

OM-GRYPHON™ SERIES

QUICK REFERENCE



DATALOGIC

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OM-GRYPHON™

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Preliminary

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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 Handbuchs 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







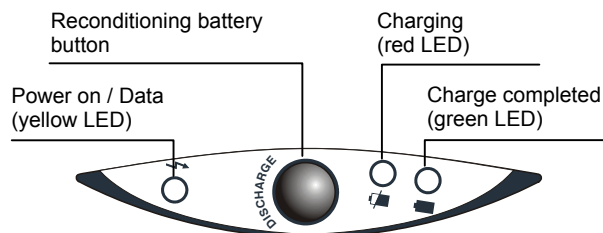
USING OM-GRYPHON™ RADIO CRADLE

The OM-GRYPHON™ cradle, paired with one Gryphon™ M series reader, builds a Cordless Reading System for the collection, decoding and transmission of barcoded data.

USB multi-standard interface models can be connected to a Host PC through a USB, RS232, Wedge or Pen emulation cable. IBM models can be connected to an IBM 46xx Terminal, a USB or an RS232 interface. All models are suited for single-cradle layouts.

The LEDs signal the OM-GRYPHON™ status, as described in the following table:

	LED	STATUS
	Power on / Data	Yellow On = OM-GRYPHON™ is powered. Yellow Blinking = OM-GRYPHON™ receives data and commands from the Host or the reader.
	Charging	Red On = the battery charge is in progress. Red Blinking = the battery reconditioning is in progress.
	Charge completed	Green On = the battery is completely charged.
	Charging + Charge completed	Red and Green Blinking together = the reader is not correctly placed onto the reader.



To setup your OM-GRYPHON™ cradle you must:

1. Make all system connections.
2. Configure the OM-GRYPHON™ cradle.



SYSTEM CONNECTIONS



Connections should always be made with power off!

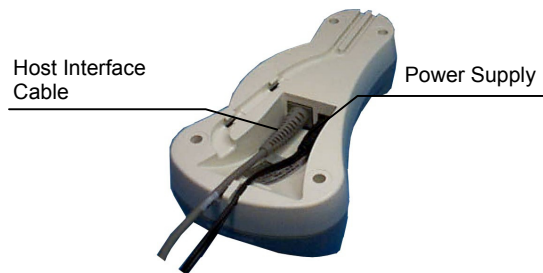
CAUTION

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

CONNECTING AND DISCONNECTING THE OM-GRYPHON™ INTERFACE CABLE

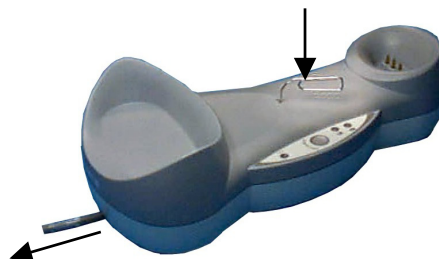
To connect the OM-GRYPHON™ :

1. Connect the OM-GRYPHON™ to the appropriate interface cable which must be simply plugged into the Host connector on the base of the cradle.
2. Connect the cradle to an external power supply, see the figure below.



OM-GRYPHON™ - Bottom View

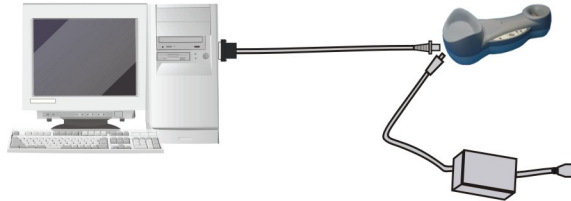
To disconnect the cable, insert a paper clip or other similar object into the hole corresponding to the Host connector on the body of the cradle. Push down on the clip while unplugging the cable. Refer to the following figure:



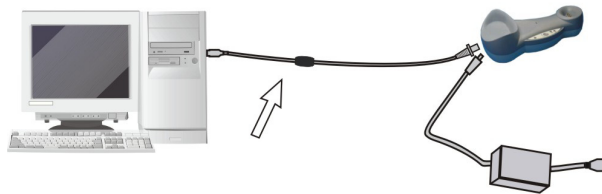
OM-GRYPHON™ - Disconnecting the Cable



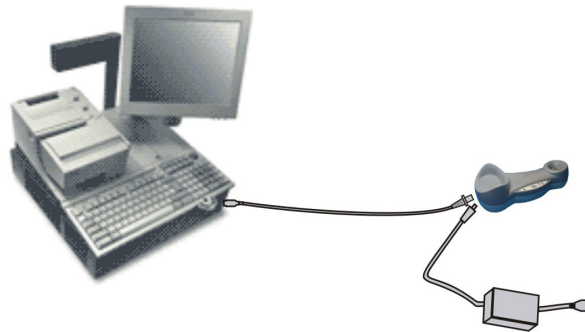
RS232 CONNECTION



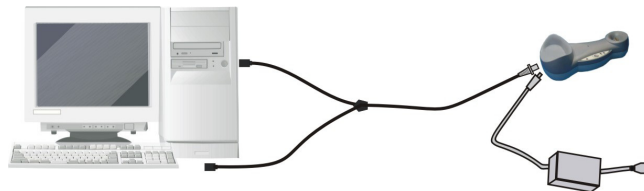
USB CONNECTION



IBM USB POS CONNECTION



WEDGE CONNECTION

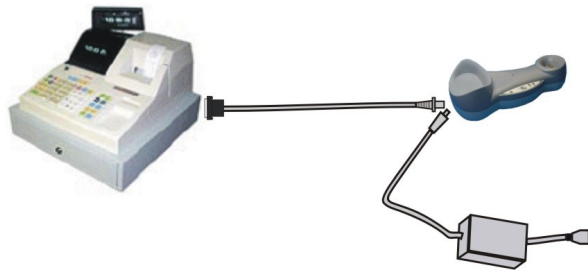




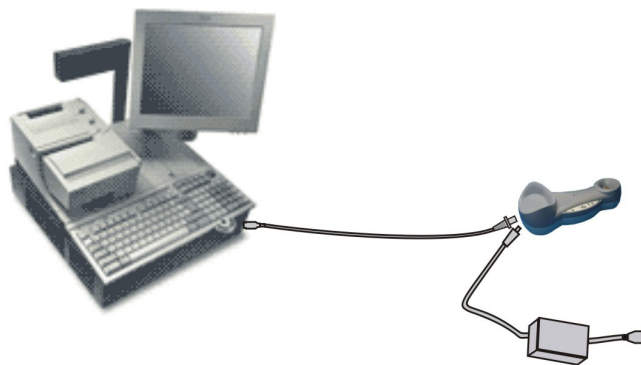
WEDGE CONNECTION



PEN CONNECTION



IBM 46XX TERMINALS – PORT 9B/PORT 5B CONNECTION





OM-GRYPHON™ CONFIGURATION

The OM-GRYPHON™ configuration can be performed in two ways: either by sending configuration strings from the Host via the RS232 or USB-COM interface or by reading configuration barcodes with the Gryphon™ M reader.

SERIAL/USB COM CONFIGURATION

By connecting the OM-GRYPHON™ to a PC through an RS232 or USB interface cable it is possible to send configuration strings from the PC to OM-GRYPHON™. Using this method you can also send new configuration strings from the PC to the reader or upgrade application software onto the Gryphon™ M reader.

CONFIGURATION BARCODES

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

For the Gryphon™ M configuration refer to the "Gryphon™ M Quick Reference".

To configure the OM-GRYPHON™ using the Gryphon™ M reader (the one paired to the cradle with the **Bind** command), follow the procedure according to the Interface selected.

INTERFACE SELECTION

Follow the procedure to configure the interface required by your application.

USB multi-standard interface models:

- USB Interface
- RS232 Interface
- Wedge Interface
- Pen Interface

IBM models:

- USB
- RS232 Interface
- IBM 46xx terminal Interface



USB INTERFACE CONFIGURATION

The USB interface is compatible with:

- Windows 98 (and later)
- Mac SO 8.0 (and later)
- IBM POS for Windows
- 4690 Operating System

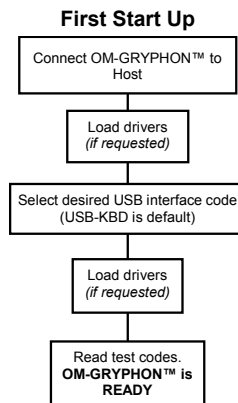
START-UP

As with all USB devices, upon connection, the Host performs several checks by communicating with the OM-GRYPHON™. Before the OM-GRYPHON™ is ready, the correct USB driver must be loaded.

For all systems, the correct USB driver for the default USB-KBD interface is included in the Host Operating System and will either be loaded automatically or will be suggested by the O.S. and should therefore be selected from the dialog box (the first time only).

You can now read codes with the associated Gryphon™ M reader. At this point you can read the USB interface configuration code according to your application. Load drivers from the O.S. (if requested). When configuring the USB-COM interface, 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>.







The OM-GRYPHON™ is ready.



Successive start-ups will automatically recognize the previously loaded drivers.



USB INTERFACE SELECTION

USB-KBD (default) 
USB-KBD-ALT-MODE 
USB-KBD-APPLE 
USB-COM* 
USB-IBM-Table Top 
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>.



USB KEYBOARD NATIONALITY

USB-KBD users should select one of the following KEYBOARD NATIONALITY codes.

Belge



Deutsch



English



Español



Français



Italiano



Japanese



Svenskt



USA





RS232 INTERFACE SELECTION

Read the OM-GRYPHON™ restore default code, then read the interface selection code for your application:

RESTORE OM-GRYPHON™ DEFAULT



RS232 INTERFACE

Standard



POS TERMINALS

Nixdorf Mode A



Fujitsu



ICL Mode





WEDGE INTERFACE SELECTION

Read the OM-GRYPHON™ restore default code, then read the interface selection code for your application:

RESTORE OM-GRYPHON™ DEFAULT



WEDGE INTERFACE

IBM AT or PS/2 PCs



IBM XT



PC Notebook



IBM SURE1



IBM Terminal 3153



**WEDGE INTERFACE (CONTINUED)**

IBM Terminals 31xx, 32xx, 34xx, 37xx:

To select the interface for these IBM Terminals, read the correct key transmission code. Select the keyboard type if necessary (default = advanced keyboard).

KEY TRANSMISSION MODE

make-only keyboard



make-break keyboard

**KEYBOARD TYPE**

advanced keyboard



typewriter keyboard

**ALT MODE**

The following interface selection allows barcodes sent to the PC to be interpreted correctly independently from the Keyboard Nationality used. **You do not need to make a Keyboard Nationality selection.**

(default = Num Lock Unchanged)

Make sure the Num Lock key on your keyboard is ON.

IBM AT - ALT mode



PC Notebook - ALT mode





WEDGE INTERFACE (CONTINUED)

WYSE TERMINALS

ANSI Keyboard



PC Keyboard



ASCII Keyboard



VT220 style Keyboard



DIGITAL TERMINALS

VT2xx/VT3xx/VT4xx



APPLE

APPLE ADB Bus





WEDGE KEYBOARD NATIONALITY

If you selected the Wedge interface, you should also read among the following codes the one that matches your Keyboard Nationality:

Belge



Deutsch



English



Español



Français



Italiano



Svenskt



USA



The following Keyboard Nationality selection is only valid for IBM AT compatible PCs:

Japanese





PEN INTERFACE SELECTION

Read the OM-GRYPHON™ restore default code, then read the interface selection code for your application:

RESTORE OM-GRYPHON™ DEFAULT



PEN INTERFACE



IBM 46xx TERMINAL INTERFACE SELECTION

Read the OM-GRYPHON™ restore default code, then read the interface selection code for your application:

RESTORE OM-GRYPHON™ DEFAULT



PORT 9B

4501 Protocol



(typical)

1520 Protocol



PORT 5B

1520 Protocol



(typical)

4501 Protocol





IBM 46XX TERMINAL DATA FORMATTING

To select the data formatting for these IBM Terminals, read one of the code selections below. (default = IBM Standard).

Conversion to Code 39



◆ IBM Standard



Mixed IBM Standard + Code 39



IBM DATA FORMATTING (Transmission Format)

The IBM 46xx Series cash register recognizes the following codes:

EAN 8 / EAN13 / UPC A / UPC E with and without Add On	
Normal 2/5	Interleaved 2/5
Code 39	Codabar
Code 128	Code 93

The transmission format of codes belonging to this set is specified by the protocol. Since the reader allows a wider set of codes to be selected, the following formats are defined to offer the user all the reading possibilities of the Datalogic product.

Conversion to Code 39 Format

Data from any code selected may be transmitted. Each code is transmitted to the Host as Code 39. Any character not included in the standard Code 39 set will be replaced with a "Space" (20 Hex).

IBM Standard Format (default)

Only codes belonging to the above mentioned set may be transmitted. Each code transmitted to the Host is recognized by the identifier requested by the protocol. If the selected code does not belong to this set, it will not be transmitted.

MIXED IBM Standard + Code 39 Format

Data from any code selected may be transmitted. For codes belonging to the above mentioned set, the "IBM Standard Format" is applied. The "Code 39" Format applies to codes not belonging to this set.



OM-GRYPHON™ DEFAULT CONFIGURATION

USB DEFAULT SETTINGS

DATA FORMAT: code identifier disabled, code length not transmitted, character replacement disabled, address stamping disabled, address delimiter disabled.

USB KEYBOARD: USA keyboard, inter-character and inter-code delays disabled.

USB COM: handshaking disabled, delay disabled, rx timeout 5 sec., ack/nack disabled, FIFO enabled, serial trigger lock disabled.

Default Headers and Terminators for each USB mode:

- USB-KBD: no header, terminator = ENTER
- USB-KBD-ALT-MODE: no header, terminator = CR
- USB-COM: no header, terminator = CR-LF
- USB-IBM-TABLE TOP: not applicable
- USB-IBM-HAND HELD: not applicable

RS232 Standard DEFAULT SETTINGS

9600 baud, no parity, 8 data bits, 1 stop bit, handshaking disabled, ACK/NACK disabled, FIFO enabled, inter-character delay disabled, 5 sec. rx timeout, serial trigger lock disabled.

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

RS232 Nixdorf DEFAULT SETTINGS

9600 baud, odd parity, 8 data bits, 1 stop bit, handshaking hardware (RTS/CTS), ACK/NACK disabled, FIFO disabled, inter-character delay disabled, 9.9 sec. rx timeout, serial trigger lock disabled.

DATA FORMAT: code identifier enabled, code length not transmitted, no header, terminator = CR, character replacement disabled, address stamping disabled, address delimiter disabled.

RS232 Fujitsu DEFAULT SETTINGS

9600 baud, no parity, 8 data bits, 1 stop bit, handshaking disabled, ACK/NACK disabled, FIFO enabled, inter-character delay disabled, 2 sec. rx timeout, serial trigger lock disabled.

DATA FORMAT: code identifier enabled, code length not transmitted, no header, terminator = CR, character replacement disabled, address stamping disabled, address delimiter disabled.

RS232 ICL DEFAULT SETTINGS

9600 baud, even parity, 8 data bits, 1 stop bit, handshaking RTS always on, ACK/NACK disabled, FIFO enabled, inter-character delay disabled, 9.9 sec. rx timeout, serial trigger lock disabled.

DATA FORMAT: code identifier enabled, code length not transmitted, no header, terminator = CR, character replacement disabled, address stamping disabled, address delimiter disabled.



WEDGE DEFAULT SETTINGS

USA keyboard, caps lock off, caps lock auto-recognition enabled; num lock unchanged, inter-character and intercode delay disabled.

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

PEN DEFAULT SETTINGS

Interpret operating mode, minimum output pulse 600 μ s, conversion to Code 39,, overflow medium, output level normal, idle level normal, interblock delay disabled.

IBM DEFAULT SETTINGS

DATA FORMAT: IBM Standard, code identifier disabled, no header, no terminator, address stamping disabled, address delimiter disabled.

RADIO PARAMETERS

battery type NiMh.



OPERATING TEST

Read the TEST codes below.

EAN-8



1234 5670

EAN-13



1 234567 000992

Code 39 (Normal)



1 7 1 6 2

Code 128



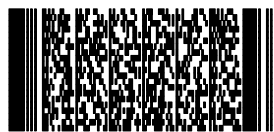
t e s t

Interleaved 2 of 5



0 1 2 3 4 5 6 7 8 4

PDF417



DATALOGIC PDF417 Test Code

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

To change the defaults refer to the "Gryphon™ Software Configuration Manual", part number **90ACC1780**, or to the DL Sm@rtSet™ Configuration program, both downloadable from the website.



COPY CONFIGURATION

This procedure allows using a previously configured Gryphon™ M reader (Master) to send its configuration directly to other devices of the same type (Slaves) by means of a single OM-GRYPHON™.

Proceed as follows:

1. With the **master** Gryphon™ M (correctly configured reader), read the Copy Configuration barcode below. Then, place it onto the OM-GRYPHON™ cradle within 10 seconds. The reader will beep indicating the configuration has been copied.

Copy Configuration



2. With the **slave** Gryphon™ M, read the Get Configuration barcode below. Then place it onto the **same** OM-GRYPHON™ cradle used in the step above. The slave reader's address will not be changed.

Get Configuration



The configuration will be copied from the master to the slave Gryphon™ M. The slave Gryphon™ M signals the end of the procedure with a series of beeps.

3. Repeat the procedure above to configure other slave readers. The OM-GRYPHON™ can continue to configure slave readers until it receives another command.



NOTE

This procedure does not require connection to a PC, however by connecting the RS232 interface cable to the OM-GRYPHON™ the copied configuration will be sent to the PC.



BATTERY SELECTION

Battery selection is required only when the Gryphon™ M reader has an Alkaline battery and you want to use OM-GRYPHON™ either for serial configuration, software upgrades or to hold Gryphon™ M. Since this type of battery must not be charged it is necessary to disable the OM-GRYPHON™ charge function by following the procedure:

1. With the Gryphon™ M read the following code:

Alkaline



The green LED on the Gryphon™ M will blink, signaling the reader has accepted the command.

2. Place the reader onto the cradle within 10 seconds. The green LED turns off and a short beep is emitted.

To enable the charge function repeat step 1 and 2 substituting the "Alkaline" code with the following one:

NiMh/NiCd



CAUTION

Attempts to charge Alkaline batteries could cause leakage of liquid, generation of heat or, in extreme cases, explosion. If using Alkaline batteries, carefully follow the procedure above to avoid damage.



TECHNICAL FEATURES

OM-GRYPHON™		
Electrical Features		
Supply voltage	9..28 Vdc	
Power consumption	max. 8 W (charging) *	
LED Indicators	Battery charging red Charge completed green Power / Data yellow	
Time of recharge	From 3 to 5 hours	
Radio Features	European Models	USA Models
Working Frequency	433.92 Mhz	910 Mhz
Bit rate	19200 baud	36800 baud
Range (in open air)	30 m.	15 m.
RF Modulation	FSK	
Max number of devices per base station	16	
Max number of devices in the same reading area	2000	
Environmental Features		
Working temperature	0° to +40 °C / 32° to 104 °F	
Storage temperature	-20° to +70 °C / - 4° to 158 °F	
Humidity	90 % non condensing	
Protection class	IP30	
Mechanical Features		
Weight	about 250 g. / 8.81 oz	
Dimensions	208 x 107 x 55.5 mm / 8.1 x 4.2 x 2.18 in	
Material	ABS	

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



WARRANTY

Datalogic warrants this product against defects in workmanship and materials, for a period of 24 months 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:

- **DL Sm@rtSet™** a Windows-based utility program which allows device configuration using a PC. It provides RS232 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

POWER SUPPLY

This device is intended to be supplied by a UL Listed or CSA Certified Direct Plug-in Power Unit marked "Class 2" output rated 9-28 V DC, minimum 0.8 A and having a cable length <3 m.

This device must be opened by qualified personnel only.



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.

This equipment 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.

RADIO COMPLIANCE

Contact the competent authority responsible for the management of radio frequency devices of your country to verify the eventual necessity of a user license.

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



WEEE COMPLIANCE



DATALOGIC S.p.A.,
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Bologna - Italy



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

OM-GRYPHON, Base charger

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

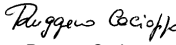
sono conformi alla Direttiva del Consiglio Europeo sottoelencata:
are in conformity with the requirements of the European Council Directive listed below:
sont conformes aux spécifications de la Directive de l'Union Européenne ci-dessous:
der nachstehenden angeführten Direktive des Europäischen Rats entsprechen:
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 v.1.4.1, 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 v.1.1.1, SEPTEMBER 2004:** 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, September 8th, 2005


Ruggero Cacioppo
Quality Assurance Laboratory Manager