



M-Flex is Marlin's new family of off-the-shelf electronic controls designed for severe duty, outdoor mobile applications.

The M-Flex Product line are standard control components that are your quick-to-market option that provide flexibility in terms of software and hardware customization.



M-FLEX 4.3" CAN COLOR DISPLAY

The M-Flex 4.3" Color Display is designed specifically for severe duty, outdoor mobile applications to withstand the harsh temperatures, shock and vibration, moisture and electrical transients that are common to these environments. The high bright LCD ensures easy viewing in brilliant sunlight, and the high resolution screen provides sophisticated graphics and animation. The silicone rubber pushbuttons provide intuitive screen navigation and function control. Two RGB multicolor LED's provide alarm and status indication. The standard CAN interface is SAE J1939, with autobaud detection for 250/500Kbps. Inputs and outputs are available for control of machine functions. The M-Flex 4.3" Color Display is typically used for construction, agriculture, and turf care equipment, utility vehicles, power sports vehicles, marine, military, outdoor power equipment, and similar harsh environment applications.

Applications



- Designed for severe duty, outdoor mobile applications.
- High brightness LCD (800cd/m²) for true outdoor viewing in sunlight. Wide viewing angle from all directions.
- Wide operating voltage and temperature range for 12V and 24V applications.
- Low power sleep mode for applications requiring direct-to-battery connection.
- Eight pushbutton keypad with tactile feedback provides menu navigation and function selection.
- Silicon rubber pushbuttons have operating life exceeding 1 million cycles.
- Two RGB multi-color LED's for status and alarm indication.
- CAN port with auto baud detection of 250/500 Kbps. SAE J1939 CAN protocol.
- High resolution color LCD provides incredible customized screen graphics and detailed images.
- Day and night screen inversion.
- Inputs and outputs available for custom control functions (See options list.)
- Compact, low profile housing with Deutsch DT style connectors.
- Mounting bracket provides quick, snap-in panel mounting. Alternatively, RAM-mount bolt pattern is built into housing.
- IP67 submersion and IP69K pressure wash rated for maximum water ingress protection.
- RoHS and CE compliant.
- Programmed by Marlin to meet customers' specific application requirements. Saves you time and development cost.

Specifications

Input/Output Options

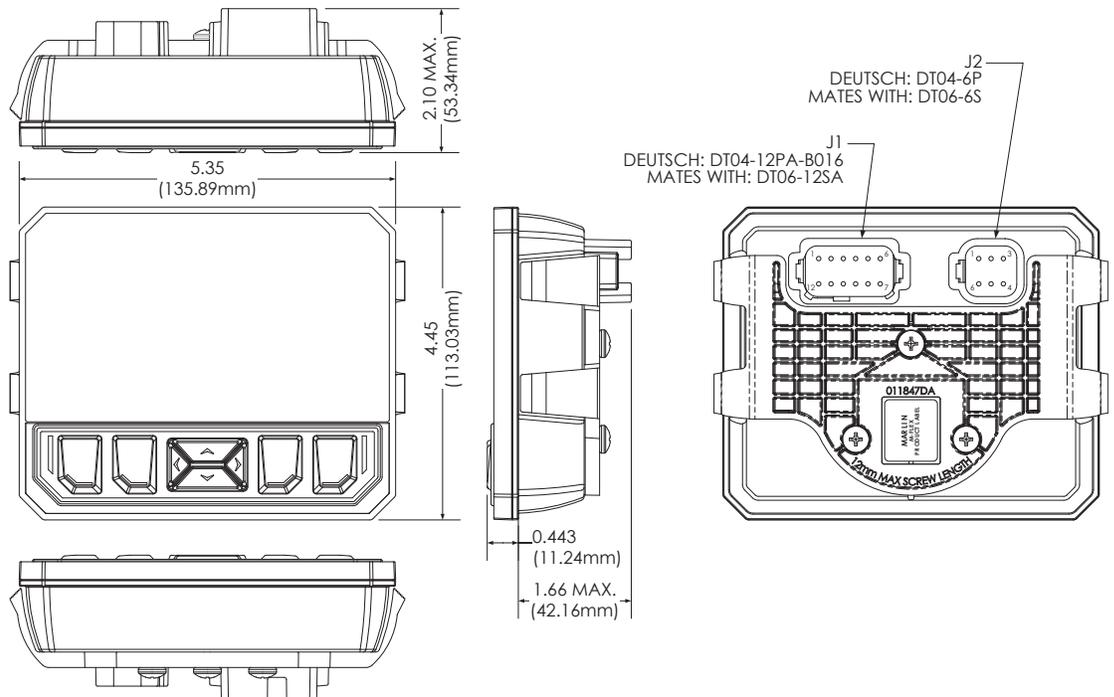
- (0) inputs, (0) outputs
- (4) inputs, (2) outputs
- (2) inputs, (4) outputs
- (2) inputs, (2) outputs, (2) CAN ports

Programming

The M-Flex display has rich graphics and animation capability to provide the end user a vivid display that is easy to use and enjoyable to operate. To accomplish this, Marlin develops the software for our customer's to meet their unique application requirements. Marlin uses a powerful graphics development tool, the same used by major automotive manufacturers, to create the software faster than can be done with conventional tools. This saves our customers time, cost, and the frustration of having to develop the screen graphics and functions. Customers who wish to participate in the screen development can provide graphic images generated from common programs such as Adobe Photoshop™ and Adobe Illustrator™ that can then be imported by Marlin into our development tool.

Supply Voltage	8 - 36VDC operating range, reverse polarity protected.
Communication	SAE J1939 CAN 2.0A and 2.0B compliant.
Baud Rate	Auto Detection for 250/500 kps.
CAN Port	One CAN Port with option for 2nd CAN port.
Inputs	2 or 4 configurable inputs that can be configured as analog, digital or frequency, PWM, resistive or quadrature encoder.
Outputs	2 half-bridge PWM outputs rated at Configurable as PWM proportional, On/off current-sourcing or On/off current-sinking. Optional 2 high-side outputs rated 3.0A maximum continuous current for on/off control.
Sensor Power	Power supply rated 5VDC 500mA max.
LCD	Brightness: 800 cd/m ² . Resolution: 480 X 272 pixels.
LED Indicators	Two RGB multi-color LEDs for status and alarm indication.
Keypad	4 pushbuttons for screen navigation and 4 pushbuttons for function selection and parameter setting.
Ingress Protection	IP67 (1 meter submersion for 30 minutes) and IP69K pressure wash, >15° nozzle, with appropriate mating connector boot installed.
Operating Temperature	-20° to 70°C .
Storage Temperature	-40° to 85°C.

Dimensions



For a detailed specification: visit www.marlintech.com/m-flex
Ordering Information: visit www.marlintech.com or call 920-485-4463