

# M-FLEX 4.3” COLOR DISPLAY

The M-Flex 4.3” Color Display is designed for severe duty, outdoor mobile applications and built to withstand the harsh temperatures, shock and vibration, moisture and electrical transients that are common to these environments.



M-Flex Displays are typically used for construction, agriculture and turf care equipment, utility and power sports vehicles, marine, military, outdoor power equipment and similar harsh environment applications.



## FEATURES

- Designed for severe duty, outdoor mobile applications.
- High brightness LCD (800cd/m<sup>2</sup>) for true outdoor viewing in sunlight. Wide viewing angle from all directions.
- Designed for 12V and 24V applications.
- Low power sleep mode for applications requiring a direct-to battery connection.
- Eight pushbutton keypad with tactile feedback provides menu navigation and function selection.
- Silicon rubber pushbuttons have operating life exceeding one million cycles.
- Two RGB multi-color LED's for status and alarm indication.
- 250/500 Kbps CAN Port with autobaud detection.
- CAN protocol J1939, CAN open, NMEA 2000.
- High resolution color LCD provides incredible customized screen graphics and detailed images.
- 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 > 15° nozzle 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

Specifications subject to change without notice. \ Revised 11.19

<b>Supply Voltage</b>	8 - 36VDC operating range, reverse polarity protected.
<b>CAN Protocol</b>	SAE J1939 CAN 2.0A and 2.0B compliant, CAN Open, NMEA 2000.
<b>Baud Rate</b>	Auto Detection for 250/500 kps.
<b>CAN Port</b>	One CAN Port with option for 2nd CAN port.
<b>Inputs</b>	2 or 4 configurable inputs that can be configured as analog, digital or frequency, PWM, resistive or quadrature encoder.
<b>Outputs</b>	2 half-bridge PWM outputs. Configurable as PWM proportional, configurable as a source or sink. Optional 2 high-side outputs rated 3.0A maximum continuous current for on/off control.
<b>Sensor Power</b>	Power supply rated 5VDC 500mA max.
<b>LCD</b>	Brightness: 800 cd/m <sup>2</sup> . Resolution: 480 X 272 pixels. Viewing cone: 80/80/80/80.
<b>LED Indicators</b>	Two RGB multi-color LEDs for status and alarm indication.
<b>Keypad</b>	4 pushbuttons for screen navigation and 4 pushbuttons for function selection and parameter setting.
<b>Ingress Protection</b>	IP67 (1 meter submersion for 30 minutes) and IP69K pressure wash, >15° nozzle, with appropriate mating connector boot installed.
<b>Operating Temperature</b>	-20° to 70°C.
<b>Storage Temperature</b>	-40° to 85°C.

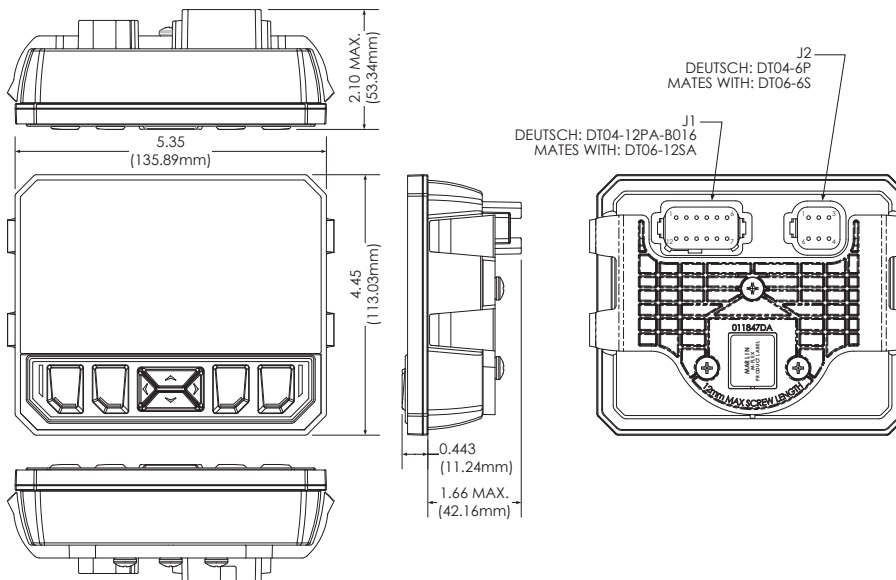
## PROGRAMMING OPTIONS

Marlin Technologies offers two software programming options for M-Flex Displays. For customers looking for a full solution, our engineering team can develop custom display software to meet specific application requirements. For customers with the engineering resources for developing their own applications, M-Flex Displays use a TouchGFX template. TouchGFX is a user-friendly graphic C++ tool that creates embedded graphic user interfaces (GUIs) on STM32 microcontrollers.

## I/O OPTIONS

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

## DIMENSIONS



For a detailed specification visit [marlintech.com/m-flex](http://marlintech.com/m-flex)

Marlin Technologies, Inc.  
101 Industrial Drive \ P.O. Box 123  
Horicon, WI 53032-1803  
920.485.4463 \ P  
920.485.2899 \ F

**MARLINTECH.COM**  
PROUDLY MADE IN THE USA