HOW-TO

How-to Set Up Buttons in eDash

Document version: 0.2
Software version: 0.0.43 or later
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1. Description

eDash allows the use of on-screen buttons to control selected ECU functions. This feature is currently available only for **EMU Black** and **EMU Classic** used with **EDL-1**.

Controlling ECU via eDash (2-way communication)

ECU	Bluetooth device	Supported
EMU Black V3	EDL-1	**Yes - full capabilities**[1]
	BT to CAN	No
EMU Black V2	EDL-1	**Yes - limited**[2]
	BT to CAN	No
EMU Classic V3	EDL-1	**Yes - full capabilities**[3]
	CAN module + BT to CAN	No
	BT module	No
EMU Classic V1	EDL-1	**Yes - limited**[4]
	CAN module + BT to CAN	No
	BT module	No
EMU PRO	BT to CAN	No

[1] Requires EMU Black V3 firmware 3.064 or later

[2] Requires EMU Black firmware 2.178 or later, rotary buttons are not supported

[3] Not available yet

[4] Requires EMU Classic firmware 1.227 or later, rotary buttons are not supported

Unsupported Configurations

If your setup does not support 2-way communication, this functionality will not be available. Support for additional devices is currently under development.

EMU Black – 2-way communication setup

1. **Update EDL-1 firmware**

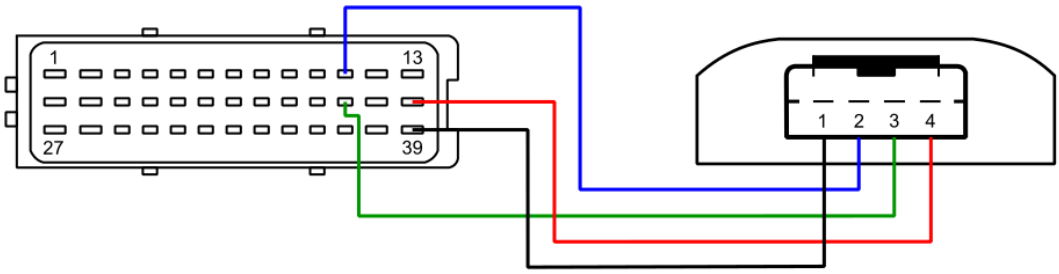
   Make sure the EDL-1 is using the latest firmware version (1.25). For more details, see https://www.ecumaster.com/files/EDL/EDL1_Manual.pdf

2. **Verify wiring**

   Two-way communication requires both TX and RX connections between the EMU Black and EDL-1 (shown as EMULOGGER in the device list).

   Connection to EMU Black

EMU Black	EDL-1
B39 Sensor Ground	**1** Ground
B11 RS232 TXD	**2** RXD
B24 RS232 RXD	**3** TXD
B26 +5V supply	**4** Power supply



Important:

EMU RX → EDL TX

EMU TX → EDL RX

3. **Connect via eDash**

   Open the eDash application and connect to the EDL-1 device.

4. **Add a Switch Button in eDash**

   - Open Edit Layout

   - Add a Switch button widget to the layout

   - Assign a BT Switch channel number (e.g. BT Switch 1, 2, etc.)

   This number will be used later in the ECU configuration.

   For more information about layout editing, refer to the main eDash manual: https://ecumaster.com/files/EDASH/eDash_Manual.pdf

5. **Verify switch operation in EMU software**

   In EMU Black software:

   - Open *Log / Switches BT* window

   - Toggle the button in eDash

   The corresponding switch value should change in real time.

6. **Assign the switch to a function**

   In the ECU configuration:

   - Go to the desired strategy (e.g. boost control, traction control, etc.)

   - Set the input to BT Switch #, matching the number configured in eDash

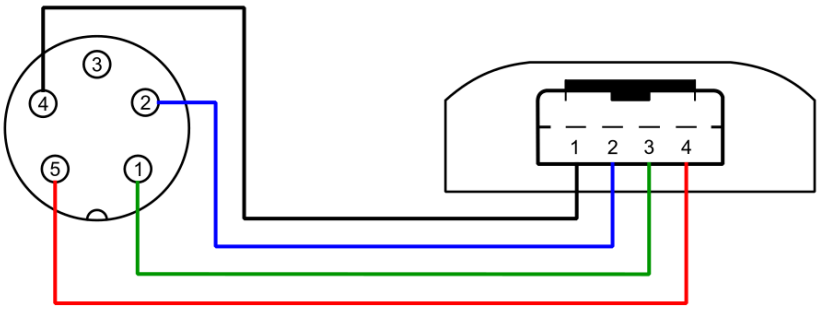
EMU Classic – 2-Way Communication Setup

The setup procedure is identical to EMU Black.

1. Update EDL-1 firmware to the latest version (1.25). For more details, see https://www.ecumaster.com/files/EDL/EDL1_Manual.pdf
2. Verify TX and RX wiring:

   Connection to EMU Classic

EMU Classic	EDL-1
4 Ground	**1** Ground
2 TXD	**2** RXD
1 RXD	**3** TXD
5 +5V supply	**4** Power supply



   EMU RX → EDL TX

   EMU TX → EDL RX

3. Connect to EDL-1 using eDash
4. Add a **Switch button widget** and assign a BT Switch number
5. Open ***Log / Switches BT*** window in EMU Classic software and verify operation
6. Assign the switch in the selected ECU strategy using the corresponding **BT Switch #**

2. Troubleshooting

Cannot connect from eDash app

Device not visible in eDash:

- Check EDL-1 power supply
- Verify EDL status LED
- Update EDL-1 firmware

Switch state not visible in Switches BT window

- Check TX/RX wiring
- Ensure both lines are connected correctly

Note:

Two-way communication requires compatible hardware and firmware.

Switch behavior depends on ECU configuration (strategy settings).

3. Document history

Version	Date	Changes
0.1	2026.03.30	Initial release
0.2	2026.04.01	Updated information about required ECU firmware versions