700MDI Media Display Interface



The 700MDI (Media Display Interface) is a CAN based 7.0" 262K color 800 x 480 TFT High Brightness LCD with touch-screen. The 700MDI supports dual independent CAN transceivers for providing a gateway between multiple in-vehicle networks. Screens are designed using an intuitive GUI builder (CANcreate) capable of implementing dynamic customer interfaces.

The 700MDI is housed in a custom enclosure with a 9 way silicone molded backlit keypad adjacent to the screen. The housing has a single Deutsch DT style connector for enhanced sealing and reliability located on the rear.

The 700MDI includes up to 4 GB of available memory stored on an internal micro SD card. Using the USB port all data stored on the card can be accessed through a PC as a mass storage device. Since all program application data, GUI components, and data logs are contained on the micro SD card this allows immediate field upgrades of critical software components simply by transferring new files to the card. The available memory and file OS can support thousands of pages of information and brand new to the 700MDI is the ability to playback audio events using the internal 1.5W speaker.

Also included is the ability to select one of four composite video sources to display on the screen. The video source can be NTSC or PAL and will scale to the full screen size. Touch and system functions will still be active while video is actively displayed so that the user can quickly return to any control or monitoring activity after checking the video feeds.

With the convergence of images, audio, and video unleashed by the CANcreate GUI utility the 700MDI is capable of providing a complete user interface experience.

www.hmisystems.net info@hmisystems.net 407.359.8171



feature list

- 2 CAN ports
- 1 USB port
- 4 CVBS Video input (NTSC/PAL) optional
- 1.5W Speaker with 22khz playback for pre-recorded audio alerts
- Up to 4GB Micro SD Card for graphical and audio assets plus data logging
- Onboard temperature sensor
- RTC with battery backup
- 12 position DT Deutsch connector
- Resistive Touch Screen
- 9 way silicone rubber backlit keypad for augmenting touch functions
- Utilizes CANcreate GUI design authoring tool

design specification

- Shock: Mil Std 810G method 516.6 40G 11 ms 3 pulses each perpendicular axis
- Vibration: Mil Std 810G Method 514.6 Category 4 Composite Wheeled Vehicle
- Ingress Protection: IP64 (10L / min flow against all orientations)
- PCB characteristics: UL94V-0
- Salt spray: ASTM B117 for 24 hours
- EMI Testing: SAE J1113
 - Radiated Immunity BCI SAE J1113-4 100 mA 20 MHz to 150 MHz
 - Radiated Immunity free field SAE J1113-21 100V/m 80 MHz to 1 GHz AM 30V/m 800 MHz to 2 GHz PM
 - Radiated Emissions SAE J1113-41 (CISPR25) 30 MHz to 2.5 GHz vertical/horizontal
 - Immunity Transients ISO7637-2 12/24V levels Pulse 1, 2a, 2b, 3a, 3b, and 4
 - ESD +/- 8kV contact and +/-15 kV air



electrical specifications

description	minimum	nominal	maximum
Operating Voltage	9 VDC	12 / 24 VDC	48 VDC*
Operating Current	-	750 mA @ 12VDC	-

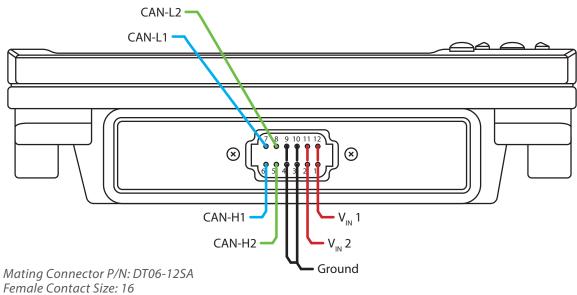
^{* 5} minute duration for 24V jump start condition

physical specifications

description	specification	
Front Bezel	UL 94 V-0 rated Polycarbonate	
Back Cover	UL 94 V-0 rated Polycarbonate	
Operating Temperature	-20°C to 70°C**	
Storage Temperature	-30°C to 80°C	
Operating Humidity	Up to 95% condensing	
Weight	700 grams	
Display brightness	1400 cd/m2 typ.	
Contrast Ratio	800:1 typ.	
Viewing Angle	-50/70 vertical -70/70 horizontal	
LED Backlight Life	> 20,000 hours	

^{**} Backlight intensity < 70% for operation above 55°C

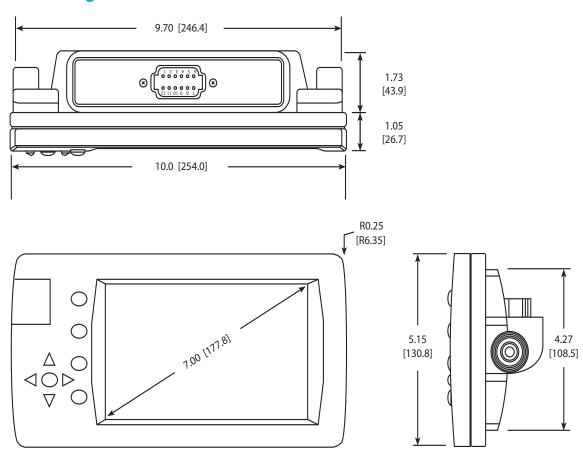
wiring diagram



Current Rating: 13A
Wire Sizes: 14-20 AWG



mounting dimensions



Cutout Dimensions

A rectangular hole the size of the keep out area must be cut from the mounting surface. The keep out area is 9.75" x 4.32" (247.65mm x 109.22mm). The depth of the module is approximately 1.325" (33.66mm). Please allow sufficient room for all wires connected to the display.

