

COGNEX

DataMan[®] 370 Series Quick Reference Guide

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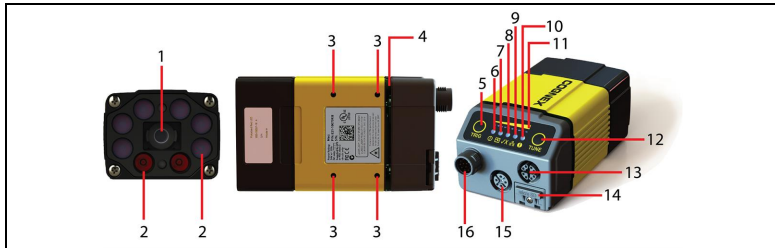
Precautions

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

- The reader is intended to be supplied by a UL or NRTL listed power supply with a 24VDC output rated for at least 2A continuous and a maximum short circuit current rating of less than 8A and a maximum power rating of less than 100VA and marked Class 2 or Limited Power Source (LPS). Any other voltage creates a risk of fire or shock and can damage the components. Applicable national and local wiring standards and rules must be followed.
- 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.
- Do not install Cognex products where they are exposed to environmental hazards such as excessive heat, dust, moisture, humidity, impact, vibration, corrosive substances, flammable substances, or static electricity.
- Do not expose the image sensor to laser light. Image sensors can be damaged by direct, or reflected, laser light. If your application requires laser light that might strike the image sensor, use a lens filter at the corresponding laser wavelength. For suggestions, contact your local integrator or application engineer.
- Changes or modifications not expressly approved by the party responsible for regulatory compliance could void the user's authority to operate the equipment.
- Include service loops with cable connections.

- 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.

Product Overview









| | |
|---|---------------------------|
| 1 | Lens |
| 2 | Illumination LED clusters |
| 3 | Mounting holes (M3 x 5mm) |
| 4 | Indicator light ring |
| 5 | Trigger button |
| 6 | Power |
| 7 | Train status |
| 8 | Read/no-read indicator |

| | |
|----|------------------------|
| 9 | Network |
| 10 | Error |
| 11 | Peak meter |
| 12 | Tuning button |
| 13 | Ethernet |
| 14 | SD card slot |
| 15 | External light control |
| 16 | Power, I/O, and RS-232 |

DataMan 370 Series Accessories

LENS OPTIONS AND COVERS

| Accessory | | | DM374 | DM375 |
|-------------------------------|----------------|---|---|---|
| 8 mm F5.6 fixed aperture lens | LEC-CFF08-F5.6 |  |  |  |
| 12 mm F8 fixed aperture lens | LEC-CFF12-F8 | | | |
| 16 mm F8 fixed aperture lens | LEC-CFF16-F8 | | | |
| 25 mm F8 fixed aperture lens | LEC-CFF25-F8 | | | |
| 35 mm F8 fixed aperture lens | LEC-CFF35-F8 | | | |
| 40 mm F8 fixed aperture lens | LEC-CFF40-F8 | | | |
| 50 mm F8 fixed aperture lens | LEC-CFF50-F8 | | | |






| Accessory | | | DM374 | DM375 |
|--|-----------------------------------|---|-------|-------|
| Liquid lens module and pre-focused 10.3* mm or 10.3 mm IR** M12 lens with wrench | DMLN-10LL-SMT DMLN-10LL-IR-SMT |  | ✓ | |
| 24 mm F6 liquid lens module* | DM360-LENS-24LL |  | ✓ | |
| 24 mm F6 liquid lens module*** | DMLN-C24F06-LL-IR | | | |
| 24 mm F10 liquid lens module* | DMLN-C24F10-LL | | | |
| 10 mm F5 autofocus lens* (use with HPIT) | DMLN-C10F05-HSSL |  | ✓ | |
| 16 mm F8 autofocus lens* (use with HPIT) | DMLN-C16F08-HSSL | | ✓ | ✓ |
| 24 mm F6 autofocus lens* (use with HPIT) | DMLN-C24F06-HSSL | | ✓ | ✓ |
| 35 mm F8 autofocus lens* (use with HPIT) | DMLN-C35F08-HSSL | | | |


* With built-in IR blocking filter

** Without built-in IR blocking filter



*** Without built-in IR blocking filter, and with built-in daylight filter

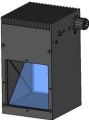





LENS COVERS AND INTEGRATED ILLUMINATIONS





| Accessory | | | DM374 | DM375 |
|--|------------------|---|-------|-------|
| C-Mount cover for C-Mount lenses | DM300-CMCOV |  | ✓ | ✓ |
| Short C-Mount cover for C-Mount lenses | DM300-CMCOV-SH |  | ✓ | ✓ |
| Extension kit | DM300-EXT |  | ✓ | ✓ |
| DM500 C-Mount cover (use with HPIA) | DM500-CMTLC-000 |  | ✓ | ✓ |
| DM500 Lens cover extender | DM500-LNSEXT-000 |  | ✓ | ✓ |





| Accessory | | DM374 | DM375 |
|---|-----------------|---|-------|
| Red LED HPIL, 10.3 mm lens (Risk Group Red LED Exempt acc. IEC 62471, Risk Group Green LED Aimer Exempt acc. IEC 62471) | DM360-HPIL-RE |  | ✓ |
| Polarized red LED HPIL, ESD safe, 10.3 mm lens (Risk Group Red LED Exempt acc. IEC 62471, Risk Group Green LED Aimer Exempt acc. IEC 62471) | DM360-HPIL-RE-P | | |
| White LED HPIL, 10.3 mm lens (Risk Group White LED low risk acc. IEC 62471, Risk Group Green LED Aimer Exempt acc. IEC 62471) | DM360-HPIL-WHI | | |
| Red LED HPIL, 24 mm liquid lens (Risk Group Red LED Exempt acc. IEC 62471, Risk Group Green LED Aimer Exempt acc. IEC 62471) | DMLT-HPIL-RE | | |
| Polarized red LED HPIL, ESD safe, 24 mm liquid lens (Risk Group White LED low risk acc. IEC 62471, Risk Group Green LED Aimer Exempt acc. IEC 62471) | DMLT-HPIL-RE-P | | |
| White LED HPIL, 24 mm liquid lens (Risk Group White LED low risk acc. IEC 62471, Risk Group Green LED Aimer Exempt acc. IEC 62471) | DMLT-HPIL-WHI | | |
| Infrared LED HPIL, ESD safe, 10.3 & 24 mm liquid lens (Risk Group IR LED Exempt acc. IEC 62471, Risk Group Green LED Aimer Exempt acc. IEC 62471) | DMLT-HPIL-IR-W | | |

EXTERNAL LIGHTS AND HIGH POWER ILLUMINATIONS

| Accessory | | DM374 | DM375 |
|------------|-----------------|---|-------|
| Ring Light | CLRR-R7030G1CLR |  | ✓ |
| Back light | CLRB-F100100G1 |  | ✓ |

| Accessory | | | DM374 | DM375 |
|---|-------------------|---|-------|-------|
| Coaxial (DOAL) light | CLRO-K5050G1 |  | ✓ | ✓ |
| Spot light | CLRS-P14G1 |  | ✓ | ✓ |
| Dark-field light | CLRD-D120G1 |  | ✓ | ✓ |
| Brick light, narrow blue | IVSL-ODDM-S75-470 |  | ✓ | ✓ |
| Brick light, narrow red | IVSL-ODDM-S75-625 | | | |
| Brick light, narrow white | IVSL-ODDM-S75-WHI | | | |
| Bar light, wide red | IVSL-YLW2X-625 |  | ✓ | ✓ |
| Bar light, narrow red, linear polarizer | IVSL-YLW2X-625P | | | |
| Bar light, narrow infrared | IVSL-YLW2X-850 | | | |
| Bar light, narrow blue | IVSL-YLW2X-470 | | | |
| Bar light, wide red | IVSL-YLW2X-625-W | | | |
| Bar light, narrow white | IVSL-YLW2X-WHI | | | |
| Bar light, wide white | IVSL-YLW2X-WHI-W | | | |
| Bar light, wide white, linear polarizer | IVSL-YLW2X-WHIP-W | | | |
| Bar light, blue | IVSL-LX520-470 |  | ✓ | ✓ |
| Bar light, red | IVSL-LX520-625 | | | |


| Accessory | | | DM374 | DM375 |
|---|-------------------|---|-------|-------|
| LX280-series light, blue | IVSL-LX280-470 |  | ✓ | ✓ |
| LX280-series light, red | IVSL-LX280-625 | | | |
| Bar light, red | IVSL-LX800-625 |  | ✓ | ✓ |
| Linear Polarizer Kit Case | DM30X-HPIA3-LP |  | ✓ | ✓ |
| HPIA, Red narrow | DM30X-HPIA3-625 |  | ✓ | ✓ |
| HPIA, Red wide | DM30X-HPIA3-625-W | | | |
| HPIA, White narrow (Risk Group White LED low risk acc. IEC 62471) | DM30X-HPIA3-WHI | | | |
| HPIA, White wide (Risk Group White LED low risk acc. IEC 62471) | DM30X-HPIA3-WHI-W | | | |
| HPIA, Blue narrow (Risk Group White LED low risk acc. IEC 62471) | DM30X-HPIA3-470 | | | |
| HPIA, Blue wide (Risk Group White LED low risk acc. IEC 62471) | DM30X-HPIA3-470-W | | | |
| HPIA, Infrared narrow (Risk Group White LED low risk acc. IEC 62471) | DM30X-HPIA3-IR | | | |
| HPIA, Infrared wide (Risk Group White LED low risk acc. IEC 62471) | DM30X-HPIA3-IR-W | | | |






| Accessory | | | DM374 | DM375 |
|--|-------------------|---|-------|-------|
| HPIT, Red, wide, 10 and 16 mm lens (Risk Group Red LED exempt risk acc. IEC 62471) | DMLT-HPIT-RE-W |  | ✓ | ✓ |
| HPIT, Red, standard, 24 mm lens (Risk Group Red LED exempt risk acc. IEC 62471) | DMLT-HPIT-RE-S | | | |
| HPIT, White, wide, 10 and 16 mm lens (Risk Group White LED low risk acc. IEC 62471) | DMLT-HPIT-WHI-W | | | |
| HPIT, White, standard, 24 mm lens (Risk Group White LED low risk acc. IEC 62471) | DMLT-HPIT-WHI-S | | | |
| HPIT, Red, narrow (Risk Group Red LED exempt risk acc. IEC 62471) | DMLT-HPIT-RE-N | | | |
| HPIT, White, narrow (Risk Group White LED low risk acc. IEC 62471) | DMLT-HPIT-WHI-N | | | |
| Polarized front cover | DMLA-HPIT-PLCOV |  | ✓ | ✓ |
| Clear front cover | DMLA-HPIT-CLCOV | | | |
| Diffuse front cover | DMLA-HPIT-DLCOV | | | |
| Passive Dome front cover | DMLA-HPIT-DFCOV |  | ✓ | ✓ |
| Adapter (includes PCB light port adapter) | DMLA-HPIT-ADAP370 |  | ✓ | ✓ |




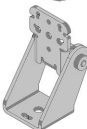

FIELD OF VIEW EXPANDERS

| Accessory | | | DM374 | DM375 |
|-----------------------------------|---------------|---|-------|-------|
| Field of view expander with mount | DMA-XPAND-100 |  | ✓ | |
| Field of view expander | DMA-XPAND-150 |  | ✓ | |
| Field of view expander | DMA-XPAND-250 |  | ✓ | |
| Field of view expander | DMA-XPAND-300 |  | ✓ | |

OTHER

| Accessory | | | DM374 | DM375 |
|-------------------------|-----------------|---|-------|-------|
| Connection cable RS-232 | CCB-M12xDB9Y-05 |  | ✓ | ✓ |

| Accessory | | | DM374 | DM375 |
|--|-------------------------------|---|-------|-------|
| Connection cable 24 V, I/O, RS-232 (y straight/angled, xx specifies length) | CCB-M12x12Fy-xx |  | ✓ | ✓ |
| Connection cable 24 V, I/O, RS-232 | CCBL-05-01 | | | |
| Power and I/O breakout cable, M12-12, straight, xx specifies length: 5 m, 10 m, 15 m, angled, xx specifies length: 5 m, 10 m, 15 m | CCB-PWRIO-xx CCB-PWRIO-xxR |  | ✓ | ✓ |
| Power cable for multiple bar lights (use in combination with IVSL-5PM12-5) | CCB-FOV25-MAL-012 | | | |
| X-Coded to A-Coded Ethernet cable adapter, 0.5 m | CCB-M12X8MS-XCAC |  | ✓ | ✓ |
| X-Coded to RJ45 Ethernet Cable (xx specifies length: 2, 5, 15, 30 m) | CCB-84901-2001-xx | | | |
| External light cable (xxx specifies length) Compatible with CLRR / CLRB / CLRO / CLRS / CLRD illumination | CCB-M12x4MS-xxx |  | ✓ | ✓ |
| External light control cable for DataMan, 5 meters with flying leads | CCB-M12XFLY-05 | | | |
| Bar light cable (xxx specifies length 300, 500, 1000, 2000 mm) Compatible with IVSL lights, except IVSL-LX280 | IVSL-5PM12-Jxxx |  | ✓ | ✓ |
| LX280-series light cable | IVSL-FSK-J5000 | | | |

| Accessory | | DM374 | DM375 |
|---|--|-------|-------|
| I/O extension cable, 5 m straight | CKR-200-CBL-EXT  | ✓ | ✓ |
| Laser aimer (use with HPIA) | DM300-AIMER-00  | ✓ | ✓ |
| Connection module (4 or 1 camera) (xx can be US, EU, UK or JP) | DMA-CCM-4X-xx DMA-CCM-1-xx  | ✓ | ✓ |
| Pivot Mounting Bracket | DM100-PIVOTM-00  | ✓ | ✓ |
| External heat sink | DMHS-370-470  | ✓ | ✓ |



WARNING: For DM300-AIMER-00 and HPIT equipped with laser: This device has been tested in accordance with IEC60825-1 3rd ed., 2014., and has been certified to be under the limits of a Class 2 Laser device.

LASER LIGHT - DO NOT STARE INTO BEAM
CLASS 2 LASER PRODUCT 650nm <1mW
CLASSIFIED PER IEC 60825-1, Ed 3, 2014



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

LASER LIGHT - DO NOT STARE INTO BEAM
CLASS 2 LASER PRODUCT 610nm <1mW
CLASSIFIED PER IEC 60825-1, Ed 3, 2014



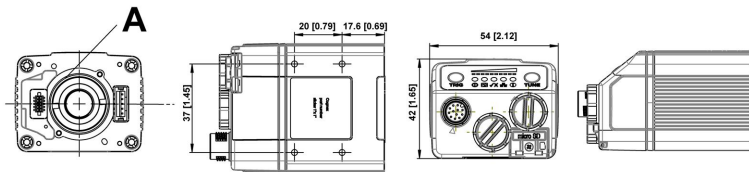
Complies with FDA performance standards for laser products except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007.



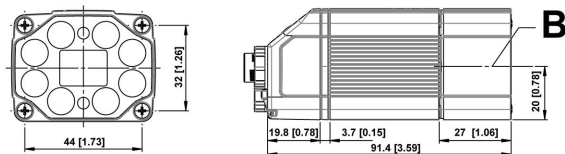
Dimensions

| | |
|---|-------------------------|
| A | C-Mount Lens (1"-32tpi) |
| B | Optical axis |

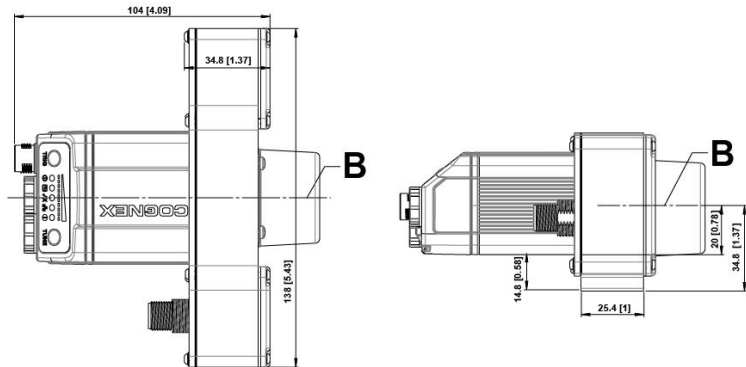
DataMan 370



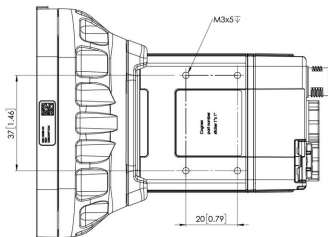
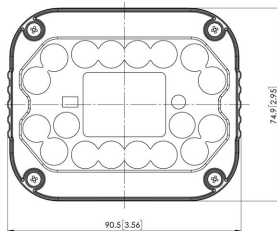
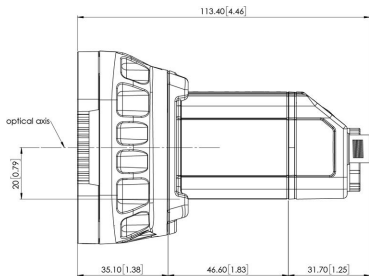
DataMan 370 with High Power Integrated Light (HPIL)



DataMan 370 with High Power Illumination Accessory (HPIA)

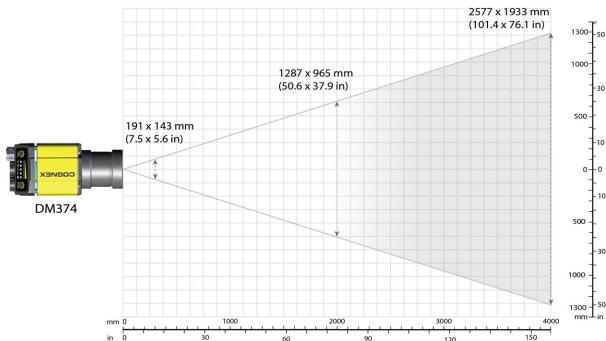


DataMan 370 with High Power Integrated Torch (HPIT)

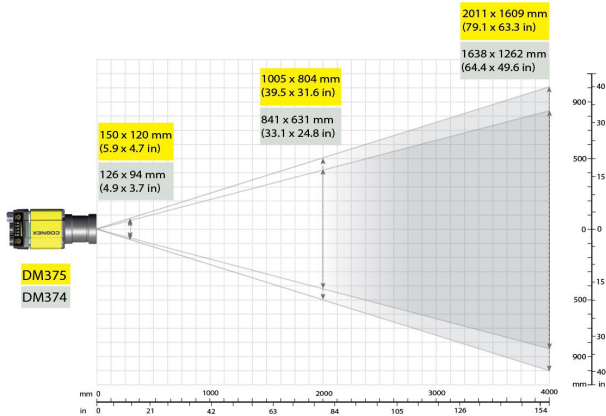


Field of View and Reading Distances

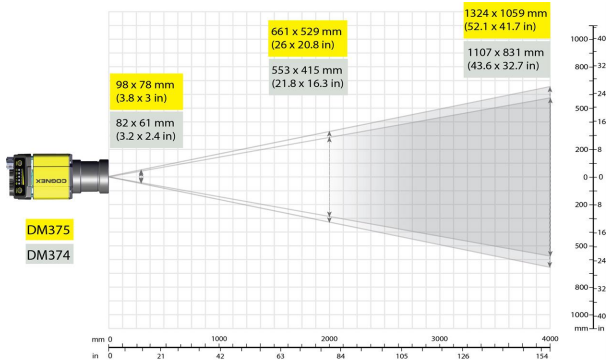
Note: Due to tolerances, ranges can vary by +/- 5 % from unit to unit.



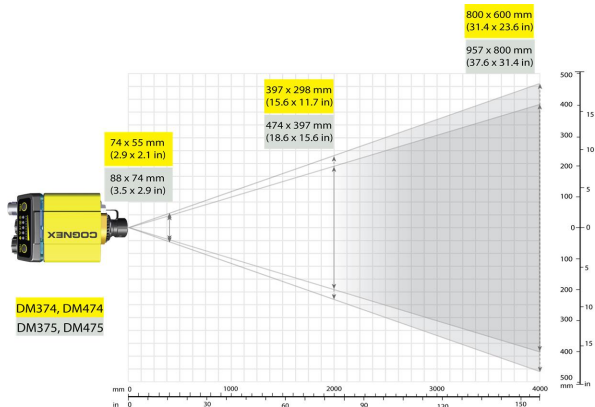
| Device | Distances in mm / 1D min code 10 mm HSL | | Distances in mm / 2D min code 10 mm HSL | |
|--------|--|--------|--|--------|
| | DM374 | 445 | 6 MIL | 307 |
| 591 | | 8 MIL | 408 | 8 MIL |
| 738 | | 10 MIL | 509 | 10 MIL |
| 958 | | 13 MIL | 660 | 13 MIL |
| 1104 | | 15 MIL | 761 | 15 MIL |
| 1471 | | 20 MIL | 1013 | 20 MIL |



| Device | Distances in mm / 1D min code 16 mm HSLL | | Distances in mm / 2D min code 16 mm HSLL | |
|--------|---|--------|---|--------|
| | DM37x | 676 | 6 MIL | 465 |
| 901 | | 8 MIL | 620 | 8 MIL |
| 1125 | | 10 MIL | 774 | 10 MIL |
| 1462 | | 13 MIL | 1006 | 13 MIL |
| 1687 | | 15 MIL | 1160 | 15 MIL |
| | 2249 | 20 MIL | 1547 | 20 MIL |



| Device | Distances in mm / 1D min code 24 mm HSSL | | Distances in mm / 2D min code 24 mm HSSL | |
|--------|---|--------|---|--------|
| | DM37x | 1029 | 6 MIL | 709 |
| 1370 | | 8 MIL | 944 | 8 MIL |
| 1711 | | 10 MIL | 1178 | 10 MIL |
| 2223 | | 13 MIL | 1530 | 13 MIL |
| 2564 | | 15 MIL | 1764 | 15 MIL |
| | 3417 | 20 MIL | 2351 | 20 MIL |



| Device | Distances in mm / 1D min code 35 mm HSSL | | Distances in mm / 2D min code 35 mm HSSL | |
|--------|---|--------|---|--------|
| | DM37x | 1300 | 6 MIL | 835 |
| 1750 | | 8 MIL | 1110 | 8 MIL |
| 2170 | | 10 MIL | 1390 | 10 MIL |
| 2820 | | 13 MIL | 1800 | 13 MIL |
| 3250 | | 15 MIL | 2080 | 15 MIL |
| 4335 | | 20 MIL | 2770 | 20 MIL |

Connecting the Reader

CAUTION: The Ethernet cable shield must be grounded at the far end. Whatever this cable is plugged into (usually a switch or router) should have a grounded Ethernet connector. A digital voltmeter should be used to validate the grounding. If the far end device is not grounded, a ground wire should be added in compliance with local electrical codes.



CAUTION: To reduce emissions, connect the far end of the Breakout cable shield to frame ground.

Perform the following steps:

1. Mount the reader.
2. Connect the Ethernet cable to a computer or a switch.
3. Connect the breakout cable to a 24 V power supply.

For information on the cable pinout and wire colors, see section *Connections, Optics, and Lighting* in the *DataMan 370 Reader Reference Manual*.



Installation

Installation procedures and specifications are presented in detail in the *DataMan 370 Series Reader Reference Manual*, which is installed with the DataMan Setup Tool. From the Windows Start menu, select the following to access the manual: *All Programs > Cognex > DataMan Software vx.x.x > Documentation*.

Note:

- Cables are sold separately.
- If a standard component is missing or damaged, immediately contact your Cognex Authorized Service Provider (ASP) or Cognex Technical Support.



CAUTION: All cable connectors are "keyed" to fit the connectors on the DataMan system; do not force the connectors or damage may occur.

Mounting



CAUTION: It is recommended the reader be grounded, either by mounting the reader to a fixture that is electrically grounded or by attaching a wire from the reader's mounting fixture to frame ground or Earth ground. If a ground wire is used, it should be attached to one of the four mounting points on the back plate of the reader; not to the mounting points on the front of the reader.

Mounting the DataMan reader at a slight angle (15°) can reduce reflections and improve performance.


Use the set of mounting holes on the bottom part to mount the DataMan reader.



For more information on mounting, see the *DataMan 370 ReaderSeries Reference Manual*.

Connect the Ethernet Cable

CAUTION: The Ethernet cable shield must be grounded at the far end.

 Whatever this cable is plugged into (usually a switch or router) should have a grounded Ethernet connector. A digital voltmeter should be used to validate the grounding. If the far end device is not grounded, a ground wire should be added in compliance with local electrical codes.

1. Connect the Ethernet cable's M12 connector to the DataMan system's ENET connector.
2. Connect the Ethernet cable's RJ-45 connector to a switch/router or PC, as applicable.

Connect the Breakout Cable



CAUTION: To reduce emissions, connect the far end of the Breakout cable shield to frame ground.

Note:



- I/O wiring or adjustments to I/O devices should be performed when the reader is not receiving power.
- You can clip unused wires short or use a tie made of non-conductive material to tie them back. Keep bare wires separated from the +24 VDC wire.

1. Verify that the 24 VDC power supply is unplugged and not receiving power.
 2. Attach the Breakout cable's +24 VDC and Ground to the corresponding terminals on the power supply.
-



CAUTION: Never connect voltages other than 24 VDC. Always observe the polarity shown.

3. Attach the Breakout cable's M12 connector to the DataMan 370 series reader's 24 VDC connector.
4. Restore power to the 24 VDC power supply and turn it on if necessary.

Install Software and Documentation and Connect the Reader

Follow the steps below to connect your reader to power and network:

1. Connect the I/O+RS232+24V cable to your reader.
2. For a network connection, connect your reader through an Ethernet cable to your network.
3. Connect the cable to a 24V power supply.

To configure a DataMan 370 series reader, the DataMan Setup Tool software must be installed on a networked PC. The DataMan Setup Tool is available from the DataMan support site: <http://www.cognex.com/support/dataman>.

1. After installing the software, connect the DataMan 370 series reader to your PC.
2. Launch the DataMan Setup Tool and click **Refresh**.
3. Select your DataMan 370 series reader from the list and click **Connect**.

DataMan 370 Series Reader Specifications

| Specification | DataMan 370 Reader | |
|------------------------------------|--|---|
| Weight | 165 g | |
| Power Consumption | <ul style="list-style-type: none"> • 24 VDC \pm10%, 1.5 A maximum (HPIL* and HPIT**) • 24 VDC , 250 mA maximum (non-HPIL)* • 24 VDC, 1000 mA (HPIA)*** <p>Supplied by LPS or NEC class 2 only.</p> <p>*HPIL denotes one of the DM360-HPIL-xxx-xx or DMLT-HPIL-xxx-xx accessories. **HPIT denotes one of the DMLT-HPIT-xxx-xx accessories. ***HPIA denotes one of the DM30X-HPIA3-xxx-xx accessories.</p> | |
| Light Connector | Output Voltage | 20 V – 26.4 V Voltage may drop below nominal input voltage depending cable length. |
| | Max avg Current | 1 A |
| | Peak Operating Current | 1.5 A up to 100 μ s, avg to not exceed 1 A |
| | Max Inrush Current | 5 A not exceeding 0.4 As |
| Case Temperature ¹ | 0 °C - 57 °C (32 °F - 134.6 °F) | |
| Operating Temperature ² | 0 °C - 40 °C (32 °F - 104 °F) | |
| Storage Temperature | -20 °C - 80 °C (-4 °F - 176 °F) | |
| Humidity | < 95% non-condensing | |
| Environmental | IP67 with cables and appropriate lens cover attached. | |

¹ Additional cooling measures may be required to keep the case temperature from exceeding 50 °C. Examples of such measures include: extra heat sinking and/or air movement.

² In situations where the operating temperature exceeds 40 °C, an external heat sink is required.

| Specification | DataMan 370 Reader | | |
|----------------------------------|--|---|---|
| Shock (Shipping and Storage) | IEC 60068-2-27: 18 shocks (3 shocks in each polarity in each (X, Y, Z) axis) 80 Gs (800 m/s ² at 11 ms, half-sinusoidal) with cables or cable plugs and appropriate lens cover attached. | | |
| Vibration (Shipping and Storage) | IEC 60068-2-6: vibration test in each of the three main axis for 2 hours @ 10 Gs (10 to 500 Hz at 100 m/s ² / 15 mm) with cables or cable plugs and appropriate lens cover attached. | | |
| RS-232 | Rx/D, Tx/D according to TIA/EIA-232-F | | |
| Codes | DataMan 374 1-D barcodes: Codabar, Code 39, Code 128, and Code 93, Interleaved 2 of 5, MSI, UPC/EAN/JAN, Code25 2-D codes: Data Matrix (IDMax and IDQuick: ECC 0, 50, 80, 100, 140, and 200), QR Code and microQR Code, MaxiCode, DotCode Stacked codes: PDF 417, Micro PDF | DataMan 375 1-D barcodes: Codabar, Code 39, Code 128, and Code 93, Interleaved 2 of 5, MSI, UPC/EAN/JAN, Code25 2-D codes: Data Matrix (IDMax and IDQuick: ECC 0, 50, 80, 100, 140, and 200), QR Code and microQR Code | |
| Discrete I/O operating limits | HS Output 0,1,2,3 Input 0 (Trigger) Input 1,2,3 | I_{MAX} R_{MIN} V_{IH} V_{IL} I_{TYP} | 50 mA 200 Ω ± 15 — ± 28 V 0 — ± 5 V @ 12 VDC @ 12 VDC @ 24 VDC 2.0 mA 4.2 mA |
| Ethernet Speed | 10/100/1000 | | |
| Duplex Mode | Full duplex or half duplex | | |

DataMan 370 Series Reader Imager Specifications

| Specification | DataMan 374 Imager | DataMan 375 Imager |
|---------------|--------------------|-------------------------------|
| Image Sensor | 1/1.8 inch CMOS | 2/3 inch CMOS, global shutter |

| Specification | DataMan 374 Imager | DataMan 375 Imager |
|--------------------------------------|--|--|
| Image Sensor Properties | 7.2 mm x 5.4 mm (H x V); 3.45 μ m square pixels | 8.8 mm x 6.6 mm (H x V); 3.45 μ m square pixels |
| Image Resolution (pixels) | 2048 x 1536 | 2448 x 2048 |
| Electronic Shutter Speed | Minimum exposure: 15 μ s Maximum exposure: 25 ms with internal illumination/100000 μ s with external illumination | Minimum exposure: 15 μ s Maximum exposure: 25 ms with internal illumination/100000 μ s with external illumination |
| Image Acquisition at Full Resolution | Max. 55 Hz | Max. 37 Hz |
| Lens Type | See <i>DataMan 370 Series Accessories</i> on page 4 | |

*Limitations to C-Mount lenses:

- The length of the thread may not exceed 5.4 mm.
- For a chosen lens, the distance from the C-mount shoulder to the bottom of the lens may not exceed 5.4 mm. Possibly, a lens spacer is required.
- When using the C-Mount lens cover, lens dimensions including spacer and filters may not exceed 32 x 42 mm (diameter x length).

LED and Laser Wavelengths

The following table shows LED types and the related peak wavelengths:

| LED | λ [nm] |
|--------------------|--------------------------------|
| WHITE | 6500K (Color Temperature) |
| BLUE | 470 |
| RED | 617 |
| HIGH POWER RED | 617 |
| IR | 850 |
| TORCHLIGHT - WHITE | 2500-5000K (Color Temperature) |
| TORCHLIGHT - RED | 625 |

Regulations/Conformity

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

DataMan 370 Series readers have Regulatory Model R00051 and 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. Please read these guidelines carefully before using your device.

| Safety and Regulatory | |
|-----------------------|--|
| Manufacturer | Cognex Corporation One Vision Drive Natick, MA 01760 USA |
| USA | TÜV SÜD AM SCC/NRTL OSHA Scheme for UL/CAN 61010-1. 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. |
| Canada | TÜV SÜD AM SCC/NRTL OSHA Scheme for UL/CAN 61010-1. ICES-003, Class A 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. |
| Europe | The CE mark on the product indicates that the system has been tested to and conforms to the provisions noted within the 2014/30/EU Electromagnetic Compatibility Directive and the 2011/65/EU RoHS Directive. For further information, please contact: Cognex Corporation, One Vision Drive, Natick, MA 01760, USA. Cognex Corporation shall not be liable for use of our product with equipment (i.e., power supplies, personal computers, etc.) that is not CE. |

| Safety and Regulatory | |
|------------------------------|--|
| Korea | A급 기기(업무용 방송통신기자재): 이 기기는 업무용(A급) 전자파적합기기로서 판매자 또는 사용자는 이 점을 주의하시기 바라며, 가정외의 지역에서 사용하는 것을 목적으로 합니다. For DataMan 374 and 375 with Regulatory Model R00051: R-REM-CGX-R00051. |
| International Product Safety | Conforms to IEC 61010-1, CAN/CSA-C22.2 No. 61010-1:2012 + UPD No. 1:2015-07, UL 61010-1:2012 + R:2015-07, UL 61010-1:2012 + R:2015-07, EN 61010-1:2010. |
| CB | TÜV SÜD AM, IEC/EN 61010-1. CB report available upon request. |

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.

| | Hazardous Substances 有害物质 | | | | | |
|--|---------------------------|----------------------|----------------------|--|---|--|
| Part Name 部件名称 | 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 R00051 | X | O | O | O | O | O |
| <p>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。</p> <p>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。</p> <p>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有害物质超过GB/T26572 - 2011的限制要求。</p> | | | | | | |

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