

COGNEX

DataMan[®] 8072 ER

Reference Manual



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Symbols

The following symbols indicate safety precautions and supplemental information:

 **WARNING:** This symbol indicates a hazard that could cause death, serious personal injury or electrical shock.

 **CAUTION:** This symbol indicates a hazard that could result in property damage.

 **Note:** This symbol indicates additional information about a subject.

 **Tip:** This symbol indicates suggestions and shortcuts that might not otherwise be apparent.

Getting Started

About DataMan 8072 ER



The DataMan 8072 ER readers offer the industry's most advanced technology for reading 1D and 2D codes regardless of size, quality, printing method or surface, and belong to the only industrial handheld ID reader family that offers Industrial Ethernet communication. DataMan 8072 ER is available with patented 1DMax+ with Hotbars, class-leading 2-D algorithms and future-proof modular communication slide-ins.

The DataMan 8072 ER readers are available with the following communication options:


- Ethernet
- USB
- RS-232
- Bluetooth

An intelligent base station is also provided when the DataMan 8072 ER reader uses the wireless (Bluetooth) communication module. The base station acts as a router between the reader and your computer or network.



Note: Henceforward, the term 'wireless' refers in this document to the Bluetooth communication module of the reader.

The DataMan 8000 series base stations are available with the following communication options:

|  | Base Station Communication | | | Wireless Protocol |
|---|------------------------------------|-----|--------|-------------------|
| | Ethernet with Industrial Protocols | USB | RS-232 | Bluetooth |
| DMA-IBASE-BT-02 | √ | √ | √ | √ |





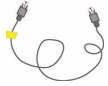

DataMan 8072 ER Accessories

DataMan 8072 ER Reader Other

| | | |
|------------------------------------|-------------------|---|
| Serial/USB slide-in | DMCM-SERIALM-00 |  |
| Ethernet slide-in | DMCM-ENETM-00 | |
| Bluetooth slide-in | DMCM-BTM-00 | |
| Charging Base Station | DMA-CBASE-01 |  |
| Intelligent Bluetooth Base Station | DMA-IBASE-BT-02 | |
| Power Supply for base station | DMA-24VPWR-xx* |  |
| Power Supply for reader | DM100-PWR-000 | |
| Battery for the wireless reader | DMA-HHBATTERY-02 |  |
| Multi-Battery Charger | DMA-MBC-xx* |  |
| POE Adapter | CPS-24V-POE1 |  |
| POE Adapter | CPS-24V-POE4 |  |
| POE Adapter | CPS-AC-POE1A-xx* |  |
| Wall Mount | DMA-WALL-8000-00 |  |
| Wall Mount for Base Station | DMA-IBASE-WALL-00 |  |
| Stand | DM-STAND-00 |  |

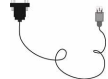

*XX can be US, EN, UK, or JP

DataMan 8072 ER Reader Cables

| | | |
|---|--------------------|---|
| RS-232 coiled cable for reader, 2.5 m | DM8000-RS232-02 |  |
| RS-232 industrial cable for reader, 2.5 m | DM8000-RS232IND-02 | |
| RS-232 coiled cable for reader, 4 m | DM8000-RS232-05 | |
| USB cable, 2.5 m | DM8500-USB-00 |  |
| USB coiled cable, 2.5 m | DM8500-USBC-02 |  |
| Ethernet Coiled cable, 5m | DM8000-ECABLEC-05* |  |
| Ethernet cable, 2.5 m | DM8000-ECABLE-02 |  |
| Ethernet cable, 5 m | DM8000-ECABLE-05 |  |
| Ethernet cable, 30 m | DM8000-ECABLE-30 | |

*Collimated cable length including DM8000-ECABLE-X should not exceed 50 m.

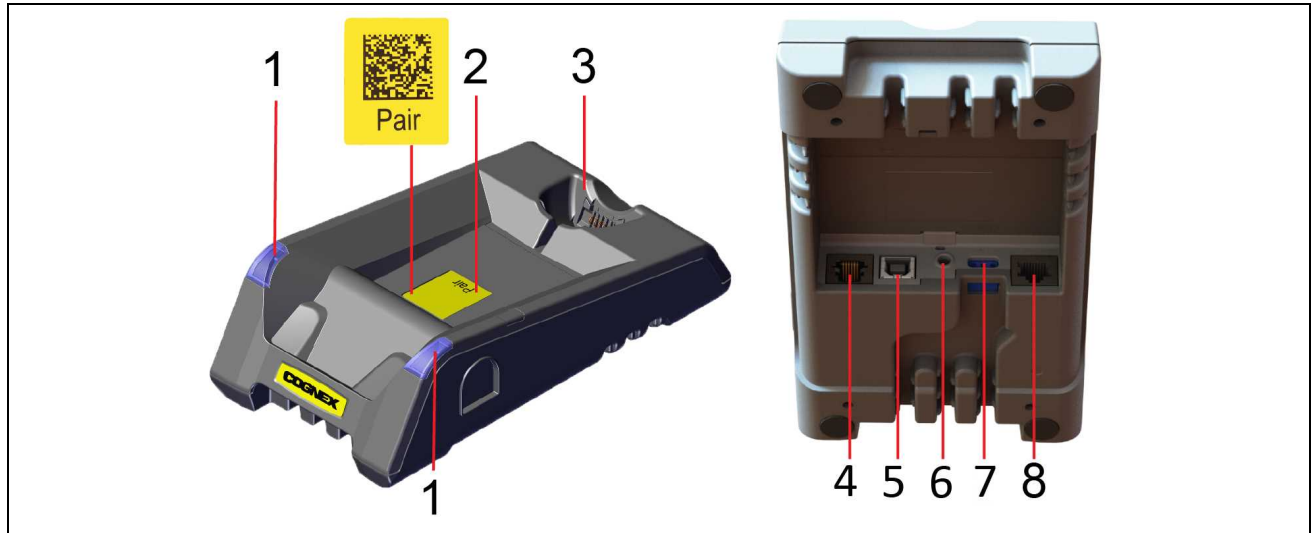
DataMan 8000 Series Base Station Cables

| | | |
|--|----------------|---|
| RJ25 (RJ12) to DSUB9 cable for base station, 5 m | DMA-RS232RJ-05 |  |
| Straight 10ft USB cable | DMA-USB-00 |  |

- 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 Base Station

DMA-IBASE-BT-02



| | |
|---|---|
| 1 | Base station status indicators |
| 2 | PAIR sticker - Reading the code pairs the base station with the device |
| 3 | Connection point to the reader: <ul style="list-style-type: none"> • pairing reader and base station • non-wireless communication • charging |
| 4 | RS-232 |
| 5 | USB |
| 6 | Power plug (24V, max. 15W) |
| 7 | Alternative power supply connector (24V, max. 15W, polarity marked on the plastic part near the connector). Recommended wire diameter is 14- 18 AWG |
| 8 | Ethernet |

Base station status indicators:

- Power: RED = base powered / BLINK = wrong reader in base
- Communication: BLUE = Wireless link / BLINK = Wireless communication
- Cradle connections: GREEN = reader properly inserted / BLINK = cradle USB interface communication



Note:

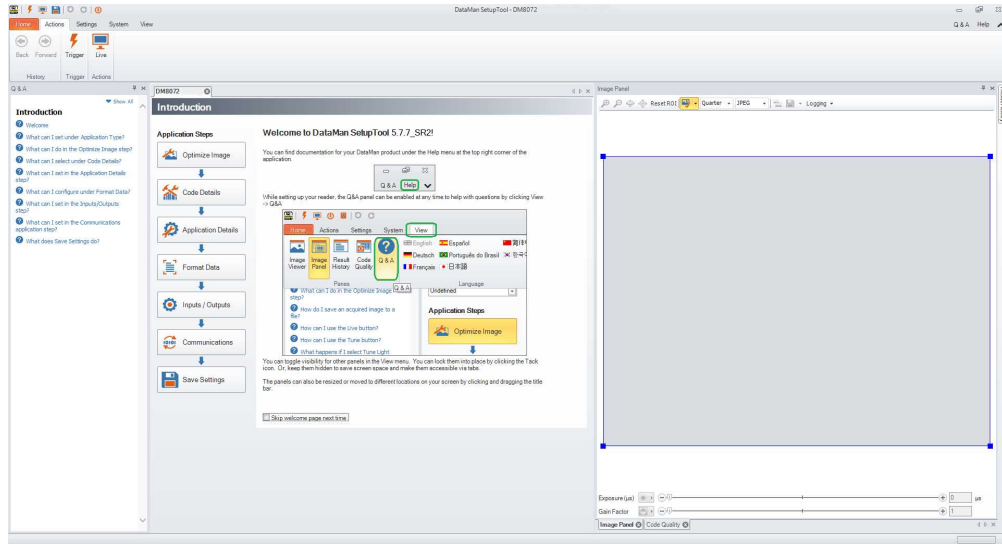
- DMA-IBASE-BT-02 supports Ethernet

Setting Up Your DataMan 8072 ER

Setting Up the Reader

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

1. [Install the DataMan Setup Tool](#) on your computer.



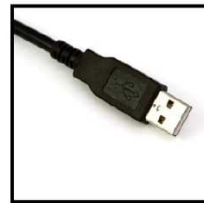
2. Select the connection type: Ethernet, RS-232 Serial, or USB; and connect the appropriate cabling.



Ethernet



RS-232



USB

3. Power on your device(s).

Install the DataMan SetupTool

1. Check the DataMan **Release Notes** for a full list of system requirements.
2. Download the DataMan Setup Tool from <http://www.cognex.com/support/dataman> and follow the on-screen steps.
3. Connect the DataMan 8072 ER to your PC.
4. Launch the DataMan 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 device** and click **Connect**.



| Other Discovered Devices | | |
|---|---------------|-----------------------|
|  | DM8050-22EE20 | DM8050 169.254.168.90 |
|  | DM8072-3DAB16 | DM8070 10.86.80.102 |
|  | DM8072-511210 | DM8070 10.86.80.63 |
|  | DM8072-58E9AA | DM8070 10.86.80.134 |
|  | DM8072-58EA4A | DM8070 10.86.80.46 |
|  | DM8600-41E178 | DM8600 10.86.80.108 |

DataMan 8072 ER Specifications

| | |
|---|---|
| Weight | 254g |
| Operating Temperature | 0°C — 40°C (32°F — 104°F) |
| Storage Temperature | -10°C — 60°C (14°F — 140°F) |
| Maximum Humidity | < 95% (non-condensing) |
| Environmental | IP65 |
| Codes | 1-D barcodes: Codabar, Code 39, Code 128, and Code 93, Interleaved 2 of 5, Pharma, GS1 DataBar, Postal, UPC/EAN/JAN, DataBar 2-D barcodes: Data Matrix™, QR Code and microQR Code, RSS/CS, PDF 417, MicroPDF 417, MaxiCode, Aztec Code |
| Power Supply Requirements | USB: external 5.0 W maximum LPS or NEC class 2 power supply: +5V - +6V DC RS232 external 5.0W max LPS or NEC class 2 power supply |
| Inrush current peak | 5A maximum Duration: approx. 30µs Electrical charge: 60µAs at 6V |
| Battery life for wireless reader (typical use case) | ca. 4100 triggers can be operated within a 13 hour working shift |
| Ethernet | 10/100 Base-T FULL/HALF DUPLEX, IEEE 802.3 |
| Bluetooth | Bluetooth™ 2.1, 2.4 GHz |

DataMan 8072 ER Imager Specifications

| Specification | DataMan 8072 ER Imager |
|---------------------------|---------------------------------|
| Image Sensor | 1/3 inch CMOS |
| Image Sensor Properties | 3.75 µm square pixels |
| Image Resolution (Pixels) | 1280 x 960 |
| Lens Type | 12 mm F:7 lens with liquid lens |

DataMan Base Station Specifications

| | DMA-IBASE-BT-02 |
|--------|-----------------|
| Weight | 300 g |

| | DMA-IBASE-BT-02 |
|---------------------------|---|
| Operating Temperature | 0°C — 45°C (32°F — 113°F) |
| Storage Temperature | -40°C — 60°C (-40°F — 140°F) |
| Maximum Humidity | 95% (non-condensing) |
| Power Supply Requirements | 24V +-10%, 15 W maximum LPS or NEC class 2 power supply Recommended wire diameter is 14-18 AWG |

LED Wavelengths

The following table shows LED types and the related wavelengths:

| LED | λ [nm] |
|------------|----------------------------------|
| RED | 623 |

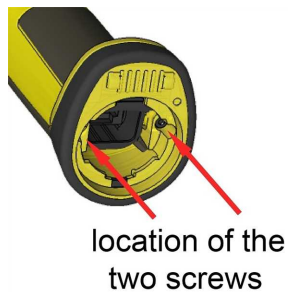
Connection Options

Connecting a DataMan 8072 ERThrough Ethernet

1. Connect the Ethernet slide-in (DMCM-ENETM-00) to your DataMan 8072 ER.



2. With a 2.5 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.



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).

Note: Disconnect the DataMan 8072 ER reader from power before inserting/removing communication modules.

Troubleshooting an Ethernet Connection

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

1. First, check your Ethernet connection and click **Refresh** in the DataMan Setup Tool.
2. 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 or the Setup Tool **Help** 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 DataMan Setup Tool.

1. If you know the IP address of the reader, use the **Add Network Device** option under **Reader Maintenance**.
2. If you do not know the IP address, use the **Force Network Settings** option. Either method should allow the DataMan 8072 ER reader to appear in the list of **Network devices** so that you can connect to it through the DataMan Setup Tool and your Ethernet connection.

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



Enable DHCP



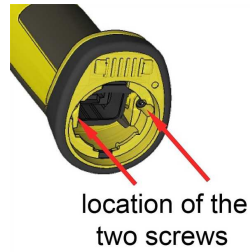
Reset Scanner to
Factory Defaults

Connecting a DataMan 8072 ER Through RS-232

1. Connect the serial slide-in (DMCM-SERIALM-00) to your DataMan 8072 ER.



2. With a 2.5 mm Allen wrench, tighten the screws so that the slide-in is firmly locked.



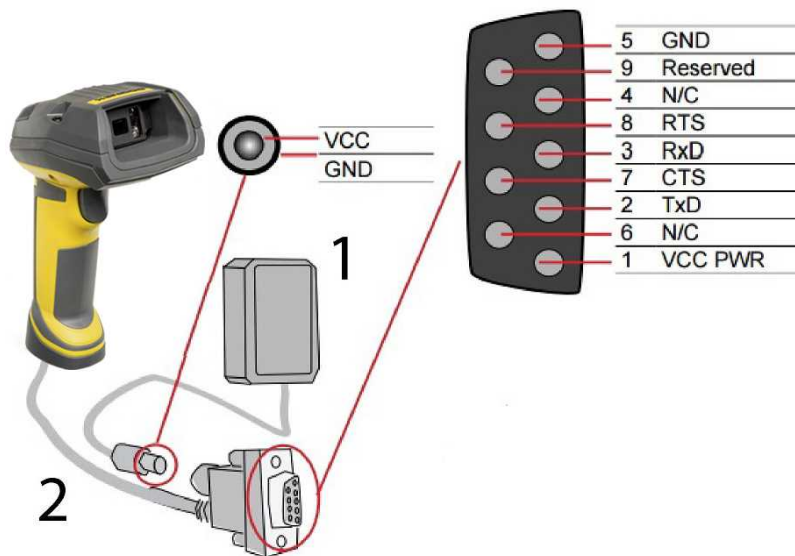
3. Insert the plug and slide the cable lock up to the reader and twist the cable lock in place.



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).

Note: Disconnect the DataMan 8072 ER reader from power before inserting/removing the communication modules.

Observe the following electrical requirements:



| | |
|---|---|
| 1 | 6VDC power supply (DM100-PWR-000), a 5.5 mm x 2.1 mm 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 |

WARNING: For proper RS-232 operation, do not apply any voltage to pin 9.

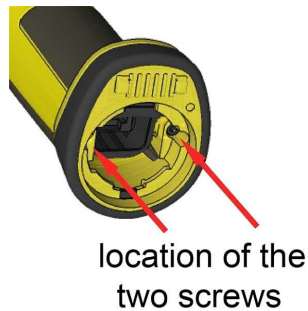
Note: Power on the RS-232 cable can be supplied by either the DC Power Plug or Pin 1 of the D-SUB. **DO NOT** use both in parallel.

Connecting a DataMan 8072 ER through USB

1. Connect the serial slide-in (DMCM-SERIALM-00) to your DataMan 8072 ER.



2. With a 2.5 mm Allen wrench, tighten the screws so that the slide-in is firmly locked.



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



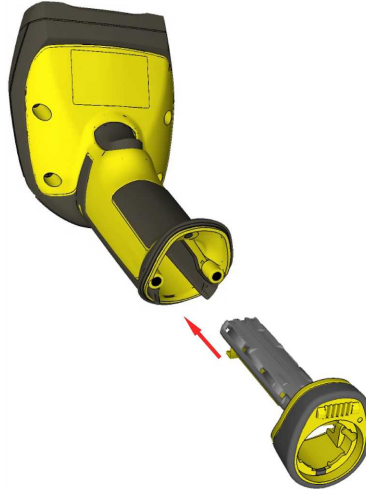
Use the DM8500-USB-00 cable (2.5 meters) or the DM8500-USBC-02 cable (2.5 meters).

Note: Disconnect the DataMan 8072 ER reader from power before inserting/removing the communication modules.

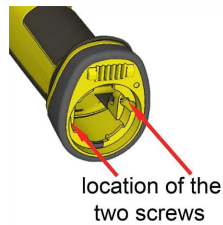
Using DataMan 8072 ER Wireless Reader

Connecting to a Wireless DataMan 8072 ER Through a Base Station

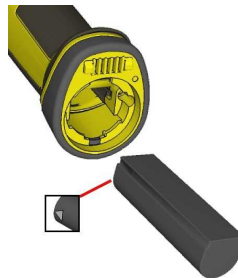
1. Connect the wireless slide-in (DMCM-BTM-00) to your DataMan 8072 ER.



2. With a 2.5 mm Allen wrench, tighten the screws so that the slide-in is firmly locked.



3. Insert the battery.



Note: Remove the battery from your DataMan 8072 ER before inserting/removing the communication module.

4. Insert the plug and twist it in place.



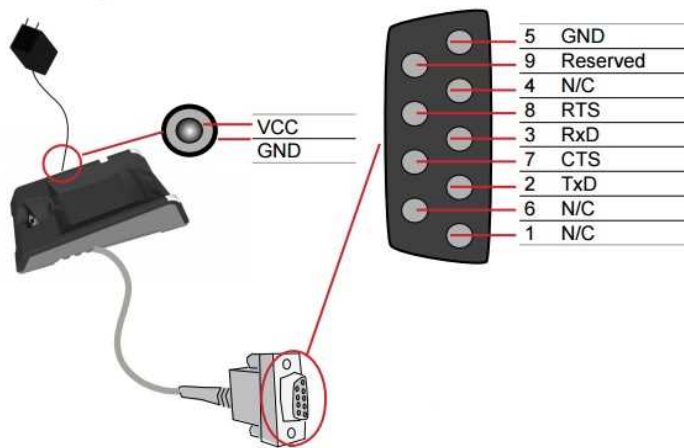
5. Power up the DMA-IBASE-BT-XX base station using a 24V power supply (DMA-24VPWR-XX).

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

DMA-IBASE-BT-02

| | |
|---|---|
| 1 | RS-232 connection (RJ-25 port) |
| 2 | USB Type B connection |
| 3 | Power (24 V, max 15W) |
| 4 | Alternative power supply connector (24V, max 15W, polarity marked on plastic part near connector) |
| 5 | Ethernet connection |

Observe the following electrical requirements when connecting the base station through RS-232:



WARNING: For proper RS-232 operation, do not apply any voltage to pin 9.

Power to the base station can be supplied by either the DC power plug or by wiring in 24V. **DO NOT** use both in parallel. The DC power plug is a 24VDC power supply (DMA-24VPWR-xx), 3.5 mm x 1.3 mm.

Note: Be careful to use the appropriate connector for RS-232. See [Step 6](#) above.

7. When the base station is powered up, scan the Pair scan code and place your reader into the base station. 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 that the reader and the base have successfully paired and are communicating.
8. Connect to your base station or to the wireless reader. You have the following connection options:

| Base Station Connection Type | Connect to Reader in the DataMan Setup Tool | Connection Channels |
|------------------------------|---|--------------------------------|
| RS-232 | Wireless reader appears: COM port (Base Station does not appear) | terminal program Setup Tool |
| 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 |

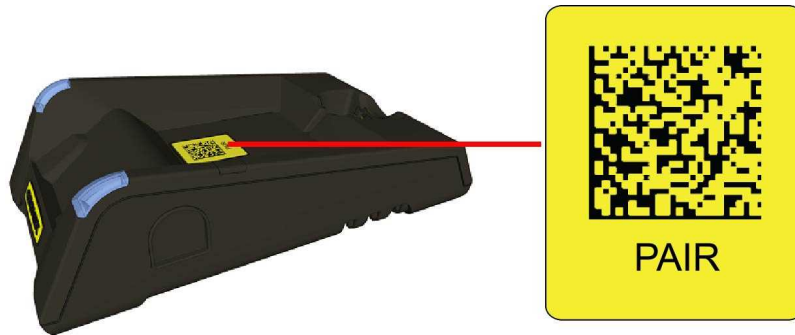
9. Lift your reader up from the base station and start reading codes.

Note:

- When the reader is on the base station, 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 8072 ER 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 DataMan 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 Bluetooth or Wireless tab of the *Communication Settings* pane of the DataMan Setup Tool (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 series of short beeps can be heard.

Pairing Strategy (DMA-IBASE-BT-02)

In order to pair the base station and the reader in a single step without considering former pairing states and without using the DataMan Setup Tool, scan the Pair sticker from the scan code sticker on the base station. Place the reader in the base station.



The reader then blinks green/blue until it gets paired with the base station (or until the end of the 20 second timeout period). When the reader is put on the base station, the base station drops its pairing with its old reader and pairs with the new reader.



Note: Scanning the Pair code puts the base station and the reader put on it into **force pairing mode**. This means **i** that the reader and the base it is put on get paired regardless of any assignments they both had previously. This force pairing mode is valid for 20 seconds after reading the Pair code.

The base station's indicators turn green to indicate successful pairing:



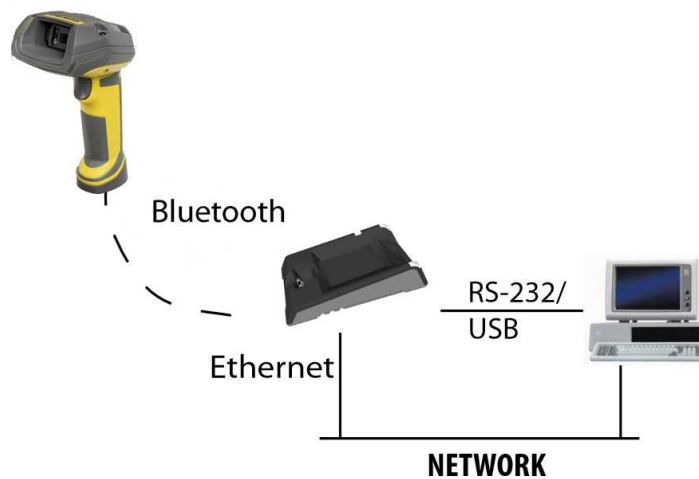
When the reader is put onto another (unpaired) base station without any previous actions, the base station signals this event with beeping and red flashing of its indicators:



The base station that is paired with a certain reader signals a bad reader alert (beeps and flashing red indicators) also when another, unassigned reader is put into it.

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 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 DataMan Setup Tool, if it is running and is 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 DataMan Setup Tool; they are only transmitted over an existing keyboard emulation, RS-232 Serial or TCP/IP Telnet connection.

Note: The images acquired by the reader when it is out of the wireless range are never saved, and cannot 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:

| 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 Connect backstage page in the DataMan Setup Tool and check the IP address of the reader in the Address column. |
| 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.

When the reader leaves the wireless range, the base station's signal becomes red.



Blinking blue status indicator: wireless connection is alive.



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. The 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 default). The 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

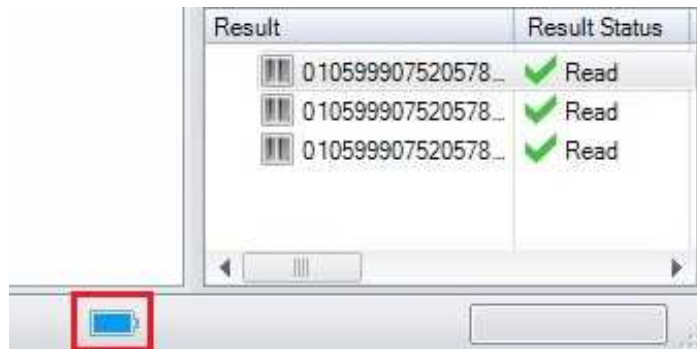
| Condition | Status Indicator: Reader | Status Indicator: Base Station | Sounds |
|--|--|--|--|
| Reader in wireless range of base station | When the reader is awake, blinking blue indicates wireless connection with the base. When the reader is offline, no indicator. Pull the trigger to wake it up and 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: flashing green . Base station is receiving data or images from reader: steady 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

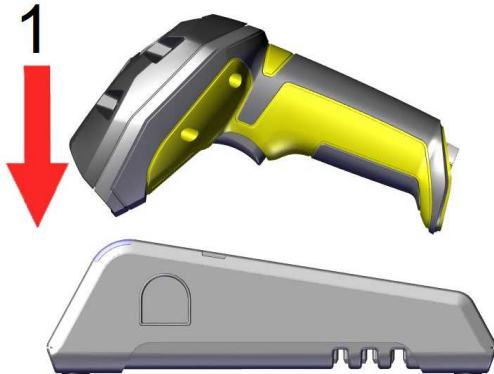
When you are reading codes with your wireless reader, blinking red status indicators will indicate a low battery. As the battery discharges, the blink frequency increases. A blinking red status indicator indicates low battery or thermal shutdown mode.



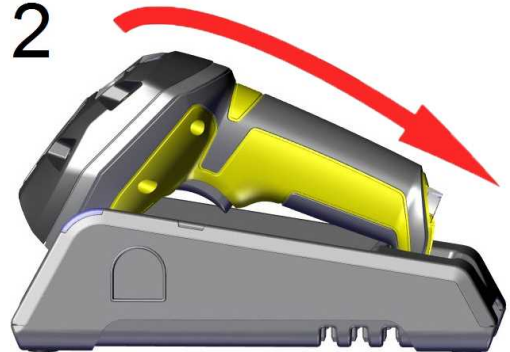
You can also check the status of the battery in the DataMan Setup Tool.



Place the reader on the base station for charging. Make sure that the pins at the end of the handle make contact with the pins in the base station.



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 connection flashing blue, indicating data transfer |
| Reader is charging in the base station | steady red indicators | steady green, indicating connection flashing green, indicating data transfer |
| Reader is fully charged in the base station | steady green indicators | steady green, indicating connection flashing green, indicating data transfer |

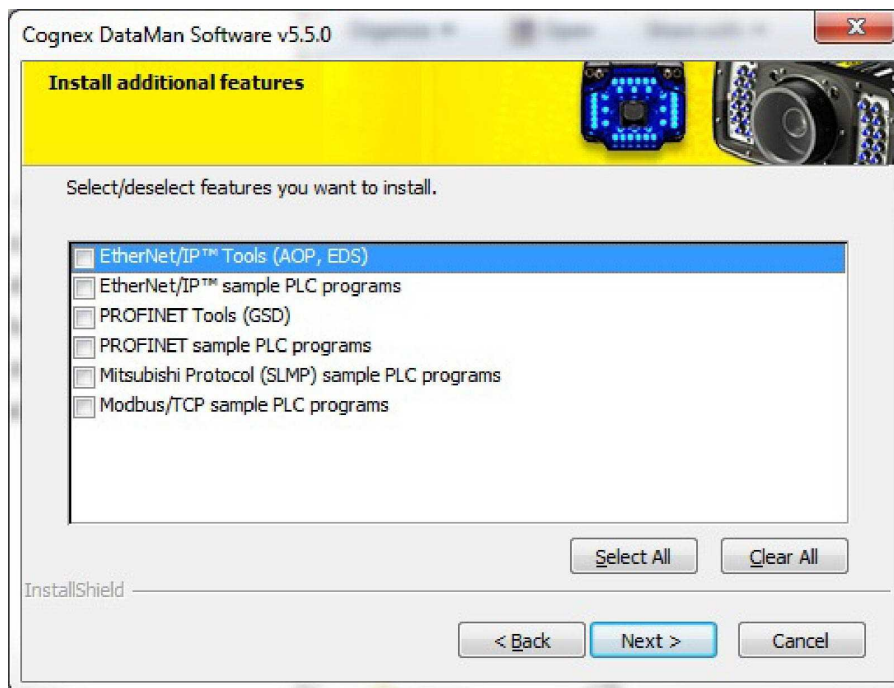
Reading Codes with the DataMan 8072 ER

Industrial Protocols

The DataMan 8072 ER readers support the following industrial protocols:

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

Select the industrial protocol tools and sample programs when installing the DataMan 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 DataMan Setup Tool (under **Communication Settings**).
- Scan the appropriate **Reader Configuration codes** (see **Reader Configuration Codes** available through the Windows **Start** menu or the Setup Tool **Help** menu).
- Send the appropriate **DMCC** (see **Command Reference** available through the Windows **Start** menu or the Setup Tool **Help** menu).

For more information on using the industrial protocols, see the **DataMan Industrial Protocols Manual** available through the Windows **Start** menu or the Setup Tool **Help** menu.

Trigger Types

The DataMan 8072 ER trigger mode determines when the reader attempts to read a code. Use the DataMan Setup Tool or the appropriate reader configuration codes to change trigger types.

The following trigger types are supported:

- **Presentation:** The LED 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):** The reader 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.

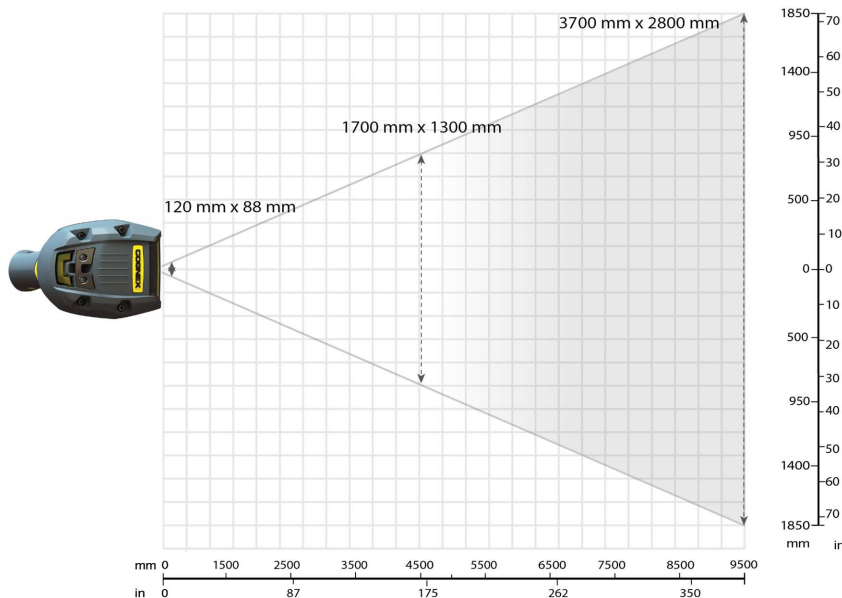
Note that while in Presentation mode, as the operator pulls the trigger, the reader switches to Manual mode until the device is re-docked into the base station. Setup Tool continues to display Presentation mode while in this state. To bring it back to standard Presentation mode, use one of the following options:

- Dock the device into the base station
- Switch to Manual trigger mode in Setup Tool, then switch back to Presentation mode
- Scan the Enter Presentation Reader Configuration Code

Field of View and Reading Distances

The following map shows the range of reading distances available for different code sizes and focus positions.

DataMan 8072 ER with a 12 mm Liquid Lens (Long Range, Focused to 8 meters)




| Device | Distances in mm/ 1D min. code | | Distances in mm/ 2D min. code | |
|--------|----------------------------------|---------|----------------------------------|---------|
| | DM8072ER | 300 | 4 MIL | 300 |
| 4000 | | 50 MIL | 2250 | 50 MIL |
| 8000 | | 100 MIL | 4750 | 100 MIL |

Cleaning and Maintenance

Cleaning the Reader Housing

To clean the outside of the reader housing, use a small amount of mild detergent cleaner or isopropyl alcohol on a cleaning cloth. Do not pour the cleaner directly onto the reader housing.

 **CAUTION:** Do not attempt to clean any DataMan product with harsh or corrosive solvents, including lye, methyl ethyl ketone (MEK) or gasoline.

Cleaning the Reader Lens Cover

To remove dust from the lens cover, use a pressurized air duster. The air must be free of oil, moisture or other contaminants that could remain on the lens cover. To clean the plastic window of the lens cover, use a small amount of isopropyl alcohol on a cleaning cloth. Do not scratch the plastic window. Do not pour the alcohol directly on the plastic window.


Compliance Information, Warnings and Notices

Regulations/Conformity

The DataMan 8072 ER has Regulatory Model R00049, and 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.

Note: For the most current CE declaration and regulatory conformity information, see the Cognex support site: cognex.com/support.

| Regulator | Specification |
|--------------------|-----------------------------------|
| USA | FCC Part 15B, Class A |
| Canada | ICES-003, Class A |
| European Community | CE, Class A EN55032 EN55024 |
| Japan | VCCI - CISPR 32 Class A |
| Korea | KN32/KN35 |

| Safety and Regulatory | |
|---|---|
| Manufacturer | Cognex Corporation One Vision Drive Natick, MA 01760 USA |
|  | This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take immediate measures. This equipment complies with the essential requirements of the EU Directive 2014/30/EU. Declarations are available from your local representative. |
| FCC | FCC Part 15, Class A 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. |
| 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. |

LED Safety Statement

CAUTION: Illumination and Lens assembly: This device has been tested in accordance with IEC 62471-1:2008 and has been certified to the limits of Risk Group 2. Possibly hazardous optical radiation emitted from this product. Do not stare at the operating lamp. May be harmful to the eyes.

Laser Safety Statement

WARNING: 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 3rd ed., and has been certified to be under the limits of a Class 2 Laser device.



For European Community Users

Cognex complies with Directive 2012/19/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 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.



Compliance Statements: DataMan Base Station

The DataMan Base Stations have the following Regulatory models respectively: DMA-IBASE-BT-02 has 1AAG, DMA-CBASE-01 has R00046, and they meet or exceed 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.

Note: For the most current CE declaration and regulatory conformity information, see the Cognex support site: cognex.com/support.

Please read these guidelines carefully before using your device.

| Safety and Regulatory | |
|----------------------------------|--|
| Manufacturer | Cognex Corporation One Vision Drive Natick, MA 01760 USA |
| European Compliance CE | This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take immediate measures. This equipment complies with the essential requirements of the EU Directive 2014/30/EU. Declarations are available from your local representative. DMA-IBASE-BT-XX: This equipment complies with the essential requirements of EU Directives 2014/30/EU and 2014/53/EU as applicable. Declarations are available from your local representative. DMA-IBASE-01 and DMA-CBASE-01: This equipment complies with the essential requirements of EU Directives 2014/30/EU and 2014/53/EU as applicable. Declarations are available from your local representative. |

| Safety and Regulatory | |
|---|--|
| 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. |
| 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. |
| UL and cUL Statement  | UL and cUL listed: UL60950-1 2nd ed. and CSA C22.2 No.60950-1 2nd ed. |
| Mexican Compliance | DMA-IBASE-BT-XX: RCPCO1A15-0073 DMA-IBASE-01: RCPCODM12-0655 |
| Chinese Compliance | DMA-IBASE-BT-XX: CMIIT ID: 2015DJ0237 DMA-IBASE-01: CMIIT ID: 2012DJ2857 |

For European Community Users

Cognex complies with Directive 2012/19/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 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.

中国大陆RoHS (Information for China RoHS Compliance)

根据中国大陆《电子信息产品污染控制管理办法》(也称为中国大陆RoHS), 以下部份列出了本产品中可能包含的有毒有害物质或元素的名称和含量。



Table of toxic and hazardous substances/elements and their content, as required by China's management methods for controlling pollution by electronic information products.

| Part Name 部件名称 | Hazardous Substances 有害物质 | | | | | |
|---|---------------------------|-------------------|-------------------|--------------------------------------|--|--|
| | Lead (Pb) 铅 | Mercury (Hg) 汞 | Cadmium (Cd) 镉 | Hexavalent Chromium (Cr (VI)) 六价铬 | Polybrominated biphenyls (PBB) 多溴联苯 | Polybrominated diphenyl ethers (PBDE) 多溴二苯醚 |
| Regulatory Model R00049 Base Station | X | O | O | O | O | O |

This table is prepared in accordance with the provisions of SJ/T 11364.
这个标签是根据SJ/T 11364 的规定准备的。

O: Indicates that said hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement of GB / T26572 - 2011.
表示本部件所有均质材料中含有的有害物质低于GB / T26572 - 2011 的限量要求。

X: Indicates that said hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement of GB / T26572 - 2011.
表示用于本部件的至少一种均质材料中所含的危害物质超过GB / T26572 - 2011 的限制要求。

Precautions

⚠ WARNING: LASER LIGHT, DO NOT STARE INTO BEAM: CLASS 2 LASER PRODUCT. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY CAUSE SERIOUS INJURY.

To reduce the risk of injury or equipment damage, observe the following precautions when you install the Cognex product:

- Route cables and wires away from high-current wiring or high-voltage power sources to reduce the risk of damage or malfunction from the following causes: over-voltage, line noise, electrostatic discharge (ESD), power surges, or other irregularities in the power supply.
- Changes or modifications not expressly approved by the party responsible for regulatory compliance could void the user's authority to operate the equipment.
- Ensure that the cable bend radius begins at least six inches from the connector. Cable shielding can be degraded or cables can be damaged or wear out faster if a service loop or bend radius is tighter than 10X the cable diameter.
- This device should be used in accordance with the instructions in this manual.
- All specifications are for reference purposes only and can change without notice.

