DATALOGIC

OM-30X0

CRADLE

QUICK REFERENCE

UPDATES AND LANGUAGE AVAILABILITY

UK/US

The latest drivers and documentation updates for this product are available on Internet.
Log on to : www.datalogic.com

I

Su Internet sono disponibili le versioni aggiornate di driver e documentazione di questo prodotto. Questo manuale è disponibile anche nella versione italiana.
Collegarsi a : www.datalogic.com

F

Les versions mises à jour de drivers et documentation de ce produit sont disponibles sur Internet. Ce manuel est aussi disponible en version française.
Cliquez sur : www.datalogic.com

D

Im Internet finden Sie die aktuellsten Versionen der Treiber und Dokumentation von diesem Produkt. Die deutschsprachige Version dieses Handbuches ist auch verfügbar.
Adresse : www.datalogic.com

E

En Internet están disponibles las versiones actualizadas de los drivers y documentación de este producto. También está disponible la versión en español de este manual.
Dirección Internet : www.datalogic.com

USING OM-30X0 RADIO CRADLE

The OM-30X0 cradle, paired with one or more Dragon™ M131 readers, builds a Cordless Reading System for the collection, decoding and transmission of barcoded data.

It can be connected to a Host PC through an RS232, USB, Wedge or Pen cable and is suited for single-cradle point-to-point layouts. It can also be connected to a C-BOX and therefore integrated into a fixed scanner application.

The OM-3000 models also allow multi-cradle layouts through an RS485 Network.

The LEDs signal the OM-30X0 status, as described in the following table:

LED	STATUS
Aux	Yellow On = OM-30X0 is powered through an external power supply. Yellow Blinking = OM-30X0 transmission occurs over the Host port.
Host	Yellow On = OM-30X0 is powered by the Host. Yellow Blinking = OM-30X0 transmission occurs over the Host port.
Reader	Green On = the reader battery is completely charged. Red On = the reader battery is charging. Orange Blinking = reader battery fault – replace battery. Red / Green Alternatively Blinking = charging error - see Ref. Manual
Spare*	Green On = the spare battery is completely charged. Red On = the spare battery is charging. Orange Blinking = spare battery fault – replace battery. Red / Green Alternatively Blinking = charging error - see Ref. Manual

* This LED refers to the accessory SBS-3000 Spare Battery Slot when mounted to the OM-3000. Not available for OM-3010 models.
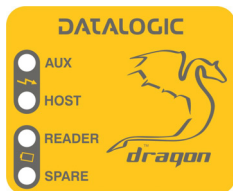

Figure 1 – Cradle Overview

Figure 2 – LEDs

To setup your OM-30X0 cradle you must:

1. Physically install the cradle.
2. Make all system connections.
3. Configure the OM-30X0 cradle.

INSTALLATION

The OM-30X0 can be mounted for portable or fixed desktop usage by using either a horizontal base or an inclined base to offer a comfortable handling of the Dragon™ M131 reader.
The OM-30X0 package contains the following:

OM-30X0	1 inclined base
This Quick Reference Manual	4 rubber feet
2 adhesive strips	1 Antenna
1 horizontal base	

DESKTOP MOUNTING
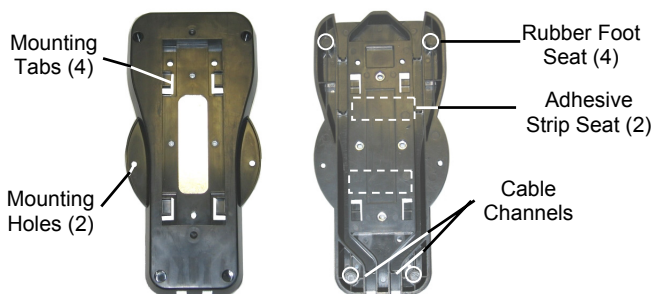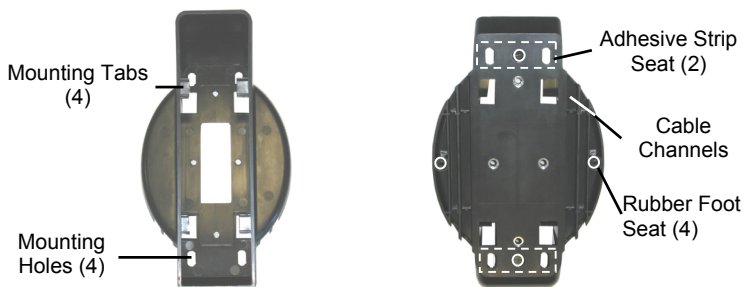

Figure 3 - Horizontal Base Top and Bottom View

Mounting Tabs (4)
Mounting Holes (2)
Rubber Foot Seat (4)
Adhesive Strip Seat (2)
Cable Channels

Figure 4 - Inclined Base Top and Bottom View

Mounting Tabs (4)
Mounting Holes (4)
Adhesive Strip Seat (2)
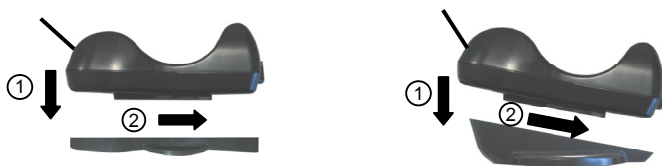Cable Channels
Rubber Foot Seat (4)

Figure 5 –Base Desktop Mounting

Portable Desktop Use

For desktop use, follow the given procedure:

1. Referring to Figure 3 and Figure 4, carefully clean the rubber feet seat of the base to remove any impurities that could reduce adhesion.
2. Remove the protective plastic from the rubber feet and stick them onto the bottom surface of the base.
3. Position the cradle onto the base by sliding it along the mounting tabs until aligned (see Figure 5).
4. Insert the antenna in the appropriate hole on the body of the cradle and screw it clockwise until tight.

Fixed Desktop Use

For fixed desktop installation using the adhesive strips:

1. Position the cradle onto the base by sliding it along the mounting tabs until aligned (see Figure 5).
2. If desired, position the cables to be connected to the cradle in the dedicated channels (see Figure 3 and Figure 4).
3. Carefully clean the adhesive strip seat of the base to remove any impurities that could reduce adhesion.
4. Remove the protective plastic from one side of the adhesive strips and stick them onto the base surface.
5. Remove the plastic from the other side of the strips and affix the base to the table.
6. Insert the antenna in the appropriate hole on the body of the cradle and screw it clockwise until tight.

For fixed desktop installation using screws (not provided):

1. If desired, position the cables to be connected to the OM-30X0 cradle in the dedicated channels (see Figure 3 and Figure 4).
2. Position the base on the table and affix it by means of the screws.
3. Position the OM-30X0 onto the base by sliding it along the mounting tabs (see Figure 5) until aligned.
4. Insert the antenna in the appropriate hole on the body of the cradle and screw it clockwise until tight.

APPLYING RAPID POINT-TO-POINT CONFIGURATION LABEL (OPTIONAL)

A pre-printed barcode label is included in the package for rapid configuration of point-to-point applications. If you wish to use this method, apply this label to the seat provided on the OM-30X0 cradle as shown in the figure. See the Dragon™ M131 Quick Reference Manual for the configuration procedure.

SYSTEM CONNECTIONS

Connections should always be made with power off!

CAUTION

You can connect the OM-30X0 cradle to the Host through the dedicated connector, using the cable corresponding to the desired interface type.

CONNECTING AND DISCONNECTING THE OM-30X0 INTERFACE CABLE

The OM-30X0 can be connected to a Host by means of an RS232, USB, Wedge or Pen cable which must be simply plugged into the Host connector, visible on the rear panel of the cradle.

To disconnect the cable, insert a paper clip or other similar object into the hole corresponding to the Host connector on the body of the cradle. Push down on the clip while unplugging the cable. Refer to the following figure:
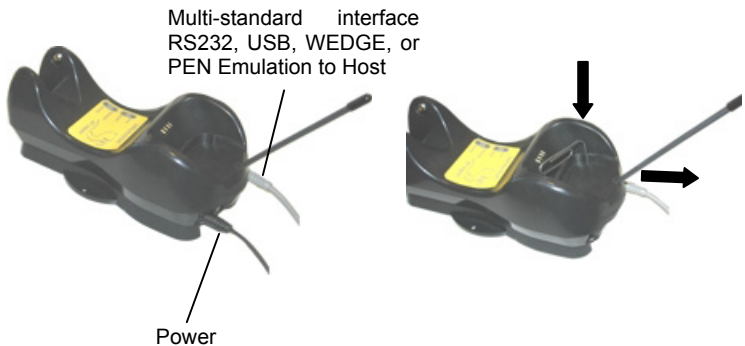
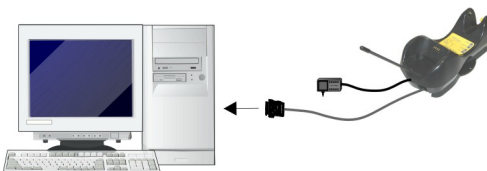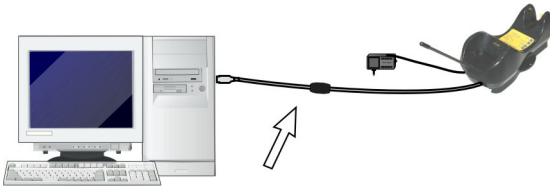Multi-standard interface RS232, USB, WEDGE, or PEN Emulation to Host

Power

Figure 6 – Connecting/Disconnecting the Cable

RS232

USB

WEDGE

PEN

C-BOX

Dragon™ M

JOIN

BIND

OM-30X0

C-BOX

Scanner

System cables to Host
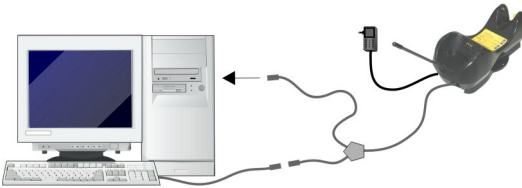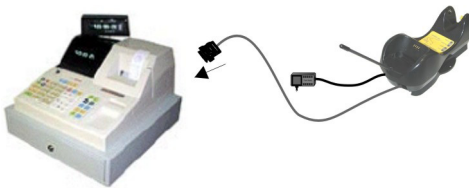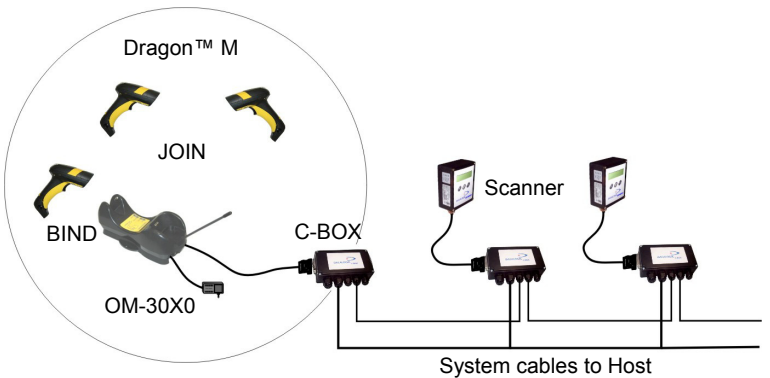
OM-30X0 CONFIGURATION

The OM-30X0 configuration can be performed in three ways: by using the Datalogic Aladdin™ software configuration program, by sending configuration strings from the Host PC via the RS232 or USB-COM interface or by reading configuration barcodes with the Dragon™ M reader.

DATALOGIC ALADDIN™

Datalogic Aladdin™ is a multi-platform utility program providing a quick and user-friendly configuration method via the RS232/USB-COM interface.
It also allows upgrading the software of the connected device (see the Datalogic Aladdin™ Help On-Line for more details).

SERIAL CONFIGURATION

By connecting the OM-30X0 to a PC through an RS232 or USB-COM interface cable it is possible to send configuration strings from the PC to OM-30X0.

CONFIGURATION BARCODES

Once you have performed system connection and Dragon™ M reader configuration, you can configure the OM-30X0 cradle by reading configuration barcodes. **Apply power to the OM-30X0**.

For the Dragon™ M configuration refer to the "Dragon™ M131 Quick Reference".

To configure the OM-30X0 using the Dragon™ M reader (the one paired to the cradle with the **Bind** command), follow the procedure according to the interface selected.

RESTORE DEFAULT

RESTORE OM-30X0 DEFAULT

To change the defaults refer to the "Dragon™ D131/M131 Reference Manual", part number **90ACC1929**, or to the Datalogic Aladdin™ Configuration program, both downloadable from the website.

INTERFACE SELECTION

Select one of the interface codes according to your application.

USB INTERFACE SELECTION

USB-KBD

||| || || ||||||| | ||||||| | |||| ||| |||

USB-KBD – ALT-mode

||| || ||| |||||| | ||||||| | |||| ||| |||

USB-COM*

||| || || |||||| | ||||||| | |||| ||| |||

USB-IBM-Hand Held

||| || ||| |||||| | ||||||| | |||| ||| |||

* When configuring USB-COM, the relevant files and drivers must be installed from the USB Device Installation Software, which can be downloaded from the web site http://www.datalogic.com.

RS232 INTERFACE SELECTION

RS232 Standard

||| | ||| ||| | ||||||| || ||||| ||| |||

Nixdorf Mode A

||| || | ||||| | |||| ||||| ||| | ||||| | ||||| ||| |||

Fujitsu

||| || | ||||| | |||| ||||| || ||||| |||

ICL Mode

||| | || ||||| |||| ||||| | |||||| | |||

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INTERFACE SELECTION

Select one of the interface codes according to your application.

PEN EMULATION INTERFACE SELECTION

PEN

WEDGE INTERFACE SELECTION

Wedge IBM AT or PS/2 PCs

PC Notebook

PC Notebook - ALT mode

IBM AT - ALT mode

Many other interfaces are supported and can be selected from the Dragon™ D131/M131 Reference Manual available online at http://www.datalogic.com. Other supported interfaces:

USB: USB-IBM-Table Top; USB-KBD-APPLE

WEDGE: IBM XT; IBM SURE1; IBM Terminal 3153; IBM Terminals 31xx, 32xx, 34xx, 37xx; Wyse Terminals ANSI – PC – ASCII – VT220 style Keyboards; Digital Terminal VT2xx/VT3xx/VT4xx; APPLE ADB Bus

KEYBOARD NATIONALITY

USB-KBD and Wedge users should select one of the following wedge keyboard nationality codes according to your keyboard.

Belge

Deutsch

English

Español

Français

Italiano

Svenskt

USA (Default)

The following Keyboard Nationality selections are only valid for IBM AT compatible PCs:

Japanese

Russian (Latin)

Russian (Cyrillic)

Hungarian

Slovenian, Croatian, Serbian (Latin)

Romanian

Czech Republic

DATA FORMAT TERMINATORS

For your convenience, some common Terminators are given below. For other Header/Terminators selections, Data Format and Advanced Data Format parameters, see the Dragon™ D131/M131 Reference Manual.

CR-LF

Enter

Tab

None

OM-30X0 DEFAULT CONFIGURATION

USB-KBD DEFAULT SETTINGS

USA keyboard, FIFO enabled, inter-character and inter-code delays disabled, USB keyboard speed normal.

DATA FORMAT: code identifier disabled, code length not transmitted, character replacement disabled, gun and cradle address stamping disabled, gun and cradle address delimiter disabled, time stamping disabled, time stamping delimiter disabled, no header, terminator = ENTER.

RS232 DEFAULT SETTINGS

9600 baud, no parity, 8 data bits, 1 stop bit, no handshaking, ack/nack protocol disabled, FIFO enabled, delay disabled, 5 sec. rx timeout

DATA FORMAT: code identifier disabled, code length not transmitted, character replacement disabled, gun and cradle address stamping disabled, gun and cradle address delimiter disabled, time stamping disabled, time stamping delimiter disabled, no header, terminator = CR-LF.

WEDGE DEFAULT SETTINGS

USA keyboard, Caps Lock off, Caps Lock Auto-Recognition enabled, num lock unchanged, inter-character and intercode delay disabled, control character emulation = ctrl+shift+key.

DATA FORMAT: code identifier disabled, code length not transmitted, character replacement disabled, gun and cradle address stamping disabled, gun and cradle address delimiter disabled, time stamping disabled, time stamping delimiter disabled, no header, terminator = ENTER.

PEN DEFAULT SETTINGS

Interpret operating mode, conversion to code 39, output level normal, idle level normal, minimum output pulse 600µs, overflow medium, inter-block delay disabled.

NETWORK PARAMETERS

RS485 network disabled (for OM-3000 only)

OPERATING TEST

Read the TEST codes below.

EAN-8

```
1 2 3 4  5 6 7 0
```

EAN-13

```
1  2 3 4 5 6 7  0 0 0 9 9 2
```

Code 39 (Normal)

```
1    7    1    6    2
```

Code 128

```
t    e    s    t
```

Interleaved 2 of 5

```
0 1 2 3 4 5 6 7 8 4
```

YOUR SYSTEM IS NOW READY TO READ CODES AND TO SEND THE DATA TO THE HOST.

TECHNICAL FEATURES

OM-30X0		
Electrical Features		

Supply Voltage
    External Power
    Host Power
	10..30 Vdc
	5 Vdc ±10%	

Power Consumption
    External Power
    Host Power
	max. 10 W (charging) *
	max. 500 mA (charging)	

Indicators	Ext. Power/Data **yellow** LED Host Power/Data **yellow** LED Reader batt. state **green/red** LED Spare batt. state **green/red** LED (OM-3000 only) **beeper**	

Time of Recharge
    External Power
    Host Power
	max. 4 hours with 2150 mAh Li-Ion battery
	max. 10 hours with 2150 mAh Li-Ion battery	

Radio Features	**European Models**	**USA Models**
Working Frequency	433.92 MHz	910 MHz
Bit Rate	19200 baud	36800 baud
Range (in open air)	50 m	30 m
Environmental Features		

Working Temperature
    Radio
    Battery Charging
	-20° to +50 °C / -4° to +122 °F
	0° to +40 °C / +32° to +104 °F	

Storage Temperature	-20° to +70 °C / -4° to +158 °F	
Humidity	90 % non condensing	
Protection Class	IP40	
Mechanical Features		
Weight without mounting base	about 380 g. / 13.4 oz	
Dimensions (without antenna)	240 x 108 x 95 mm / 9.44 x 4.25 x 3.74 in	
Material	ABS	

* Having a switching regulator inside, the OM-30X0 draws the same power, regardless of the supply voltage. i.e. as the input voltage increases the current drawn decreases.

System Configuration	**OM-30X0**	**STARGATE™**
Max number of devices per base station	32	255
Max number of devices in the same reading area	2000	
	OM-3000	**STARGATE™**
Max number of base stations in network	16 (including cradle Master)	

WARRANTY

Datalogic warranties this product against defects in workmanship and materials, for a period of 3 years from the date of shipment, provided that the product is operated under normal and proper conditions.

Datalogic has the faculty to repair or replace the product, these provisions do not prolong the original warranty term. The warranty does not apply to any product that has been subject to misuse, accidental damage, unauthorized repair or tampering.

SERVICES AND SUPPORT

Datalogic provides several services as well as technical support through its website. Log on to **www.datalogic.com** and click on the links indicated for further information including:

- **PRODUCTS**

  Search through the links to arrive at your product page where you can download specific **Manuals** and **Software & Utilities** including:

  - **Datalogic Aladdin™** a multi-platform utility program which allows device configuration using a PC. It provides RS232/USB-COM interface configuration as well as configuration barcode printing.

- **SERVICES & SUPPORT**

  - **Datalogic Services -** Warranty Extensions and Maintenance Agreements

  - **Authorised Repair Centres**

- **CONTACT US**

  E-mail form and listing of Datalogic Subsidiaries

COMPLIANCE

This device must be opened by qualified personnel only.

POWER SUPPLY

This device is intended to be supplied by a UL Listed/CSA Certified Power Unit marked "Class 2" or LPS power source rated 10-30 V DC, minimum 1 A, which supplies power directly to the cradle.

FCC COMPLIANCE

Modifications or changes to this equipment without the expressed written approval of Datalogic could void the authority to use the equipment.

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 which may cause undesired operation.

This device contains FCC ID OMJ0015.

RADIO COMPLIANCE

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/rtte/spectr.htm for further information.

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WEEE COMPLIANCE

$C\epsilon_{06}$

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declares that the
déclare que le
bescheinigt, daß das Gerät
declare que el

OM-30X0, RF Base Charger

e tutti i suoi modelli
and all its models
et tous ses modèles
und seine Modelle
y todos sus modelos

sono conformi alla Direttiva del Consiglio Europeo sottoelencata:
are in conformity with the requirements of the European Council Directive listed below:
sont conformes aux spécifications de la Directive de l'Union Européenne ci-dessous:
der nachstehenden angeführten Direktive des Europäischen Rats entsprechen:
cumple con los requisitos de la Directiva del Consejo Europeo, según la lista siguiente:

1999/5/EEC R&TTE

Questa dichiarazione è basata sulla conformità dei prodotti alle norme seguenti:
This declaration is based upon compliance of the products to the following standards:
Cette déclaration repose sur la conformité des produits aux normes suivantes:
Diese Erklärung basiert darauf, daß das Produkt den folgenden Normen entspricht:
Esta declaración se basa en el cumplimiento de los productos con las siguientes normas:

ETSI EN 301 489-3 v1.4.1, August 2002: ELECTROMAGNETIC COMPATIBILITY AND RADIO SPECTRUM MATTERS (ERM); ELECTROMAGNETIC COMPATIBILITY (EMC) STANDARD FOR RADIO EQUIPMENT AND SERVICES; PART 3: SPECIFIC CONDITIONS FOR SHORT-RANGE DEVICES (SRD) OPERATING ON FREQUENCIES BETWEEN 9 KHZ AND 40 GHZ
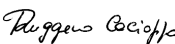
ETSI EN 300 220-3 v1.1.1, September 2000: ELECTROMAGNETIC COMPATIBILITY AND RADIO SPECTRUM MATTERS (ERM); SHORT RANGE DEVICES (SRD); RADIO EQUIPMENT TO BE USED IN THE 25 MHZ TO 1000 MHZ FREQUENCY RANGE WITH POWER LEVELS RANGING UP TO 500 MW; PART 3: HARMONIZED EN COVERING ESSENTIAL REQUIREMENTS UNDER ARTICLE 3.2 OF THE R&TTE DIRECTIVE

EN 60950-1, December 2001: INFORMATION TECHNOLOGY EQUIPMENT – SAFETY – PART 1: GENERAL REQUIREMENTS

Lippo di Calderara, October 18th, 2006

Ruggero Cacioppo
Ruggero Cacioppo
Quality Assurance Laboratory Manager