

# Mercury Quick-Start Guide

This document is intended for installations using a pre-manufactured Brivo EP1502 Mercury panel for new customer installations. If migrating a Mercury panel that has been previously installed on a customer site, please refer to the *Brivo Mercury Installation Manual*.

## Step 1 – Powering the Mercury Panel

The EP1502 requires 12 to 24 VDC power for input power, cabinet tamper and UPS fault input wiring (See Figure 1).

1. Locate power source as close to the unit as possible.
2. Connect power with minimum of 18 AWG wire.
3. Connect the GND signal to earth ground in ONE LOCATION within the system! Multiple earth ground connections may cause ground loop problems and are not advised.
4. Observe POLARITY on 12 to 24 VDC input!

The MR52 accepts 12 to 24 VDC for power on TB7. Locate the power source as close to the MR52 as possible. Make power connection with minimum of 18 AWG wires (See Figure 2).

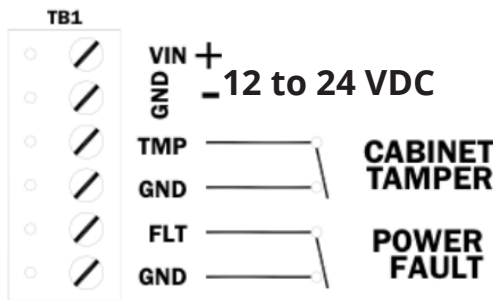


Figure 1



Figure 2

## Step 2 – Communication Wiring

The EP1502 controller communicates to the host via the on-board 10-BaseT/100Base-TX Ethernet interface J2 (port 0).

The serial I/O device communication port (TB3) is a 2-wire RS-485 interface which can be used to connect additional downstream expansion boards.

The interface allows multi-drop communication on a single bus of up to 4,000 feet (1,219 m).

Use twisted pairs (minimum 24 AWG) with drain wire and shield for communication.

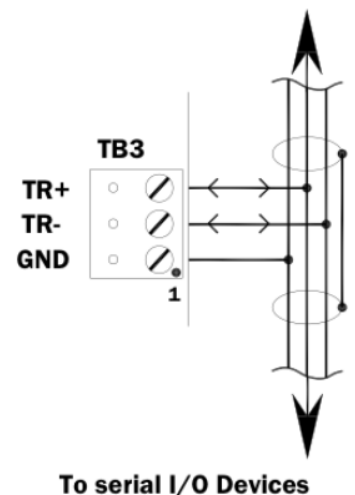


Figure 3

## EP1502 Jumpers

The EP1502 processor hardware interface is configured using jumpers to set up the port interface and end of line termination.

JUMPER	SET AT	DESCRIPTION
J2	N/A	10-Base-T/100Base-Tx Ethernet Connection (Port 0)
J5	OFF	Port 2 RS-485 EOL Terminator is Off
J7	Reader Power Select. <i>See Note 1</i>	
	12V	Internal 12 VDC at Reader Ports
	PASS	VIN "Pass Through" to Reader Ports

*Note 1: The input power (VIN) must be 20 VDC minimum if the 12 V selection is to be used.*

## EP1502 Dip Switches

The four switches on S1 DIP switch configure the operating mode of the EP1502 processor. DIP switches are read on power-up except where noted. Pressing switch S2 causes the EP1502 to reboot.

S1	S2	S3	S4	DEFINITIONS
OFF	OFF	OFF	OFF	Normal operating mode
OFF	X	X	X	After initialization, enable default User Name (admin) and Password (password). The switch is read on the fly, no need to re-boot.

*X = Unused*

## MR52 Jumpers and DIP Switches

The EP1502 processor hardware interface is configured using jumpers to set up the port interface and end of line termination.

JUMPER	DESCRIPTION	DIP SWITCH	SELECTION FOR ADDRESS
J2	Reader Power Select	S1	OFF
	12V = 12 VDC at reader ports.	S2	OFF
	PT = Vin "Passed Through" to reader ports	S3	OFF
J3	2-Wire/4-Wire Select, install in 2W position only	S4	OFF
J5	RS-485 Termination, install in first and last units only	S5	OFF
		S6	OFF

*NOTE: The MR52 input power must be 20 VDC minimum if 12 VDC is required at reader ports*

## Step 3 – Associating the Panel with Onair

1. Login to your Onair account.
2. Navigate to the Setup tab and down to Setup → Sites/Doors → New Control Panel
3. Type in the desired name for the control panel
4. Insert the Control Panel ID. This will be the panel's MAC address with the prefix "SCP-." (Ex. SCP-1234567890)
5. Input any notes and then click Save Control Panel

The panel has now been associated to the Onair account. Ensure that the panel is now communicating and continue with configuring your Onair account.

For additional notes on Onair configuration, please read the *Brivo Onair Administrator's Manual*.

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## Wiring Recommendations

SIGNAL	BELDEN # OR EQUIVALENT	AWG	TWISTED PAIR	CONDUCTOR	MAX LENGTH
RS-485 Comm, two wire	9841	24	Yes		4000 ft
Power (22 Gauge)	5504FE	22	Yes		600 ft
Power (18 Gauge)	6300FE	18	Yes		1500 ft
RJ45-Ethernet	N/A	Cat5	Yes		330 ft
Request-to-Exit	5520FE/6300FE	22/18	Yes		1500 ft
Door Contact	5500FE	22	Yes		1500 ft
Reader Option 1 (22 AWG)	5504FE	22		Yes	200 ft
Reader Option 2 (20 AWG)	5400FE	20		Yes	300 ft
Reader Option 3 (18 AWG)	6300FE	18		Yes	500 ft

*Please note that the shielded cable is recommended for all cable types used.*

## MR52 Board Addressing

The following table displays how to address the MR52 boards. Please note the Onair Address column at right. This is the board number to use when associating the MR52 board in Onair.

ADDRESS	S1	S2	S3	S4	S5	ONAIR ADDRESS
0	OFF	OFF	OFF	OFF	OFF	2
1	ON	OFF	OFF	OFF	OFF	3
2	OFF	ON	OFF	OFF	OFF	4
3	ON	ON	OFF	OFF	OFF	5
4	OFF	OFF	ON	OFF	OFF	6
5	ON	OFF	ON	OFF	OFF	7
6	OFF	ON	ON	OFF	OFF	8
7	ON	ON	ON	OFF	OFF	9
8	OFF	OFF	OFF	ON	OFF	10
9	ON	OFF	OFF	ON	OFF	11
10	OFF	ON	OFF	ON	OFF	12
11	ON	ON	OFF	ON	OFF	13
12	OFF	OFF	ON	ON	OFF	14
13	ON	OFF	ON	ON	OFF	15

## Status LEDs

STATUS	LED SEQUENCE
Status	LED Sequence
Power-up	All LEDs off
Initialization	LEDs A through R2 are briefly sequenced ON then OFF
A LED	Offline: 1 second rate, 20% ON
	Communicating: 1 second rate, 80% ON
B LED	Indicates activity communicating with the EP1502

## Additional Resources

Additional resources are available for the installer as well as the client. Access these resources at [www.brivo.com/techdocs](http://www.brivo.com/techdocs)

Available resources include:

- *Brivo Mercury Installation Manual*
- *Brivo Onair Account Quick Start Guide*
- *Brivo Onair Administrator's Manual*

## Contacting Brivo Customer Care

For any issues, please contact Brivo Customer Care at: 866-274-8648 or [customer@brivo.com](mailto:customer@brivo.com)