



## Datalogic Joya™ R2U “Ready to Use”



[User's manual](#)



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Datalogic Joya™ - User's Manual

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## REFERENCES

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### CONVENTIONS

This manual uses the following conventions:

“User” refers to anyone using a Datalogic Joya™ mobile computer.

“Mobile computer” and “Datalogic Joya™” refer to Datalogic Joya™ mobile computer.

“You” refers to the System Administrator or Technical Support person using this manual to install, configure, operate, maintain or troubleshoot a Datalogic Joya™ mobile computer.

“Cradle” refers to Datalogic Joya™ Cradle Dispenser.

### REFERENCE DOCUMENTATION

For further information regarding Datalogic Joya™ refer to the SDK Help on-Line.

## SAFETY REGULATIONS

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**NOTE**

*Read this manual carefully before performing any type of connection to the Datalogic Joya™ mobile computer. The user is responsible for any damages caused by incorrect use of the equipment or by inobservance of the indication supplied in this manual.*

### GENERAL SAFETY RULES

- Use only the components supplied by the manufacturer for the specific Datalogic Joya™ being used.
- Do not attempt to disassemble the Datalogic Joya™ mobile computer, 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 Datalogic Joya™ mobile computer, disposal must be performed in compliance with the laws in force.
- Before using the device and the battery pack, see par. 4.2 and read every warnings about the device and the battery pack.
- Do not submerge the Datalogic Joya™ in liquid products.
- The Datalogic Joya™ is designed and labelled to be compliant with laws, rules and regulations in force in the countries where it is sold.
- For further information, refer to this manual and to the Datalogic Mobile web site: [www.mobile.datalogic.com](http://www.mobile.datalogic.com).

### BLUETOOTH® APPROVAL

This product is equipped with the following certified Bluetooth® module:

Product Name: DL\_NEXTGEN\_BT

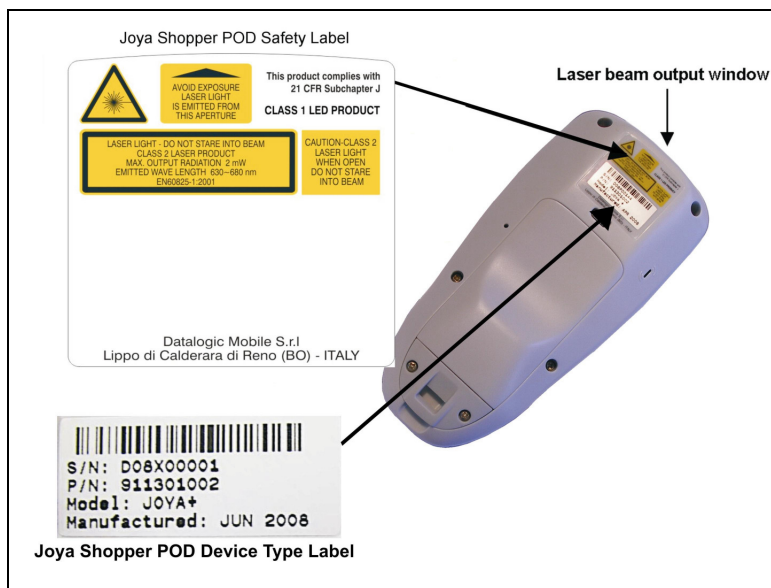
Bluetooth ID: [B016669](#)

Product ID: DL\_NEXTGEN\_BT



**LASER SAFETY**

The laser light is visible to the human eye and is emitted from the window indicated in the figure.



I	D	F	E
La luce laser è visibile all'occhio umano e viene emessa dalla finestra indicata nella figura.	Die Laserstrahlung ist für das menschliche Auge sichtbar und wird am Strahlaustrittsfenster ausgesendet (siehe Bild).	Le rayon laser est visible à l'oeil nu et il est émis par la fenêtre désignée sur l'illustration dans la figure.	La luz láser es visible al ojo humano y es emitida por la ventana indicada en la figura.
I	D	F	E
LUCE LASER NON FISSARE IL FASCIO APPARECCHIO LASER DI CLASSE 2 MASSIMA POTENZA DI USCITA: 2mW LUNGHEZZA D'ONDA EMESSA: 650nm CONFORME A EN 60825-1 (2001)	LASERSTRAHLUNG NICHT IN DER STRAHL BLINKEN PRODUKT DER LASERKLASSE 2 MAXIMALE AUSGANGLEISTUNG: 2mW WELLENLÄNGE: 650nm ENTSPR. EN 60825-1 (2001)	RAYON LASER EVITER DE REGARDER LE RAYON APPAREIL LASER DE CLASSE 2 PUISSANCE DE SORTIE: 2mW LONGUER D'ONDE EMISE: 650nm CONFORME A EN 60825-1 (2001)	RAYO LÁSER NO MIRAR FIJO EL RAYO APARATO LÁSER DE CLASE 2 MÁXIMA POTENCIA DE SALIDA: 2mW LONGITUD DE ONDA EMITIDA: 650nm CONFORME A EN 60825-1 (2001)

**ENGLISH**

The following information is provided to comply with the rules imposed by international authorities and refers to the correct use of your mobile computer.

**STANDARD LASER SAFETY REGULATIONS**

This product conforms to the applicable requirements of both CDRH 21 CFR 1040 Subchapter J and EN 60825-1:2001 at the date of manufacture.

For installation, use and maintenance, it is not necessary to open the device.

**CAUTION**

*Do not attempt to open or otherwise service any components in the optics cavity. Opening or servicing any part of the optics cavity by unauthorized personnel may violate laser safety regulations. The optics system is a factory only repair item.*

**CAUTION**

*Use of controls or adjustments or performance of procedures other than those specified herein may result in exposure to hazardous visible laser light.*

The product utilizes a low-power laser diode. Although staring directly at the laser beam momentarily causes no known biological damage, avoid staring at the beam as one would with any very strong light source, such as the sun. Avoid that the laser beam hits the eye of an observer, even through reflective surfaces such as mirrors, etc.

**CAUTION**

*Use of optical systems with the scanner will increase eye hazard. Optical instruments include binoculars, microscopes, eye glasses and magnifying glasses.*

**ITALIANO**

Le seguenti informazioni vengono fornite dietro direttive delle autorità internazionali e si riferiscono all'uso corretto del terminale.

**NORMATIVE STANDARD PER LA SICUREZZA LASER**

Questo prodotto risulta conforme alle normative vigenti sulla sicurezza laser alla data di produzione: CDRH 21 CFR 1040 sezione J e EN 60825-1:2001.

Non si rende mai necessario aprire l'apparecchio per motivi di installazione, utilizzo o manutenzione.

**CAUTION**

*Non tentare di accedere allo scomparto contenete i componenti ottici o di farne la manutenzione. L'apertura dello scomparto, o la manutenzione di qualsiasi parte ottica da parte di personale non autorizzato, potrebbe violare le norme della sicurezza. Il sistema ottico può essere riparato solamente alla fabbrica.*

**ATTENZIONE**

*L'utilizzo di procedure o regolazioni differenti da quelle descritte nella documentazione può provocare un'esposizione pericolosa a luce laser visibile.*

Il prodotto utilizza un diodo laser a bassa potenza. Sebbene non siano noti danni riportati dall'occhio umano in seguito ad una esposizione di breve durata, evitare di fissare il raggio laser così come si eviterebbe qualsiasi altra sorgente di luminosità intensa, ad esempio il sole. Evitare inoltre di dirigere il raggio laser negli occhi di un osservatore, anche attraverso superfici riflettenti come gli specchi.

**CAUTION**

*L'uso di strumenti ottici assieme allo scanner può aumentare il pericolo di danno agli occhi. Tali strumenti ottici includono cannocchiali, microscopi, occhiali e lenti di ingrandimento.*

**DEUTSCH**

Die folgenden Informationen stimmen mit den Sicherheitshinweisen überein, die von internationalen Behörden auferlegt wurden, und sie beziehen sich auf den korrekten Gebrauch vom Terminal.

**NORM FÜR DIE LASERSICHERHEIT**

Dies Produkt entspricht am Tag der Herstellung den gültigen EN 60825-1:2001 und CDRH 21 CFR 1040 Subchapter J Normen für die Lasersicherheit.

Es ist nicht notwendig, das Gerät wegen Betrieb oder Installations-, und Wartungs-Arbeiten zu öffnen.

**CAUTION**

*Unter keinen Umständen darf versucht werden, die Komponenten im Optikhohlraum zu öffnen oder auf irgendwelche andere Weise zu warten. Das Öffnen bzw. Warten der Komponenten im Optikhohlraum durch unbefugtes Personal verstößt gegen die Laser-Sicherheitsbestimmungen. Das Optiksystm darf nur werkseitig repariert werden.*

**ACHTUNG**

*Jegliche Änderungen am Gerät sowie Vorgehensweisen, die nicht in dieser Betriebsanleitung beschrieben werden, können ein gefährliches Laserlicht verursachen.*

Der Produkt benutzt eine Laserdiode. Obwohl zur Zeit keine Augenschäden von kurzen Einstrahlungen bekannt sind, sollten Sie es vermeiden für längere

Zeit in den Laserstrahl zu schauen, genauso wenig wie in starke Lichtquellen (z.B. die Sonne). Vermeiden Sie es, den Laserstrahl weder gegen die Augen eines Beobachters, noch gegen reflektierende Oberflächen zu richten.

**CAUTION**

*Die Verwendung von Optiksystemen mit diesem Scanner erhöht die Gefahr einer Augenbeschädigung. Zu optischen Instrumenten gehören unter anderem Ferngläser, Mikroskope, Brillen und Vergrößerungsgläser.*

### FRANÇAIS

Les informations suivantes sont fournies selon les règles fixées par les autorités internationales et se réfèrent à une correcte utilisation du terminal.

#### NORMES DE SECURITE LASER

Ce produit est conforme aux normes de sécurité laser en vigueur à sa date de fabrication: CDRH 21 CFR 1040 sous-chapitre J et EN 60825-1:2001.

Il n'est pas nécessaire d'ouvrir l'appareil pour l'installation, l'utilisation ou l'entretien.

**CAUTION**

*Ne pas essayer d'ouvrir ou de réparer les composants de la cavité optique. L'ouverture de la cavité optique ou la réparation de ses composants par une personne non qualifiée peut entraîner le nonrespect des règles de sécurité relatives au laser. Le système optique ne peut être réparé qu'en usine.*

**ATTENTION**

*L'utilisation de procédures ou réglages différents de ceux donnés ici peut entraîner une dangereuse exposition à lumière laser visible.*

Le produit utilise une diode laser. Aucun dommage aux yeux humains n'a été constaté à la suite d'une exposition au rayon laser. Eviter de regarder fixement le rayon, comme toute autre source lumineuse intense telle que le soleil. Eviter aussi de diriger le rayon vers les yeux d'un observateur, même à travers des surfaces réfléchissantes (miroirs, par exemple).

**CAUTION**

*L'utilisation d'instruments optiques avec le scanneur augmente le danger pour les yeux. Les instruments optiques comprennent les jumelles, les microscopes, les lunettes et les verres grossissants.*

**ESPAÑOL**

Las informaciones siguientes son presentadas en conformidad con las disposiciones de las autoridades internacionales y se refieren al uso correcto del terminal.

**NORMATIVAS ESTÁNDAR PARA LA SEGURIDAD LÁSER**

Este aparato resulta conforme a las normativas vigentes de seguridad láser a la fecha de producción: CDRH 21 CFR 1040 Sección y EN 60825-1:2001.

No es necesario abrir el aparato para la instalación, la utilización o la manutención.

**CAUTION**

*No intente abrir o de ninguna manera dar servicio a ninguno de los componentes del receptáculo óptico. Abrir o dar servicio a las piezas del receptáculo óptico por parte del personal no autorizado podría ser una violación a los reglamentos de seguridad. El sistema óptico se puede reparar en la fábrica solamente.*

**ATENCIÓN**

*La utilización de procedimientos o regulaciones diferentes de aquellas descritas en la documentación puede causar una exposición peligrosa a la luz láser visible.*

El aparato utiliza un diodo láser a baja potencia. No son notorios daños a los ojos humanos a consecuencia de una exposición de corta duración. Eviten de mirar fijo el rayo láser así como evitarían cualquiera otra fuente de luminosidad intensa, por ejemplo el sol. Además, eviten de dirigir el rayo láser hacia los ojos de un observador, también a través de superficies reflectantes como los espejos.

**CAUTION**

*El uso de sistemas ópticos con el escáner aumentará el riesgo de daños oculares. Los instrumentos ópticos incluyen binoculares, microscopios, lentes y lupas.*

**LED CLASS**

According to EN 60825-1:2001, the Datalogic Joya™ models which use the good read spot LED are also CLASS 1 LED PRODUCTS.

APPARECCHIO LED CLASSE 1  
PRODUKT LED KLASSE 1

PRODUIT LED DE CLASSE 1  
PRODUCTO LED DE CLASE 1

## RADIO COMPLIANCE

In radio systems configured with mobile computers and access points, the frequencies to be used must be allowed by the spectrum authorities of the specific country in which the installation takes place. Be absolutely sure that the system frequencies are correctly set to be compliant with the spectrum requirements of the country.

### Information for the User

#### ENGLISH

Contact the competent authority responsible for the management of radio frequency devices of your country to verify any possible restrictions or licenses required.

Refer to the web site <http://europa.eu.int/comm/enterprise/rte/spectr.htm> for further information.

#### ITALIANO

Prendi contatto con l'autorità competente per la gestione degli apparati a radio frequenza del tuo paese, per verificare eventuali restrizioni o licenze. Ulteriori informazioni sono disponibili sul sito:

<http://europa.eu.int/comm/enterprise/rte/spectr.htm>.

#### FRANÇAIS

Contactez l'autorité compétente en la gestion des appareils à radio fréquence de votre pays pour vérifier d'éventuelles restrictions ou licences. Pour tout renseignement vous pouvez vous adresser au site web:

<http://europa.eu.int/comm/enterprise/rte/spectr.htm>.

#### DEUTSCH

Wenden Sie sich an die für Radiofrequenzgeräte zuständige Behörde Ihres Landes, um zu prüfen ob es Einschränkungen gibt, oder eine Lizenz erforderlich ist. Weitere Informationen finden Sie auf der Web Seite:

<http://europa.eu.int/comm/enterprise/rte/spectr.htm>.

#### ESPAÑOL

Contacta la autoridad competente para la gestión de los dispositivos de radio frecuencia de tu país, para verificar cualesquiera restricciones o licencias posibles requerida. Además se puede encontrar mas información en el sitio Web:

<http://europa.eu.int/comm/enterprise/rte/spectr.htm>.



**FCC COMPLIANCE**

## FCC Regulations:

- This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
- This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

- The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

**INDUSTRY CANADA COMPLIANCE**

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

This Class B digital apparatus complies with Canadian ICES-003.  
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

The County Code Selection feature is disabled for products marketed in the US/Canada.

This EUT is compliant with SAR for general population/uncontrolled exposure limits in IC RSS-102 and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528. This equipment should be

installed and operated with minimum distance 1,5cm between the radiator & your body.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

#### **RF EXPOSURE INFORMATION (SAR)**

This model device meets the government's requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

The exposure standard for wireless devices employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6W/kg. \*Tests for SAR are conducted using standard operating positions accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the device while operating can be well below the maximum value. This is because the device is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output.

While there may be differences between the SAR levels of various devices and at various positions, they all meet the government requirement.

The FCC has granted an Equipment Authorization for this model device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model device is on file with the FCC and can be found under the Display Grant section of <http://www.fcc.gov/oet/fccid> after searching on the below FCC IDs:

FCC ID: U4G-A056 (for JOYA + A with BT and WLAN)

Contains FCC ID: U4G-004W (for JOYA A and JOYA + A with WLAN only)

This device is compliant with SAR for general population /uncontrolled exposure limits in ANSI/IEEE C95.1-1999 and had been tested in accordance with the measurement methods and procedures specified in OET Bulletin 65 Supplement C.

#### **SAR COMPLIANCE**

This product has been tested and found to comply with the following standards:

- The portable device Joya + A from Datalogic (FCC ID: U4GA056) is in compliance with the IC RSS 102 Issue 4 [RSS 102] and Federal



Communications Commission (FCC) Guidelines [OET 65] for uncontrolled exposure. SAR assessment in body worn was conducted with the back of the device in direct contact against the flat phantom.

- For the used worst case positions, the portable device Joya from Datalogic (Contains FCC ID: U4G004W) is in compliance with the IC RSS 102 Issue 4 [RSS 102] and Federal Communications Commission (FCC) Guidelines [OET 65] for uncontrolled exposure. SAR assessment in body worn was conducted with the back of the device in direct contact against the flat phantom.
- EN 62311:2008 Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz – 300 GHz)

## 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.*



**WARNING**

*Most modern electronic equipment is shielded from RF signals. However, certain electronic equipment may not be shielded against the RF signals generated by Datalogic Joya™.*




**WARNING**


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


**WARNING** *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.*

  
**WARNING** *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.*

  
**WARNING** *Do not use the device while driving: give full attention to driving — driving safely is your first responsibility. The device is not designed to be used with a GPS system. Any program installed without Datalogic authorization may affect the device's safety.*

  
**WARNING** *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.*

  
**WARNING** *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 vehicle's wireless equipment is improperly installed and the air bag inflates, serious injury could result.*

  
**WARNING** *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 distribution fuel*

**WARNING** *areas, chemical plants or where some 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 showed.*

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

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## PATENTS

This product is covered by one or more of the following patents.  
Design Pat.: EP 891,544; AU 323,628; US D 613,289 S; ZL 200830146270.9.  
U.S. Pat. Nos: 5,992,740; 6,808,114 B1; 6,997,385 B2; 7,387,246 B2;  
7,620,475 B2.  
European Pat. Nos: 789,315 B1; 1,128,315 B1; 1,396,811 B1; 1,413,971 B1.  
Additional patents pending.

## WEEE COMPLIANCE



### Informazione degli utenti ai sensi della Direttiva Europea 2002/96/EC

L'apparecchiatura che riporta il simbolo del bidone barrato deve essere smaltita, alla fine della sua vita utile, separatamente dai rifiuti urbani.

Smaltire l'apparecchiatura in conformità alla presente Direttiva consente di:

- evitare possibili conseguenze negative per l'ambiente e per la salute umana che potrebbero invece essere causati dall'errato smaltimento dello stesso;
- recuperare materiali di cui è composto al fine di ottenere un importante risparmio di energia e di risorse.

Per maggiori dettagli sulle modalità di smaltimento, contattare il Fornitore dal quale è stata acquistata l'apparecchiatura o consultare la sezione dedicata sul sito [www.mobile.datalogic.com](http://www.mobile.datalogic.com).

### Information for the user in accordance with the European Commission Directive 2002/96/EC

At the end of its useful life, the product marked with the crossed out wheeled wastebin must be disposed of separately from urban waste.

Disposing of the product according to this Directive:

- avoids potentially negative consequences to the environment and human health which otherwise could be caused by incorrect disposal
- enables the recovery of materials to obtain a significant savings of energy and resources.

For more detailed information about disposal, contact the supplier that provided you with the product in question or consult the dedicated section at the website [www.mobile.datalogic.com](http://www.mobile.datalogic.com).

**Information aux utilisateurs concernant la Directive Européenne 2002/96/EC**

Au terme de sa vie utile, le produit qui porte le symbole d'un caisson à ordures barré ne doit pas être éliminé avec les déchets urbains.

Éliminer ce produit selon cette Directive permet de:

- éviter les retombées négatives pour l'environnement et la santé dérivant d'une élimination incorrecte
- récupérer les matériaux dans le but d'une économie importante en termes d'énergie et de ressources

Pour obtenir des informations complémentaires concernant l'élimination, veuillez contacter le fournisseur auprès duquel vous avez acheté le produit ou consulter la section consacrée au site Web [www.mobile.datalogic.com](http://www.mobile.datalogic.com).

**Información para el usuario de acuerdo con la Directiva Europea 2002/96/CE**

Al final de su vida útil, el producto marcado con un símbolo de contenedor de basura móvil tachado no debe eliminarse junto a los desechos urbanos.

Eliminar este producto de acuerdo con la Directiva permite de:

- evitar posibles consecuencias negativas para el medio ambiente y la salud derivadas de una eliminación inadecuada
- recuperar los materiales obteniendo así un ahorro importante de energía y recursos

Para obtener una información más detallada sobre la eliminación, por favor, póngase en contacto con el proveedor donde lo compró o consultar la sección dedicada en el Web site [www.mobile.datalogic.com](http://www.mobile.datalogic.com).

**Benutzerinformation bezüglich Richtlinie 2002/96/EC der europäischen Kommission**

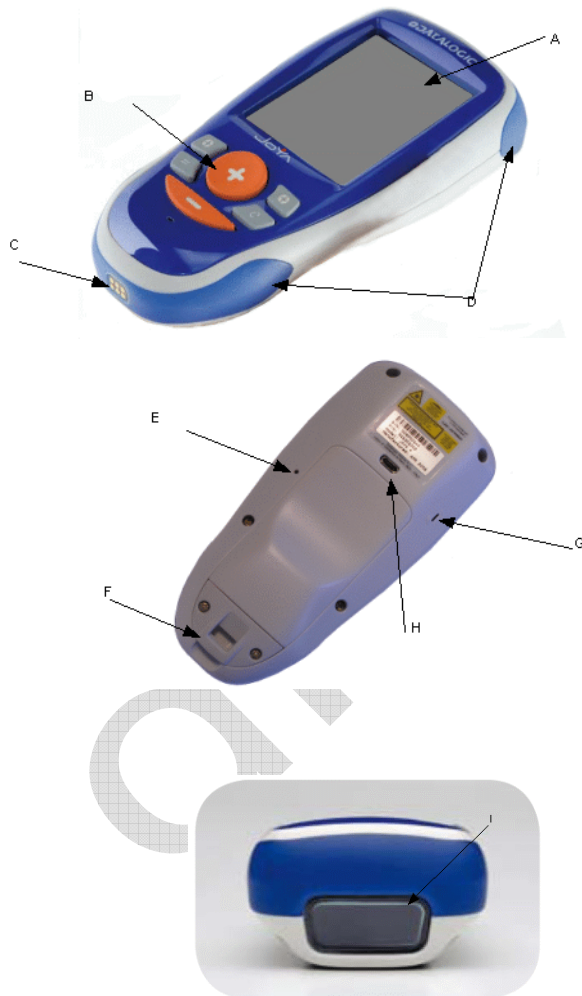
Am Ende des Gerätelebenszyklus darf das Produkt nicht über den städtischen Hausmüll entsorgt werden. Eine entsprechende Mülltrennung ist erforderlich.

Beseitigung des Produkts entsprechend der Richtlinie:

- verhindert negative Auswirkungen für die Umwelt und die Gesundheit der Menschen
- ermöglicht die Wiederverwendung der Materialien und spart somit Energie und Ressourcen

Weitere Informationen zu dieser Richtlinie erhalten sie von ihrem Lieferanten über den sie das Produkt erworben haben, oder besuchen sie unsere Homepage unter [www.mobile.datalogic.com](http://www.mobile.datalogic.com).

## GENERAL VIEW



A) Display*	D) Bumper	G) Loudspeaker
B) 6 keys keyboard	E) Cold reset Hole	H) Micro USB
C) TTL Serial connector	F) Neck Strip Anchor	I) Laser window

\*Remove protective film cover before use

## **1 INTRODUCTION**

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### **1.1 DATALOGIC JOYA™ DESCRIPTION**

The Datalogic Joya™ is a pocket-sized Windows powered mobile computer.

This extremely compact, lightweight, and versatile device, combines fully integrated automatic data capture (1D bar code) and wireless communication capabilities, supporting nearly any application.

The Datalogic Joya™ system architecture is based on the blend of Intel X-Scale series processors coupled with the Windows CE operating system and it was developed to meet the most demanding customer needs.

A huge quantity of on-board memory is available. it enables the user to adapt the terminal for any specific need.

Thanks to its great ergonomics and the state of the art architecture, the Datalogic Joya™ is the right answer to enhance your business opportunities.

### **1.2 MODEL DESCRIPTION**

For further details about the Datalogic Joya™ models refer to the web site: <http://www.joya.datalogic.com>.

### 1.3 PACKAGE CONTENTS

The Datalogic Joya™ package contains:

- 1 Datalogic Joya™ mobile computer

Remove all the components from their packaging; check their integrity and congruity with 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.*



**NOTE**

*Rechargeable battery packs are not initially charged. Therefore the initial operation to perform is to charge them.*

### 1.4 ACCESSORIES

- Cradle**  
912201000 Datalogic Joya™ Cradle Dispenser
- Batteries**  
91ACC1055 Datalogic Joya™ Battery Pack (10 pcs.)
  - Cradle Accessories**  
91ACC1000 Power Supply 12V 300W  
91ACC0730 Power Junction Cable I90x/3 Cradle (8 pcs.)  
91ACC0650 Term. Unlock Magnets (5 pcs.)
  - Various**  
94ACC1328 Datalogic Joya™ Stylus Pens (10 pcs)  
91ACC1056 Datalogic Joya™ trolley holder (60 pcs.)  
91ACC1057 Datalogic Joya™ checkout holder



**NOTE**

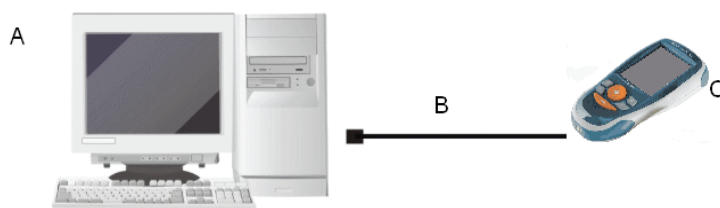
*Use only a Datalogic Mobile-approved power supply and cables. Use of an alternative power supply will invalidate any approval given to this device and may be dangerous.*



## 2 CONNECTIONS

### 2.1 USB CONNECTION

You can use any standard micro USB cable (with length less than 3m) to directly connect the Datalogic Joya™ to a host computer to transfer data through the USB interface.



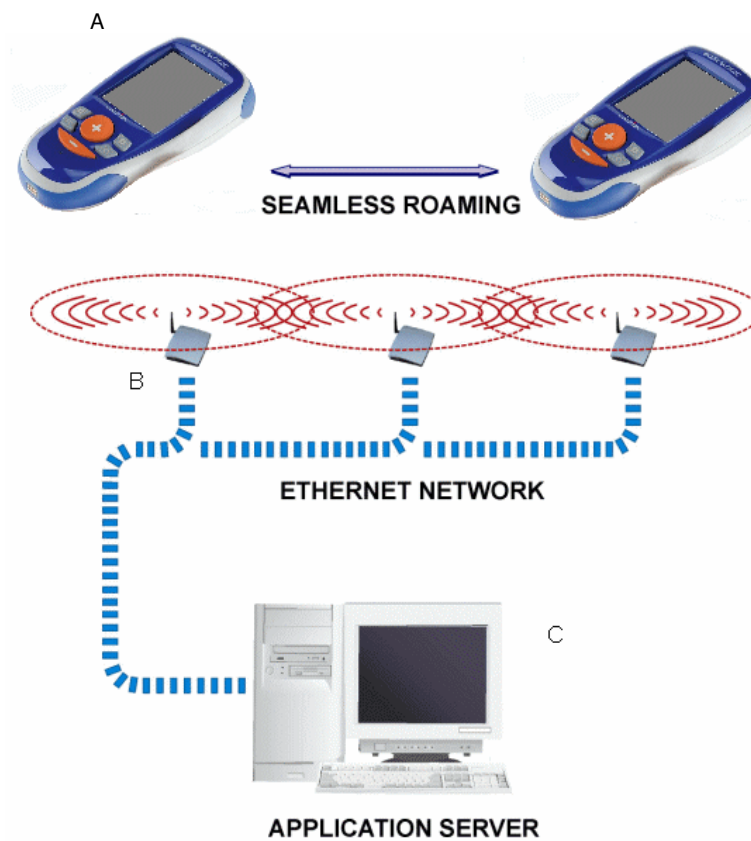
Key:

- A) Host Computer
- B) Standard Micro USB cable type USB A – micro USB B
- C) Datalogic Joya™

## 2.2 WLAN CONNECTION

Datalogic Joya™ Wi-Fi 802.11 a/b/g radio models can communicate with the host using the on-board radio frequency component and an Access Point connected to the host computer.

To launch this utility you can tap the specific icon if it's visible on the taskbar or you can open Connections folder or Control Panel from desktop and select the 'Summit Client Utility' icon.



Key:

- A) Datalogic Joya™
- B) Access Point
- C) Host – Application Server

**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**

*Suspending the terminal powers off the 802.11b/g radio and drops the radio connection. When the terminal resumes, depending on the radio power mode and security protocol selected, it may take up to 30 seconds for the 802.11b/g radio driver to re-associate the radio to the network.*

**NOTE**

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

## 2.3 WPAN CONNECTIONS

Bluetooth® Datalogic Joya™ mobile computer models can communicate with a Bluetooth® device, such as a printer, within a range of 10 m, using the on-board Bluetooth® module.



Key:

- A) Datalogic Joya™
- B) Bluetooth® printer



**NOTE**

*In order to avoid wasting energy, the Bluetooth® module is off by default. If you need to have Bluetooth® working, the module must be powered on using the Wireless Communications applet (see par. 0), and perform the Discovery procedure (see par. 3.6.2).*



**NOTE**

*Suspending the terminal powers off the Bluetooth® radio and drops the piconet (Bluetooth® connection). When the terminal resumes, it takes approximately 10 seconds for the Bluetooth® radio driver to re-initialize the radio.*



**NOTE**

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

## 3 USE AND FUNCTIONING

The use of the Datalogic Joya™ depends on the application software loaded. However there are several parameters that can be set and utilities that can be used to perform some basic functions such as data capture, communications, file management, etc.

### 3.1 STARTUP

The Datalogic Joya™ turns on when a charged battery pack is inserted.

As soon as the mobile computer is on, the Windows desktop configuration will appear on the screen. Wait a few seconds before starting any activity so that the mobile computer completes its startup procedure.



The mobile computer goes into power-off (low power with display and keyboard backlight off), when it is no longer used for more than a programmable timeout, which is defined in the POWER applet of the Control Panel. In this mode it can be awakened (resuming operation) pressing the “Up” Key.

**NOTE**

*The mobile computer can also be awakened or turned off by the application program.*

### 3.1.1 Using the Stylus (available only on Joya+™)

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



**CAUTION**

*Use only original Datalogic styluses supplied with the product itself.*

*In harsh applications, use of screen protectors should be taken into consideration, in order to extend the touch screen operating life.*

*To prevent damage to the screen, do not use sharp devices or any device other than the Datalogic Mobile-provided stylus.*

*Do not apply not necessary high pressures on the screen.*

*For applications where an intensive use of the touch screen is foreseen, please consider that touch screen components are subject to progressive wear.*

## 3.2 DATA CAPTURE

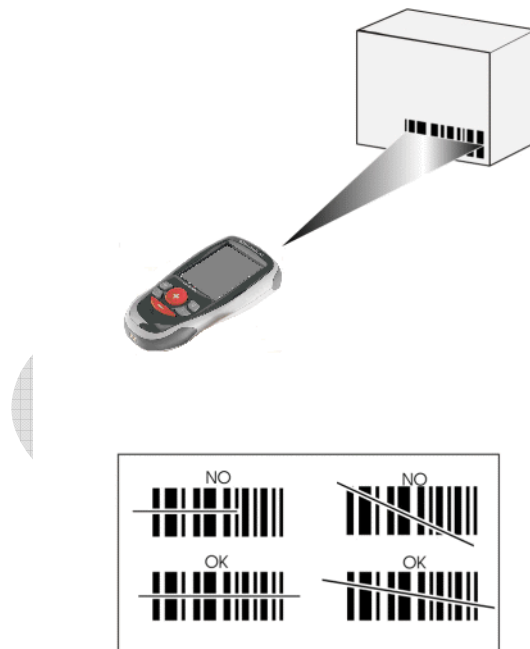
To capture data first of all select the barcode icon on the bottom-right side of the display and tap the 'Capture' menu item then proceed with the following directions.

To configure and enable data capture parameters refer to par. 3.5.

### 3.2.1 Laser Data Capture

To scan barcodes, point the Datalogic Joya™ laser model onto the code from a distance within the reading range while pressing the “Up” key.

The lighted band emitted by the laser must completely intercept the barcode as shown in the figure below. If enabled, the emission of an acoustic signal will indicate that the scan has taken place correctly.



### 3.3 DESCRIPTION OF THE KEYS

The Datalogic Joya™ 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.



### 3.3.1 Resetting the Joya™

There are two reset methods for the Joya™.

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.

#### 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™ 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 -) 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.

	Warm Boot	Cold Boot
<b>REGISTRY</b>	Preserved	Restored from flash (if available)
<b>Flash Disk (Backup Folder)</b>	Preserved	Preserved
<b>RAM File System</b>	Preserved	Reinitialized (factory default)



**CAUTION**

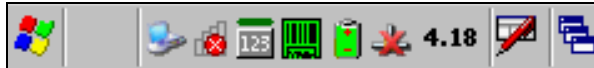
*Before performing a reset, it is recommended to:*











- *execute a system backup to keep your more important files and applications persistent. See par. 3.7;*
- *save the registry to non-volatile memory to guarantee the persistence of the Windows configuration. See par. -.*

### 3.4 STATUS INDICATORS

#### 3.4.1 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>	
<b>10.50</b>	It displays the time.
	They are representative of five 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>Keyboard Status Icons</b>	
	It indicates that the blue FUNC key has been pressed and is going to affect the next key press.
	It indicates that the yellow FUNC key has been pressed and is going to affect the next key press.
	It indicates that the ALPHA key has enabled the selection of the characters printed in orange.
	It indicates the NUMERIC key selection, the ALPHA key has not been pressed.
	It indicates that the ALPHA key has enabled the selection of the characters printed in orange and the Capslock is active.
	It indicates that the keyboard is locked.
<b>Decoding Status Icons</b>	
 	It indicates that the decoder is active (green), not active (grey).

### 3.5 DATA CAPTURE CONFIGURATION

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Figure 2

## WINDOWS CONNECTIONS

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

### 3.6.1 Microsoft® ActiveSync®

Microsoft® ActiveSync® gives you the possibility to connect your desktop computer to your Datalogic Joya™ and synchronize the information on them. Synchronization compares the data on the Datalogic Joya™ with that on the desktop computer and updates both computers with the most recent information.

With ActiveSync®, it is possible to:

- Back up and restore Datalogic Joya™ data.
- Copy files between Datalogic Joya™ and desktop computer.
- Synchronize files by selecting a synchronization mode.

You can establish an ActiveSync® connection to your Datalogic Joya™ through the following electrical interfaces:

- **USB** directly
- **Bluetooth®** (see par. 3.6.2)

It is possible to constantly synchronize while connected to a desktop computer or, alternatively, synchronization can be performed only when the synchronize command is chosen. You can select which information types are synchronized and control how much data is synchronized.

**NOTE**

*By default, ActiveSync® does not automatically synchronize all types of information. Use ActiveSync® options to turn synchronization on and off for specific information types.*

For example:

Synchronize Microsoft Word and Microsoft Excel files between the Datalogic Joya™ and the desktop computer. The files will automatically be converted to the correct format.

**NOTE**

*Visit the following Microsoft Web site for the latest in updates and technical information:  
<http://www.microsoft.com/windowsmobile/activesync/default.mspx>*

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**ActiveSync® Remote****NOTE**

*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 Server and connecting to an FTP Client. See par. 1.1.1.*

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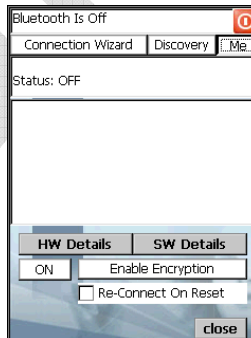
### 3.6.2 Bluetooth® Manager Device Setup

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:

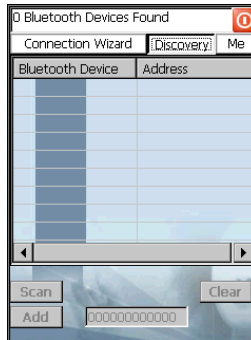


3. Tap on the “Me” button to enter the related window; then, tap on the “ON” button to activate the Bluetooth® module. The module activation may be also performed by using the WIRELESS COMMUNICATION applet as described in par. 0.



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 Bluetooth® communication data. If tapping on the “Close” button the Bluetooth® Manager Device window will be closed.

4. Tap on the “Discovery” button to enter the related window; then, tap on the “Scan” button to run the Discovery procedure:



Once the Discovery procedure has been completed, select the desired Bluetooth® device from the list. It is also possible to digit (12 hexadecimal digits) the Bluetooth® address of the desired device by tapping on the “Add” button. The “Clear” button deletes all discovered devices from the list.

5. Once the desired Bluetooth® device has been selected, tap on the “Connection Wizard” button to enter the related window where selecting the connection type to be used for communication with the Bluetooth® device:




The “Serial Port” button starts communication through the Bluetooth® serial port COM 5 (typically used for connection with GPS devices).

The “Printer” button starts communication with a printer through the Bluetooth® serial port COM 5.

The “Kbd Emulation” button allows connection with a barcode reader using the keyboard emulation.

The “ActiveSync” button starts communication with a PC equipped with a Bluetooth® antenna and the related ActiveSync.



6. Hide the Bluetooth® Manager Device window by tapping on the  icon available on each window or close it through the “Close” button available in the “Me” window (see step 3 of this procedure).

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### 3.6.3 FTP Server Setup

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### BACKUP DIRECTORY FILE MANAGEMENT

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### 3.8 FIRMWARE UPDATE

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## 4 MAINTENANCE



NOTE

*Battery packs are not initially charged. Therefore the initial operation to perform is to charge them. See below.*



CAUTION

*By default, the battery pack is disconnected at the factory to avoid damage due to excessive draining. Annual replacement of rechargeable battery pack avoids possible risks or abnormalities and ensures maximum performance.*

### 4.1 CHARGING THE BATTERY PACK

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

The battery icon on the Taskbar indicates when the battery pack is low.

It is also possible to recharge the battery pack by using a Joya Cradle.

Moreover recharging is possible by USB Direct connection with the host computer, but with longer charging times and in this case it is advised to keep the mobile computer off.



NOTE

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



CAUTION

*If the battery pack is new or has not been recharged for a long time, it is necessary to perform two or three charging and discharging cycles (complete use) before it can reach its maximum charge capability.  
The maximum time required to recharge a completely run-down standard battery pack is about 3 hours.*



NOTE

*Even if the storage temperature range is wider, In order to achieve the longest battery life, store the terminal and the spare batteries between 20 to 30 °C (68 to 86 °F).  
The Batteries must be charged at a temperature ranging from 0° to +45 °C (+32° to +113 °F).*

## 4.2 REPLACING THE BATTERY PACK

To correctly replace the battery pack, proceed as follows.

1. Unscrew the two screws placed on the back bottom. The battery pack cover is now released.



2. Remove the cover and then the battery pack, using the proper plastic strip. Pay attention when disconnecting the connector.



3. Install the new battery pack, first insert the connector respecting the right way, then the upper side, finally the bottom side, leaving the plastic strip available for future replace.
4. For correct locking, first insert the upper part of the battery cover, then the lower and rotate the screws to the horizontal position.



To install, charge and/or do any other action on the battery, follow this manual.

**WARNING** 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 heat; 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, dryer, high pressure containers, on induction cookware or similar device. 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.

Use only a Datalogic Mobile approved power supply. The use of an alternative power supply will void the product warranty, may cause product damage and may cause heat, explode or ignite.

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 for power devices different from this mobile computer.

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 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.

**WARNING**

*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.*

*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.*

*Collect and recycle waste batteries separately from the device in comply with European Directive 2006/66/EC, 2002/95/EC, 2002/96/EC and subsequent modifications, US and China regulatory and others laws and regulations about environment.*

**NOTE**

*In order to guarantee an adequate operating autonomy, when replacing the battery pack the mobile computer checks the battery energy level. If the battery is not sufficiently charged, Datalogic Joya™ does not turn on.*

*In this case, either substitute the battery pack with a charged one (sufficiently charged) or insert Datalogic Joya™ into a powered cradle or plug it into the direct power supply.*

**NOTE**

*To achieve the best battery life, turn off the radios not in use.*

### 4.3 CLEANING THE MOBILE COMPUTER

Periodically clean the Datalogic Joya™ with a slightly dampened cloth.



## 5 JOYA™ CRADLE DISPENSER

### 5.1 INTRODUCTION

Joya™ Cradle Dispenser has the following responsibilities:

- to recognize the insertion and extraction of the Joya
- to control the blocking device
- to signal status using the LEDs
- to supply power to the Joya for battery recharging



Joya Cradle Dispenser has three Joya slots, each equipped with its own control unit, an electromechanical system for blocking/releasing the terminal, notification light, battery power and recharging circuits. Its special structure makes it possible to design any type of dispenser (wall-mounted or island) easily, allowing twice the number of terminals to be installed per vertical square meter with respect to the competing systems.

### 5.2 ACCESSORIES

- 91ACC1000 Power Supply 12V 300W
- 91ACC0730 Power Junction Cable I90x/3 Cradle (8 pcs.)
- 91ACC0650 Term. Unlock Magnets (5 pcs.)

### 5.3 INSTALLATION REQUIREMENTS

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### 5.4 BASE UNIT CONSTRUCTION DETAILS

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#### 5.4.1 Joya™ Cradle Dispenser Supports

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#### 5.4.3 Internal Cabinet Space and Openings

Confidential.

#### 5.4.4 Anchoring and Maintenance Issues

Confidential

#### 5.4.5 Power Supply Positioning and Cooling

Confidential

#### 5.4.6 AC Power Cabling

Confidential

#### 5.4.7 Cable to Power Supply Connection

Confidential

#### 5.4.8 Safety Precautions

Joya Cradle Dispenser Cabinet, the relative electrical wiring and connection to the AC power line must be made according to the Safety Normatives currently in force.

The following paragraphs contain some particularly important considerations to keep in mind.

- Cradle Dispenser Operating Temperature

Joya Cradle Dispensers are designed and built to operate within the following environmental conditions:

Operating Temperature Range: 10 to 30 °C

Storage Temperature Range:	-20 to 60 °C
Humidity:	90% non condensing

- Cabinet

The cabinet must not have any exposed sharp edges, which could represent a danger to customers.

The requirements for air passages to cool both the JoyaCradle Dispensers and the power supplies must be adhered to in order to avoid overheating problems for the components inside the cabinet.

All components having dangerous voltage levels must be protected from unauthorized access. Only qualified personnel should be authorized access for maintenance purposes.

In particular, the opening at the top of the cabinet must be closed with a grill or mesh that prevents access from the outside to the power supplies below. In addition, the plastic protection covers must be mounted over the power supply terminals to avoid accidental contact by maintenance personnel when the cabinet is open.

- Wiring

The wires used for cabling must have flame retardant insulation.

The cables must be affixed to the cabinet avoiding types of cable clamps that use screws or have moving parts that press directly upon the cable itself. Cable clamps must also be applied close to the wires coming from the power supplies so that they won't be accidentally pulled out of the power supply terminals to which they are connected.

Avoid running cables with sharp bends or that rest on sharp edges which can damage them over time and in the long run pose a danger inside the cabinet.

After making all the wiring connections, if some connections have wire exposed without insulation, they must be insulated.

#### 5.4.9 Connection to AC Line Voltage

If connection to the AC power line is made with a plug at the end of the cable, The outlet to which it is inserted must be close by and easily accessible. The outlet must also be rated for the maximum power consumption, which can be considered equal to the nominal power of the connected power supplies.

If the Terminal Distributor is connected in a fixed electrical plant, a circuit breaker must be provided in order to completely disconnect the AC line voltage from the Cradle Dispenser cabinet. This circuit breaker must be positioned close to the cabinet and be easily accessible. It must also be rated for the maximum power consumption and must meet the Safety Normatives currently in force.

## 5.5 JOYA™ CRADLE DISPENSER FIRMWARE

Joya Cradle Dispenser is provided with a full operational Firmware, therefore it doesn't require any kind of software developing activity. Instead, the behaviour of the Joya Cradle Dispenser could be controlled at high level using the Joya. In SDK Tools is furnished APC.exe program, to upgrade Joya Cradle Dispenser firmware release.

### 5.5.1 APC installation

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### 5.5.2 Starting program

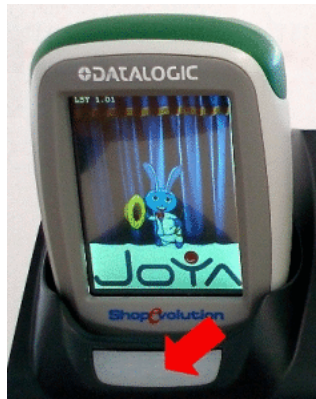
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### 5.5.3 Reading firmware version

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Cradle locks terminal in the slot, the terminal top flashes three times. At the end approach a magnet to the sensitive area to unlock and extract the terminal.



If user does not insert Joya into a slot, a timeout message is displayed asking to remake the operation.  
In case of errors a suitable message is displayed.

#### 5.5.4 Firmware update procedure

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#### 5.6 JOYA™ – JOYA™ CRADLE DISPENSER CONNECTION

Joya Cradle Dispenser is equipped with an electrical-serial connection, used to exchange command and response with Joya. The communications between the terminal inserted into the slot and the slot itself, are performed by means of a special “RPC like commad-response” protocol.

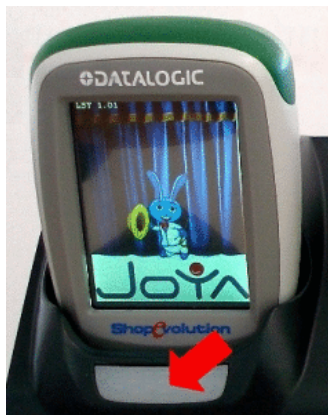


## 5.7 CONFIGURATION

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## 5.8 USE AND FUNCTIONING

Insert a Joya inside a slot, Joya Cradle Dispenser will lock the Joya, when electrical connectors are contacted.  
To unlock Joya, approach a magnet to the sensitive area and extract the Joya.



All other commands could be developed by developers using Joya SDK.

## **6 JOYA A™/JOYA+ A™ TECHNICAL FEATURES**

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### **6.1 TECHNICAL DATA**

Datalogic Joya A™/Joya+ A Common Features  
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## 7 TEST CODES

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### High Density Codes



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### Medium Density Codes



3 07 12345 00001 0

### Low Density Codes



3 07 12345 00001 0

## 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.

### **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.

### **Baud Rate**

A measure for data transmission speed.

### **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 mobile computer is compatible with the 1.1 protocol.

### **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.

### **Decode**

To recognize a bar code symbology (*e.g.*, Codabar, Code 128, Code 3 of 9, UPC/EAN, etc.) and analyze the content of the bar code scanned.

### **EEPROM**

Electrically Erasable Programmable Read-Only Memory. An on-board non-volatile memory chip.

### **Flash Disk**

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.

**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.

**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).

**RAM**

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

**RF**

Radio Frequency.

**RTC**

Real Time Clock.

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# CE

Declarations

They will be added in the final releases

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