COGNEX®

DataMan® 8000 Series

Quick Reference Guide

DATAMAN
ID Readers

About DataMan 8000

The DataMan 8000 series of readers offers the industry's most advanced technology for reading 1D and 2D codes regardless of size, quality, printing method or surface, and is the only handheld ID reader that offers Industrial Ethernet communication and liquid lens technology.

The DataMan 8000 series is available in two models, each with patented 1DMax and 2DMax algorithms, liquid lens technology, and future-proof modular communication slide-ins with optional Industrial Ethernet capability.

The **DataMan 8500** readers use Cognex's patented *UltraLight® technology* for superior image formation on any mark type and surface. UltraLight illumination provides dark field, bright field and diffuse lighting all in one electronically controlled light.

The **DataMan 8100** readers feature integrated bright field illumination ideal for applications that require superior performance without specialty lighting.

Both models are available with the following communication options:

| Ethernet | RS-232 | USB | Wireless |

An intelligent base station is also provided when the DataMan 8000 reader uses the wireless communication module. The base station acts as a router between the reader and your computer or network.
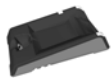
DataMan 8000 Accessories

Serial/USB slide-in
DMCM-SERIALM-00

Ethernet slide-in
DMCM-ENETM-00

Wireless slide-in
DMCM-WLESSM-00

Intelligent Base Station
DMA-IBASE-00

Power Supply for reader
DM100-PWR-00

Power Supply for base station
DMA-24VPWR-xx

POE Adapter
CPS-AC-POE1A-xx

POE Adapter
CPS-24V-POE1

POE Adapter
CPS-24V-POE4

Stand
DM-STAND-00

Wall Mount
DMA-WALL-8000-00

Battery for the wireless reader
DMA-HHBATTERY-00

DataMan 8000 Accessories: Cables

DataMan 8000 Reader Cables
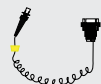
RS-232 coiled cable for reader, 2.5 m
DM8000-RS232-02

RS-232 coiled cable for reader, 5 m
DM8000-RS232-05

USB cable, 2.5 m
DM8500-USB-02

USB coiled cable, 2.5 m
DM8000-USBC-02

PS/2 adapter cable
DM700-PS2-00

Ethernet cable, 2.5 m
DM8000-ECABLE-02

Ethernet cable, 5 m
DM8000-ECABLE-05

Ethernet cable, 30 m
DM8000-ECABLE-30

DataMan Base Station Cables
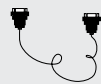
RS-232 cable for base station, 5 m
DMA-RS232-05

- USB cable for base station: Use any standard USB-A to USB-B 2.0 cable up to 3 meters
- Ethernet cable for base station: Use any standard CAT5/5e, SF/FTP or S/FTP cable

Physical Layout of the Reader

⚠️ **LASER LIGHT, DO NOT STARE INTO BEAM**

S/N: 1A1001XT123456
P/N: 821-0053-1R A
MAC: 00D024ABCDEF

LASER LIGHT - DO NOT STARE INTO BEAM
CLASS 2 LASER PRODUCT 650nm < 1mW
CLASSIFIED PER IEC 60825-1, Ed 2, 2007-03
CLASSIFIED PER AU/NZS 2211.1 : 2004

Complies with FDA performance standards for
laser products except for deviations pursuant
to Laser Notice No. 50, dated June 24, 2007.

UL LISTED
I.T.E. E246963

Laser aimer

Lanyard hook

UltraLight
(DataMan
8500 only)

Indicator Light

Trigger
(press and
hold to read)

Communication module
insertion point

Communication
module

Physical Layout of the Base Station

base station
status indicators

Connection point with
the reader:

- pairing reader and
  base station
- non-wireless
  communication
- charging

spare battery charger
status indicator

spare battery
charger

power plug (24V,
max. 13W)

RS-232

USB

Ethernet (with
optional Class
3 PoE power)
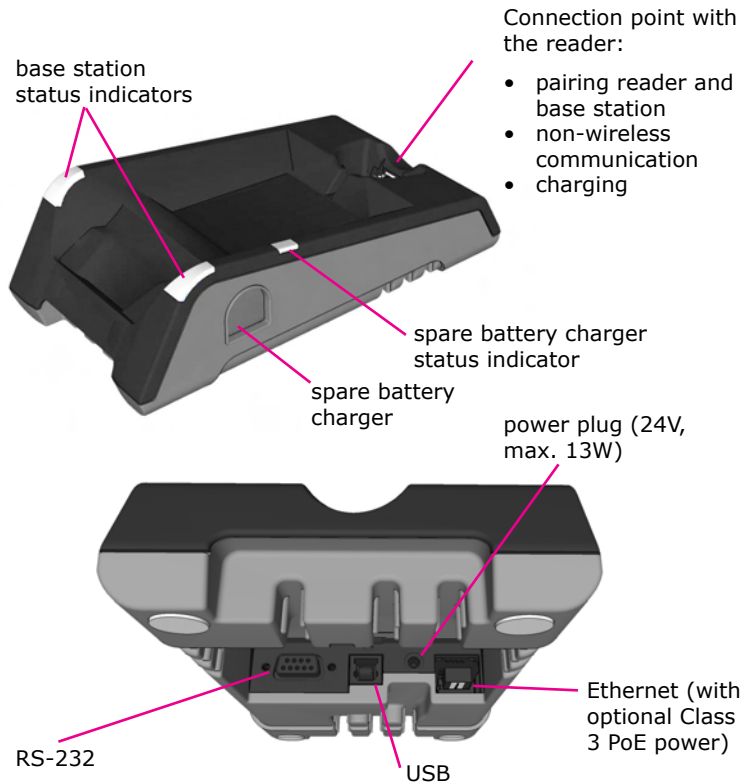
Overview of Setting Up the Reader

To be able to connect to your reader or base station on your computer, you must perform the following steps:

1. Install the Setup Tool on your computer.

2. Select the connection type: Ethernet, Serial, or USB.

| Ethernet | RS-232 | USB |

3. Connect the appropriate cabling.

4. Power on your device(s).

Install DataMan 8000 Software

1. Check the DataMan Release Notes for a full list of system requirements.

2. Insert CD-ROM and follow the on-screen prompts.

3. Connect the DataMan 8000 to your PC.

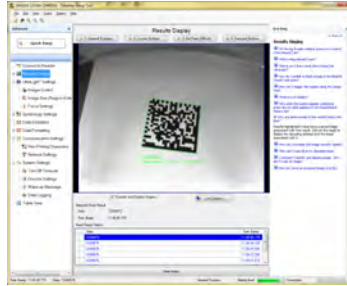4. Launch the Setup Tool and click **Refresh**. The reader or the base station appears under **COM ports** or **Network devices**.

5. Select a **COM port** or a **Network devices** listing and click **Connect**.
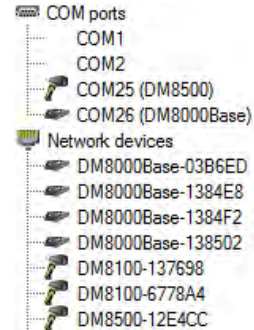
RS-232/USB connection

Ethernet connection

"DM8_00" with last 6 characters of MAC address, printed on back of the reader or the base station

Start the Setup Tool

Connect the reader to the Setup Tool to configure it with the type of symbologies it will decode as well as other parameters, such as the type of trigger it will use and the format of the results it will generate.

Alternatively, configure your reader by scanning the appropriate reader configuration code from the *Reader Configuration Codes* document, available through the Windows Start menu.

Quick Setup

Configure your reader in a few basic steps

Connect to Reader

Establish a connection to the reader
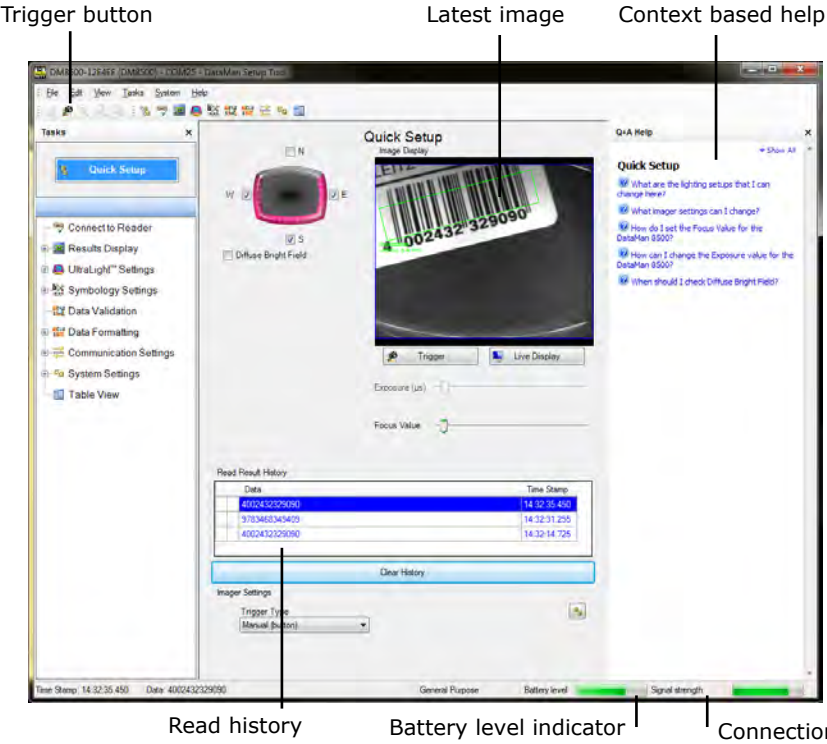
Results Display

View results

Light and Imager Settings/ UltraLight Settings

Choose a trigger type and other acquisition parameters

System Settings

Configure visual and audio feedback, trigger and output actions

Trigger button

Latest image

Context based help

Read history

Battery level indicator

Connection status/Signal strength

Use the Setup Tool Menu Bar

Each reader can store its current set of runtime parameters to a configuration (.cfg) file, which contains information such as the enabled symbologies and how any output data should be formatted.

The same configuration file can be loaded onto multiple readers, as the file does not contain identification information such as the IP address or device name of the reader used to create it.

A reader can also generate a Cognex device configuration (.cdc) file, which stores the set of runtime parameters plus any identification data, such as the name of the device, its IP address, subnet mask, and so on. Cognex recommends generating a device configuration file for each reader to allow you to restore a reader to its operating state with minimal effort.

Use the **File** menu of the Setup Tool to manage .cfg and .cdc files:

File Menu	
Open Configuration	Open a saved .cfg configuration file.
Save Configuration	Create a .cfg configuration file of current runtime parameters.
Print Configuration Code	Generate a programming codes sheet representing your reader's configuration.
Restore Device	Load a saved device configuration .cdc file, with run-time parameters plus device-specific information for a particular DataMan 8000.
Backup Device	Create a device configuration .cdc file for a specific reader.
Save Image	Save the latest acquired image with .jpg file format.

Use the **Edit** menu for standard Cut, Copy and Paste operations.

Use the **View** menu to view reader information (serial number, firmware version, and so on) and to enable and disable various elements of the Setup Tool, and the **Tasks** menu to switch between various Setup Tool options.

Use the **System** menu to manage the current settings on the reader and to upgrade the features it currently supports:

System Menu	
Save Settings	Save the current parameters to non-volatile memory, which allows the reader to restore these settings each time you reboot it.
Reset Configuration	Reset all configuration parameters in RAM (volatile memory) to the default settings except for communication settings.
Update Firmware	Update the reader software.
Upload Feature Key	Unlock additional features available in the reader software if you have the right key.

Use the **Help** menu to display Setup Tool version information.

Connecting a DataMan 8000 through Ethernet

1. Connect the Ethernet slide-in (DMCM-ENETM-00) to your DataMan 8000.

2. With a 2 mm Allen Wrench, tighten the screws so that the slide-in is firmly locked.

3. Insert the plug and slide the cable lock up to the reader and twist the cable lock in place.

location of the two screws
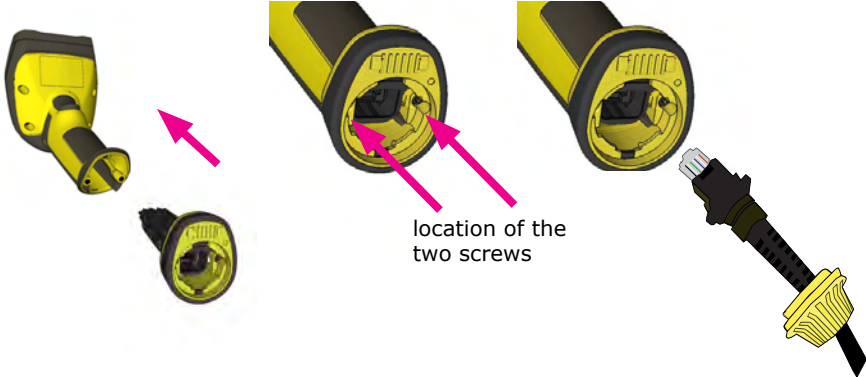
Use the DM8000-ECABLE-05 (5 meters) or the DM8000-ECABLE-30 (30 meters). You also need a Power Over Ethernet Adapter (CPS-AC-POE1A-xx).

WARNING

Disconnect DataMan from power before inserting/removing communication modules.

Troubleshooting an Ethernet Connection

If your reader does not appear in the Setup Tool's list of network devices, you may need to adjust your network settings.

First check your Ethernet connection and click **Refresh** in the Setup Tool. Next, scan the **Enable DHCP** code below (which you can also find in the *DataMan Reader Configuration Codes* document available from the Windows Start menu). This might allow the reader to acquire a suitable IP address from a DHCP server on your subnet.

If the reader still does not appear, you can use either the **Add Device** or **Force Network Settings** options in the Setup Tool.

If you know the IP address of the reader, use the **Add Device** option. If you do not know the IP address, use the **Force Network Settings** options. Either method should allow the DataMan 8000 reader to appear in the list of **Network devices** so that you can connect to it through the Setup Tool and your Ethernet connection.

If none of the above helps, reset your reader to factory defaults by scanning the **Reser Scanner to Factory Defaults** code below.
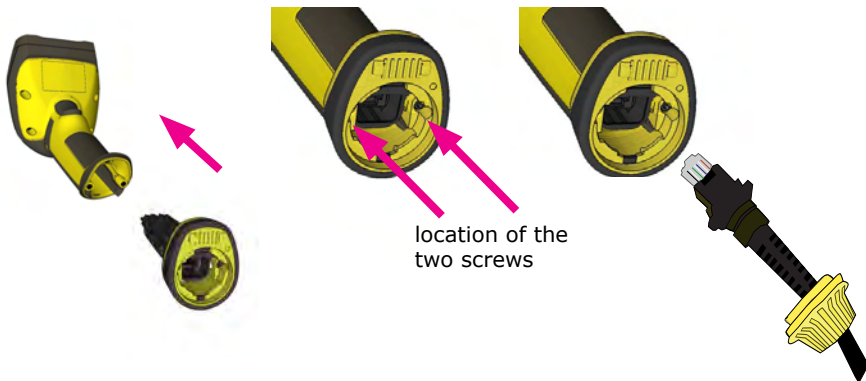

Enable DHCP

Reset Scanner to Factory Defaults

Connecting a DataMan 8000 through RS-232

1. Connect the serial slide-in (DMCM-SERIALM-00) to your DataMan 8000.

2. With a 2 mm Allen Wrench, tighten the screws so that the slide-in is firmly locked.

3. Insert the plug and slide the cable lock up to the reader and twist the cable lock in place.

location of the two screws

Use the DM8000-RS232-02 cable (2.5 meters) or the DM8000-RS232-05 cable (5 meters). For power supply, use the DataMan 8000 Power Supply (DM100-PWR-000).

> **WARNING**
>
> Disconnect DataMan from power before inserting/removing communication modules.

Observe the following electrical requirements:

Pin	Signal
5	GND
9	Reserved
4	N/C
8	RTS
3	RxD
7	CTS
2	TxD
6	N/C
1	VCC PWR

> **WARNING**
>
> For proper RS-232 operation, do not apply any voltage to pin 9.
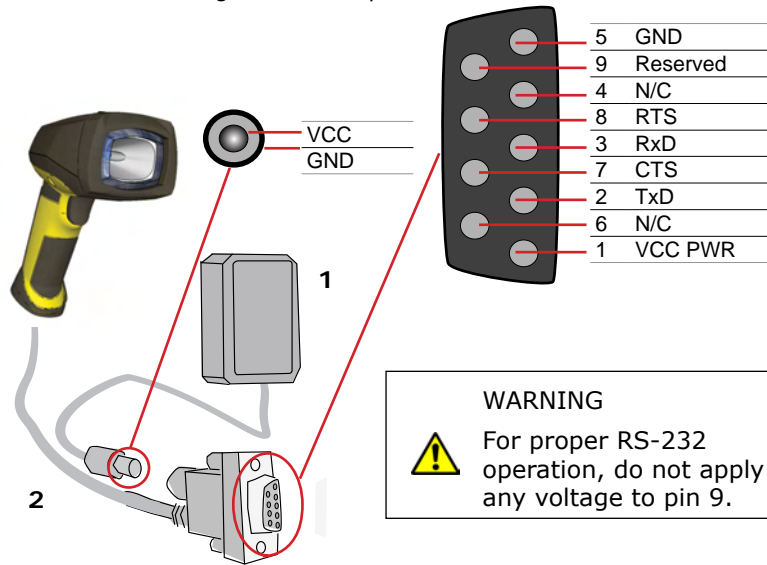
1. 6VDC power supply (DM100-PWR-000), a 5.5mm x 2.1mm DC Power Plug

2. VCC = +4.75V up to +6.0V for 2.5 m cable

   VCC = +5.5V up to +6.0V for 5.0 m cable

Power on the RS-232 cable can be supplied by either the DC Power Plug or Pin 1 of the D-SUB. **DO NOT** use both in parallel.

Keyboard Emulation with Keyboard
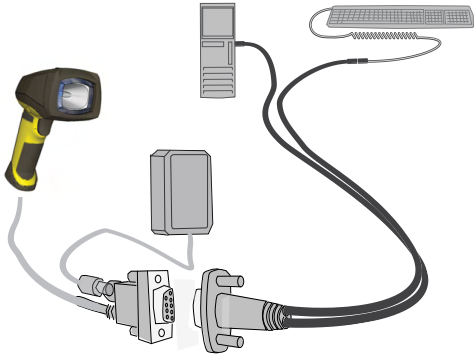
1. Connect the PS/2 keyboard adapter to your unpowered PC.

2. Connect your PS/2 keyboard to the PS/2 keyboard adapter, and start up your PC.
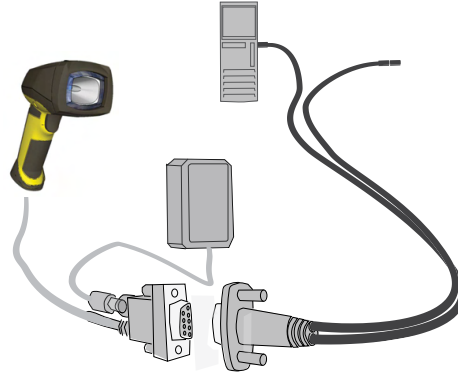
3. Connect your reader to an RS-232 cable and power up your reader.

4. Scan the PS/2 Keyboard Emulation Disable Configuration Code (from the *Reader Configuration Codes* document, available through the Windows Start menu).

5. Connect the RS-232 cable to the PS/2 keyboard adapter.

6. Start reading codes.

You can change your reader's configuration by switching back to the serial interface and connecting to the Setup Tool.

Keyboard Emulation without Keyboard

1. Scan the PS/2 Keyboard Emulation Enable Configuration Code (from the *Reader Configuration Codes* document, available though the Windows Start menu.)

2. Power down your PC and unplug your device from power.

3. Connect the PS/2 keyboard adapter to your PC.

4. Connect your reader's serial cable to the PS/2 keyboard adapter and plug in your device to power. Wait until the device boots up.

5. Power up your PC and start reading codes.

You can change your device's configuration by scanning the appropriate Configuration Codes.

Keyboard Emulation with Wireless Reader using Keyboard

1. Connect the PS/2 keyboard adapter to your unpowered PC.

2. Connect your PS/2 keyboard to the PS/2 keyboard adapter.

3. Start up your PC.

4. Power up your base station.

5. With your wireless reader, scan the Base Station PS/2 Keyboard Emulation Disable Configuration Code (from the *Reader Configuration Codes* document, available through the Windows Start menu).

6. Connect the base station to an RS-232 cable, and plug it in to the PS/2 keyboard adapter.

7. Start reading codes.

You can change your device's configuration by switching back to the serial interface and connecting to the Setup Tool.
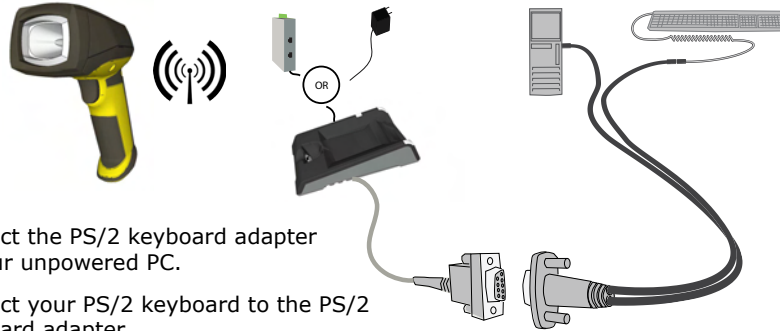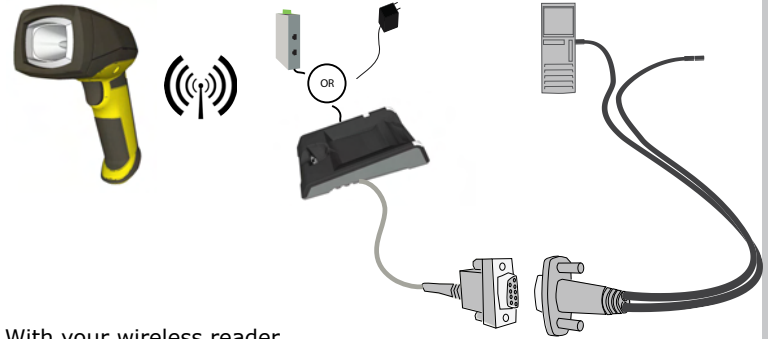
Keyboard Emulation with Wireless Reader without Keyboard

1. With your wireless reader, scan the Base Station PS/2 Keyboard Emulation Enable Configuration Code (from the *Reader Configuration Codes* document, available though the Windows Start menu.)

2. Disconnect your base station's serial cable from your PC.

3. Power down your PC and unplug your device from power.

4. Connect your base station's serial cable to the PS/2 keyboard adapter and plug in your device to power.

5. Connect the PS/2 keyboard adapter to your PC.

6. Power up your PC and start reading codes.

You can change your device's configuration by scanning the appropriate Configuration Codes.

Connecting a DataMan 8000 through USB

1. Connect the serial slide-in (DMCM-SERIALM-00) to your DataMan 8000.

2. With a 2 mm Allen Wrench, tighten the screws so that the slide-in is firmly locked.

3. Insert the plug and slide the cable lock up to the reader and twist the cable lock in place.

location of the two screws
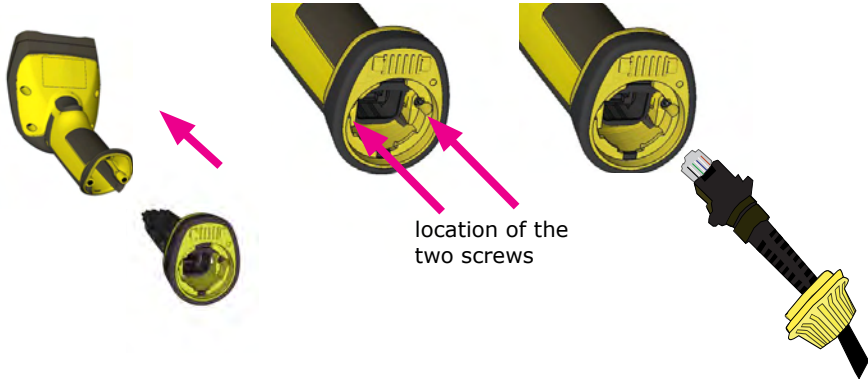
Use the DM8000-USB-00 cable (2.5 meters) or the DM8000-USBC-02 cable (2.5 meters). For DataMan 8500, use an external power supply: DataMan 8000 Power Supply (DM100-PWR-000).

> **WARNING**
>
> Disconnect DataMan from power before inserting/removing communication modules.

Using your Device through USB

If you connect your reader with the coiled USB cable, you must use your device in USB 1.1 mode (which is the default mode). With a straight USB cable, you can use your device in both modes.

Change the USB Connection in the Setup Tool's Communication Settings pane's Serial tab, or scan the appropriate code from the DataMan Configuration Codes document.

USB Connection

☑ USB Driver Compatibility Mode   USB 1.1 mode ⊙ ○ USB 2.0 mode
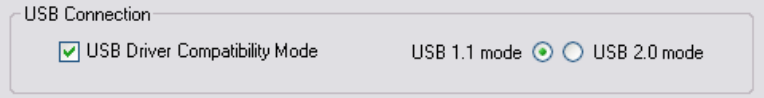
You can also switch the USB mode (CDC or HID) of both the reader and the base station with a pair of RP codes. Perform the following steps:

1. Disconnect from the Setup Tool if you are connected.

2. Scan the "USB Keyboard" code from the DataMan Configuration Codes document.

3. Start scanning codes with your corded reader.

1. Disconnect from the Setup Tool if you are connected.

2. Scan the "Enable USB Keyboard for the base station" code from the DataMan Configuration Codes document.

3. Start scanning codes with your wireless reader.

Connecting to a Wireless DataMan 8000 through a Base Station

1. Connect the wireless slide-in (DMCM-WLESSM-00) to your DataMan 8000.

2. With a 2 mm Allen Wrench, tighten the screws so that the slide-in is firmly locked.

3. Insert the battery.

4. Insert the plug and twist it in place.

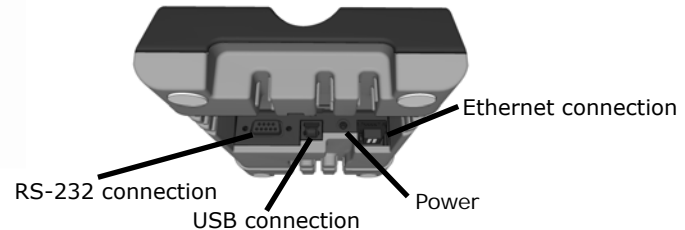location of the two screws

5. Power up the base station using either a 24V power supply, or a Class 3 Power Over Ethernet adapter.

6. Connect your base station to your PC using either serial, USB or Ethernet communication.

Ethernet connection

RS-232 connection

USB connection

Power

WARNING

Remove battery from your DataMan before inserting/removing the communication module.

Wireless Connections (continued)

7. When the base station is powered up, place your reader into the base station. They become automatically paired. The base station's status indicator becomes green. When the wireless reader is removed from the base, a wireless connection is established. The status indicator of both the base station and the reader become blue and you can hear a beep. Blue lights indicate the reader and base have successfully paired and are communicating.

8. Connect to your base station or to the wireless reader. You have the possible connection options:

Base Station Connection Type	Connect to Reader in the Setup Tool	Connection Channels
RS-232	Base Station appears: COM port (Wireless reader does not appear)	terminal program
USB	Base Station appears: COM port 1 Wireless reader appears: COM port 2	terminal program Setup Tool
Ethernet	Base station appears: Network device 1 Wireless reader appears: Network device 2	terminal program Setup Tool

9. Lift your reader up from the base station and start reading codes.

NOTES

- When the reader is on the base, communication is established by means of cradle contacts. Wireless communication is disabled.
- Configure wireless communication settings by connecting to the base station. In order for the changed settings to be synchronized between the DataMan 8000 wireless reader and the base station, place your reader in the base station after your changes are saved. To assign a static IP address to the base station or the reader when communicating via Ethernet, connect to the base station in the Setup Tool. The base station, however, auto-assigns the IP address to the reader when they become paired.
- When you connect with the base station to a terminal program, your wireless reader sends decode results to the terminal, but you cannot send commands to the reader.
- If you want to unpair your reader from the base station, you can either click Unassign in the Setup Tool's *Communication Settings* pane's Wireless tab (when you are connected either with the reader or the base station), or scan the "Unassign Reader" reader configuration code.
- If you place the wrong reader (that is, a reader that is not associated with the base station) into the base station, the base station status indicator flashes red and a long beep is sounded.

Base Station Routing Capabilities

The base station is visible as connected through either RS-232, USB or Ethernet, but it routes data through the wireless interface to the reader.

Wireless

((•))

RS-232/
USB

Ethernet

NETWORK
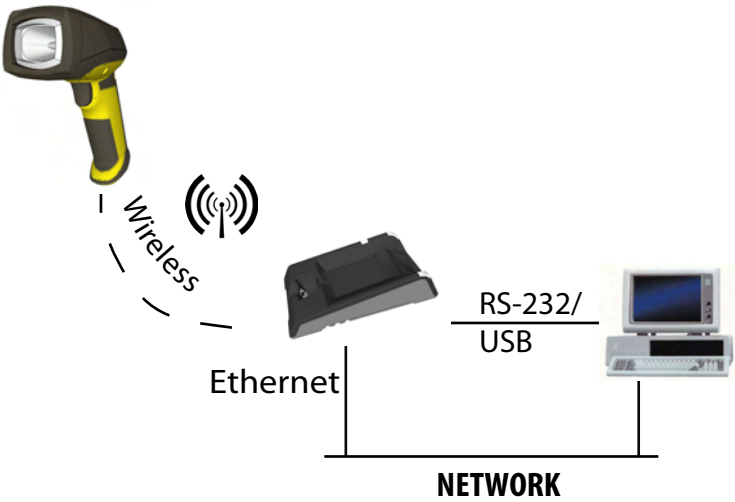
Wireless Reader: Buffering Data

When you are within the wireless range of the base station, your wireless reader sends decoded data to your PC through the base station, just as if you used a tethered reader. You can also see the decoded images in the Setup Tool, if it is running and connected to the reader.

When you leave the wireless range, however, you lose connection to your PC, but you can still keep reading codes. The decoded data is saved in the buffer of the reader.

This buffered data appears on your PC again when you come back within the wireless range, but **ONLY IF** you were connected to a terminal program when you left the wireless range.

Buffered read results on the reader are not displayed in the Setup Tool; they are only transmitted over an existing keyboard emulation, RS-232 Serial or TCP/IP Telnet connection. **NOTE** that the images acquired by the reader when it is out of wireless range are *never* saved, and can not be retrieved.

Open a connection with the reader in a terminal program so that you gain the buffered data when wireless connection is established again.

See the following table for connection options according to communication type:

Wireless Reader: Buffering Data (Continued)

Base Station Connection Type	How to Connect
RS-232	Connect to the COM port of the base station.
USB	Connect to the COM port of the wireless reader.
Ethernet	Connect to the terminal program using the IP address of the reader. To find out the IP address, go to the Setup Tool's *Connect to Reader* pane and hover your mouse over the reader. The IP address appears.
PS/2 Keyboard or USB Keyboard	Open the text editor or your program of choice to use keyboard emulation. When you return to the wireless range, keyboard emulation continues starting with the buffered data.

While you are still within the wireless range, the reader occasionally blinks blue to indicate that the wireless connection is established.

blinking blue status indicator: wireless connection is alive
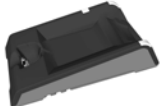
when the reader leaves the wireless range, the base station's signal stops being blue

When you leave the wireless range, you can still keep reading codes. The reader going offline is indicated by a long beep and the status indicator flashes magenta.

status indicator blinks magenta: your reader is offline

When the reader is offline, good reads are indicated with 2 short beeps and the selected good read status indicator color (green by deafult).

status indicator beeps twice: your reader is offline while decoding symbols

When the buffer is full, no more codes are read. The reader does not discard the oldest read.

when the buffer is full, the reader beeps and the status indicator becomes white

Summary of Wireless Buffering Indicators

Condition	Status Indicator: Reader	Status Indicator: Base Station	Sounds
Reader in wireless range of base station	When the reader is awake, blinking blue indicates wireless connection with base. When the reader is offline, no indicator. Pull the trigger to wake it up and it will blink blue. Good read: green, single beep (default) No read: red, no beep (default)	Reader out of the base station and reader is awake: steady blue. Reader out of the base station and reader is offline: steady red. Paired reader in the base station: steady green. Base station is receiving data or images from reader: flashing blue.	Good read: 1 beep (default) No read: no beep (default)
Reader out of wireless range of base station	Offline: When the reader wakes up out of the wireless range, there is no indicator. Good read: green (default) No read: red (default)	Reader offline: steady red.	Long beep when you leave the wireless range. Good read: 2 beeps No read: no beep
Reader out of wireless range, buffer is full	Good read: green and then white No read: red (default)	Reader offline: steady red	Good read: long beep No read: no beep

Wireless Reader: Charging

When you are reading codes with your wireless reader, blinking red status indicators will indicate low battery. As the battery discharges, the blink frequency increases.

blinking red status indicator indicates low battery

You can also check the status of the battery in the Setup Tool.
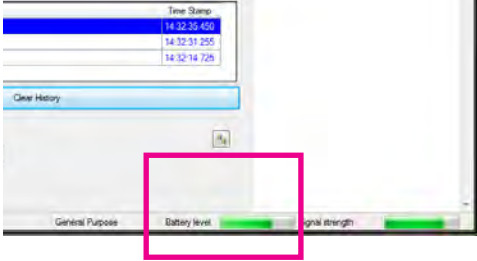
Wireless Reader: Charging (Continued)

Place the reader on the base station for charging.
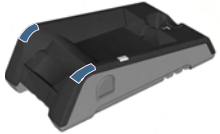
Paired Reader Charging

Paired Reader Fully Charged

Refer to the following table for a summary of indicators regarding charging.

Condition	Status Indicator: Reader	Status Indicator: Base Station
Battery low	flashing red indicators	• steady blue, indicating wireless connection • flashing blue, indicating data transfer
Reader is charging in the base station	steady red indicators	• steady green indicator • flashing green, indicating data transfer
Reader is fully charged in the base station	steady green indicators	• steady green indicator • flashing green, indicating data transfer

Wireless Reader: Changing Batteries

To change batteries, perform the following steps:

1. Twist the reader's end cap, and take it off.

2. Hold the reader in an upright position and the battery will slide out of the handle. NOTE that you may need to shake the reader slightly.
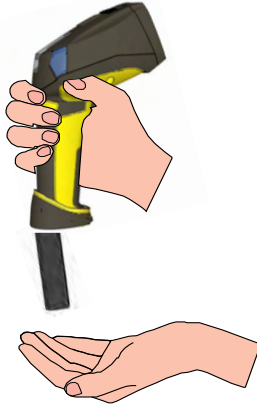
3. Put the replacement battery into the slot. The battery has a small triangle on one of its side. Make sure you insert the battery triangle end first.

4. Put the end cap back on and twist it.

Make sure the triangle aligns with the circle when the cover is locked.

The battery should not be disposed of along with municipal waste. Use the appropriate separate take-back systems for battery disposal.

Wireless Reader: Changing Batteries (Cont.)

5. Place the battery in the spare battery charger in the direction of the small triangle of the battery.

When you are charging the auxilliary battery, the base station's spare battery status indicator displays either charging in progress (red) or fully charged (green).
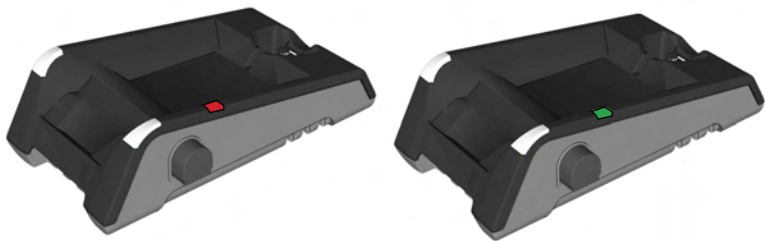
Field of View and Reading Distances

There is a range of reading distances available for different code sizes and focus positions. Select a focus position that allows you to read the desired code sizes at the desired working distance.

- If your application has a consistent reading range, set the focus range to a limited depth of field with no steps (for example, set it to 20) or with limited steps (for example, set it to 2 steps between 0 and 30). This way you can achieve fast performance.

- If your application has a variety of code types and sizes, set the focus range to a wider depth of field with increased number of steps (for example, set it to 6 steps between 0 and 200). This way you can get better coverage.

For a map of the field of view and reading distances, see pages 42-43.

Map of Field of View and Reading Distances

396 mm (15.5 in)

312 mm (12.2 in)

154 mm (6.06 in)

33 mm (1.29 in)

2D
- 5 mil 75 mm (2.9 in)
- 10 mil 210 mm (8.2 in)
- 20 mil 374 mm (14.7 in)

1D
- 7 mil 215 mm (8.4 in)
- 13 mil 409 mm (16.1 in)
- 18 mil 500 mm (19.6 in)

mm 0   100   200   300   400   500   600

in 0   3   6   9   **12**   15   18   21   **24**
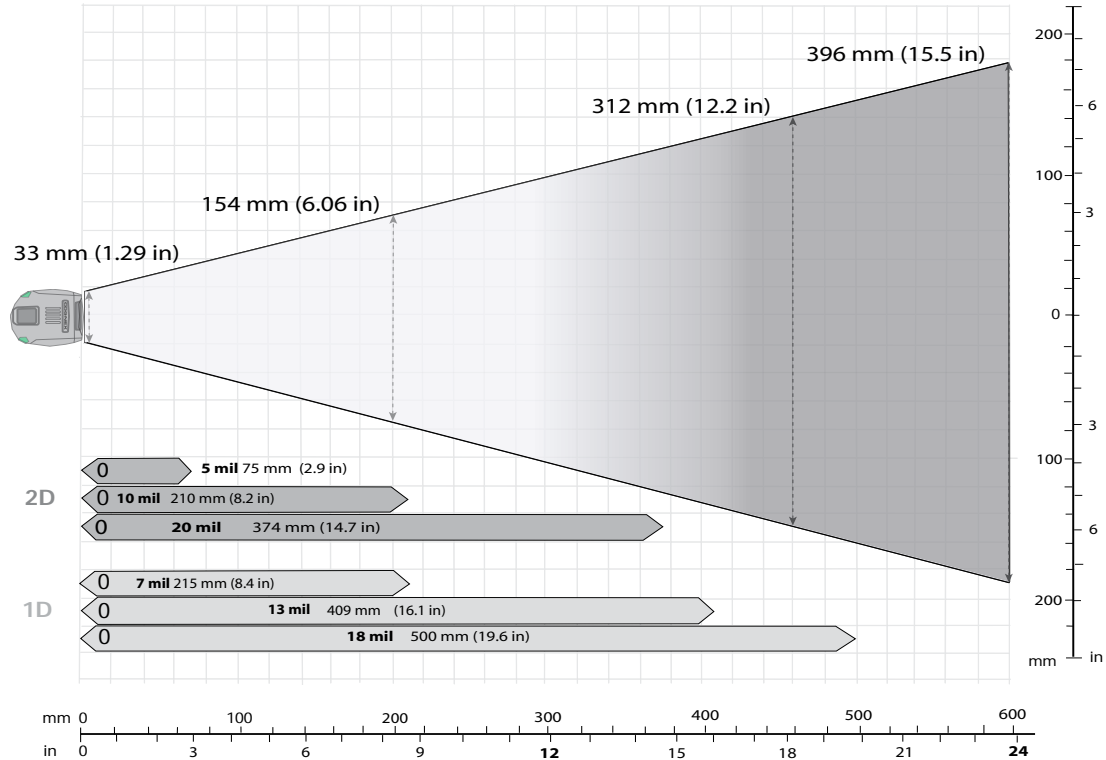
Trigger Types

The DataMan 8000 trigger mode determines when the reader attempts to read a code. Use the Setup Tool, or the appropriate reader configuration codes, to change trigger types.

The following trigger types are supported:

- Presentation: The laser aimer is always on. When motion is detected in front of the reader, the reader will turn on and scan for a symbol. The reader relies on an internal timing mechanism to acquire images.

- Manual (default): Begins acquiring images when you press the trigger button on the reader, and continues acquiring images until a symbol is found and decoded or you release the button.

Industrial Protocols

The DataMan 8000 corded readers support the following industrial protocols:

- EtherNet/IP™
- PROFINET
- MC Protocol
- Modbus TCP

Select the industrial protocol tools and sample programs when installing the Setup Tool.
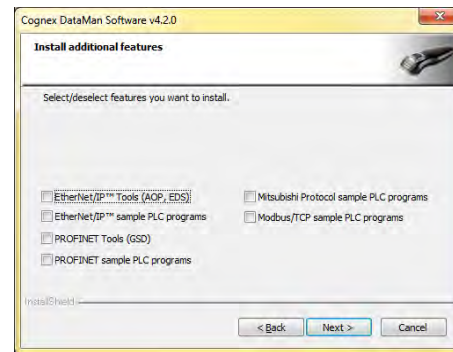
There are three ways to enable or disable Industrial Protocols. Using either method, a reboot is required for the changes to come into effect.

- Enable the protocols using the **Industrial Protocols** pane of the Setup Tool (under Communication Settings).
- Scan the appropriate **Reader Configuration codes** (see *Reader Configuration Codes* available through the Windows Start menu).
- Send the appropriate **DMCC** (see *Command Reference* available through the Windows Start menu).

For more information on using the industrial protocols, read the *DataMan Communications and Programming Guide* available through the Windows Start menu.

DataMan 8000 Specifications

Weight	326 g
Operating Temperature	0ºC — 40ºC (32ºF — 104ºF)
Storage Temperature	-40ºC — 60ºC (-40ºF — 140ºF)
Maximum Humidity	95% (non-condensing)
Codes	Data Matrix™; QR Code and microQR Code; UPC/EAN/JAN; Codabar, Interleaved 2 of 5, Code 39, Code 128, and Code 93, Pharma, Postal, RSS/CS, PDF 417, MicroPDF 417
Power Supply Requirements	• DataMan 8100 with USB (USB BUS powered or external 2.5 W maximum LPS or NEC class 2 power supply): +5V - +6V DC • DataMan 8500 with USB (external 2.5 W maximum LPS or NEC class 2 power supply is required): +5V - +6V DC DataMan 8100/8500 with RS-232 (external 5.0W maximum LPS or NEC class 2 power supply): +4.75V - +6.0V DC (2.5 m RS-232 cable), +5.5V - +6.0V DC (5.0 m RS-232 cable) DataMan 8100/8500 with Ethernet (Class 2 PoE supply): 6.0W maximum
Battery life for wireless reader (typical use case)	2900 triggers can be operated within a 10 hour working shift
Wireless protocol	802.11 b/g, 2.4 GHz, User Selectable channels 1-11

DataMan Base Station Specifications

Weight	328 g
Operating Temperature	0ºC — 40ºC (32ºF — 104ºF)
Storage Temperature	-40ºC — 60ºC (-40ºF — 140ºF)
Maximum Humidity	95% (non-condensing)
Power Supply Requirements	24V -+ 10%, 13 W maximum LPS or NEC class 2 power supply, or PoE class 3

Laser Information

LASER LIGHT, DO NOT STARE INTO BEAM: CLASS 2 LASER PRODUCT

FAILURE TO FOLLOW THESE INSTRUCTIONS MAY CAUSE SERIOUS INJURY

- **CAUTION**: Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
- Do not attempt to service or repair this product -- return it to Cognex for service.
- Do not permit anyone other than Cognex Corporation to service, repair, or adjust this product.
- Do not attempt to open or modify this device except as described in this document.
- Do not direct or reflect laser light toward people or reflective objects.
- Do not operate this device if it is damaged or if the covers or seals are missing or damaged.

This Laser Product is designated as Class 2 during all procedures of operation.

Wavelength	650 nm
Laser Power for classification	< 1 mW
Beam Diameter	< 3mm at aperture
Divergence	< 5 mrad

For assistance contact Cognex Corporation at http://support.cognex.com

Agency Compliance Statements: DataMan 8000 Series Readers

The DataMan 8000 series device meets or exceeds the requirements of all applicable standards organizations for safe operation. However, as with any electrical equipment, the best way to ensure safe operation is to operate them according to the agency guidelines that follow. Please read these guidelines carefully before using your device.

The following specifications apply to the DataMan 8000 corded readers:

Regulator	Specification
USA	FCC Part 15B, Class A
	FCC Part 15.247
	FDA/CDRH Laser Notice No 50
Canada	ICES-003
European Community	EN55022, Class A
	EN55024
	EN60950
	EN60825-1
Australia	C-TICK, AS/NZS CISPR 22 / EN 55022 for Class A Equipment
Japan	J55022, Class A

The following specifications apply to the DataMan 8000 wireless readers:

Regulator	Specification
USA	FCC Part 15B, Class A
	FCC Part 15.247
	FDA/CDRH Laser Notice No 50
Canada	ICES-003
	RSS 210

Agency Compliance Statements: DataMan 8000 Series Readers (Continued)

Regulator	Specification
European Community	EN301 489-1 / -17
	EN300 328-2
	EN60950
	EN60825-1
Australia	C-TICK
Japan	ARIB STD-T66

FCC Class A Compliance Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to

cause harmful interference in which case the user will be required to correct the interference at his own expense.

This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. 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.

Changes or modifications made to this equipment not expressly approved by Cognex may void the FCC authorization to operate this equipment.

Radiofrequency radiation exposure information:
For body worn operation, this device has been tested and meets the FCC RF exposure guidelines when worn in hand or close to the body. Use of any accessory may not ensure compliance with FCC RF exposure guidelines.

Canadian Compliance

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

Japanese Compliance

 202WW11139331
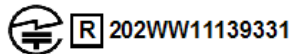
These devices have been granted a designation number by the Ministry of Internal Affairs and Communications according to the Ordinance concerning the Technical Regulations Conformity Certification etc. of Specified Radio Equipment
(特定無線設備の技術基準適合証明等に関する規則).
Article 2 clause 1 item 19
Approval n°: 202WW11139331
These devices should not be modified (otherwise the granted designation number will become invalid).

C-Tick Statement

 N13060

Conforms to AS/NZS CISPR 22/ EN 55022 for Class A Equipment.

European Compliance

This equipment complies with the essential requirements of EU Directives 1999/5/EC, 2004/108/EC and 2006/95/EC, as applicable. Declarations are available from your local representative.

Agency Compliance Statements: DataMan 8000 Series Readers (Continued)

Където е приложимо, оборудването е съобразено с основните изисквания наЕвропейските директиви 1999/5/EC, 2004/108/EC и 2006/95/EC. Декларации са налични от местния представител.

Toto zařízení splňuje základní požadavky směrnic EU 1999/5/ES, 2004/108/ES a 2006/95/ES, vždy dle konkrétního způsobu použití. Příslušná prohlášení jsou k dispozici u vašeho lokálního distributora.

Dette udstyr overholder de væsentlige krav i EU-direktiv 1999/5/EF, 2004/108/EF og 2006/95/EF, som er relevant. Erklæringerne kan fås hos din lokale repræsentant.

Tämä laitteisto täyttää seuraavat EU Direktiivien olennaiset vaatimukset 1999/5/EY, 2004/108/EY ja 2006/95/EY, soveltuen. Vaatimusten-mukaisuusvakuutukset ovat saata-villa paikalliselta edustajalta.

Dit produkt voldoet aan de voorschriften van de richtlijnen van de EG Raad (1999/5/EC, 2004/108/EC en 2006/95/EC), indien van toepassing. Declaraties zijn beschikbaar bij uw locale vertegenwoordiger.

Cet appareil est conforme aux exigences essentielles des Directives de l'Union Europée-nne 1999/5/CE, 2004/108/CE et/ou 2006/95/CE. Veuillez consulter votre représentant local pour les déclarations applicables.

Ezen készülék technikai jellemzői megfelelnek a vonatkozó 1999/5/ EC, 2004/108/EC és 2006/95/EC EU rendeletekben foglalt követelményeknek. A megfelelőségi dokumentáció a gyártó helyi partnereinél áll az Ön rendelkezésére.

Questo prodotto,ove applicabile, risponde alle direttive Europee 1999/5/EC, 2004/108/EC e 2006/95/EC. Dichiarazioni sono disponibili presso il vostro rappresentante locale.

Ten sprzęt jest zgodny z ogólnymi wymaganiami Dyrektyw UE nr 1999/5/EC, 2004/108/EC i 2006/95/EC, na ile znajdują zastosow-anie. Oświadczenia są dostępne u lokalnych przedstawicieli.

Acest echipament este in conformitate cu cerintele esentiale ale Directivelor EU 1999/5/EC, 2004/108/EC si 2006/95/EC. Certifi-catele sunt disponibile la reprezentanta lo-cala. Toto zariadenie spĺňa základné požiadavky smerníc EÚ 1999/5/ES,2004/108/ES a 2006/95/ES, vždy podľa konkrétneho spôsobu použitia. Príslušné vyhlásenia sú k dispózíii u vášho lokálneho dis-tributora.

Das Gerät erfüllt die wesentlichen Anforderungen der EU-Direktiven 1999/5/EC, 2004/108/EC und 2006/95/EC, soweit anwendbar. Eine entsprechende Bescheinigung kann bei Ihrem zuständigen Vertriebspartner angefordert werden.

Ta oprema je skladna in izpolnjuje nujne zahteve direktiv EU 1999/5/ES, 2004/108/ES in 2006/95/ES. Deklaracije so na voljo pri vašemkrajevnem predstavniku.

Αυτός ο εξοπλισμός συμμορφώνεται με τις βασικές απαιτήσεις των εφαρμοσμένων οδηγιών 1999/5/EC, 2004/108/EC και 2006/95/ECτης Ευρωπαικής Ένωσης. Οι επίσημες δηλώσεις είναι διαθέσιμες από τον τοπικό σας αντιπρόσωπο.

Dan l-apparat huwa konformi mar-regolamenti stipulati mid-Direttivi Ewropej 1999/5/EC, 2004/108/EC u 2006/95/EC skond kif inhu likabbli. Kopji ta' dawn id-dikjarazjonijiet huma aċċessibbli mingħand ir-rappreżentant locali tiegħek.

Este equipo cumple com as condiçãos vigorantes da la EU diretivas 1999/5/EC, 2004/108/EC e 2006/95/EC, com é pertinente. Las normativas estão disponível com su representado local.

Este equipo cumple con los requerimientos esenciales de las direc-tivas de la EU 1999/5/EC, 2004/108/EC y 2006/95/EC, si es aplica-ble. Dichas declaraciones están en poder de sus representanteslocales.

Ši iranga atitinka esminius ES direktyvu 1999/5/EC, 2004/108/EC ir 2006/95/EC reikalavimus. Deklaracijas galima gauti iš Jusu vietinio atstovo.

Šis iekartas atbilst ES direktivu 1999/5/EC, 2004/108/EC un 2006/95/EC prasi-bam. Deklaracijas ir pieejamas regionalajasparstavniecibas. See seadmed vastavad olulistele nõuetele ELi direktiivide 1999/5/EC, 2004/108/EC ja 2006/95/EC, mida kohaldatakse. Deklarat-sioonid on saadaval Teie kohaliku esindaja.

Laser Safety Statement

Complies with FDA performance standards for laser products except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007.

This device has been tested in accordance with IEC60825-1 2nd ed., and has been certified to be under the limits of a Class 2 Laser device.

Agency Compliance Statements: DataMan 8000 Series Readers

UL and cUL Statement

UL and cUL listed: UL60950-1 1st ed. and CSA C22.2 No.60950-1 1st ed.

For European Union Users
Cognex complies with Directive 2002/96/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 January 2003 on waste electrical and electronic equipment (WEEE).

This product has required the extraction and use of natural resources for its production. It may contain hazardous substances that could impact health and the environment, if not properly disposed.

In order to avoid the dissemination of those substances in our environment and to diminish the pressure on the natural resources, we encourage you to use the appropriate take-back systems for product disposal. Those systems will reuse or recycle most of the materials of the product you are disposing in a sound way.

The crossed out wheeled bin symbol informs you that the product should not be disposed of along with municipal waste and invites you to use the appropriate separate take-back systems for product disposal.

If you need more information on the collection, reuse, and recycling systems, please contact your local or regional waste administration.

You may also contact your supplier for more information on the environmental performance of this product.

Agency Compliance Statements: DataMan Base Station

The DataMan Base Station meets or exceeds the requirements of all applicable standards organizations for safe operation. However, as with any electrical equipment, the best way to ensure safe operation is to operate them according to the agency guidelines that follow. Please read these guidelines carefully before using your device.

Regulator	Specification
USA	FCC Part 15B, Class A
	FCC Part 15.247
	FDA/CDRH Laser Notice No 50
Canada	ICES-003
	RSS 210
European Community	EN301 489-1 / -17
	EN300 328-2
	EN60950
Australia	C-TICK, AS/NZS CISPR 22 / EN 55022 for Class A Equipment
Japan	J55022, Class A
	ARIB STD-T66

FCC Class A Compliance Statement for the DataMan Base Station
This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of

Agency Compliance Statements: DataMan Base Station (Continued)

this equipment in a residential area is likely to cause harmful interference in which case the
user will be required to correct the interference at his own expense.

This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions:
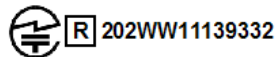(1)   this device may not cause harmful interference, and
(2)   this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications made to this equipment not expressly approved by Cognex may void the FCC authorization to operate this equipment.

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

Japanese Compliance

R 202WW11139332

These devices have been granted a designation number by the Ministry of Internal Affairs and Communications according to the Ordinance concerning the Technical Regulations Conformity Certification etc. of Specified Radio Equipment
(特定無線設備の技術基準適合証明等に関する規則).
Article 2 clause 1 item 19
Approval n°: 202WW11139332
These devices should not be modified (otherwise the granted designation number will become invalid).

C-Tick Statement

N13060

Conforms to AS/NZS CISPR 22/ EN 55022 for Class A Equipment.

European Compliance

CE ！

This equipment complies with the essential requirements of EU Directives 1999/5/EC, 2004/108/EC and 2006/95/EC, as applicable. Declarations are available from your local representative.
Където е приложимо, оборудването е съобразено с основните изисквания наЕвропейските директиви 1999/5/EC, 2004/108/EC и 2006/95/EC. Декларации са налични от местния представител.
Toto zařízení splňuje základní požadavky směrnic EU 1999/5/ES, 2004/108/ES a 2006/95/ES, vždy dle konkrétního způsobu použití. Příslušná prohlášení jsou k dispozici u vašeho lokálního distributora.
Dette udstyr overholder de væsentlige krav i EU-direktiv 1999/5/EF, 2004/108/EF og 2006/95/EF, som er relevant. Erklæringerne kan fås hos din lokale repræsentant.
Tämä laitteisto täyttää seuraavat EU Direktiivien olennaiset vaatimukset 1999/5/EY, 2004/108/EY ja 2006/95/EY, soveltuen. Vaatimusten-mukaisuusvakuutukset ovat saatavilla paikalliselta edustajalta.
Dit produkt voldoet aan de voorschriften van de richtlijnen van de EG Raad (1999/5/EC, 2004/108/EC en 2006/95/EC), indien van toepassing. Declaraties zijn beschikbaar bij uw locale vertegenwoordiger.
Cet appareil est conforme aux exigences essentielles des Directives de l'Union Européenne 1999/5/CE, 2004/108/CE et/ou 2006/95/CE. Veuillez consulter votre

Agency Compliance Statements: DataMan Base Station (Continued)

représentant local pour les déclarations applicables.

Ezen készülék technikai jellemzői megfelelnek a vonatkozó 1999/5/ EC, 2004/108/EC és 2006/95/EC EU rendeletekben foglalt követelményeknek. A megfelelőségi dokumentáció a gyártó helyi partnereinél áll az Ön rendelkezésére.

Questo prodotto,ove applicabile, risponde alle direttive Europee 1999/5/EC, 2004/108/EC e 2006/95/EC. Dichiarazioni sono disponibili presso il vostro rappresentante locale.

Ten sprzęt jest zgodny z ogólnymi wymaganiami Dyrektyw UE nr 1999/5/EC, 2004/108/EC i 2006/95/EC, na ile znajdują zastosow-anie. Oświadczenia są dostępne u lokalnych przedstawicieli.

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Das Gerät erfüllt die wesentlichen Anforderungen der EU-Direktiven 1999/5/EC, 2004/108/EC und 2006/95/EC, soweit anwendbar. Eine entsprechende Bescheinigung kann bei Ihrem zuständigen Vertriebspartner angefordert werden.

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Dan l-apparat huwa konformi mar-regolamenti stipulati mid-Direttivi Ewropej 1999/5/EC, 2004/108/EC u 2006/95/EC skond kif inhu likabbli. Kopji ta' dawn id-dikjarazjonijiet huma aċċessibbli mingħand ir-rappreżentant locali tiegħek.

Este equipo cumple com las condiçãos vigorantes de la EU diretivas 1999/5/EC, 2004/108/EC e 2006/95/EC, com é pertinente. Las normativas estão disponível com su representado local.

Este equipo cumple con los requerimientos esenciales de las direc-tivas de la EU 1999/5/EC, 2004/108/EC y 2006/95/EC, si es aplica-ble. Dichas declaraciones están en poder de sus representanteslocales.

Ši iranga atitinka esminius ES direktyvu 1999/5/EC, 2004/108/EC ir 2006/95/EC reikalavi-mus. Deklaracijas galima gauti iš Jusu vietinio atstovo.

Šis iekartas atbilst ES direktivu 1999/5/EC, 2004/108/EC un 2006/95/EC prasi-bam. Deklaracijas ir pieejamas regionalajasparstavniecibas. See seadmed vastavad olulistele nõuetele ELi direktiivide 1999/5/EC, 2004/108/EC ja 2006/95/EC, mida kohaldatakse. Deklarat-sioonid on saadaval Teie kohaliku esindaja.

For European Union Users

Cognex complies with Directive 2002/96/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 January 2003 on waste electrical and electronic equipment (WEEE).

This product has required the extraction and use of natural resources for its pro-duction. It may contain hazardous substances that could impact health and the environment, if not properly disposed.

In order to avoid the dissemination of those substances in our environment and to diminish the pressure on the natural resources, we encourage you to use the appropriate take-back systems for product disposal. Those systems will reuse or recycle most of the materials of the product you are disposing in a sound way.

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If you need more information on the collection, reuse, and recycling systems, please contact your local or regional waste administration.

You may also contact your supplier for more information on the environmental performance of this product.

Reader Control Codes

Reset Scanner to Factory Defaults	Reboot Scanner	USB Serial	USB Keyboard	Enable DHCP

Keyboard Language

US English	German	French	Spanish	Japanese

P/N 590-7135