

User Manual

# Engine Information Center (EIC) DM430E Series Display



**Revision history***Table of revisions*

Date	Changed	Rev
December 2018	Minor change for print on demand, removed 2 blank pages at end of the manual for required total pages divisible by 4.	0103
December 2018	Added note in regards to keeping ambient light sensor area clean and uncovered for best operation.	0102
December 2018	First edition	0101

## Contents

### User liability and safety statements

OEM responsibility.....	4
Safety statements.....	4
Display operation guidelines.....	4
Machine wiring guidelines.....	5
Machine welding guidelines.....	5

### Overview

DM430E Series Display package.....	6
DM430E literature references.....	6
Technical Information (TI).....	6
Data Sheet (DS).....	6
API Specifications (API).....	6
PLUS+1® GUIDE User Manual.....	6
Latest version of technical literature.....	6
The Engine Information Center (EIC).....	6
Navigation using soft keys.....	7
Initiate and inhibit regeneration.....	7
Inhibit Regeneration action.....	8
Initiate Regeneration action.....	8
TSC1 RPM setpoint.....	8

### Main Menu

Basic Setup menu.....	9
Brightness.....	10
Color Theme.....	10
Time & Date.....	10
Language.....	11
Units.....	11
Diagnostics menu.....	11
System Info.....	12
Fault Log.....	12
Device List.....	12
Screen Setup menu.....	13
Select Screens.....	13
Number of Screens.....	13
System Setup menu.....	14
Reset Defaults.....	14
CAN.....	14
Display.....	15
PIN Setup.....	15
Trip Reset.....	16

### Setup to monitor signals

Symbols for J1939 parameters.....	21
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### LED indicators

Particulate filter lamp.....	25
High exhaust system temperature lamp.....	25
Regeneration disabled lamp.....	25

### Installation and mounting

Mounting.....	26
Fastening.....	27
Pin assignments.....	27

### Ordering information

Model variants.....	29
Model code.....	29
Model code key.....	29
Related products.....	30

## User liability and safety statements

### OEM responsibility

The OEM of a machine or vehicle in which Danfoss products are installed has the full responsibility for all consequences that might occur. Danfoss has no responsibility for any consequences, direct or indirect, caused by failures or malfunctions.

- Danfoss has no responsibility for any accidents caused by incorrectly mounted or maintained equipment.
- Danfoss does not assume any responsibility for Danfoss products being incorrectly applied or the system being programmed in a manner that jeopardizes safety.
- All safety critical systems shall include an emergency stop to switch off the main supply voltage for the outputs of the electronic control system. All safety critical components shall be installed in such a way that the main supply voltage can be switched off at any time. The emergency stop must be easily accessible to the operator.

### Safety statements

#### Display operation guidelines

- Disconnect your machine's battery power before connecting power and signal cables to the display.
- Before doing any electrical welding on your machine, disconnect all power and signal cables connected to the display.
- Do not exceed the display power supply voltage ratings. Using higher voltages may damage the display and can create a fire or electrical shock hazard.
- Do not use or store the display where flammable gases or chemicals are present. Using or storing the display where flammable gases or chemicals are present may cause an explosion.
- Software configures the keypad buttons on the display. Do not use these buttons to implement critical safety features. Use separate mechanical switches to implement critical safety features such as emergency stops.
- Design systems that use the display so that a communication error or failure between the display and other units cannot cause a malfunction that might injure people or damage material.
- The protective glass over the display screen will break if hit with a hard or heavy object. Install the display to reduce the possibility of it being hit by hard or heavy objects.
- Storing or operating a display in an environment that exceeds the display specified temperature or humidity rating may damage the display.
- Always clean the display with a soft, damp cloth. Use a mild dishwashing detergent as needed. To avoid scratching and discoloring the display, do not use abrasive pads, scouring powders, or solvents such as alcohol, benzene, or paint thinner.
- Keep ambient light sensor area clean and uncovered for best operation.
- Danfoss graphical displays are not user serviceable. Return the display to the factory in case of failure.

## User liability and safety statements

### Machine wiring guidelines

#### **Warning**

Unintended movement of the machine or mechanism may cause injury to the technician or bystanders. Improperly protected power input lines against over current conditions may cause damage to the hardware. Properly protect all power input lines against over-current conditions. To protect against unintended movement, secure the machine.

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#### **Caution**

Unused pins on mating connectors may cause intermittent product performance or premature failure. Plug all pins on mating connectors.

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- Protect wires from mechanical abuse, run wires in flexible metal or plastic conduits.
- Use 85° C (185° F) wire with abrasion resistant insulation and 105° C (221° F) wire should be considered near hot surfaces.
- Use a wire size that is appropriate for the module connector.
- Separate high current wires such as solenoids, lights, alternators or fuel pumps from sensor and other noise-sensitive input wires.
- Run wires along the inside of, or close to, metal machine surfaces where possible, this simulates a shield which will minimize the effects of EMI/RFI radiation.
- Do not run wires near sharp metal corners, consider running wires through a grommet when rounding a corner.
- Do not run wires near hot machine members.
- Provide strain relief for all wires.
- Avoid running wires near moving or vibrating components.
- Avoid long, unsupported wire spans.
- Ground electronic modules to a dedicated conductor of sufficient size that is connected to the battery (-).
- Power the sensors and valve drive circuits by their dedicated wired power sources and ground returns.
- Twist sensor lines about one turn every 10 cm (4 in).
- Use wire harness anchors that will allow wires to float with respect to the machine rather than rigid anchors.

### Machine welding guidelines

#### **Warning**

High voltage from power and signal cables may cause fire or electrical shock, and cause an explosion if flammable gasses or chemicals are present.

Disconnect all power and signal cables connected to the electronic component before performing any electrical welding on a machine.

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The following is recommended when welding on a machine equipped with electronic components:

- Turn the engine off.
- Remove electronic components from the machine before any arc welding.
- Disconnect the negative battery cable from the battery.
- Do not use electrical components to ground the welder.
- Clamp the ground cable for the welder to the component that will be welded as close as possible to the weld.

## Overview

### DM430E Series Display package

Prior to use, ensure the following are included in the display package:

- DM430E Series Display
- Panel Seal Gasket
- DM430E Series Display - Engine Information Center (EIC) User Manual

### DM430E literature references

#### Reference literature

Literature title	Literature type	Literature number
DM430E Series PLUS+1® Mobile Machine Displays	Technical Information	BC00000397
DM430E Series PLUS+1® Mobile Machine Displays	Data Sheet	AI00000332
DM430E Series Display - Engine Information Center (EIC) Software	User Manual	AQ00000253
PLUS+1® GUIDE Software	User Manual	AQ00000026

#### Technical Information (TI)

A TI is comprehensive information for engineering and service personnel to reference.

#### Data Sheet (DS)

A DS is summarized information and parameters that are unique to a specific model.

#### API Specifications (API)

An API is specifications for programming variable settings.

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[API specifications are the definitive source of information regarding pin characteristics.](#)

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#### PLUS+1® GUIDE User Manual

The Operation Manual (OM) details information regarding the PLUS+1® GUIDE tool used in building PLUS+1® applications. This OM covers the following broad topics:

- How to use the PLUS+1® GUIDE graphical application development tool to create machine applications
- How to configure module input and output parameters
- How to download PLUS+1® GUIDE applications to target PLUS+1® hardware modules
- How to upload and download tuning parameters
- How to use the PLUS+1® Service Tool

#### Latest version of technical literature

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[Comprehensive technical literature is online at www.danfoss.com](http://www.danfoss.com)

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### The Engine Information Center (EIC)

The DM430E comes installed with the powerful and flexible Danfoss Engine Information Center (EIC) J1939 engine monitor software application. Use the application to customize the look and feel of your individual engine monitoring needs by creating and controlling analog and digital display information in the screen configurations that work best for your performance requirements.

Navigate through diagnostic information and configuration screens with ease by using the four context-dependent soft keys located at the front of the display. Choose from more than 4500 different monitoring parameter profiles to customize the DM430E.

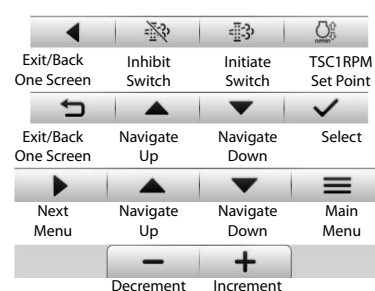
## Overview

Up to four signals can be monitored on each screen. Use the EIC software to configure the DM430E for alarms and alerts.

## Navigation using soft keys

The DM430E is controlled by navigation through a set of four soft keys located at the lower front of the display. The keys are context dependent. Soft key selection options are displayed above each key and are dependent on the current navigation location within the engine monitor software program. As a general rule, the far right soft key is the selector button and the far left soft key is the step back one screen key. To optimize full screen use, the on-screen selections are not displayed when not in use. Press any soft key to display current selection options.

### Navigation using soft keys



### Screen navigation

<b>Navigate Up</b>	Press to move up through menu items or screens
<b>Navigate Down</b>	Press to move down through menu items or screens
<b>Main Menu</b>	Press to go to Main Menu screen
<b>Exit/Back one screen</b>	Press to go back one screen
<b>Select</b>	Press to accept selection
<b>Next Menu</b>	Press to select next digit or screen element
<b>Inhibit Regen</b>	Press to force regeneration of particulate filter
<b>Initiate Regen</b>	Press to inhibit particulate filter regeneration
<b>Increment/decrement</b>	Press to increment or decrement value

## Initiate and inhibit regeneration

While EIC DM430E is displaying one of the monitor screens, pressing any soft key will show the available navigation actions in an action menu. There are two separate action menus on this level, the first one to appear contains the following actions (from left to right).

- Next Menu
- Navigate Up
- Navigate Down
- Main Menu

Selecting **Next Menu** will display the second action menu with **Inhibit switch** (Inhibit Regeneration), **Initiate switch** (Initiate Regeneration) and **RPM Set Point**. Pressing it again will show the first set of actions once more. Selecting **Navigate Up** and **Navigate Down** will allow navigation between signal monitoring screens. Selecting **Main Menu** will display the DM430E set up options. If no soft keys are pressed and released for 3 seconds while the action menu is shown, the menu will disappear and the actions are no longer available. Pressing (and releasing) any soft key will activate the first menu once more.

## Overview

### Inhibit Regeneration action

If the user selects the Inhibit Regeneration action while the action menu is being displayed the same function as described in [Initiate Regeneration action](#) will be executed, with the following.

- Bit 0 (out of 0-7) in byte 5 (out of 0-7) is set to 1 (true).
- The pop up reads **Inhibit Regen.**
- The acknowledgment lights up the Regeneration Inhibit LED.

### Initiate Regeneration action

If the user selects the Initiate Regeneration action while the action menu is being displayed; bit 2 (out of 0-7) in byte 5 (out of 0-7) will be set to 1 (true) in the J1939 message PGN 57344 bound for the engine. This change prompts the message to be transmitted. The bit will stay like this for the duration of the soft key press or for the 3 second countdown to soft key inactivity, whichever occurs first. The bit is then reset to 0 (false).

The soft key press also prompts the display to show a pop up lasting for 3 seconds. This popup simply says **Initiate Regen.** If the display does not receive an acknowledgment from the engine on the change to message PGN 57344 the last half of the pop up will read **No Engine Signal.** This acknowledgment is the command that lights up the Initiate Regeneration LED on the display unit housing.

### TSC1 RPM setpoint

The TSC1 message sends the RPM requirement for the engine.



## Main Menu

Use the **Main Menu** as the starting point for configuring the DM430E Series Display.

*Main Menu screen*



*Main Menu*

<b>Basic Setup</b>	Use to set Brightness, Color Theme, Time & Date, Language, Units
<b>Diagnostics</b>	Use to view system, fault log and device information
<b>Screen Setup</b>	Use to select screens, number of screens and parameters (can be PIN protected)
<b>System Setup</b>	Use to reset defaults and trip information, access CAN information, select display settings, and configure PIN settings

## Basic Setup menu

Use **Basic Setup** to set brightness, color theme, time & date, language, and units for the DM430E Series Display.

*Basic Setup screen*



*Basic Setup menu*

<b>Brightness</b>	Use to adjust brightness level of the screen
<b>Color Theme</b>	Use to set background color of display
<b>Time &amp; Date</b>	Use to set time, date, and time and date styles
<b>Language</b>	Use to set the system language, default language is English
<b>Units</b>	Use to set speed, distance, pressure, volume, mass, temperature and flow settings

## Main Menu

### Brightness

Use the minus (-) and plus (+) soft keys to adjust display screen brightness. After 3 seconds of inactivity the screen will go back to basic setup.

*Brightness screen*



### Color Theme

Use to select between 3 options of Light, Dark and Automatic.

*Color Theme screen*



### Time & Date

Use up, down, select, and next soft keys to set time style, time, date style, and date.

*Time & Date screen*



## Main Menu

### Language

Use up, down and select soft keys to select program language. Available languages are English, Spanish, French, German, Italian, Swedish and Portuguese.

*Language screen*



### Units

Use up, down, and select soft keys to define units of measurement.

*Units of measurement*

<b>Speed</b>	kph, mph
<b>Distance</b>	km, miles
<b>Pressure</b>	kPa, bar, psi
<b>Volume</b>	litre, gal, igal
<b>Mass</b>	kg, lbs
<b>Temperature</b>	°C, °F
<b>Flow</b>	lph, gph, igph

## Diagnostics menu

Use to obtain system info, fault log entries, and device information.

*Diagnostics screen*



*Diagnostics menu*

<b>System Info</b>	Use to display hardware, software, system, and node information for connected devices
<b>Fault Log</b>	Use to view and monitor current and previous fault information
<b>Device List</b>	Use to display list of all currently connected J1939 devices

## Main Menu

### System Info

The System Info screen contains hardware serial number, software version, node number and ROP version.

*System Info screen example*



### Fault Log

The Fault Log screen contains saved and stored fault information. Select either **Active Faults** or **Previous Faults** to monitor fault activity. Select specific faults to list more information.

*Fault Log screen*



### Active faults

Select Active Faults to display all active faults on the CAN network.

### Previous faults

Select Previous Faults to display all previously active faults on the CAN network.

### Device List

The Device List screen lists J1939 devices and addresses that are currently being monitored on the network.

## Main Menu

### Screen Setup menu

Use **Screen Setup** to select individual screens for setup, and number of signal screens.



#### Screen Setup menu

<b>Select Screens</b>	Select screen to set up signal information, screens available are dependent on Number of Screens selection
<b>Number of Screens</b>	Select 1 to 4 screens for information display

#### Select Screens

Select screen to customize. For screen set up details, see [Setup to monitor signals](#).

#### Select Screens example



#### Number of Screens

Select number of screens for display. Choose from 1 to 4 screens. For screen set up details, see [Setup to monitor signals](#).

#### Number of Screens example



## Main Menu

### System Setup menu

Use **System Setup** to monitor and control application systems.



#### System Setup menu

<b>Reset Defaults</b>	Use to reset all system information to the default settings
<b>CAN</b>	Use to customize CAN settings
<b>Display</b>	Use to customize display settings
<b>PIN Setup</b>	Use to customize PIN settings
<b>Trip Reset</b>	Use to reset trip information

#### Reset Defaults

Select Reset Defaults to reset all EIC settings to original factory default settings.



#### CAN

Use the CAN settings screen to make the following selections.



## Main Menu

### CAN settings menu

<b>Fault Popup</b>	Select on/off to enable/disable pop-up messages.
<b>Conversion Method</b>	Select 1, 2 or 3 to determine how to interpret non-standard fault messages. Consult engine manufacturer for correct setting.
<b>Engine Address</b>	Select engine address. Selection range is 0 to 253.
<b>Engine Type</b>	Select from a list of predetermined engine types.
<b>Engine DMs Only</b>	Only accepts fault codes or J1939 DM messages from the engine.
<b>Transmit TSC1</b>	Enable to send the TSC1 (Torque Speed Control 1) message.
<b>JD Interlock</b>	Transmit John Deere Interlock message required for regeneration.

### Display



### Display Setting

<b>Startup Screen</b>	Select to enable/disable logo display at startup.
<b>Buzzer Output</b>	Select to enable/disable warning buzzer functionality.
<b>Force Return to Gauges</b>	After 5 minutes of inactivity returns to main Gauge.
<b>Demo Mode</b>	Select on/off to enable demonstration mode.

### PIN Setup

To reduce the potential for errors, Screen Setup and System Setup menu options can only be accessed after entering a PIN code.

The default code is 1-2-3-4. To change PIN code go to **System Setup > PIN Setup > Change PIN Code**.

### PIN Setup



**Main Menu****Trip Reset**

Select Yes to reset all trip data.





## Setup to monitor signals

The following steps are for screen setup. Steps 1 through 3 are for selecting number of screens and screen types and 4 through 7 are for selecting J1939 monitor controls.

For J1939 parameters available, function and symbols, reference [Symbols for J1939 parameters](#).

1. Navigate to **Main Menu > Screen Setup > Number of Screens**. Select from one to four screens for signal monitoring.



2. Navigate to **Main Menu > Screen Setup > Select Screens** and select screen to customize.



3. Select screen type for each of the screens selected. There are four screen variants.



### Screen type 1

Type 1 is a two-up screen view with two signal capacity.



### Screen type 2

## Setup to monitor signals

Type 2 is a three-up view with one large signal display capacity and behind it, partially visible, are two small signal display capacities.



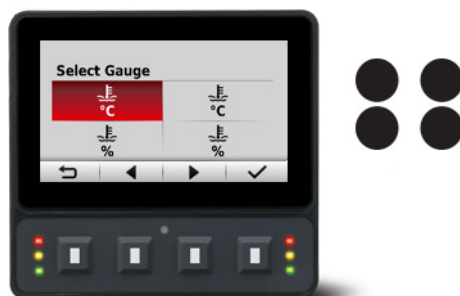
### Screen type 3

Type 3 is a three-up view with one large and two small signal display capacities.



### Screen type 4

Type 4 is a four-up view with four small signal display capacities.



For more screen type customization it is possible to configure the small signal displays by choosing from three styles.

4. After choosing the gauge to modify, press select key, a screen called **Modify What?** will open.

Within this screen it is possible to modify the signal and advanced parameters. Additionally, for screen type 3 and 4, the gauge type can also be modified.

## Setup to monitor signals

### Modify What? screen



### Modify What?

<b>Signal</b>	Use to define the signal you would like to display.
<b>Advanced Parameters</b>	Use to define gauge icon, range, multiplier and tick settings.
<b>Gauge Type</b>	Use to define gauge appearance.

5. When modifying signal, 3 signal types are available.

### Signal Type screen



### Signal Type

<b>Standard J1939</b>	Choose from over 4500 signal types.
<b>Custom CAN</b>	Choose a CAN signal.
<b>Hardware</b>	Choose hardware specific signals.

6. When choosing Standard J1939, it is possible to search for available signals. Choose between Text, PGN and SPN search types. Use the left and right arrow soft keys to cycle through the alphabet and enter the signal.

### Search for the signal screen



## Setup to monitor signals

7. After making a signal selection, press the right arrow soft key to go to the next selection area.
  - Use left arrow, right arrow, and next soft keys to select signal monitoring screen.
  - Use the right arrow soft key to rotate through the selections in a clockwise rotation.

*Examples of screen signal selections*



8. Complete screen signal selections then press the back symbol soft key to return to previous menus.

Navigate back for more screen selections or press the back soft key until you reach the Main Screen.

*Example of screen setup*



## Setup to monitor signals

### Symbols for J1939 parameters

The following table lists symbols for the J1939 engine and transmission parameters that are available and can be monitored.

*Symbols for the J1939 engine and transmission parameters*

Symbol	Name/Function	Symbol	Name/Function
	Temperature		Engine coolant temperature
	Battery charging condition		Engine oil
	Engine		Fuel economy
	Primary voltage		Oil; fluid
	Transmission		Transmission
	Transmission oil pressure		Transmission oil temperature
	Transmission oil temperature		Transmission oil filter
	Engine intake air filter; engine combustion air filter		Hour meter; elapsed operating hours
	Hand accelerator control; hand throttle		Engine failure; engine malfunction
	Engine lubricating oil		Engine lubricating oil level
	Engine lubricating oil pressure		Engine lubricating oil temperature
	Engine lubricating oil filter		Engine coolant
	Engine coolant level		Engine coolant pressure
	Engine coolant temperature		Engine intake; combustion air
	Engine intake; combustion air pressure		Engine intake; combustion air temperature
	Engine exhaust gas		Engine exhaust gas pressure
	Engine exhaust gas temperature		Engine start
	Engine stop		Engine rotational speed (revolutions per minute)

## Setup to monitor signals

Symbols for the J1939 engine and transmission parameters (continued)

Symbol	Name/Function	Symbol	Name/Function
	Heat exchanger, coolant fluid radiator; radiator		Fuel system failure; malfunction
	Fuel pressure		Fuel filter
	Fuel temperature		Fuel shut-off
	Fuel shut-off		Transmission failure/malfunction
	Transmission failure/malfunction		Transmission oil
	Transmission oil level		Transmission oil level
	Brake system		Brake oil/fluid
	Brake fluid level		Brake system pressure
	Brake system temperature; brake temperature		Brake system filter
	Brake system temperature; brake temperature		Brake system, first circuit
	Brake system, second circuit		Anti-lock brake system, failure
	Worn brake linings		Hydraulic system
	Hydraulic system failure/malfunction		Hydraulic oil
	Hydraulic oil level		Hydraulic oil pressure
	Hydraulic oil temperature		Hydraulic oil filter
	Tire failure/malfunction		Tire pressure
	Tire failure/malfunction		Liquid cooled oil cooler, oil outlet temperature
	Engine-exhaust-gas coolant temperature		Charge air cooler, coolant inlet temperature
	Fuel level		Engine coolant filter







## Setup to monitor signals

Symbols for the J1939 engine and transmission parameters (continued)

Symbol	Name/Function	Symbol	Name/Function
	Engine, electrical preheat (low temperature start aid)		Separator-drive oil
	Separator-drive oil pressure		Separator-drive oil filter
	Separator-drive oil temperature		Spray solution tank
	Spray solution tank pressure		Spray solution tank level
	Engine air filter pressure		Tractor, front-wheel drive, automatic operation
	Tractor, front-wheel drive, braking		Road vehicle, engine heating
	Road vehicle, engine failure/malfunction		Road vehicle, electronic diesel control
	Road vehicle, engine start		Road vehicle, engine oil temperature
	Road vehicle, engine oil level		Road vehicle, engine oil filter
	Road vehicle, engine coolant level		Road vehicle, engine coolant heating
	Road vehicle, engine coolant fan		Road vehicle, engine inlet air filter
	Road vehicle, engine emission filter		Road vehicle, engine inlet air preheat
	Transmission converter temperature		Transmission converter fluid level
	Transmission converter failure		Axle fluid level
	Axle failure		Steering fluid level
	Tire temperature		Road vehicle, fuel temperature
	Road vehicle, fuel filter		Fuel heating
	Road vehicle, fuel system failure		Battery fluid level
	Battery failure		Engine emission system temperature; diesel particulate filter, regeneration underway

## Setup to monitor signals

*Symbols for the J1939 engine and transmission parameters (continued)*

Symbol	Name/Function	Symbol	Name/Function
	Engine emissions system temperature; diesel particulate filter, regeneration underway		Diesel exhaust fluid (DEF); selective catalyst reduction (SCR) fluid
	Latitude and longitude		Power take-off (PTO), rotational speed
	Engine system temperature		Differential gear oil temperature



## LED indicators

### Particulate filter lamp

- |                |   |
|----------------|---|
| <b>Stage 1</b> | The right Amber LED indicates the initial need for regeneration.<br>The lamp is on solid. |
| <b>Stage 2</b> | The right Amber LED indicates an urgent regeneration.<br>Lamp flashes with 1 Hz.          |
| <b>Stage 3</b> | Same as Stage 2 but check engine lamp will also turn on.                                  |

### High exhaust system temperature lamp

The left Amber LED indicates the increase of exhaust system temperature due to regeneration.

### Regeneration disabled lamp

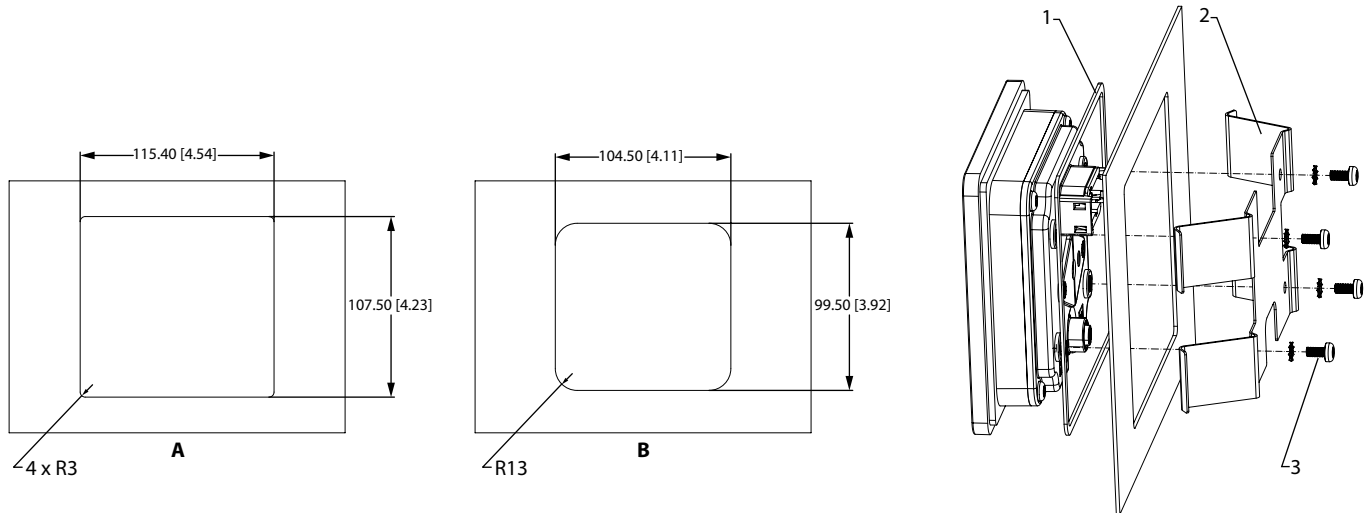
The left Amber LED indicates that the regeneration disabled switch is active.

## Installation and mounting

### Mounting

*Recommended mounting procedure*

mm [in]



Callout	Description
A	Panel opening for mounting on surface A
B	Panel opening for mounting on surface B
1	Panel seal
2	Panel bracket
3	Four screws

## Installation and mounting

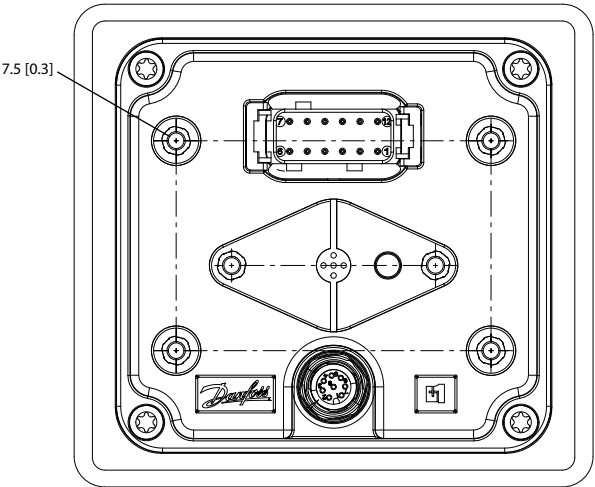
### Fastening

#### **Caution**

- Use of non-recommended screws can cause damage to housing.
- Excessive screw torque force can cause damage to housing. Maximum torque: 0.9 N m (8 in-lbs).
- Reassembly with self-tapping screws can damage existing threads in housing.
- Oversized panel cutouts can jeopardize product IP rating.
- Ensure the vent is not covered. This excludes the RAM mount option.

#### Fastening hole depth

mm [in]

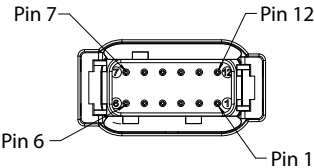


**Fastening hole depth:** 7.5 mm (0.3 in). Standard M4x0.7 screw may be used.

**Maximum torque:** 0.9 N m (8 in-lbs).

### Pin assignments

#### 12 pin DEUTSCH connector



#### DEUTSCH DTM06-12SA 12 pin

C1 pin	DM430E-0-x-x-x	DM430E-1-x-x-x	DM430E-2-x-x-x
1	Power ground -	Power ground -	Power ground -
2	Power supply +	Power supply +	Power supply +
3	CAN 0 +	CAN 0 +	CAN 0 +
4	CAN 0 -	CAN 0 -	CAN 0 -
5	AnIn/CAN 0 Shield	AnIn/CAN 0 Shield	AnIn/CAN 0 Shield
6	DigIn/AnIn	DigIn/AnIn	DigIn/AnIn

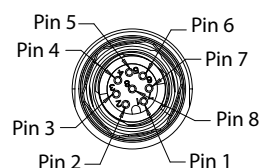
## Installation and mounting

DEUTSCH DTM06-12SA 12 pin (continued)

C1 pin	DM430E-0-x-x-x	DM430E-1-x-x-x	DM430E-2-x-x-x
7	DigIn/AnIn	DigIn/AnIn	DigIn/AnIn
8	DigIn/AnIn	CAN 1+	Sensor power
9	DigIn/AnIn	CAN 1-	Secondary power input*
10	Multifunction input (DigIn/AnIn/Freq/4-20 mA/Rheostat)	Multifunction input (DigIn/AnIn/Freq/4-20 mA/Rheostat)	Multifunction input (DigIn/AnIn/Freq/4-20 mA/Rheostat)
11	Multifunction input (DigIn/AnIn/Freq/4-20 mA/Rheostat)	Multifunction input (DigIn/AnIn/Freq/4-20 mA/Rheostat)	Multifunction input (DigIn/AnIn/Freq/4-20 mA/Rheostat)
12	Digital out (0.5A sinking)	Digital out (0.5A sinking)	Digital out (0.5A sinking)

\* From controller (requires surge protection).

8 pin M12 connector



M12-A 8 pin

C2 pin	Function
1	Device Vbus
2	Device data -
3	Device data +
4	Ground
5	Ground
6	RS232 Rx
7	RS232 Tx
8	NC

## Ordering information

### Model variants

Part number	Order code	Description
11197958	DM430E-0-0-0-0	4 Buttons, I/O
11197973	DM430E-1-0-0-0	4 Buttons, 2-CAN
11197977	DM430E-2-0-0-0	4 Buttons, Sensor Power, Secondary Power Input
11197960	DM430E-0-1-0-0	4 Buttons, I/O, USB/RS232
11197974	DM430E-1-1-0-0	4 Buttons, 2-CAN, USB/RS232
11197978	DM430E-2-1-0-0	4 Buttons, Sensor Power, Secondary Power Input, USB/RS232
11197961	DM430E-0-0-1-0	Navigation Buttons, I/O
11197975	DM430E-1-0-1-0	Navigation Buttons, 2-CAN
11197979	DM430E-2-0-1-0	Navigation Buttons, Sensor Power, Secondary Power Input
11197972	DM430E-0-1-1-0	Navigation Buttons, I/O, USB/RS232
11197976	DM430E-1-1-1-0	Navigation Buttons, 2-CAN, USB/RS232
11197980	DM430E-2-1-1-0	Navigation Buttons, Sensor Power, Secondary Power Input, USB/RS232
11197981	DM430E-0-0-0-1	4 Buttons, I/O, EIC Application
11197985	DM430E-1-0-0-1	4 Buttons, 2-CAN, EIC Application
11197989	DM430E-2-0-0-1	4 Buttons, Sensor Power, Secondary Power Input, EIC Application
11197982	DM430E-0-1-0-1	4 Buttons, I/O, USB/RS232, EIC Application
11197986	DM430E-1-1-0-1	4 Buttons, 2-CAN, USB/RS232, EIC Application
11197990	DM430E-2-1-0-1	4 Buttons, Sensor Power, Secondary Power Input, USB/RS232, EIC Application
11197983	DM430E-0-0-1-1	Navigation Buttons, I/O, EIC Application
11197987	DM430E-1-0-1-1	Navigation Buttons, 2-CAN, EIC Application
11197991	DM430E-2-0-1-1	Navigation Buttons, Sensor Power, Secondary Power Input, EIC Application
11197984	DM430E-0-1-1-1	Navigation Buttons, I/O, USB/RS232, EIC Application
11197988	DM430E-1-1-1-1	Navigation Buttons, 2-CAN, USB/RS232, EIC Application
11197992	DM430E-2-1-1-1	Navigation Buttons, Sensor Power, Secondary Power Input, USB/RS232, EIC Application

### Model code

A	B	C	D	E
DM430E				

### Model code key

A—Model name	Description
DM430E	4.3" Color Graphical Display

B—Inputs/Outputs	Description
0	1 CAN Port, 4DIN/AIN, 2 MFIN
1	2 CAN Port, 2DIN/AIN, 2 MFIN
2	1 CAN Port, 2DIN/AIN, 2 MFIN, Sensor Power

C—M12 connector	Description
0	No USB Device, No RS232
1	USB Device, RS232

## Ordering information

D—Button Pads	Description
0	4 Buttons, 6 LEDs
1	Navigation buttons, 2 Dual-color LEDs

E—Application key (EIC Application)	Description
0	No Application Key
1	Application Key (EIC Application)

## Related products

### Connector bag assembly

<b>10100944</b>	DEUTSCH 12-pin Connector Kit (DTM06-12SA)
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### Connector and cable kit

<b>11130518</b>	Cable, M12 8-Pin to USB Device
<b>11130713</b>	Cable, M12 8-Pin to Lead Wires

### Connection tools

<b>10100744</b>	DEUTSCH stamped contacts terminal crimp tool, size 20
<b>10100745</b>	DEUTSCH solid contacts terminal crimp tool

### Mounting kit

<b>11198661</b>	Panel mounting kit
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### Software

<b>11179523</b> (annual renewal with 11179524 to keep the software updates)	PLUS+1® GUIDE Professional Software (includes 1 year of software updates, a single user license, Service and Diagnostic Tool and Screen Editor)
<b>Online</b>	J1939 CAN EIC Engine Monitor Software*

\* Requires a model with Application Key. See [Model variants](#) for model codes.



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