00-02-0032 rev. 2023/11/06



M-Link[®] Quick Start

Before beginning installation of this product: Disconnect all electrical power to the machine. Make sure the machine cannot operate during installation. Follow all safety warnings of the machine manufacturer. Read and follow all installation instructions.

Get Your Password

- 1. Locate the ID sticker on the bottom of the M-Link device (see example at right).
- 2. Email <u>IOThelpdesk@fwmurphy.com</u> and include the M-Link ID number, panel number and unit information. You will receive an email with a password to set up the device.



Mobile App

With your smartphone, scan the QR code and download the M-Link Connect app, or use the link <u>Android App</u> or <u>iOs App</u>.

- 1. Open app and select Login.
- 2. Accept the b2clogin.com.
- 3. Sign in with your email address and password you received via email.
- 4. Select Menu.
- 5. Choose Scan New Device.
- 6. Position the red frame over the M-Link ID sticker on bottom of M-link. This will enter the information into the system.
- 7. Select a company.
- 8. Choose a level to add the device. A pop-up with Success, Device Added will appear.
- 9. You may now mount the M-Link or load the configuration.

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Web App

Once your M-Link is recognized in the system, you may load the configuration. This can be done before or after installation.

- 1. Click on the Web App link (www.fwmurphy-iot.com).
- 2. Enter your email address and password the help desk sent.
- 3. Install the configuration. There are two ways to achieve this.
 - a. Option 1
 - i. If your company has a configuration loaded into the system, contact your internal M-Link administrator to gain access.
 - ii. Power up the M-Link.
 - iii. Work with your internal team to send file to the M-Link.
 - b. Option 2
 - i. Email <u>IOTHelpdesk@fwmurphy.com</u> and include the M-Link serial number.
 - ii. Power up the M-link.
 - iii. FW Murphy's team can load the file directly to the M-Link.



4. Enter M-Link ID or asset name in the Device Search Filter. Select device. Device Information is now on Dashboard widgets.

Mounting Information

- Mount the M-Link horizontally so the top has a clear unobstructed view of the sky. Keep metal away from all sides and top of the M-Link by 12 inches or more to achieve best performance.
- Do not place objects on top of or touching the sides of the M-Link.
- To maintain CSA compliance, mount the M-Link to a NEMA type 4X enclosure. The mounting surface flatness must maintain a tolerance ≤ 0.5 mm across the entire gasket surface to maintain the NEMA type of seal to the enclosure.
- Support the harness using provided stay straps to secure in several places preventing excessive vibration. Keep away from heated or moving parts. The special clips allow for attaching to metal or plastic when holes are not present.

Bracket Mount Kit

Bracket Mount with Magnets

- 1. Place the M-Link on top of bracket with gasket face down flat, and secure with short screws from underneath top side of bracket to M-Link.
- Tighten screws using an X-pattern. Torque to 2.05 Nm ± 0.3 Nm. Do not over-tighten.
- Insert bolt through magnets flat side to sit flush in countersink. Attach to bottom of bracket mounting holes and secure with flat washer and locknut.

Bracket Mount with Bolts

- 1. On the mounting surface, mark and drill holes for the mounting bolts.
- Place the M-Link on top of bracket with gasket face down flat, and secure with short screws from underneath top side of bracket to M-Link.
- Tighten screws using an X-pattern. Torque to 2.05 Nm ± 0.3 Nm. Do not over tighten.
- Place the bracket on mounting surface aligned with holes. Secure with bolts, washers and locking nuts provided. Tighten fasteners using an X-pattern.

Bracket with Magnet Mount



Refer to: M-Link <u>Diagrams and Specifications</u> online if needed.

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M-Link Harness Connections

Make the M-Link Harness connections. Extension harnesses of 25 ft. and 50 ft. are available, if needed.

- Deutsch 18-pin connector to the M-Link unit.
- DC+ wire to battery power (10-30 VDC, 360 mA max, 4 W max).
- GND to battery ground.
- Enable to battery power.
- Communication wires as appropriate to EICS, TTD, Centurion, PLC, etc.
- Dual ECM application only: dongle connects pins 2 to 3 and pins 8 to 9.

PIN	Name/Function	Description
1	Enable	Switched VDC+ (Sleep)
2	CAN HI	CAN Positive
3	Can HI Dongle	Dual ECM only (2 to 3)
4	Unused	
5	RS485 Shield 1	
6	RS485 B2	RS485_2 Low
7	CAN Shield	
8	CAN LO	CAN Negative
9	Can LO Dongle	Dual ECM only (8 to 9)
10	Unused	
11	RS485 Shield 2	
12	RS485 A2	RS485_2 High
13	DC-	Ground
14	DC+	10-30 VDC, 3A
15	Unused	
16	Unused	
17	RS485 A1	RS485_1 High
18	RS485 B1	RS485_1 Low

Communications Wiring

M-Link Com Wiring to Controller System		
Controller System	Wire Connection	
EICS	CAN Hi Lo	
Conturion	C4 = RS485	
Centunion	C5 = RS485 or CAN or Ethernet	
ASC	CAN Hi Lo	
PLC	RS485 or CAN or Ethernet	
TTD	RS485 Hi Lo	
TDXM	RS485 Hi Lo	
EICS-Dual ECM	CAN HI/LO (must use dongle)	

Refer to: <u>Wiring Diagrams for CAN communication</u> <u>in Control panels</u> online if needed.

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