupting the user. Users can continue to use their devices during an OTA, the only downtime during an update is when the device reboots into the updated disk partition.

To transfer the OTA package from your PC to the Joya Touch 22, follow the steps below:

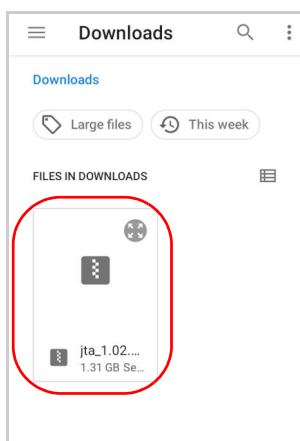
1. Connect the device and the PC via USB cable (see "USB Connection" on page 89);
2. Copy the OTA package to the device **Download** folder;

### Local Upgrade

From the **Settings** menu, tap **Datalogic Settings > System Update > Local upgrade**. Tap the menu icon on the top left corner of the screen and then tap **Downloads**.

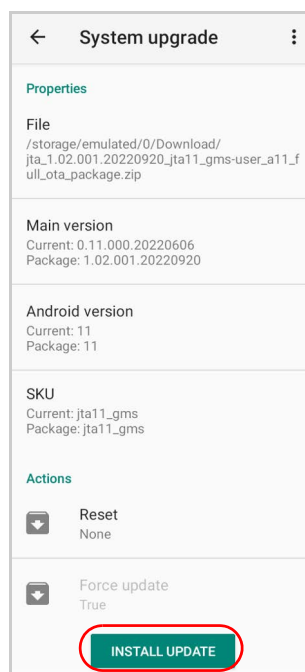


Select the update package you want to install:



**NOTE:** The OTA package would also be available if copied into another folder. You just need to select the right folder.

The following window displays on screen, showing information about the device and the update package components:

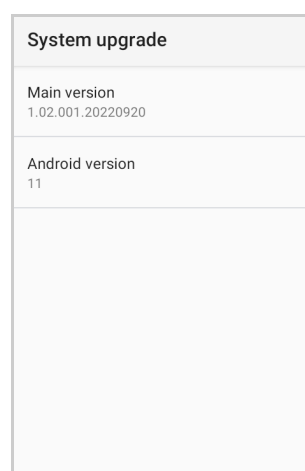
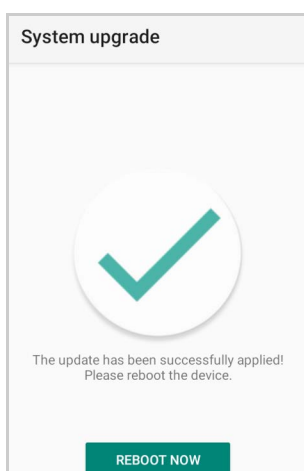


The **PROPERTIES** section shows information about the device model and OS version and the update package version.

The **ACTIONS** section allows to:

- reset the device configuration after the update (see “Reset the Device” on page 27).
- force the update of all components, including those already updated.

Tap **Install Update**. The device will reboot and a success notification will be displayed. Tap the notification to display a report showing the installed update components.



**NOTE:** During the update, ensure that:

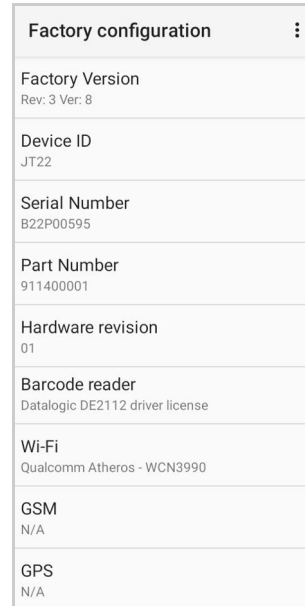
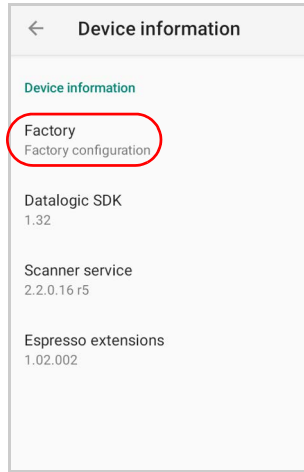
- **battery level is more than 20% if the Joya Touch 22 is not connected to a power source;**

or

- **battery level is more than 15% if the Joya Touch 22 is connected to a power source (USB or dock).**

## Device Information

The Device info screen displays information about the device including: serial number, scan engine, sdk, system versions.

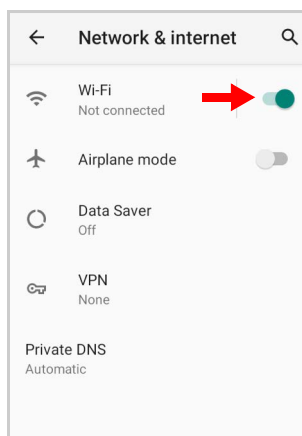




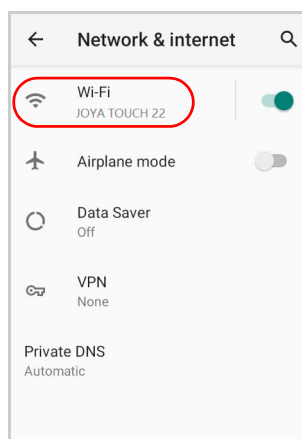
## NETWORK & INTERNET

### Connect to Wi-Fi Network

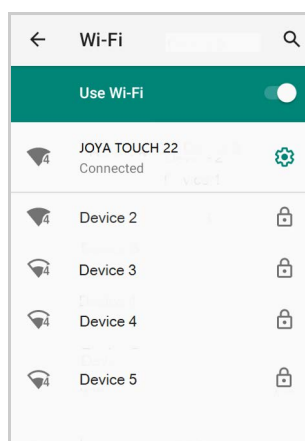
1. To turn on the Wi-Fi, tap **Settings > Network & Internet** and switch right to the **On** position.



If the device finds a network that you connected to previously, it will connect to it automatically.

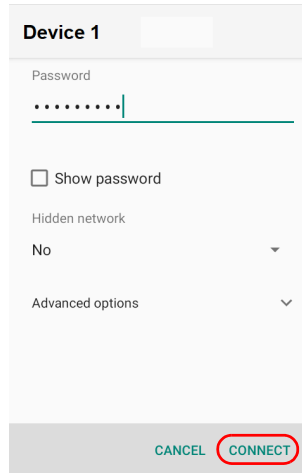


2. Tap **Wi-Fi**. The Joya Touch 22 scans for available Wi-Fi networks within range and lists them. Secured networks are indicated with a lock icon.



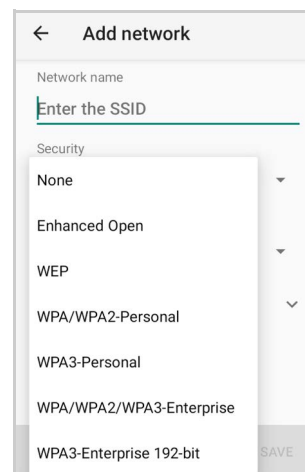
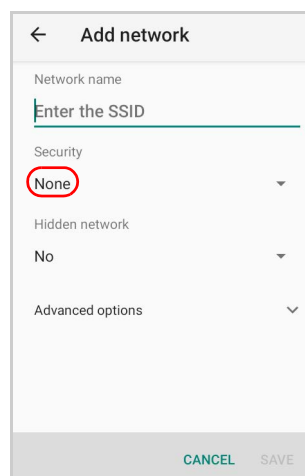
3. Select the network name you want to connect to from the available network list.
4. If the network is open, tap the profile and then tap **Connect**, or press and hold and then select **Connect**.

If the network is secured, a dialog box appears requesting information relevant to the network security protocol (e.g., password, key, or certificate). Enter the required information, then tap **Connect**:



## Add a Wi-Fi Network

1. Tap **Settings > Network & Internet** and verify that the Wi-Fi is turned on.
2. Tap **Wi-Fi**.
3. Tap **Add network** at the end of the available network list:
4. Enter the Network SSID (Wi-Fi network name). For secure Wi-Fi network connections, tap **None** under **Security**, and then select the type of security protocol required from the pop-up menu. Enter any additional security information required by the type of security protocol selected.



5. Tap **Save**.

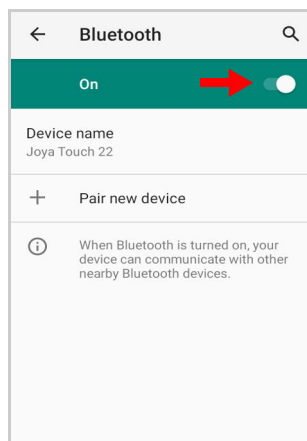
## CONNECTED DEVICES

### Bluetooth Settings

To create a Bluetooth® pairing between your device and another device that has Bluetooth® capabilities, ensure that the two devices are turned on, discoverable, and within operable range.

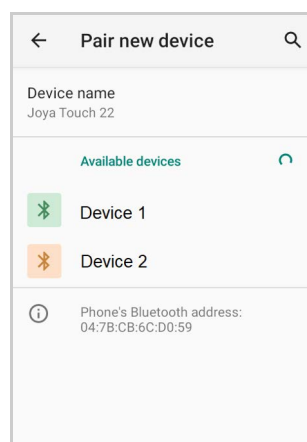
#### Enable Bluetooth®

To turn on the Bluetooth®, tap **Settings > Connected Devices > Connection preferences > Bluetooth** and switch right to the **Bluetooth On** position.

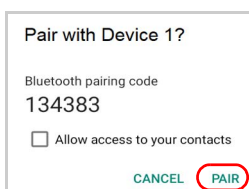


#### Connect to Other Bluetooth® Devices

1. Tap **Pair new device**. The device automatically starts searching for discoverable devices.



2. Swipe up the list and select a device. The **Bluetooth pairing request** dialog box displays on the screen:

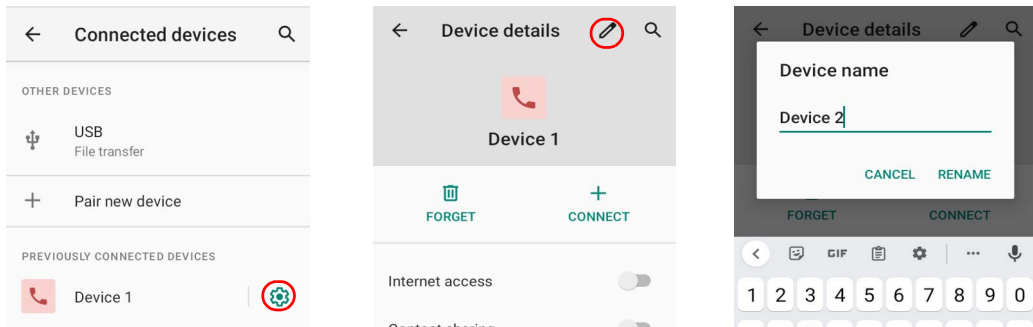


3. Make sure both devices show the same passkey and tap **Pair**.
4. The selected Bluetooth® device is added to the **Previously connected devices** list and a paired connection is established.

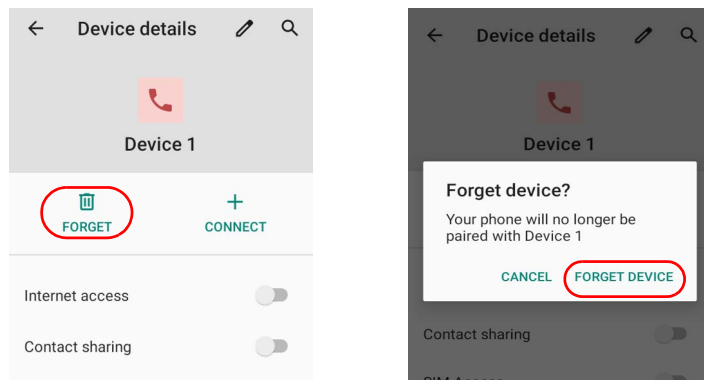
### Configure, Rename or Unpair Bluetooth® Devices

Tap **Settings > Connected devices > Previously connected devices**.

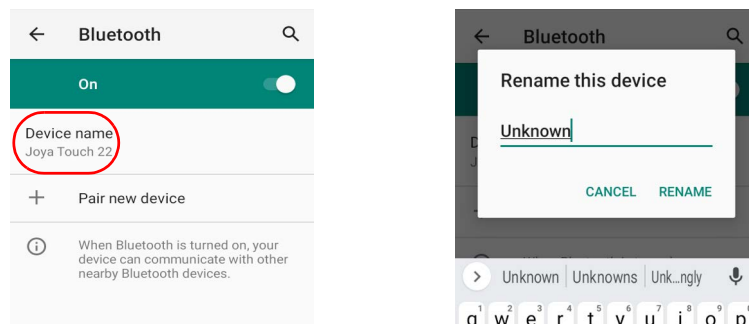
Select a device and tap the settings icon next to its name. The **Device Details** window displays on the screen. Type the **Edit** icon to rename the paired device.



Tap **FORGET** to unpair:



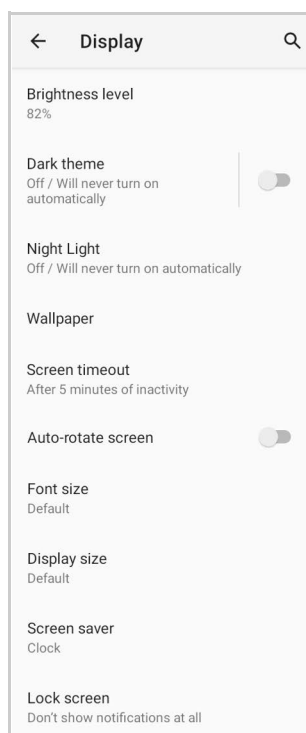
To rename your device, tap **Device name**. Type in the new name.



Tap **Rename** to confirm.

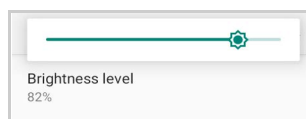
## DISPLAY

Use the Display settings to set the screen brightness and theme, enable night light, change the background image and the screensaver, enable screen rotation, set display and font size.



### Brightness Level

Use the slider to adjust the screen brightness level.



### Dark Theme

Tap to enable black background.

### Night Light

Tap to enable Night Light and adjust its intensity.

### Wallpaper

Tap to select a wallpaper.

### Screen Timeout

Tap to set the suspend timeout (see "Suspend Timeout" on page 47).

### Auto-Rotate Screen

Enables/disables screen auto-rotation.

### Font Size

Tap to set the size of the font.

### Display Size

Tap to set the size of the items on your screen.

### Screen Saver

Tap to select the screen saver, set the style (**Analog** or **Digital**) and time (**When to start**), or enable the **Night mode**.

### Lock Screen Display

Tap to customize your lock screen.

## TOUCH MODE

Use the **Touch Mode** settings to adjust touch-screen sensitivity for input with a bare, a gloved finger or a stylus (see "[Touch Mode](#)" on page 55).

## RECOVERY MODE

Recovery is an independent, runtime environment that's included on a separate bootable partition from the main Android OS. It contains tools to help repair your installations as well as install official OS updates by using a combination of key presses. Its main purpose is to reset the device, wipe data or perform system updates when the system crashes and the screen is unresponsive.

To enter boot menu:

1. Install ADB driver (see "[Install ADB Driver](#)" on page 86).
2. Connect your Joya Touch 22 to a PC via USB. Make sure USB Debugging is enabled in Developer Settings.
3. Launch a command prompt window and 'cd' to the ADB directory.
4. Type in `adb devices` and hit enter to make sure your device is properly connected. If it is, the command window will return a string of numbers.
5. Type in `adb reboot recovery` and your device will reboot to recovery.



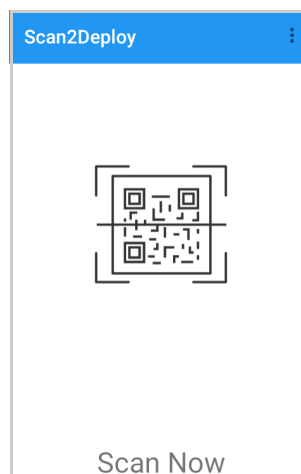
**NOTE: In Recovery mode, you can only apply updates from external storage (see "Local Upgrade" on page 56).**

# DATALOGIC APPLICATIONS

---

## SCAN2DEPLOY

Scan2Deploy is a configuration tool that uses special barcode labels.



For more details, visit the website: <https://datalogic.github.io/scan2deploy>.

## DATALOGIC LAUNCHER

Datalogic Launcher is an Android application used to lock down the device to launch only allowed applications. It can also limit access to several system device features, such as the Overview button (for switching apps) and the Global Actions dialog (for restarting the device). Once started, it behaves as the device Home screen (when you tap the Home button).

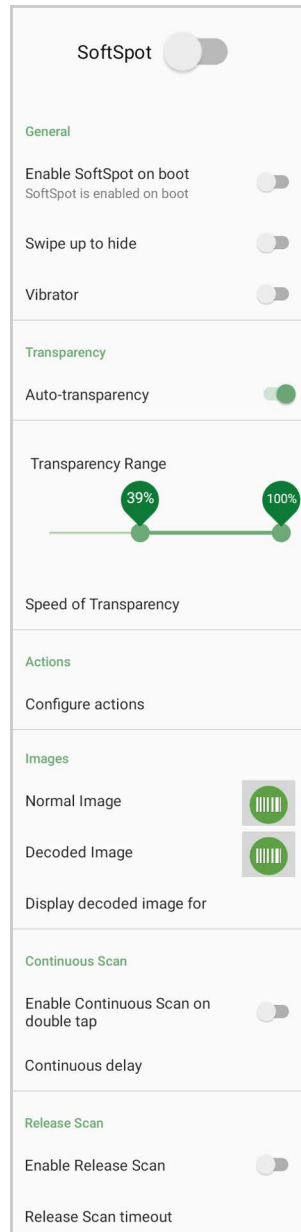
For more details, visit the website: <https://datalogic.github.io/launcher/overview>.



# SOFTSPOT™

Datalogic’s SoftSpot technology is a user-definable "floating soft trigger" meant to provide easy access to the barcode scanner application and other frequently used functionalities on mobile scanning devices.

Tap the SoftSpot icon on the favorites tray or on the All Apps screen to launch SoftSpot:



Tap the SoftSpot to scan barcodes.

## SoftSpot

Enables the SoftSpot.

## Enable SoftSpot on boot

Enables SoftSpot on boot.

## Swipe to hide

If enabled, it allows to hide the SoftSpot from the screen by swiping it up in the Notification/Status bar.

## Vibrator

Enables the vibrator.

## Auto-transparency

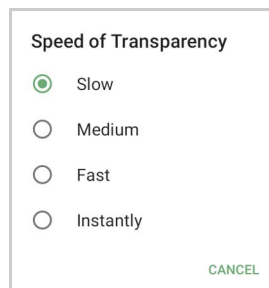
If enabled, the SoftSpot turns transparent automatically when it is not used.

## Transparency Range

Sets the SoftSpot transparency level when it is used or when the auto-transparency feature is not enabled.

## Speed of transparency

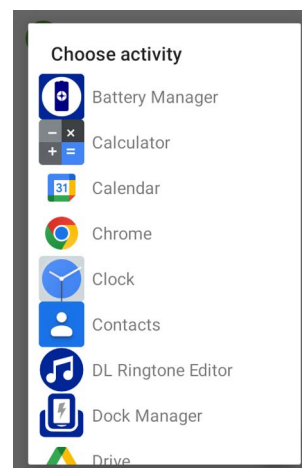
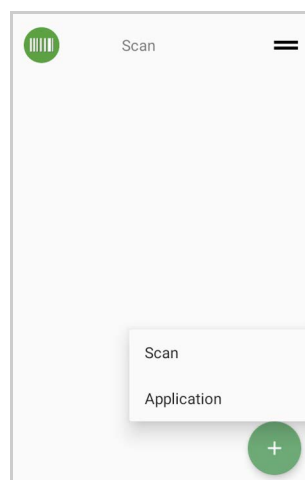
Sets the lapse of time it takes for the SoftSpot to turn transparent.



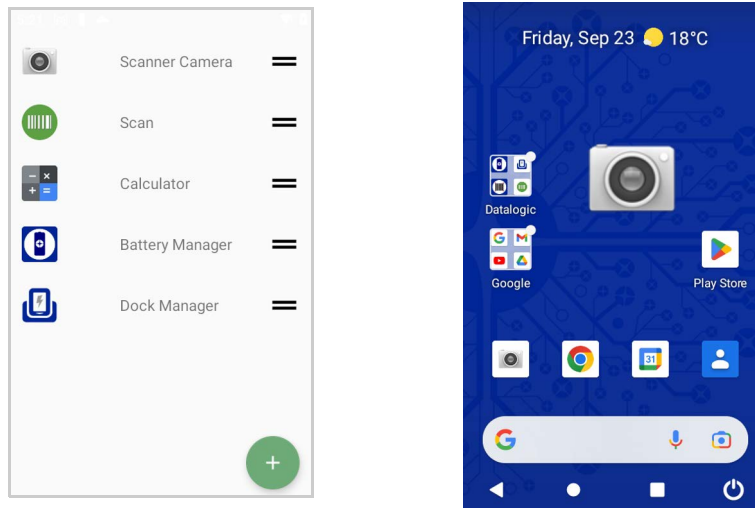
## Actions

You can use SoftSpot to quickly switch between the applications you actively use.

Tap **Configure actions** > **+** > **Application** to add the applications you want to launch with SoftSpot.



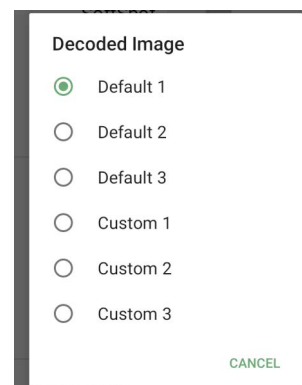
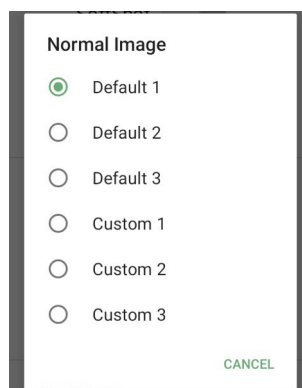
Only one action is active at a given moment. Tap the SoftSpot to launch the application. You can switch between actions by swiping left and right on the SoftSpot.



To remove an application from the actions list, tap and swipe right.

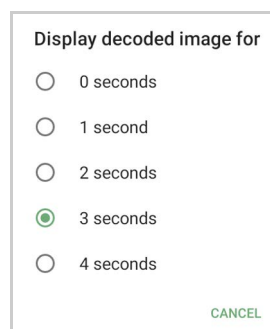
## Images

Tap **Normal Image** and/or **Decoded Image** to change the SoftSpot images. You have six options: three default images and three custom images.



## Display Decoded Image For

Sets the duration of the decoded image.

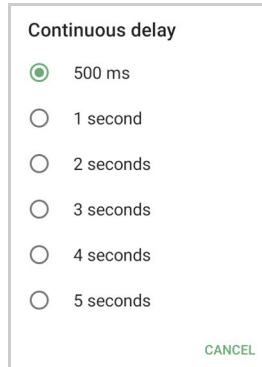


## Enable Continuous Scan on Double Tap

To enable the Continuous Scan mode and scan barcodes consecutively, switch right and then double-tap the SoftSpot. Tap one more time to stop laser emission.

### Continuous Delay

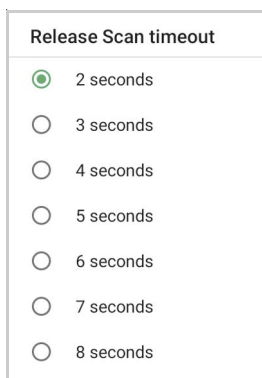
Allows to set the continuous delay time.



The screenshot shows a settings dialog titled "Continuous delay". It contains a list of radio button options: "500 ms", "1 second", "2 seconds", "3 seconds", "4 seconds", and "5 seconds". The "500 ms" option is selected, indicated by a green dot. A "CANCEL" button is located at the bottom right of the dialog.

## Enable Release Scan

Scanning takes place after the scan button is released. Tap **Release Scan timeout** to set the scanning timeout after releasing the scan button:



The screenshot shows a settings dialog titled "Release Scan timeout". It contains a list of radio button options: "2 seconds", "3 seconds", "4 seconds", "5 seconds", "6 seconds", "7 seconds", and "8 seconds". The "2 seconds" option is selected, indicated by a green dot.

---

## DATALOGIC ENTERPRISE BROWSER

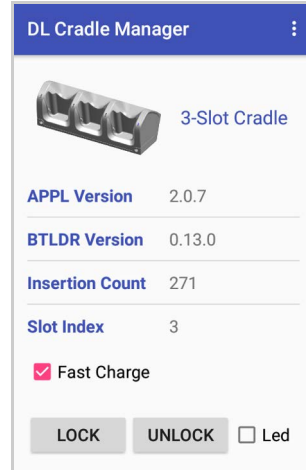
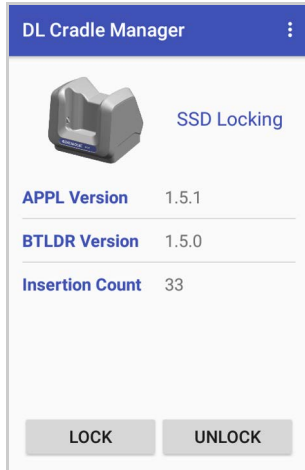
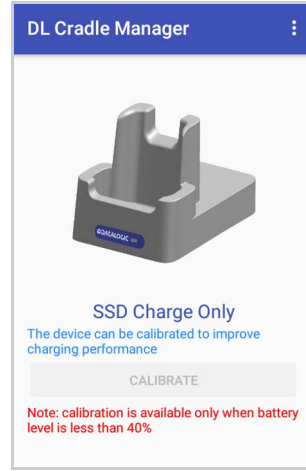
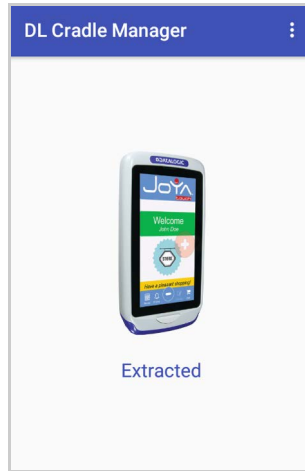
Datalogic Enterprise Browser is an Android application used for web browsing to only allowed websites. It also includes a JavaScript interface which exposes access to the barcode scanner. These features combine to allow the device to run web-based applications which need to access the scanner in a safe, controlled environment.

For more details, visit the website: <https://datalogic.github.io/browser/overview>.

# DOCK MANAGER

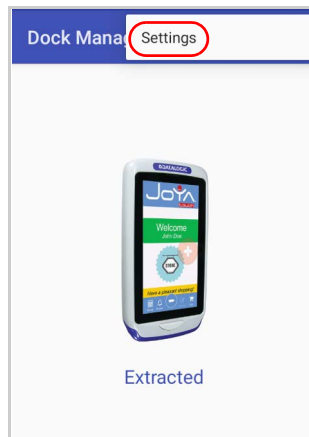
This application provides information about the cradle you're currently using and allows to enable/disable some of its properties.

Below are some screenshots showing different cradle options:

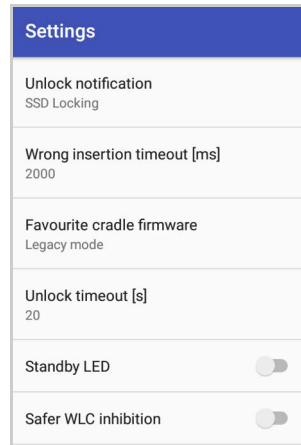


If the Joya Touch 22 is inserted into the Single Slot Dock Locking or into the 3-Slot Cradle, you can unlock and lock the device without using the unlock key, by tapping the **UNLOCK** and **LOCK** buttons.

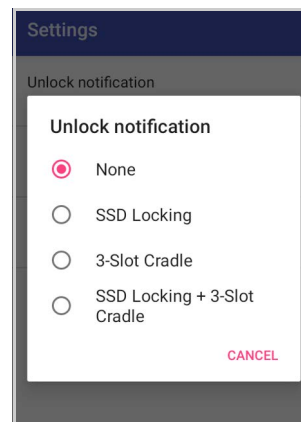
In addition, you have further details and options. Tap the menu icon on the right top of the screen to access the **Settings** menu:



# Settings



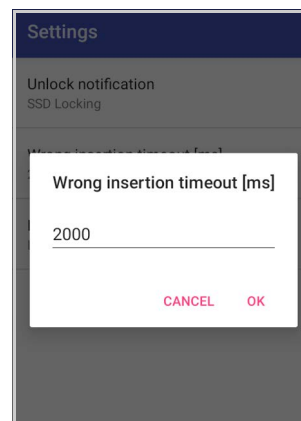
## Unlock Notification



If enabled, it allows you to unlock the cradle from the Power Menu and the Status Bar.

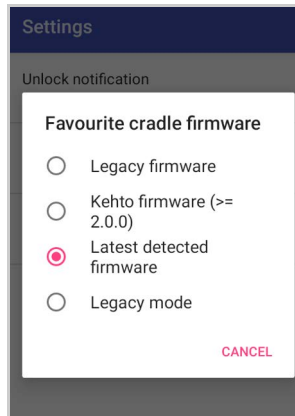
## Wrong Insertion Timeout

You can set the time lapse after which a "wrong insertion" notification is sent. Tap **Wrong insertion timeout [ms]** and digit your desired insertion timeout.



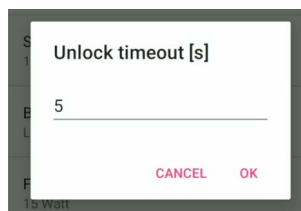
## Favourite Cradle Firmware

Tap **Favourite cradle firmware** to select the cradle firmware.



## Unlock Timeout

You can set the time available to the user to remove the cradle after tapping the **UNLOCK** button. Tap **Unlock timeout [s]** to set your desired unlock timeout (5 by 5 seconds):



## Standby LED

If enabled, when the dock is powered and no device is inserted, the Power On LED gives a short blink every few seconds. (See "[Single Slot Dock Locking LED Indicators](#)" on page 10).

This feature is only available in the Single Slot Dock Locking.

## Safer WLC inhibition

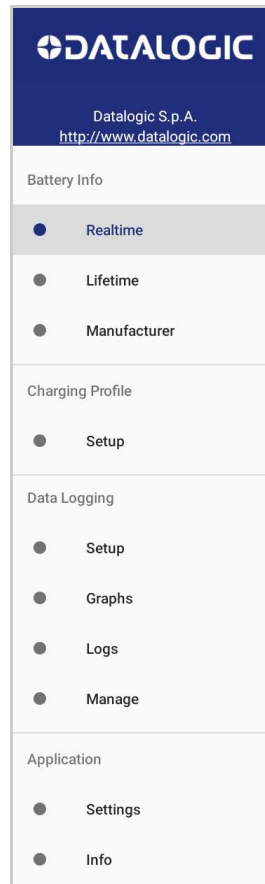
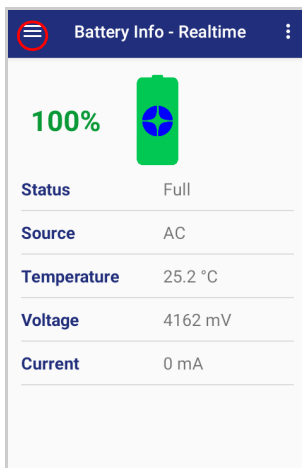
If enabled, it inhibits the wireless charging when the lever is open.



# BATTERY MANAGER

This application provides information about the battery features and status, allows to configure the battery charging profile and to log battery data.

Tap **All Apps** > **Battery Manager** icon, then tap the menu icon on the top left corner of the screen, or swipe right to display the menu.

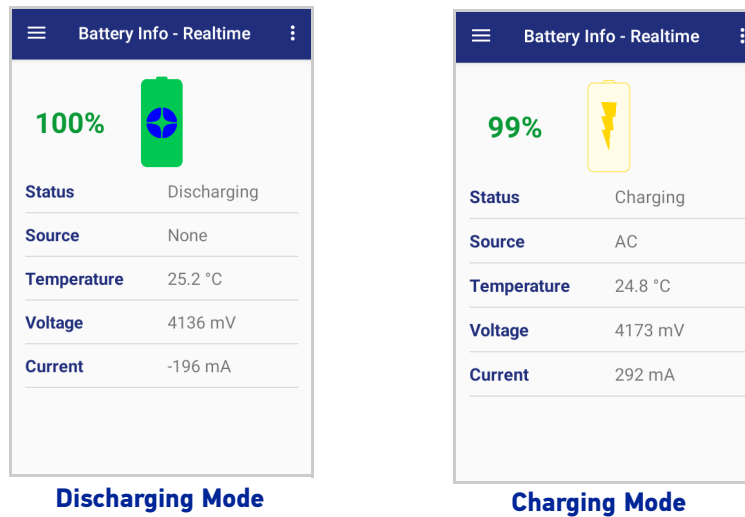


## Battery Info

The **Battery Info** section provides information about the battery’s health, capacity, manufacturer, level and charging status.

### Battery Info - Realtime

This window provides real-time information about the battery.



The top section shows the battery level and the time left to full discharge (when in discharge mode) and to full charge (when in charge mode).

#### Status

Displays the charging status.

#### Source

Displays the charging source.

#### Temperature

Displays the real-time temperature.

#### Voltage


Displays the real-time voltage.

#### Current

Displays the real-time current.

## Battery Info - Lifetime

This window displays information and statistics about battery life, health and usage over its whole life cycle.

Battery Info - Lifetime	
HEALTH GOOD	STATE OF HEALTH 100%
	
Total Discharge	1.6 Ah
Temperature	min = 12.1 °C max = 39.3 °C
Voltage	min = 2847 mV max = 4178 mV
Charge Current	max = 1583 mA
Discharge Current	max = 1426 mA

### Health

Shows the current battery health and warns potential errors.

### State of Health

Shows the current battery's health level.

### Total Discharge

Shows how much the battery has been used over its whole life cycle.

### Temperature

Shows the maximum and minimum temperature reached by the battery.

### Voltage

Shows the maximum and minimum voltage reached by the battery.

### Charge Current

Shows the maximum charge current.

### Discharge Current

Shows the maximum discharge current.

## Battery Info - Manufacturer

This window displays the model name, the type, the nominal capacity, the serial number, the product number and the manufacture date of the battery.

Battery Info - Manufacturer	
	
<b>Model</b>	BY-04
<b>Technology</b>	Li-ion
<b>Cell Capacity</b>	3300 mAh
<b>Product Number</b>	N/A
<b>Serial Number</b>	TW210804026
<b>Manufacture Date</b>	08-2021

# Charging Profile

## Charging Profile - Setup

This window allows to customize the charging process according to the user's needs and priorities.

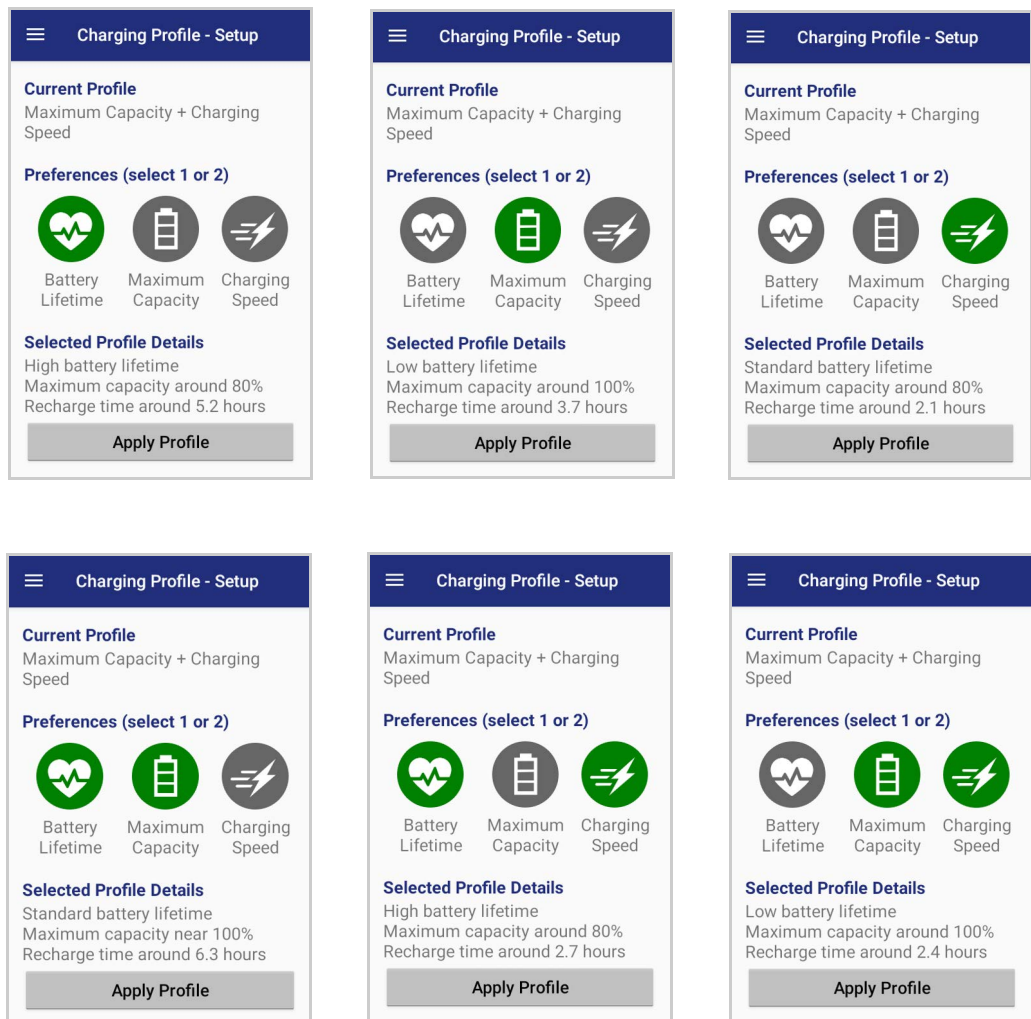
To configure a charging profile, select 1 or 2 of the following preferences:

- Battery Lifetime.
- Maximum Capacity.
- Charging Speed.

If a third preference is selected, the system will automatically clear the oldest option.

Tap **Apply Profile** to confirm.

You can configure up to 6 different charging profiles:



Once you have set your profile, it will be applied by default whenever you charge the device.



**NOTE: The selected profile is saved into the battery memory. When the battery is changed, the device load the current profile from the new battery.**

You can change your profile at any time, even during charging.

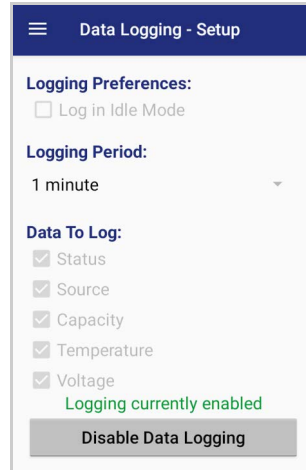
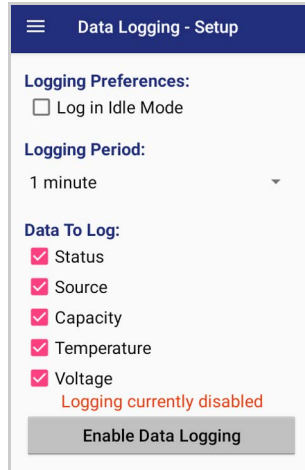
## Data Logging

The data logging feature allows to collect, store, display and analyze minute-by-minute battery data.

### Setup

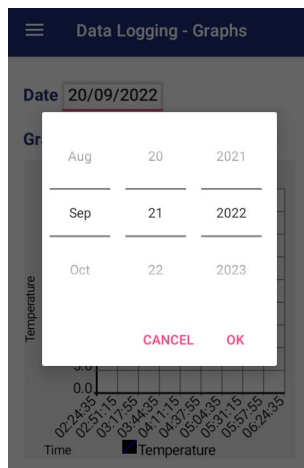
Use the **Setup** window to select the data you want to log.

The data logging is disabled by default. To enable it, tap **Enable Data Logging**. When enabled, the log is always running, even when the device is in suspend mode.

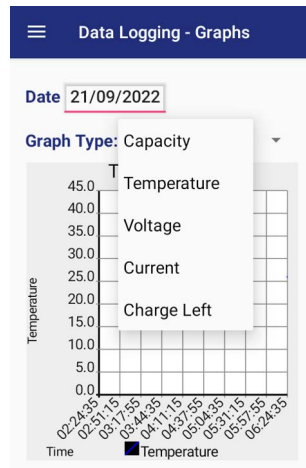


### Graphs

The **Graphs** window provides a graphical display of selected data on a specific date.



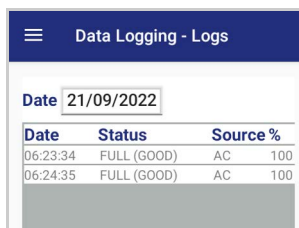
Select Date



Select Data

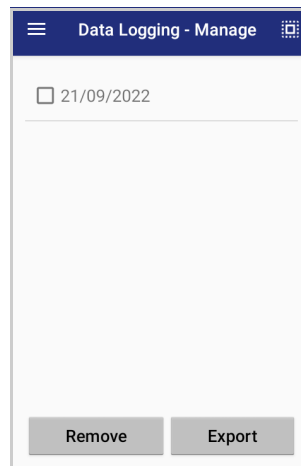
### Logs

The **Logs** window displays data details by date.

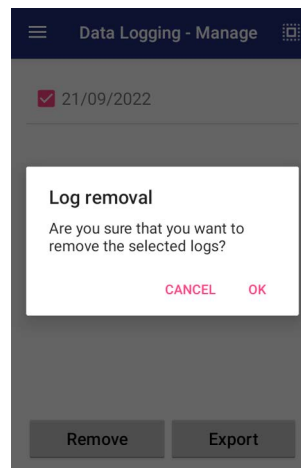


## Manage

The **Manage** window allows to remove or export logs.



Select one or more logs and tap **Remove** to remove them. Tap **OK** to confirm:



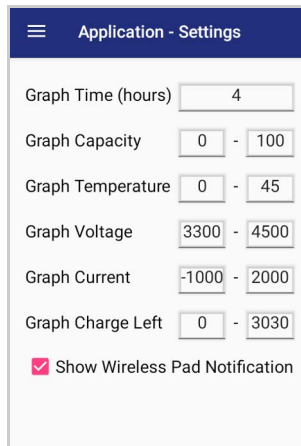
Select one or more logs and tap **Export** to export data and store them for extended periods.

The selected log files will be saved in the "battery" folder in the internal storage of your device.

# Application

## Settings

The **Settings** section allows to set the value ranges that will be used to create the graphs.



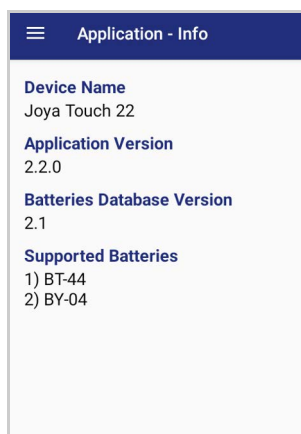
If you charge the Joya Touch 22 with a wireless charging pad, you're not allowed to customize the charging profile.

If the **Show Wireless Pad Notification** check box is selected, the system displays a warning message saying that the charging profile won't be applied.

**Show Wireless Pad Notification** is enabled by default. To disable it, clear the **Show Wireless Pad Notification** check box.

## Info

The **Info** section displays information about the device name and the software version.



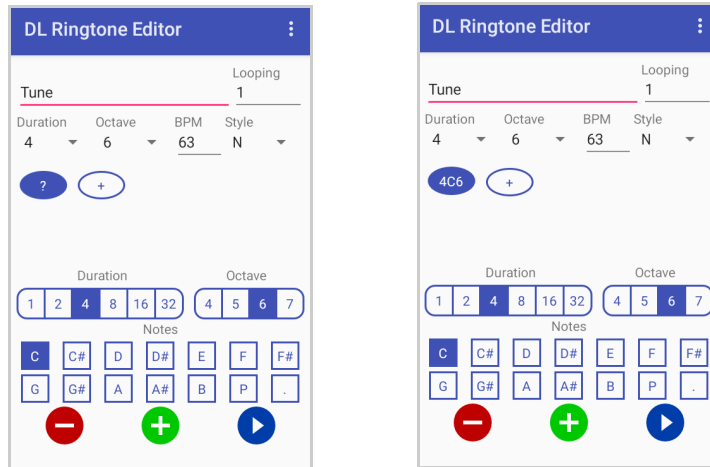


# DL RINGTONE EDITOR

DL Ringtone Editor allows to create, edit and save your own ringtones and notifications.


Enter the name for the new ringtone in the **Ringtone Name** field and tap  to add the first note.


Set the note, the duration and the octave by selecting the desired options. You can also set the BPM and the style.



Repeat the procedure for each new note.

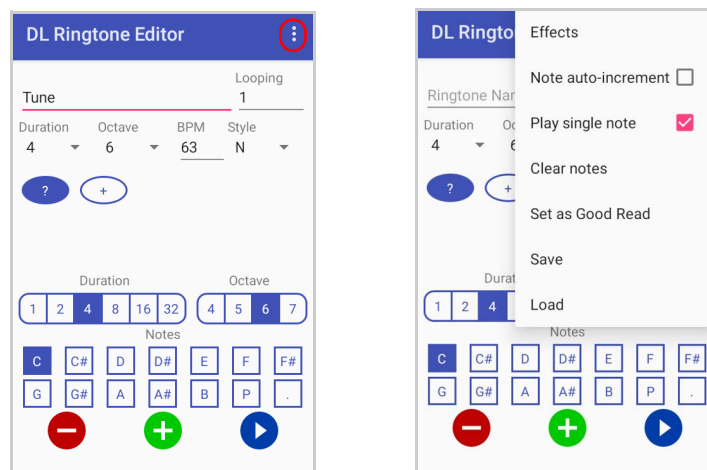
Tap  to remove a note.

Tap  to add a new note.

Tap  to play the ringtone.

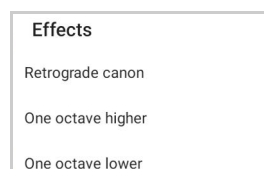
Enter the number of loops in the **Looping** fields.

Tap the menu icon on the right top of the screen for more options:




## Effects

Allows to add the following effects to the ringtone.



### Note auto-increment

If enabled, you can add a new note without tapping the button .

### Play single note

Select to play notes while editing.

### Clear notes

Clears all the notes.

### Set as Good Read

Set the ringtone as good read notification.

### Save

When the ringtone is ready, tap **Save** on the menu list to save the ringtone. The audio file will be saved in the "Ringtones" folder in the internal storage of your device.

### Load

Loads a file from the device's internal storage.

## DATALOGIC LOGGER

Datalogic Logger is an Android application designed to collect information logged by various software components to assist in diagnosing issues. Once started, it runs in the background with minimal impact to device performance. When complete, an archive of the results is generated, which can be exported from the device for further study. It comes pre-installed on the device and is not available for download.

For more details, visit the website: <https://datalogic.github.io/logger/overview>.

# TOOLS

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Refer to the Datalogic Mobile Computers Software Tools main page to find more detailed and up-to-date information: <https://datalogic.github.io/>.



## USB ADB DRIVER

USB connection allows to read and write files on both the internal storage memory and the external storage memory, but doesn't allow to install applications.

Android Debug Bridge (ADB) is a command-line utility included with Google's Android SDK and you can use it to control your device over USB from a computer, copy files back and forth, install and uninstall apps and run shell commands.

## SDK ADD-ON

SDK add-on is a library which extends the Android SDK and development tools.

For more information and instructions to install SDK Add-on, Android™ Studio and Android SDK, visit the website <https://datalogic.github.io/android/overview>.

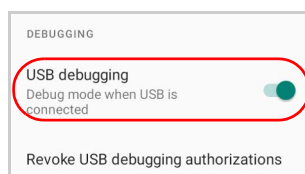
## Install ADB Driver

1. Download and install the Google USB Driver (see <https://developer.android.com> for further information).



**NOTE: Before installing the Google USB Driver, ensure you have installed the Datalogic plug-in.**

2. In order to use ADB with your device connected over USB, you must enable USB debugging in the device system settings. To enable Android **Developer options**, go to **Settings > System > About phone** and tap on the **Build Number** section 7 times. After the 7th tap, the Developer options will be unlocked and available. Go back to **Settings > System > Advanced** and tap **Developer options**. Enable **USB debugging**:



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## Create a New Application based on Datalogic SDK Add-on with Android Studio

For information and instructions to configure Datalogic SDK Add-on in Android Studio, refer to the website:

<https://datalogic.github.io/android/overview>.

## DATALOGIC SDK

For information on the Datalogic SDK APIs, visit the web site: <https://datalogic.github.io/android/overview>.

## DATALOGIC OEMCONFIG

OEMConfig is a new Android standard that enables device manufacturers to create custom device features that can be immediately and universally supported by enterprise mobility management (EMM platforms). Instead of integrating enterprise APIs from each OEM to support their custom features such as control of barcode scanners or enabling extra security features, EMMs can easily use an OEM-built application that configures all of the unique capabilities of a device.

OEMConfig utilizes a feature in Android Enterprise called managed configurations, which allows developers to provide built-in support for the configuration of apps. With OEMConfig, EMMs can support all of a device manufacturer's diverse set of controls without any incremental development work on their end.

For more details, visit the website: <https://datalogic.github.io/oemconfig>.

## WI-FI QR CODE GENERATOR

Allows to generate a QR code that will automatically connect your device to a Wi-Fi network when scanned.

For more details, visit the website: <https://datalogic.github.io/wifiqr>.

# DATA CAPTURE

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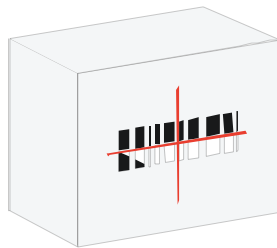
The Joya Touch 22 has an integrated imager that collects data by scanning bar codes. See "[Scanner & Decoder](#)" on page 32 for instructions on configuring the scanner settings.

## IMAGER DATA CAPTURE

The imager uses digital camera technology to take a digital picture of a bar code, the image is stored in memory and software decoding algorithms are executed to extract the data from the image.

To scan a bar code symbol:

1. Point the scan window at the barcode from a distance within the reading range.
2. Press the Scan Key or the Scan Trigger. The imager projects a laser aiming pattern similar to those used on cameras. The aiming pattern is used to position the barcode or object within the field of view.
3. Center the symbol in any orientation within the aiming pattern. Ensure the entire symbol is within the rectangular area formed by the brackets in the aiming pattern, then either wait for the timeout or release the Scan Key to capture the image. A red beam illuminates the symbol, which is captured and decoded.



If the scan has been successful:

- If enabled, the good read LED turns on.
- If enabled, the good read beep plays.
- If enabled, the Green Spot projects a green spot onto the barcode image.
- The barcode type and content data display on the screen.

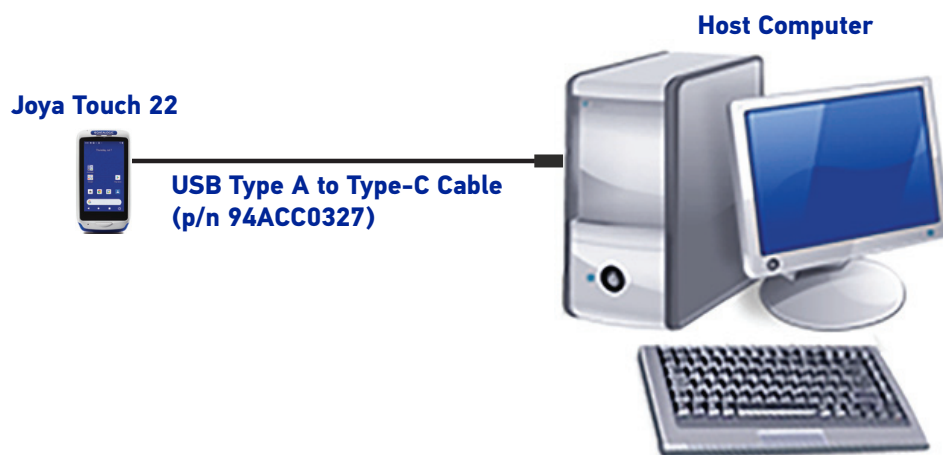
# CONNECTIONS

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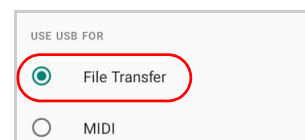
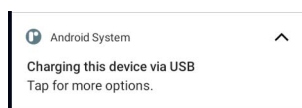
## USB CONNECTION

### USB Direct Connection

You can use the USB Type A to Type-C cable (sold separately, p/n 94ACC0327) to directly connect the Joya Touch 22 to a host computer and transfer data through the USB interface.



1. Turn on the Joya Touch 22.
2. Turn on the host computer.
3. Connect the device to the host PC via USB cable.
4. Scroll down the notification bar, tap the charging notification and change to **Transfer files**.



5. The device is now visible in your PC as a USB disk. You can start the data transfer.

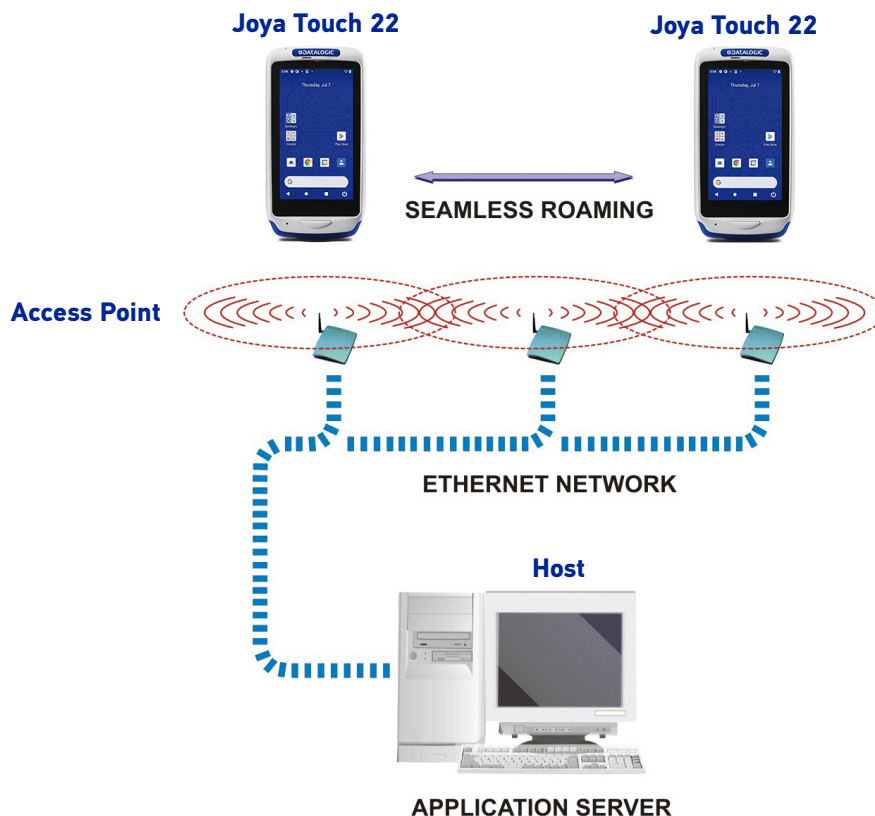


**NOTE: Connection through the cable complies to USB 2.0 standard.**

## WI-FI CONNECTION

The Joya Touch 22 has a IEEE 802.11 a/b/g/n/ac and 802.11 d/e/h/i/k/r/v/w/mc WLAN (Wireless Local Area Network) radio and can communicate with other IEEE 802.11 a/b/g/n/ac and 802.11 d/e/h/i/k/r/v/w/mc Wi-Fi compliant products including access points, workstations via PC card adapters and other wireless portable devices.

Datalogic WiFi Guard can be used to help diagnose Wi-Fi connection issues. See <https://datalogic.github.io/wifiguard/overview/>.



**NOTE:** Wi-Fi module is on by default, in order to avoid wasting energy, you can switch it off using the Wireless Communications applet.



**NOTE:** Area coverage and radio performance may vary, due to environmental conditions, access point types or interference caused by other devices (microwave ovens, radio transmitters, etc.).



## BLUETOOTH® SERIAL CONNECTION

The Joya Touch 22 can communicate with a Bluetooth® device, such as a printer, within a range of 10 m, using the on-board Bluetooth® module.



**NOTE:** In order to extend battery life, the Bluetooth® module is off by default. If you need to have Bluetooth® working, the module must be powered on.



**NOTE:** Area coverage and Bluetooth® radio performance may vary, due to environmental conditions or interference caused by other devices (microwave ovens, radio transmitters, etc.).

## WIRELESS AND RADIO FREQUENCIES WARNINGS



**WARNING:** Use only the supplied or an approved replacement antenna. Unauthorized antennas, modifications or attachments could damage the product and may violate laws and regulations.

Most modern electronic equipment is shielded from RF signals. However, certain electronic equipment may not be shielded against the RF signals generated by JOYA TOUCH 22.

Datalogic recommends persons with pacemakers or other medical devices to follow the same recommendations provided by Health Industry Manufacturers Associations for mobile phones.

**Persons with pacemakers:**

- Should **ALWAYS** keep this device more than twenty five (25) cm from their pacemaker and/or any other medical device;
- Should not carry this device in a breast pocket;
- Should keep the device at the opposite side of the pacemaker and/or any other medical device;
- Should turn this device **OFF** or move it immediately **AWAY** if there is any reason to suspect that interference is taking place.
- Should **ALWAYS** read pacemaker or any other medical device guides or should consult the manufacturer of the medical device to determine if it is adequately shielded from external RF energy.

In case of doubt concerning the use of wireless devices with an implanted medical device, contact your doctor.

Turn this device **OFF** in health care facilities when any regulations posted in these areas instruct you to do so. Hospitals or health care facilities may use equipment that could be sensitive to external RF energy.

RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles. Check with the manufacturer or its representative regarding your vehicle. You should also consult the manufacturer of any equipment that has been added to your vehicle.

An air bag inflates with great force. **DO NOT** place objects, including either installed or portable wireless equipment, in the area over the air bag or in the air bag deployment area. If a vehicle's wireless equipment is improperly installed and the air bag inflates, serious injury could result.

Turn off the device when in any area with a potentially explosive atmosphere. Observe restrictions and follow closely any laws, regulations, warnings and best practices on the use of radio equipment near fuel storage areas or fuel distribution areas, chemical plants or where any operation involves use of explosive materials.

Do not store or carry flammable liquids, explosive gases or materials with the device or its parts or accessories.

Areas with a potentially explosive atmosphere are often, but not always, clearly marked or shown.

Sparks in such areas could cause an explosion or fire, resulting in injury or even death.

# TECHNICAL FEATURES

## TECHNICAL DATA




ITEM	DESCRIPTION
<b>PHYSICAL CHARACTERISTICS</b>	
<b>Color Customization</b>	Top case and battery cover (both handheld and pistolgrip models) and Scan Trigger (pistol-grip models) are available in various standard or custom colors
<b>Colors (Standard)</b>	Enclosures: Light Grey; Dark Grey and Black; Battery Covers: Blue; Red; Green; Orange; Yellow; Light Grey and Black
<b>Display</b>	4.3 inch full touch TFT-LCD color display; FWVGA: 854 x 480 pixels; 16M colors, LED backlight
<b>Touch Screen</b>	Capacitive, multi-touch, Gorilla® Glass 3 with air gap
<b>Physical Keys</b>	Handheld: Home/scan fully programmable key Pistol-Grip: Home/scan fully programmable key; Scan Trigger key
<b>Lighting</b>	Software programmable, lights at the bottom of the battery cover
<b>Dimensions</b>	Handheld: 14.5 x 7.7 x 3.4 cm / 5.7 x 3.0 x 1.3 in Pistol-Grip: 14.5 x 7.7 x 11.6 cm / 5.7 x 3.0 x 4.5 in
<b>Weight</b>	Handheld: 285 g / 10.1 oz; Pistol-Grip: 317 g / 11.2 oz
<b>ELECTRICAL</b>	
<b>Battery</b>	Replaceable battery pack with rechargeable Li-Ion batteries; 3.7 V; 3300 mAh, 3.6V, 12 Watt-hours
<b>Wireless Charging</b>	Two charging options: Fast charging or Standard charging
<b>SENSORS</b>	
<b>6-Axis Sensor</b>	Accelerometer and gyroscope
<b>Auto Scan ToF</b>	Automatic scanning feature 'Presentation mode'
<b>INTERFACES</b>	
<b>Interfaces</b>	USB-C: High Speed USB 2.0 Host and Client
<b>USER INTERFACES</b>	
<b>SoftSpot Technology</b>	Virtual trigger/scan key
<b>Triggers</b>	Pistol-grip (pistol variant only); motion trigger
<b>Vibration</b>	Software programmable






ITEM	DESCRIPTION
<b>ENVIRONMENTAL</b>	
<b>Drop Resistance</b>	Withstands repeated drops from 1.2 m / 4.0 ft onto steel or concrete according to IEC 60068-2-32 method 1
<b>Temperature</b>	Operating: -10 to 50 °C / 14 to 122 °F
<b>Tumbles Specification</b>	1,000 0.5 m / 1.64 ft tumbles at room temperature according to IEC 60068-2-232 method 2
<b>SYSTEM</b>	
<b>Memory</b>	System RAM: 4 GB; System Flash: 32 GB
<b>CPU</b>	Qualcomm® SDA660 System-on-Chip 2.2 GHz
<b>Operating System</b>	Android 11 (Upgradeable to Android 13)
<b>SOFTWARE</b>	
<b>Applications</b>	Datalogic launcher as lockdown solution; Datalogic Enterprise Browser as lockdown browser supporting Javascript SDK; Others: Datalogic's SoftSpot soft Trigger; WiFi Guard; Datalogic Logger
<b>Provisioning</b>	Scan2Deploy Studio; Android Zero-Touch; QR Code Enrollment
<b>Configuration and Maintenance</b>	Scan2Deploy Studio; OEM Config; ProfileManager; Wi-Fi QR Code Generator
<b>Development</b>	Datalogic Android SDK; Xamarin SDK; Ionic Cordova SDK; React Native SDK; Datalogic Enterprise Browser Javascript SDK
<b>MDM</b>	Soti MobiControl; VMWare Airwatch; Ivanti Avalanche; 42Gears SureMDM; Microsoft Intune
<b>DECODING CAPABILITY</b>	
<b>1D/Linear Codes</b>	Auto discriminates all standard 1D codes including GS1 DataBar™ linear codes.
<b>2D Codes</b>	Aztec Code; China Han Xin Code; Data Matrix; MaxiCode; Micro QR Code; QR Code; Dot Code
<b>Postal Codes</b>	Australia Post, Japan Post, Post NL Kix Code, UK Royal Mail, USPS Intelligent Mail, USPS Planet, USPS PostNet
<b>Stacked Codes</b>	UPC Composite; GS1 Composite; GS1 DataBar Expanded Stacked; GS1 DataBar Stacked; GS1 DataBar Stacked Omnidirectional; MacroPDF; MicroPDF417; PDF417
<b>Digital Watermark Codes</b>	Digimarc Barcode (Red LED illumination model)
<b>OCR</b>	Supported font: OCR-A, OCR-B (natively supported ID Card and Passport), MICR
<b>WIRELESS COMMUNICATIONS</b>	
<b>Local Area Network (LAN)</b>	IEEE 802.11 a/b/g/n/ac and 802.11 d/e/h/i/k/r/v/w/mc (for indoor localization); IPv4, IPv6 2x2 MU-MIMO for higher throughput and coverage Frequency range: country dependent, typically 2.4 GHz and 5 GHz bands Security standards: WPA/WPA2/WPA3 Personal and Enterprise 802.1x EAP: PEAP/MSCHAPv2, PEAP/GTC, TLS, TTLS/PAP, TTLS/MSCHAP, TTLS/MSCHAPv2, TTLS/GTC, PWD, TLS (WPA3 SuiteB/192-bit)
<b>Personal Area Network (PAN)</b>	Class 2, Bluetooth V5.1, with BR/EDR and Bluetooth Low Energy (BLE)
<b>NFC Communication</b>	NFC communication between device and cradle

ITEM	DESCRIPTION
<b>READING PERFORMANCE</b>	
<b>Imager Sensor</b>	Imager Sensor
<b>Print Contrast (Minimum)</b>	25%
<b>Field of View</b>	42°H x 32°V
<b>Depth of Field</b>	4.5 to 42.0 cm / 1.7 to 16.5 in on UPC/EAN 13
<b>Resolution (Maximum)</b>	1D Linear: 2.5 mils; Data Matrix: 6 mils; PDF417: 3 mils
<b>Reading Indicators</b>	Loudspeaker (Polyphonic); Datalogic's 'Green Spot' technology for visual good-read feedback
<b>SAFETY &amp; REGULATORY</b>	
<b>Agency Approvals</b>	The product meets necessary safety and regulatory approvals for its intended use.
<b>Environmental Compliance</b>	Complies to EU RoHS
<b>WARRANTY</b>	
<b>Warranty</b>	1-Year Factory Warranty

# TEST CODES



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High Density Codes - 0.25 mm (10 mils)
<p>Code 39</p>  <p>17162</p>
<p>Interleaved 2/5</p>  <p>0123456784</p>
<p>Code 128</p>  <p>test</p>
<p>80%</p> <p>EAN 13</p>  <p>8 012345 000012</p>
<p>80%</p> <p>EAN 8</p>  <p>6450 9723</p>

Medium Density Codes - 0.38 mm (15 mils)
<p>Code 39</p>  <p>17162</p>
<p>Interleaved 2/5</p>  <p>0123456784</p>
<p>Code 128</p>  <p>test</p>
<p>100%</p> <p>EAN 13</p>  <p>8 012345 000012</p>
<p>100%</p> <p>EAN 8</p>  <p>6450 9723</p>

Low Density Codes - 0.50 mm (20 mils)
<p>Code 39</p>  <p>17162</p>
<p>Interleaved 2/5</p>  <p>0123456784</p>
<p>Code 128</p>  <p>test</p>
<p>120%</p> <p>EAN 13</p>  <p>8 012345 000012</p>
<p>120%</p> <p>EAN 8</p>  <p>6450 9723</p>



2D Codes
<p data-bbox="724 237 948 264">Datamatrix ECC200</p>  <p data-bbox="788 405 884 432">Example</p>
<p data-bbox="679 463 992 490">Inverse Datamatrix ECC200</p>  <p data-bbox="788 689 884 716">Example</p>

# MAINTENANCE

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**CAUTION: Do not apply any sticker to the Joya Touch 22 (see the picture below).**



## CLEANING

Periodically clean the Joya Touch 22 device, the Joya Touch Single Slot Docking and the Joya Touch 3-Slot Cradle using a soft cloth slightly dampened with only water, or alternatively with Isopropyl Alcohol (70%), Bleach (diluted 10:1) or Hydrogen Peroxide (stabilized, 3%).

Please note that both Bleach and Hydrogen Peroxide may damage your device if you don't use the correct dilution.

Do not use any other cleaning agents (e.g. different alcohol, abrasive or corrosive products, solvents) or abrasive pads to clean the device.

Do not spray or pour liquids directly onto the device.

The device is not water resistant. Keep it dry.

## ERGONOMIC RECOMMENDATIONS



**CAUTION: In order to avoid or minimize the potential risk of ergonomic injury follow the recommendations below. Consult with your local Health & Safety Manager to ensure that you are adhering to your company's safety programs to prevent employee injury.**

- Reduce or eliminate repetitive motion
- Maintain a natural position
- Reduce or eliminate excessive force
- Keep objects that are used frequently within easy reach
- Perform tasks at correct heights
- Reduce or eliminate vibration
- Reduce or eliminate direct pressure
- Provide adjustable workstations
- Provide adequate clearance
- Provide a suitable working environment
- Improve work procedures.

# SAFETY AND REGULATORY INFORMATION

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**NOTE:** Read this manual carefully before performing any type of connection to the Joya Touch 22.

The user is responsible for any damage caused by incorrect use of the equipment or by inobservance of the indication supplied in the user manual.

## GENERAL SAFETY RULES

- Before using the device and the battery pack, read carefully the chapter [Charging Instructions](#).
- Use only the components and accessories supplied by the manufacturer for the specific Joya Touch 22 being used.
- Do not attempt to disassemble the Joya Touch 22 device, as it does not contain parts that can be repaired by the user. Any tampering will invalidate the warranty.
- When replacing the battery pack or at the end of the operative life of the Joya Touch 22 device, disposal must be performed in compliance with the laws in force in your jurisdiction.
- Do not submerge the Joya Touch 22 in liquid products.
- For further information or support, refer to this manual and to the Datalogic web site: [www.datalogic.com](http://www.datalogic.com).




**NOTE:** See the [Safety & Regulatory Addendum](#) included with your product for additional regulatory, safety and legal information.

# TECHNICAL SUPPORT

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## SUPPORT THROUGH THE WEBSITE

Datalogic provides several services as well as technical support through its website. Log on to ([www.datalogic.com](http://www.datalogic.com)).

For quick access, from the home page click on the search icon , and type in the name of the product you're looking for. This allows you access to download Data Sheets, Manuals, Software & Utilities, and Drawings.

Hover over the Support & Service menu for access to Services and Technical Support.

## Reseller Technical Support

An excellent source for technical assistance and information is an authorized Datalogic reseller. A reseller is acquainted with specific types of businesses, application software, and computer systems and can provide individualized assistance.

## REFERENCE DOCUMENTATION

For further information regarding Joya Touch 22 refer to the SDK Help on-line and to the Joya Touch 22 User's Manual, downloadable from our developer portal: <https://developer.datalogic.com/mobile-computers>.

## WARRANTY TERMS AND CONDITIONS

Datalogic warrants that the Products shall be free from defects in materials and workmanship under normal and proper use during the Warranty Period. Products are sold on the basis of specifications applicable at the time of manufacture and Datalogic has no obligation to modify or update Products once sold. The Warranty Period shall be **one year** from the date of shipment by Datalogic, unless otherwise agreed in an applicable writing by Datalogic.

Datalogic will not be liable under the warranty if the Product has been exposed or subjected to any: (1) maintenance, repair, installation, handling, packaging, transportation, storage, operation or use that is improper or otherwise not in compliance with Datalogic's instruction; (2) Product alteration, modification or repair by anyone other than Datalogic or those specifically authorized by Datalogic; (3) accident, contamination, foreign object damage, abuse, neglect or negligence after shipment to Buyer; (4) damage caused by failure of a Datalogic-supplied product not under warranty or by any hardware or software not supplied by Datalogic; (5) any device on which the warranty void seal has been altered, tampered with, or is missing; (6) any defect or damage caused by natural or man-made disaster such as but not limited to fire, water damage, floods, other natural disasters, vandalism or abusive events that would cause internal and external component damage or destruction of the whole unit, consumable items; (7) use of counterfeit or replacement parts that are neither manufactured nor approved by Datalogic for use in Datalogic-manufactured Products; (8) any damage or malfunctioning caused by non-restoring action as for example firmware or software upgrades, software or hardware reconfigurations etc.; (9) loss of data; (10) any consumable or equivalent (e.g. cables, power

supply, batteries, etc.); or (11) any device on which the serial number is missing or not recognizable.

THE DATALOGIC WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER WRITTEN, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE. DATALOGIC SHALL NOT BE LIABLE FOR ANY DAMAGES SUSTAINED BY BUYER ARISING FROM DELAYS IN THE REPLACEMENT OR REPAIR OF PRODUCTS UNDER THE ABOVE. THE REMEDY SET FORTH IN THE WARRANTY STATEMENT IS THE BUYER'S SOLE AND EXCLUSIVE REMEDY FOR WARRANTY CLAIMS. NO EXTENSION OF THIS WARRANTY WILL BE BINDING UPON DATALOGIC UNLESS SET FORTH IN WRITING AND SIGNED BY DATALOGIC'S AUTHORIZED REPRESENTATIVE. DATALOGIC'S LIABILITY FOR DAMAGES ON ACCOUNT OF A CLAIMED DEFECT IN ANY PRODUCT DELIVERED BY DATALOGIC SHALL IN NO EVENT EXCEED THE PURCHASE PRICE OF THE PRODUCT ON WHICH THE CLAIM IS BASED. DATALOGIC SHALL NOT BE LIABLE FOR DAMAGES RELATING TO ANY INSTRUMENT, EQUIPMENT, OR APPARATUS WITH WHICH THE PRODUCT SOLD UNDER THIS AGREEMENT IS USED. Further details on warranty coverage, rights and conditions are addressed under and regulated by the Terms and Conditions of Sales of Datalogic available at [https://www.datalogic.com/terms\\_conditions\\_sales](https://www.datalogic.com/terms_conditions_sales).

# GLOSSARY

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## Access Point

A device that provides transparent access between Ethernet wired networks and IEEE 802.11 interoperable radio-equipped mobile units. Hand-held mobile computers, PDAs or other devices equipped with radio cards, communicate with wired networks using Access Points (AP). The mobile unit (mobile computer) may roam among the APs in the same subnet while maintaining a continuous, seamless connection to the wired network.

## ASCII

American Standard Code for Information Interchange. A 7 bit-plus-parity code representing 128 letters, numerals, punctuation marks and control characters. It is a standard data transmission code in the U.S.

## Barcode

A pattern of variable-width bars and spaces which represents numeric or alphanumeric data in binary form. The general format of a barcode symbol consists of a leading margin, start character, data or message character, check character (if any), stop character, and trailing margin. Within this framework, each recognizable symbology uses its own unique format.

## Bit

Binary digit. One bit is the basic unit of binary information. Generally, eight consecutive bits compose one byte of data. The pattern of 0 and 1 values within the byte determines its meaning.

## Bluetooth®

A standard radio technology using a proprietary protocol. The onboard Bluetooth® module in the device is compatible with the 2.1 protocol with Enhanced Data Rate (EDR).

## Boot

The process a computer goes through when it starts. During boot, the computer can run self-diagnostic tests and configure hardware and software.

## Byte

On an addressable boundary, eight adjacent binary digits (0 and 1) combined in a pattern to represent a specific character or numeric value. Bits are numbered from the right, 0 through 7, with bit 0 the low-order bit. One byte in memory can be used to store one ASCII character.

### Character

A pattern of bars and spaces which either directly represents data or indicates a control function, such as a number, letter, punctuation mark, or communications control contained in a message.

### Decode

To recognize a barcode symbology (e.g., Codabar, Code 128, Code 3 of 9, UPC/EAN, etc.) and convert the content of the barcode scanned from a visual pattern into electronic data.

### Density (Barcode Density)

The number of characters represented per unit of measurement (e.g., characters per inch).

### Depth of Field (DOF)

The portion of a scene that appears acceptably sharp in the image. Although a lens can precisely focus at only one distance, the decrease in sharpness is gradual on each side of the focused distance, so that within the DOF, the unsharpness is imperceptible under normal viewing conditions.

### Dock

A dock is used for charging the terminal battery and for communicating with a host computer, and provides a storage place for the terminal when not in use.

### Firmware

A software program or set of instructions programmed on a hardware device. It provides the necessary instructions for how the device communicates with the other computer hardware. Firmware is typically stored in the flash ROM of a hardware device. While ROM is "read-only memory," flash ROM can be erased and rewritten because it is actually a type of flash memory.

### Flash Memory

Non-volatile memory for storing application and configuration files.

### Host

A computer that serves other mobile computers in a network, providing services such as network control, database access, special programs, supervisory programs, or programming languages.

### IEC

International Electrotechnical Commission. This international agency regulates laser safety by specifying various laser operation classes based on power output during operation.

### IEEE 802.11

A set of standards carrying out wireless local area network (WLAN) computer communication in the 2.4, 3.6 and 5 GHz frequency bands. They are created and maintained by the IEEE LAN/MAN Standards Committee.

### LAN

Local area network. A radio network that supports data communication within a local area, such as within a warehouse or building.

**Laser**

Light Amplification by Stimulated Emission of Radiation. The laser is an intense light source. Light from a laser is all the same frequency, unlike the output of an incandescent bulb. Laser light is typically coherent and has a high energy density.

**Light Emitting Diode (LED)**

A low power electronic light source commonly used as an indicator light. It uses less power than an incandescent light bulb but more than a Liquid Crystal Display (LCD).

**Liquid Crystal Display (LCD)**

A display that uses liquid crystal sealed between two glass plates. The crystals are excited by precise electrical charges, causing them to reflect light outside according to their bias. They use little electricity and react relatively quickly. They require external light to reflect their information to the user.

**MIL**

1 mil = 1 thousandth of an inch.

**Near-Field Communication (NFC)**

A form of contactless communication two electronic devices over a distance of 4 cm (1 1/2 in) or less. Contactless communication allows a user to wave a device over a NFC compatible device to send information without needing to touch the devices together or go through multiple steps setting up a connection.

**Pairing**

A Bluetooth@ pairing occurs when two Bluetooth@ devices agree to communicate with each other and establish a connection.

**Parameter**

A variable that can have different values assigned to it.

**RAM**

Random Access memory. Data in RAM can be accessed in random order, and quickly written and read.

**Resolution**

The narrowest element dimension which is distinguished by a particular reading device or printed with a particular device or method.

**RF**

Radio Frequency.

**Scanner**

An electronic device used to scan bar code symbols and produce a digitized pattern that corresponds to the bars and spaces of the symbol. Its three main components are:

- Light source (laser or photoelectric cell) - illuminates a bar code.
- Photodetector - registers the difference in reflected light (more light reflected from spaces).
- Signal conditioning circuit - transforms optical detector output into a digitized bar pattern.

**SDK**

Software Development Kit.



## Symbol

A scannable unit that encodes data within the conventions of a certain symbology, usually including start/stop characters, quiet zones, data characters and check characters.

## Symbology

The structural rules and conventions for representing data within a particular bar code type (e.g. UPC/EAN, Code 39, PDF417, etc.).

## USB

Universal Serial Bus. Type of serial bus that allows peripheral devices (disks, modems, printers, digitizers, data gloves, etc.) to be easily connected to a computer. A "plug-and-play" interface, it allows a device to be added without an adapter card and without rebooting the computer (the latter is known as hot-plugging).

## WLAN

A Wireless Local Area Network links devices via a wireless distribution method (typically spread-spectrum or OFDM radio), and usually provides a connection through an access point to the wider internet. This gives users the mobility to move around within a local coverage area and still be connected to the network.

## WPAN

A Wireless Personal Area Network is a personal area network - a network for interconnecting devices centered around an individual person's workspace - in which the connections are wireless. Typically, a wireless personal area network uses some technology that permits communication within about 10 meters - in other words, a very short range.



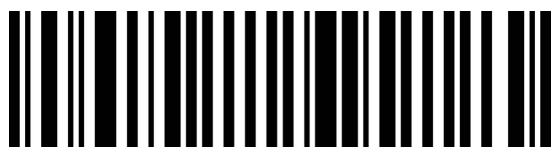


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**Datalogic S.r.l.**

Via S. Vitalino, 13 | 40012 Calderara di Reno | Bologna - Italy  
Tel. +39 051 3147011 | Fax +39 051 3147205



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