Communication

Ethernet

Motorsport Ethernet Switch

The RaceGrade Ethernet Switch is a ruggedized four port I 0/100 Ethernet switch. An Ethernet switch can be used to connect multiple Ethernet devices 1o a single easy to reach connection port. Common uses would include a digital dash, ECU, telemetry modem, or other Ethernet devices. The water resistant Ethernet switch has four activity lights that blink wtth data communication on the corresponding port. Lights also flash twice on power up. Each port has a rubber plug that must be replaced when the port is not in use to keep water out of connector. Water-resistant, or standard Ethernet cables will connect and function with this device. In order for the device to be water resistant, the 2 connectors that come with the switch must be used. Wa1er resistant cables may be ordered in 6ft lengths. These feature a water resistant connector on one end and flying lead on the other. This allows the user to integrate it into an existing harness.

Mouse over for larger view

Web	Item Number	Description
	RG SWITCH 10	**MOTORSPORT ETHERNET SWITCH**

Specifications:
Operating Temperature
  Operating Temp Range: -40°C to 85°C
Power
  Operating Voltage Range: 8 to 32 vDC
  Maximum Current Draw: 0.25 Amps
Physical
  Dimensions: 6.50" x 2.50" x 1.66"
  Weight: 362 grams
Connection:
  Mating Connector #1: ASL606-05SN
  Pin 1 – Battery Ground
  Pin 3 – Battery Positive
Mating Connector #2: M 12-2001
  Pin 1 - TX+ (White/Orange)
  Pin 2 - TX- (Orange)
  Pin 3 - RX+ (White/Green)
  Pin 4 - N/A
  Pin 5 - N/A
  Pin 6 - RX- (Green)
  Pin 7 - N/A
  Pin 8 - N/A

CAN Adaptors

USB To CAN Adaptor (UTC)

The MoTeC USB to CAN adapter is used to replace the CAN interface cable (P/N M ADL CAN) in instances where a computer needs to use USB rather than a parallel port for communications. Requires ECU manager version 2.3 or Dash manager 3.2 or above.

Software Requirements for compatibility:

Hundred Series ECU's	2.30S or later
PDM's	1.0 or later
BR2	1.0.6.2 ‡
DBW4	1.03 or later
SDC's	1.21 or later
MDC	1.22 or later
MDC2	2.0 or later
LTC	1.0 or later
ADL	3.20P or later

‡ This software ships with all data logging manager software

Web	Item Number	Description
🔴	M UTC	USB TO CAN ADAPTOR

Serial to CAN Adaptor (STC)

The STC (Serial to CAN) adaptor converts RS232 data to CAN and vice versa allowing multiple RS232 devices to be connected to a Data Logger via CAN.

Features
- Resin filled machined anodised aluminium case with through hole fastening
- Flying lead
- Bi-directional
- Converts RS232 to CAN to display andlog GPS data —position, true ground speed and GPS beacons— and ECU data
- Converts CAN to RS232 for transmitting telemetry
- Compatible with TTL voltage levels to connect early M4s and all M48s to a Dash Logger

The 2 baud rates currently available are:

- 19200 used for the M GPS-G5
- 57600 used for the M GPS BL

Web	Item Number	Description
🔴	M STC	SERIAL TO CAN ADAPTOR

Inputs
Power supply 12 V (9 - 16 VDC)
Communications
1 x RS232
Baud rates: 9600, 19200, 28800, 38400, 57600.
Data Length: 7 or 8
Parity: None, Even or Odd
Stop Bits: 1 or 2
1 x CAN
Configurable address (default 146h)
1Mbit Baud rate
NOTE: RS232 / CAN settings must be specified when ordering. Currently the STC is non-configurable.

Physical
Case size 38 mm x 14 mm x 26 mm *excluding lead*

Trim Switches

Steering-Wheel Switch Assembly

Sport Dash and ADL steering-wheel switches.
For alarm-acknowledge, scrolling alphanumeric display, and ADL mode. Terminates w/ 6-pin DTM

	M SD SW H	FOR USE WITH SPORT DASH
	M ADL SW H	FOR USE WITH ADL

Dashboard Mounted

Web	Item Number	Description
	M DS-12	12 POSITION, USER ADJUSTABLE
	M DS-11	11 POSITION, USER ADJUSTABLE
	M DSM-4	4 POSITION MAP SWITCH, M800 SERIES ECU's †

Boost Control has never been easier
The MoTeC ECU's offer unparalleled levels of boost control. In addition to having feedback type wastegate control, various inputs can be used to regulate boost for certain parameters. For example, when using a wheelspeed input, MoTeC allows boost based on wheelspeed and rpm - or boost based on gear position and rpm. A multiposition trim switch input can be used to allow the driver to manually select the desired boost level on the fly.

How can I use a Trim Switch?
The multiposition trim switch can be used in a number of ways. It is most commonly used to trim fuel or ignition but can also be used to trim boost if the wastegate is ECU controlled or can be used to select 1 of 9 or 11 different RPM limit levels on the fly without a laptop. Ask your MoTeC representative how you can use a trim switch in your application.

---

† **Requires firmware v 3.3 or higher**

Comm Cables ECU-PC

Communications Cable for M48 / M8

Web	Item Number	Description
●	M RS-232 MK 3	6 FOOT HARNESS
	M RS-232 MK3 6M	20 FOOT HARNESS

Communications Cable for M4E / M800 / M880

	Item Number	Description
	M RS-232 M4E	10' RS-232 SERIAL CABLE

Communications Cable for M48 / M8 with ADL

	M RS-232 MK3 M	ALLOWS ECU DATA TO BE SENT TO ADL

PC parallel-to-CAN cable

	M ADL CAN	CAN EXTENSION CABLE
	M ADL CAN 25'	CAN EXTENSION CABLE 25 FOOT
	M ADL CAN 36'	CAN EXTENSION CABLE 36 FOOT
	M ADL CAR	CAR-SIDE CAN CABLE

Computer Interface Module

Web	Item Number	Description
●	M CIM	CONVERTS TTL TO RS-232
	M4 CIM H	CONNECTS ECU, ADL, AND PC TO CIM
	M48 CIM H	CONNECTS ECU, ADL, AND PC TO CIM