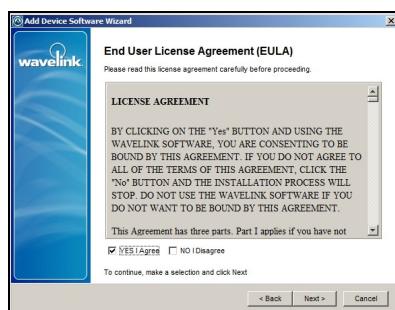
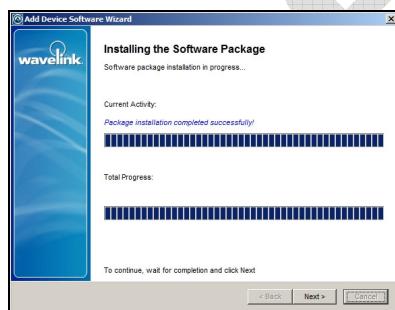


## DATALOGIC JOYA™ X2

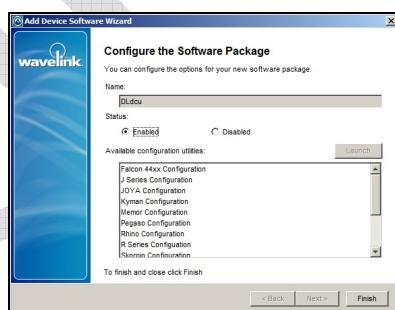
3



Acknowledge the license request



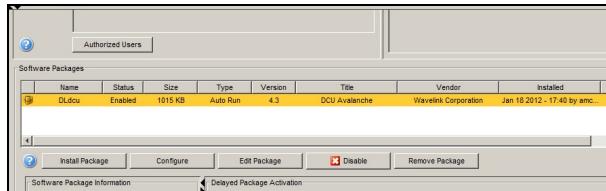
Wait for the installation end.



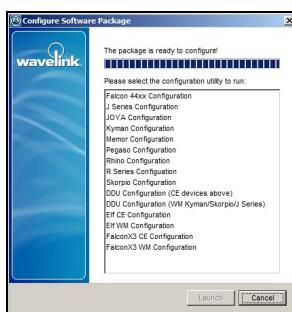
Select Finish.

## USE AND FUNCTIONING

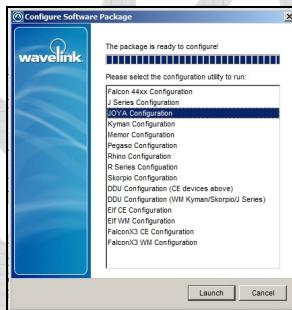
3



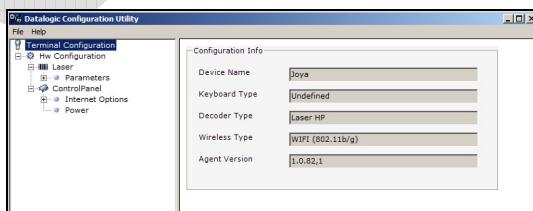
Select the DLdcu package



Click on *Configure*



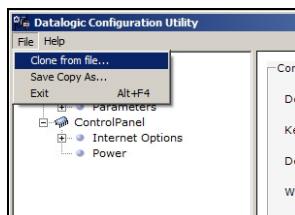
Select *JOYA Configuration* then click on the *Launch* button



DLdcu application will start.

3

## DATALOGIC JOYA™ X2



From the *File* menu select *Clone from file...*, browse up to the previously created JOYAa.cfg file (see Datalogic Configuration Utility chapter). Close the application.



Confirm the pop-up request by clicking on the *Yes* button.

This procedure is required to create a JOYA™ X2 profile in the DLdcu.AVA package. The existing JOYA profile refers to an incompatible device.

## 3.5 AVALANCHE PACKAGE BUILDER

### 3.5.1 Wavelink software package

A software package is a collection of application files that reside on a mobile device. This includes any support utilities used to configure or manage the application from the Avalanche Console. A software package includes the following components

- **Primary application files.** These files include application, configuration, and support software intended to run on a JOYA™ X2 device.
- **Plug-in management tools.** These include configuration utilities that allow Management Console operators to easily configure and manage the software package.
- **Package control file.** This file contains a master description of the package, including the package title, revision code, "selection criteria" that determines which device types can receive the package, and other information. The selection criteria can encompass many mobile device characteristics, not only JOYA™ X2 including mobile device models, physical characteristics, IP and/or MAC addresses, etc.

Additionally, Version 3 packages may contain the following components:

- **Retrievable Files.** These are files you want to retrieve from the JOYA™ X2 and copy to the Avalanche Agent. Retrievable files are supported in the 3x Enabler.
- **Post Install File.** This feature allows you to create script files using the Package Builder.
- **Uninstall Command.** This is an executable that may be added to perform specific uninstall instructions, such as the removal of registry settings.
- **Custom EULA.** This feature allows you to include a customer user license agreement that must be made available as an HTML-formatted License.text file.

Software packages are divided into the following categories:

- **Control.** An internally used package specific to the Avalanche Console. A network profile is an example of a control package.
- **Application.** These packages install an application which can be run from the Application Menu screen on the mobile device. An example of an application package is the Telnet Client.
- **Support.** These packages deliver files and do not add new items to the Application Menu screen on the mobile device. An example of a support package is a package that updates an existing file.
- **Auto Run.** These packages automatically run after download but do not appear in the mobile device's application list. An Enabler Update Kit is an example of an auto run package

The Avalanche Package Builder is a specific tool that simplifies the package creation process. This utility performs several functions:

- It gives a visual method for creating and editing software packages. It simplifies the configuration of the package through a GUI-based interface.
- It creates a file structure to contain all application files, support files, and plugin configuration files that are required to run and maintain the application.
- GUI interface provides a window into the software package structure, showing attributes that can be set for each package element.
- It automatically generates the package control file.
- It places all package files into default or configured locations in the file structure.
- Once the software is packaged, it can easily be transferred or distributed.

Deep description of this tool is beyond the scope of this document; please refer to the documentation freely available in the Wavelink website.

### 3.6 DATALOGIC CONFIGURATION UTILITY

The Datalogic Configuration (DLdcu) is software running on PC that allows managing the JOYA™ X2 parameters by using the ActiveSync or Windows Mobile Device Center Connection and a physical USB link.

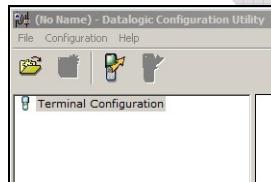
Full description of this tool is beyond the scope of this document; a detailed help is embedded in the program. Nevertheless a specific usage description, involving the Avalanche application, will follow; since it's not documented elsewhere.



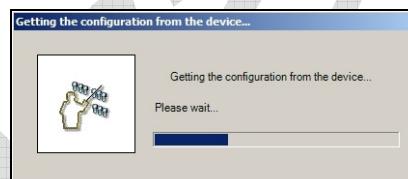
In order to use the DLdcu, your computer must have the Microsoft Active Sync or Windows Mobile Device Center installed.

### 3.6.1 Create JOYA™ X2 configuration profile

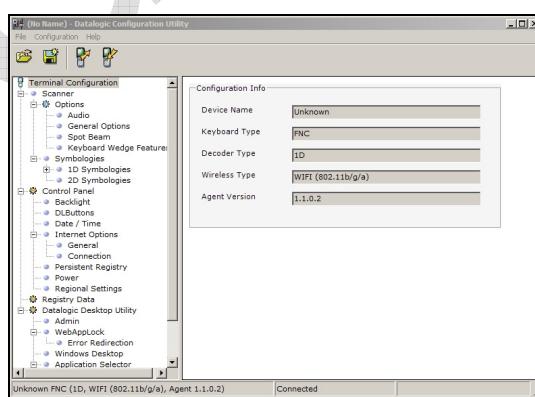
Install the DLdcu software package following the instruction provided by the DLdcu manual. Connect the JOYA™ X2 to the computer using the MicroUSB-USB cable, wait for the ActiveSync connection then start the DLdcu application.



The solid terminal icon indicates that the terminal is connected.



Click on the icon to get the configuration from device.



Once configuration is loaded it can be edited then reloaded to the device and/or saved.

Select *Save as* from the *File* menu, enter JOYA as filename; program will add automatically the CFG extension.

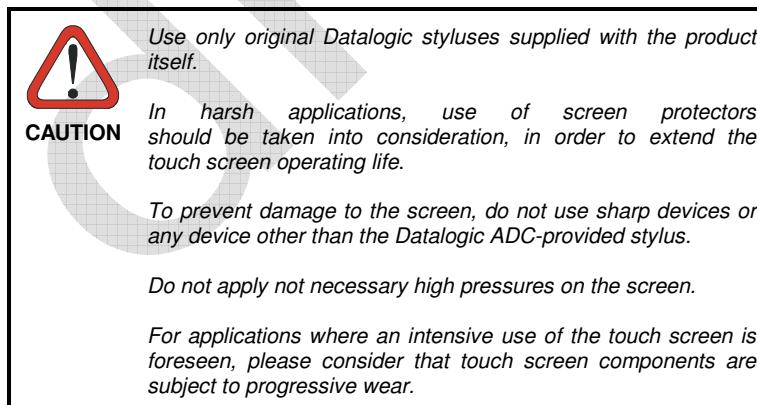
Use this file to modify the DLdcu.AVA package as stated above.

### 3.7 USING THE STYLUS (AVAILABLE ONLY ON JOYA™ X2 PLUS)

The stylus selects items and enters information. The stylus functions like a mouse.

<b>Double Tap:</b>	Touch the screen twice with the stylus to open items and select options.
<b>Drag:</b>	Hold the stylus on the screen and drag across the screen to select text and images. Drag in a list to select multiple items.
<b>Tap-and-hold:</b>	Tap and hold the 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.

To recalibrate the touch screen use the Stylus Applet, see Stylus Calibration paragraph.



### 3.8 DATA CAPTURE

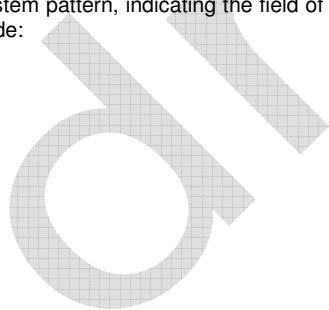
To capture data first of all select the Decoding icon on the Control Panel and open the applet.

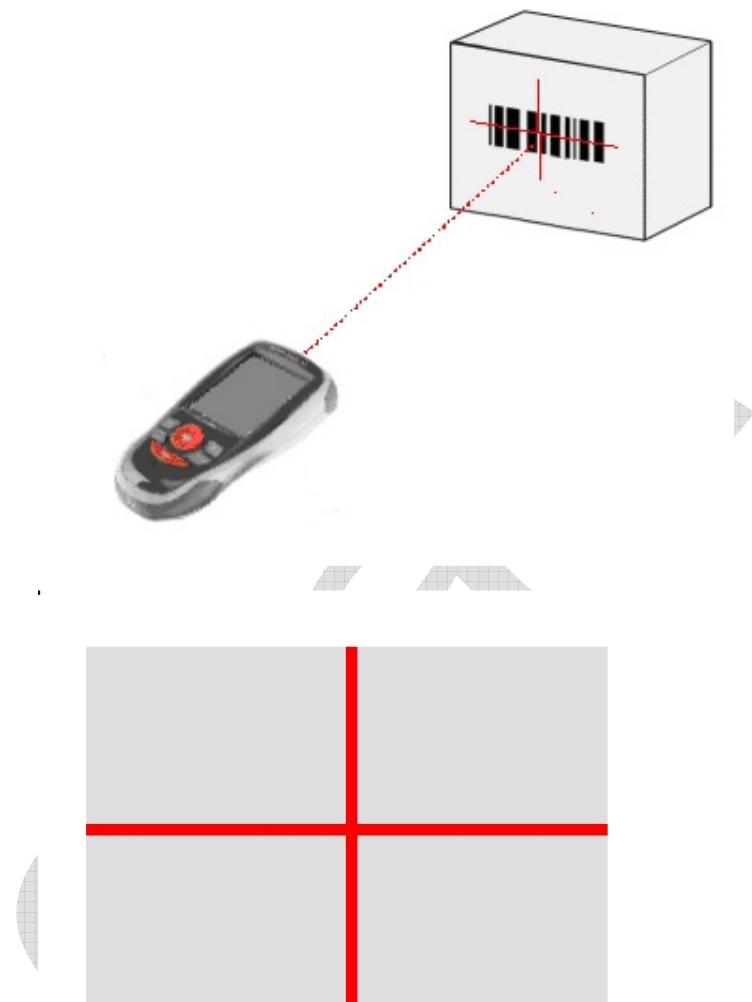


To configure and enable data capture parameters refer to par. 3.11.

### 3.8.1 Imager Data Capture

The device captures a picture of the entire bar code. The omnidirectional scanning does not require that the operator orient the bar code to align with the scan pattern. To read a 1D or 2D code, simply point the JOYA™ X2 onto the code and press the "Up" key. The JOYA™ X2 uses an intelligent aiming system pattern, indicating the field of view, which should be positioned over the code:



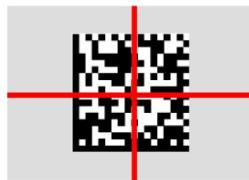


**Aiming System**

Linear barcode



2D Matrix symbol



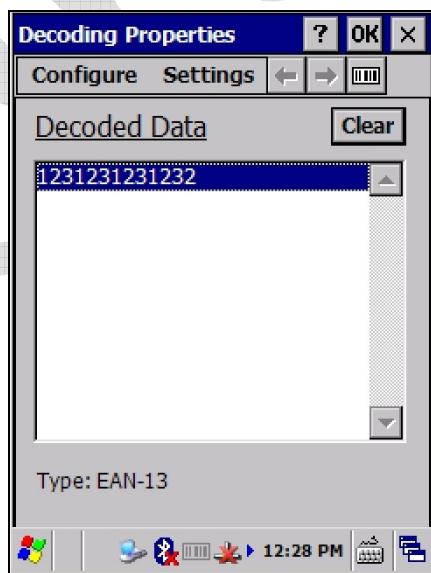
Relative Size and Location of Aiming System Pattern

The field of view changes its size as you move the reader closer or farther away from the code. The field of view indicated by the aiming system pattern will be smaller when the device is closer to the code and larger when it is farther from the code. Symbologies with smaller bars or elements (mil size) should be read closer to the unit. Symbologies with larger bars or elements (mil size) should be read farther from the unit. (See par. 5.1 for further details).

If the scan has taken place correctly:

- The Good Read LED glows steadily Green for a configurable time;
- If enabled, the Good Read Beep plays;
- If enabled, the GreenSpot projects a green spot onto the bar code image

Pop-up windows will report the data and the symbology of the scanned barcode (see: Configure/Decoding Options paragraph).



### 3.9 DESCRIPTION OF THE KEYS

The Datalogic JOYA™ X2 provides a 6-key keyboard. The following image shows this keyboard.



#### Main Keys Function

Key “+”: it corresponds to ArrowUp Key.

Key “-”: it corresponds to ArrowDown Key.

Key “Left”: it corresponds to F1 (Function1) Key.

Key “Right”: it corresponds to F2 (Function2) Key.

Key “=”: it corresponds to ESC Key.

Key “E”: it corresponds to ENTER Key.

### 3.9.1 Resetting the JOYA™ X2

There are three reset methods for the JOYA™ X2

A "warm boot" terminates an unresponsive application and clears the working RAM, but preserves both the file system and the registry.

A "cold boot" forces all applications to close and clears working RAM and files not resident on the persistent flash memory. Registry is restored from persistent memory if available or returned to factory default.

A "clean boot" restore the JOYA™ X2 to factory default.

#### WARM BOOT

A warm boot closes all applications, clears the working RAM, but preserves the file system and registry. If an application "hangs" initiate a warm boot to terminate the application.

To perform a warm boot, press these keys simultaneously for 5 seconds:

" + " & " - "

#### COLD BOOT

A cold boot is a complete reset of the JOYA™ X2 in which all applications are forcibly closed and RAM is completely cleared. Registry is restored from persistent memory if a saved copy is available (see 3.12.1) and RAM file system completely erased. You will lose any applications and data (registry too) which are not stored in persistent flash memory.

A cold boot is necessary when the Windows CE operating system locks up and the warm boot command does not work.

To perform a cold boot, lightly press with a metallic clip inside the circle hole on the back.

#### CLEAN BOOT

A clean boot is a complete restore to factory default and backup folder content erase of the JOYA™ X2. You will loose any applications and data (registry too).

To perform a clean boot first execute a cold boor while keeping pressed the keys:

" = " & " - "

A pop-up will ask you to confirm, do it by pressing:

" e "

An acknowledge pop-up and reboot will follow.



*Clean boot may require a considerable amount of time, even a few minutes.*

**CAUTION**

	<b>Warm Boot</b>	<b>Cold Boot</b>	<b>Clean Boot</b>
<b>REGISTRY</b>	Preserved	Restored from the latest persistent copy (from flash)	Reinitialized
<b>Flash Disk (Backup Folder)</b>	Preserved	Preserved	Cleared
<b>Object Store (RAM Disk)</b>	Preserved	Reinitialized, some persistent files could be restored (from flash)	Reinitialized
<b>Storage Card (IF PRESENT)</b>	Preserved	Preserved	Preserved



*Before performing a reset, it is recommended to:*

- Execute a system backup to keep your more important files and applications persistent.
- Save the registry to non-volatile memory to guarantee the persistence of the Windows configuration..

## 3.10 STATUS INDICATORS

### 3.10.1 Taskbar

The Taskbar provides information about the time, the battery level, the keyboard function, and the decoding status.



ICONS	DESCRIPTION
<b>Time and Battery Icons</b>	
	It displays the time.
	They are representative of different icons indicating the battery level. The icon is partially green when the power left is >20% and partially red colored when the power left is <20%.
	It indicates that the battery is charging.
<b>Radio Status Icons</b>	
	It indicates if the radio is connected or not with an Access Point.
<b>Network Status Icons</b>	
	It indicates that the terminal is connected or not connected to the server

Bluetooth Status Icon	
	It indicates the Bluetooth status: disabled, enabled not connected, enabled connected.
Scanner Icon	
	Give access to the scanner control tools.

### 3.11 DATA CAPTURE CONFIGURATION

Decoding can be accessed from the Control Panel.



There are two sections in the Decoding control panel, each containing additional pages. There are seven General Configuration pages and multiple 1D/2D Barcode symbology pages.

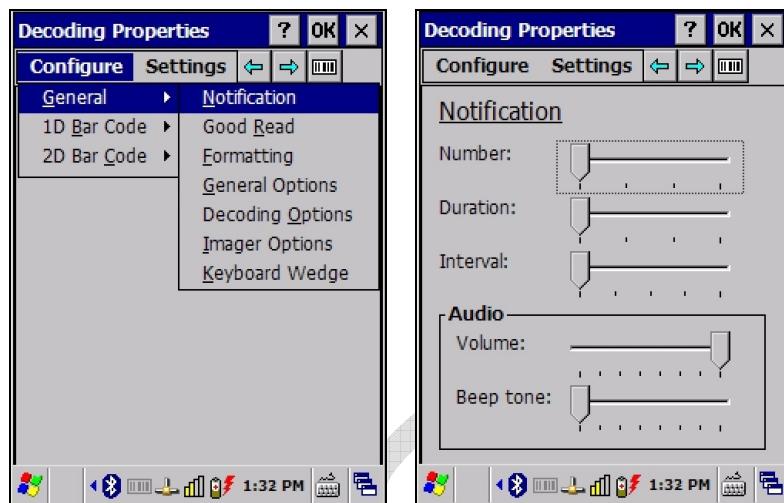
#### 3.11.1 Configure

Select the desired configuration from the options shown in the figure below, and the other Decoding Properties figures on the following pages.

Select General, 1D or 2D Bar Code, then use the menu or tap the left and right arrow keys to navigate the different pages of the Decoding utility. The menu options will change to reflect the items most recently selected.

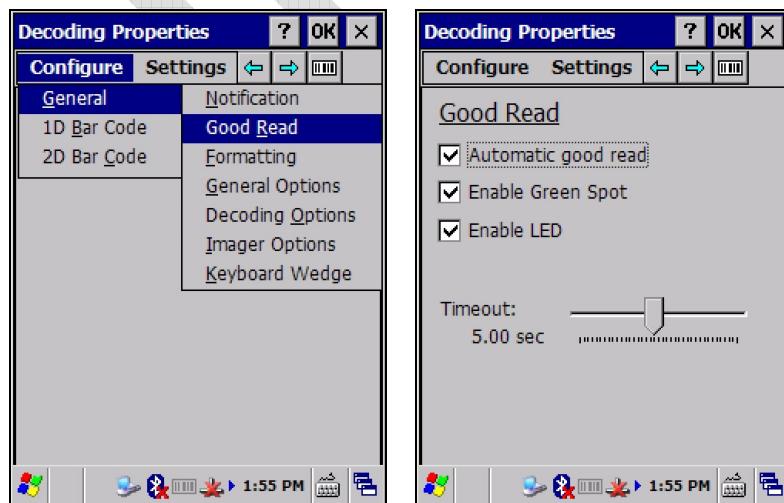
### NOTIFICATION

From the Decoding menu, tap Configure > General > Notification. Use to set volume, tone, duration, and number of various types of beeps.



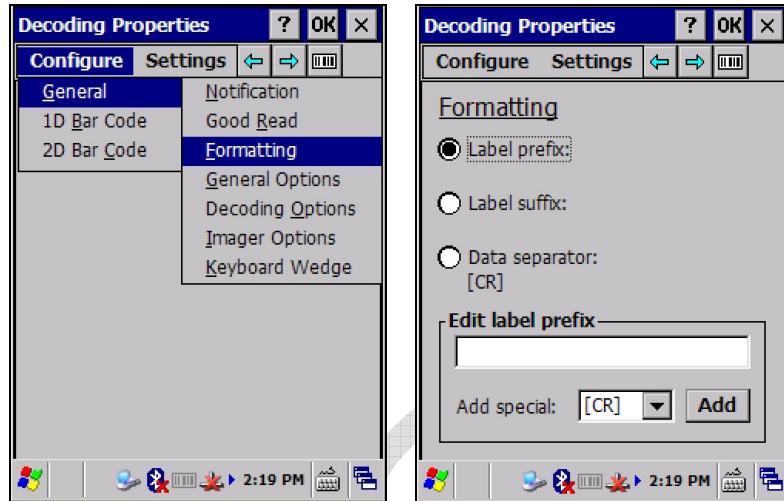
### GOOD READ

From the Decoding menu, tap Configure > General > Good Read. Select from Automatic good read, Enable Green Spot, enable LED and Timeout.



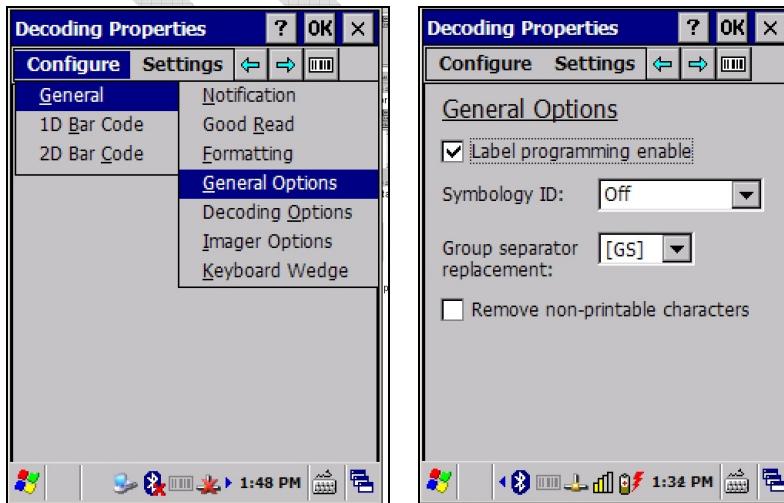
### FORMATTING

From the Decoding menu, tap Configure > General > Formatting. Select from Label Prefix, Suffix and data separator. In the Edit window enter the required value according to the previous choice.



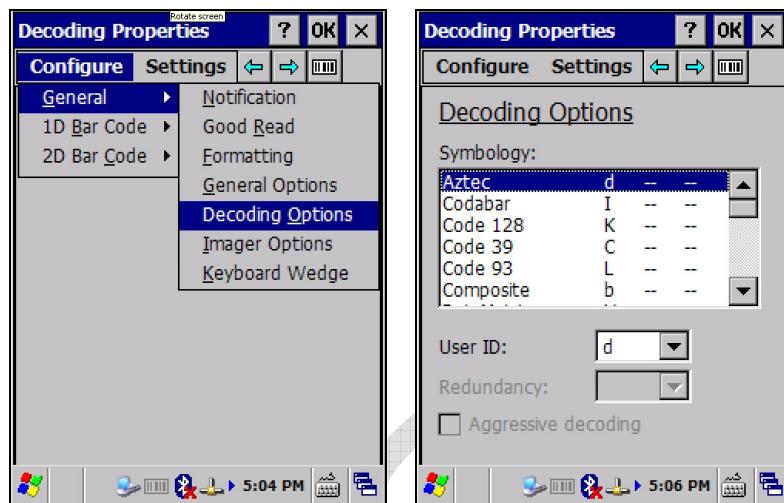
### GENERAL OPTIONS

From the Decoding menu, tap Configure > General > General Options. Select from Label Programming Enable, Symbology IDs, and Group Separator.



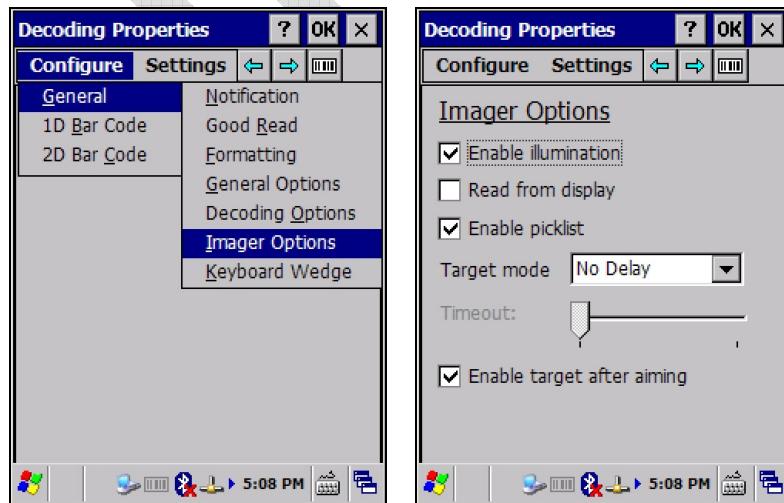
### DECODING OPTIONS

From the Decoding menu, tap Configure > General > Decoding Options. Use to customize identification of different barcode symbology.



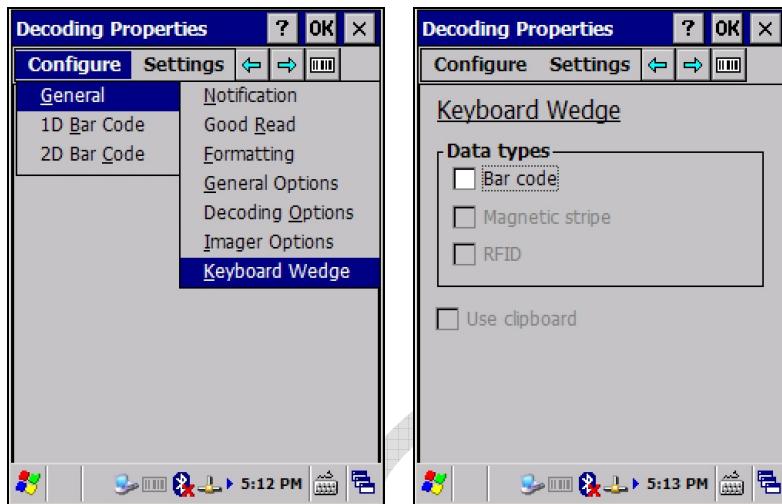
### IMAGER OPTIONS

From the Decoding menu, tap Configure > General > Imager Options. Modify the Imager related feature accordig to your needs.

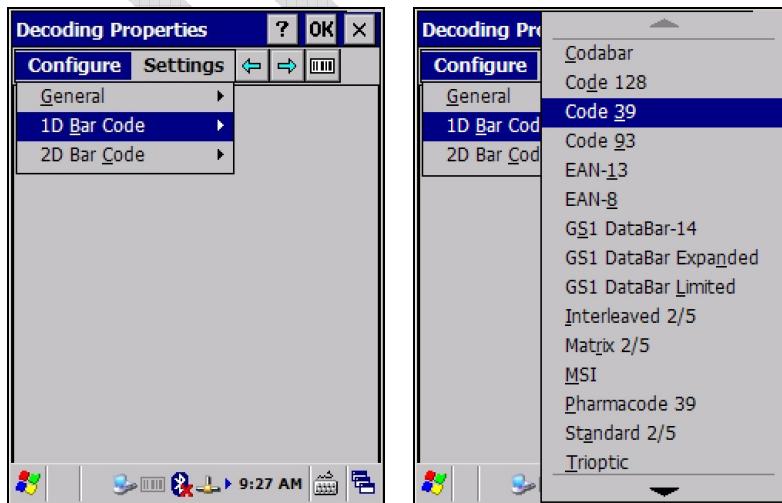


**KEYBOARD WEDGE**

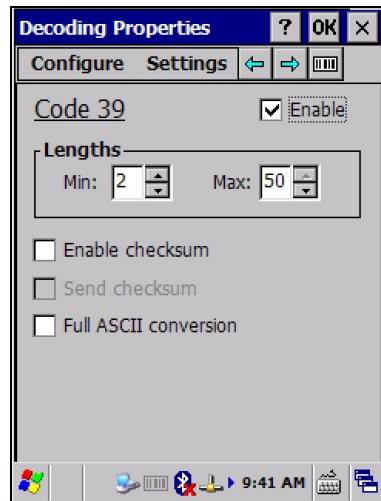
From the Decoding menu, tap Configure > General > Keyboard Wedge. Select Bar code to enable the wedge mode.

**1D BARCODE SYMOLOGY PAGES**

Use the drop-down menus from Configure > 1D Barcode, or tap the left and right arrow keys to navigate the different pages of the 1D barcode symbology pages.



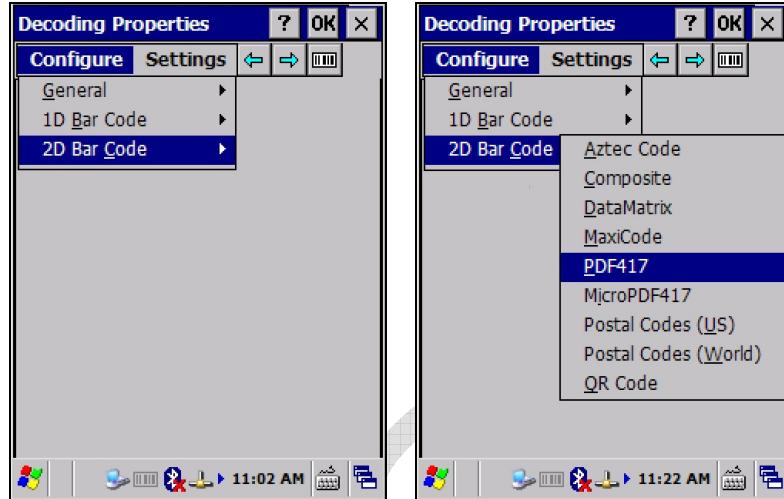
Each barcode symbology opens to its own page, as shown in the figure below. Refer to the sample symbology control panels for examples of the types of fields and options you can modify.



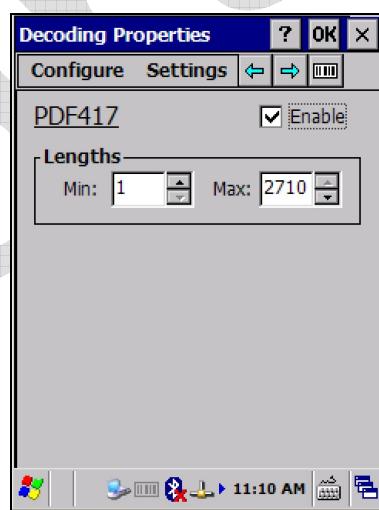
Example: Code 39: Enable, Min/Max Lengths = 2/50, not Enable Checksum, not Send Checksum, Full ASCII Conversion disabled.

**2D BARCODE SYMBOLOGY PAGES**

Use the drop-down menus from Configure > 2D Barcode, or tap the left and right arrow keys to navigate the different pages of the 2D barcode symbology pages.



Each barcode symbology opens to its own page, as shown in the figure below. Refer to the sample symbology control panels for examples of the types of fields and options you can modify.

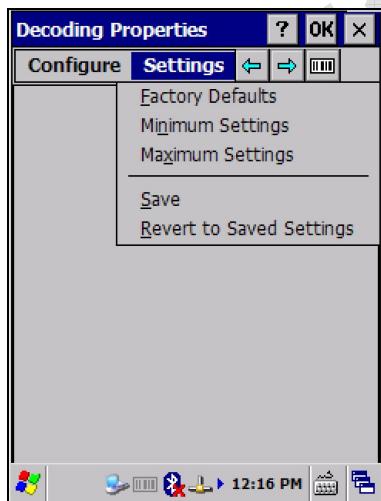


Example: PDF417: Enabled, Min/Max Lengths = 1/2710.

**DECODING SETTINGS**

Select from the Decoding Properties Settings menu to restore previous configurations and/or other available default settings. Choose from:

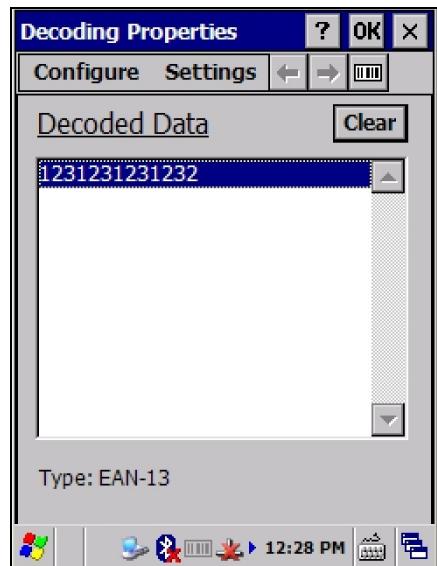
- Factory Defaults
- Minimum Settings
- Maximum Settings
- Save (New Settings)
- Revert to Saved Settings



The settings are saved when you tap OK.

**DECODED DATA**

Clicking on the barcode icon on the taskbar opens the decoded data applet.  
Press the "+" key and scan a code,

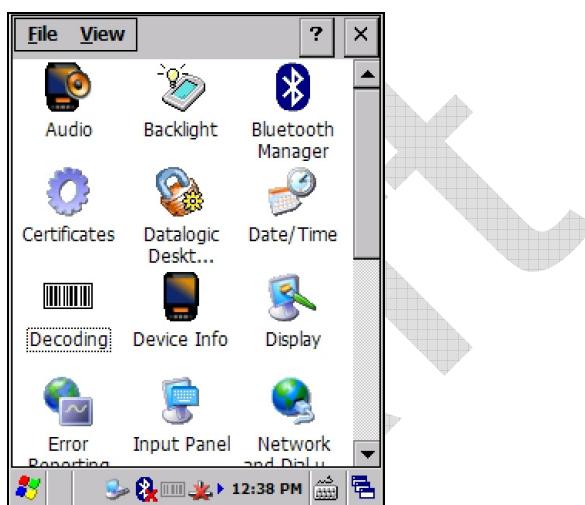


Data and barcode type will be displayed.

### 3.12 CONTROL PANEL

From the Desktop, double tap on the "My Device" icon and then double tap on the "Control Panel" icon to open the control panel main window. The Control Panel can also be launched from Start ->Settings ->Control Panel.

Applet programs are displayed as icons; one icon corresponds to each applet.



#### 3.12.1 Registry

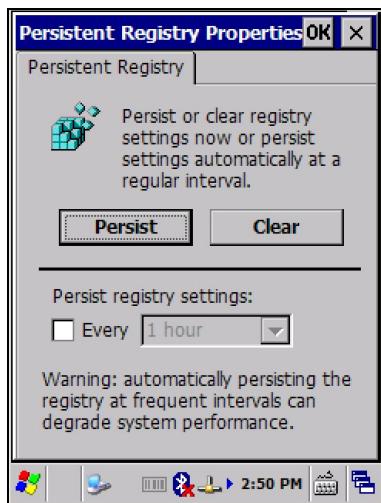
The PERSISTENT REGISTRY applet provides management of Windows CE 6.0 registry.

Select the PERSISTENT REGISTRY applet by double tapping the Persistent Registry icon.

The Persistent Registry Main window appears. Two functions are available:

- PERSIST allows permanently saving the Windows configuration (example: custom configuration of screen desktop background color, or network adapter configuration) to non-volatile memory.
- CLEAR allows restoring the initial factory default configuration. After restoring the factory default configuration, you must perform a warm boot.

Saving the registry to non-volatile memory guarantees the persistence of the Windows configuration in case of battery pack replacement and in case of a Cold Boot.



### 3.12.2 Using Summit Radio Card Utility

The JOYA Summit WiFi card provides a useful client utility suitable for radio configuration and site survey purposes.

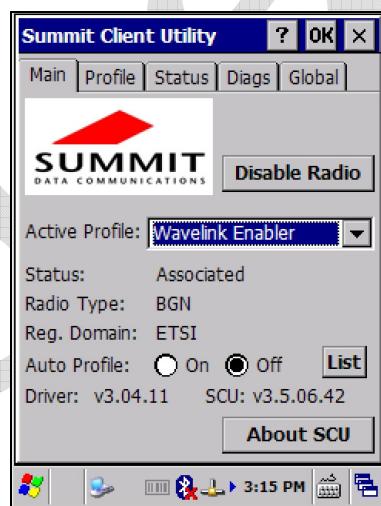
#### 3.12.3 Summit Radio Card : Starting client

The client can be started from the Windows CE desktop by clicking the related icon on the tool bar at the bottom, or selecting the Summit Client Utility icon on the desktop:



### 3.12.4 Summit Radio Card : Main screen

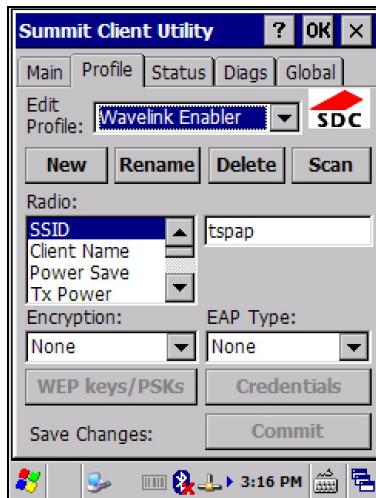
The following picture shows the screen when Summit Client is started



The *Active Profile* window displays the current profile and lets user to change it. The *Disable Radio* button turns off the radio card; after deactivation the same button changes to *Enable Radio* so the radio can be reactivated.  
To close the application, press the close button at upper-right corner of window.

### 3.12.5 Summit Radio Card : Profile screen

Radio card is managed through radio profiles.



User can rename, delete, create and save any changes by the *Rename*, *Delete*, *New* and *Commit* buttons.

The name chosen for the profile is also his identifier. Profile is defined by a set of parameter that user can customize. The following is a simple profile for testing.

Field	Value
SSID	tsunami
Client Name	Z14P00068 (the JOYA™ X2 S/N)
Power Save	Fast
Tx Power	Maximum
Bit Rate	Auto
Radio Mode	BGN rates Only
Auth Type	Open
EAP Type	None
Encryption	None

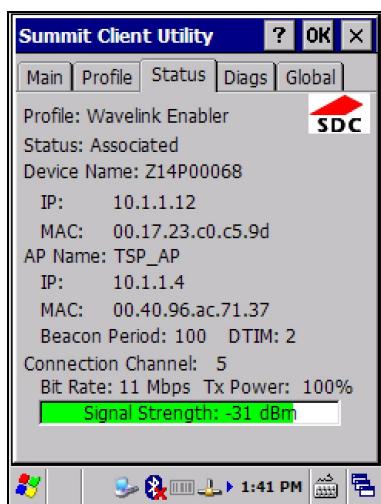
Once a new profile is created, remember to enable it from the Main windows.

### 3.12.6 Summit Radio Card : Status screen

This screen shows the radio status related to the profile currently used.

DATALOGIC JOYA™ X2

3

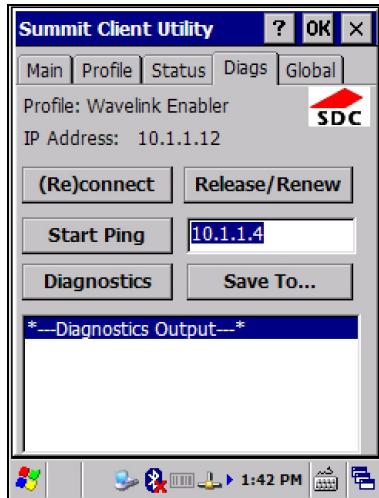


User can read current profile name, client device name, IP address and MAC address. The Access Point to which the terminal is currently associated is specified by name, IP address and MAC address.

User can also read the signal strength (dBm), the transmission power percentage, the WiFi channel, the rate (Mbps).

### 3.12.7 Summit Radio Card : Diagnostic screen

This screen allows user to interact with radio card to perform simple and useful functionalities.

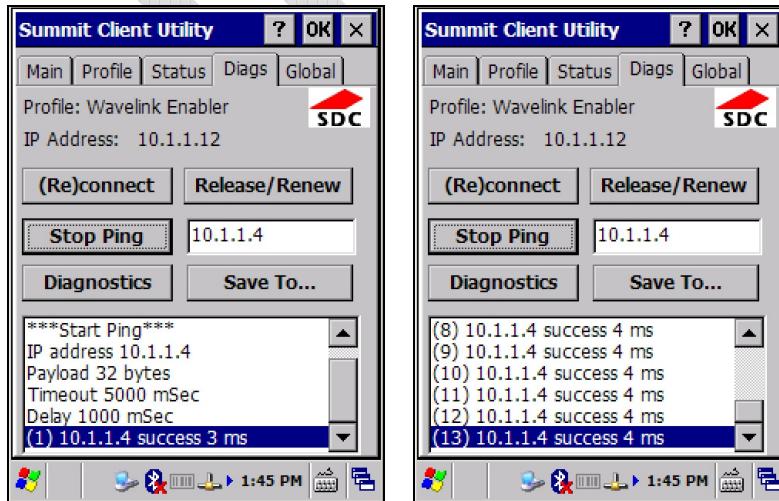


The *(Re)connect* button disables and re-connects radio card.

The *Release/Renew* button releases and renews the radio interface IP address.

In order to test the radio link, user can ping the associated access point by pressing the *Start Ping* button.

The ping output is displayed on the large text windows

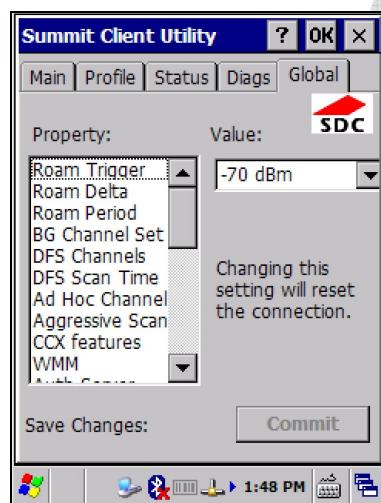


The *Diagnostic* button displays the radio configuration and dumps available profiles

*Site Survey* functionality is not available.

### 3.12.8 Summit Radio Card : Global Settings screen

There are many other parameters used to configure the radio card and they do not depend on used profile, nevertheless for good working it's recommended do not change the default values.

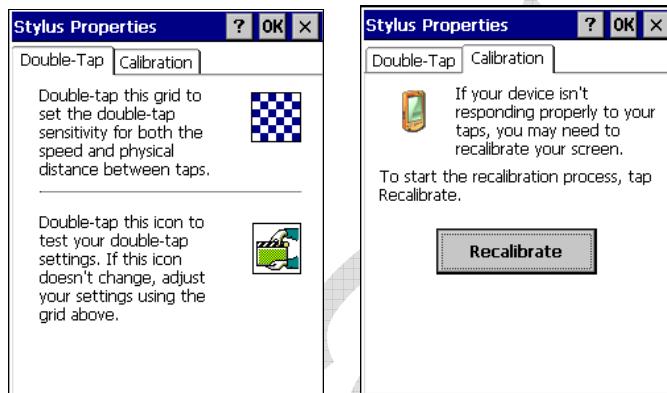


### 3.13 STYLUS CALIBRATION

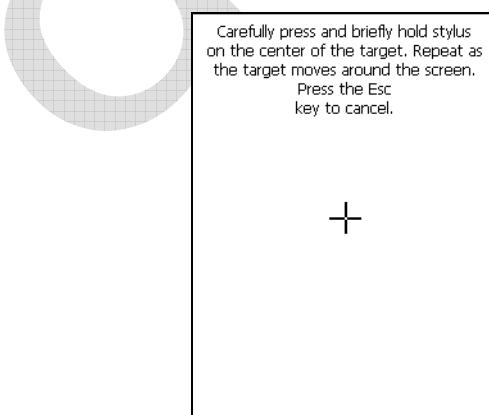
You might need to recalibrate the touch screen (i.e. when you attempt to select one item with the stylus, another item is erroneously selected).

To recalibrate the touch screen, complete the following steps:

1. Select **Start > Settings > Control Panel > Stylus** to open the **Stylus Properties** dialog as shown in Figure 1.
2. Select the **Double-Tap** tab to adjust the sensitivity, if needed or desired.
3. Select the **Calibration** tab to open the **Calibration** application.



4. Tap **Recalibrate** to open the **Calibration** screen shown in Figure 2.
5. Carefully press and briefly hold stylus on the centre of the target. Repeat as the target moves around the screen. Press the **<ESC>** key to cancel the stylus calibration.
6. Press the **<ENTER>** key or tap the screen to accept the new calibration settings. Press the **<ESC>** key to keep the old settings.
7. New calibration settings are persistently saved in registry.



### 3.14 WINDOWS CONNECTIONS

To connect the Datalogic JOYA™ X2 to another device (i.e. Host PC) from Windows, several programs are available.

#### 3.14.1 Microsoft® ActiveSync®

Microsoft® ActiveSync® gives you the possibility to connect your desktop computer to your Datalogic JOYA™ X2 and move files and folders back and forth.

With ActiveSync®, it is possible to:

- Back up and restore Datalogic JOYA™ X2 data.
- Copy files between Datalogic JOYA™ X2 and desktop computer.

You can establish an ActiveSync® connection to your Datalogic JOYA™ X2 through the USB interface.



*Visit the following Microsoft Web site for the latest in updates and technical information:  
<http://msdn.microsoft.com/en-us/library/ee484709.aspx>*

NOTE

#### 3.14.2 Microsoft® Windows Mobile Device Center®

Microsoft® Windows Mobile Device Center® works as ActiveSync. It is available in the Microsoft® Windows Vista® and Windows 7® Windows 8® operating system.



*Visit the following Microsoft Web site for the latest in updates and technical information:  
[http://technet.microsoft.com/en-us/library/cc722321\(WS.10\).aspx](http://technet.microsoft.com/en-us/library/cc722321(WS.10).aspx)*

NOTE

#### 3.14.3 ActiveSync® Remote



*Microsoft® ActiveSync® Remote is no longer supported in Windows CE. For backward compatibility you can download it from the Internet. We suggest enabling the FTP*

**NOTE** *Server and connecting to an FTP Client. See par.3.14.5.*

#### 3.14.4 Bluetooth® Manager Device Setup

In order to enable a Bluetooth® device for communication with the Datalogic Joya™ you must perform the discovery procedure and enable the device as follows:

1. Place the Bluetooth® device within the range of the Datalogic Joya™ (10 meters).
2. From the "Control Panel" main window double tap on the "Bluetooth" applet to open the Bluetooth® Manager Device window:



3. Tap on the "Me" button to enter the related window; then, tap on the "ON" button to activate the Bluetooth® module. The module activation may be also performed by using the WIRELESS COMMUNICATION applet as described in par. **Errore. L'origine riferimento non è stata trovata..**



By tapping on the "HW Details" and "SW Details" buttons, information about the mobile computer Bluetooth® hardware and software will be displayed, while the "Enable Encryption" button starts encryption of the