





# SVE BULLETIN

SPECIAL VEHICLE ENGINEERING – BODY BUILDERS ADVISORY SERVICE

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#### QVM BULLETIN: Q-251R2

DATE: 05/ JUN / 2020

# Ford Upfitter Interface Module (UIM)

REVISION	UPDATE	REVISION DATE
Q-251R2	ADDED MODEL YEAR CUTOFF	5JUN2020
Q-251R1	REMOVED UIM EMAIL INFORMATION.	12AUG2016
Q-251	INITIAL RELEASE	08AUG2016

#### MODEL(S) AFFECTED:

All 2017 through 2019 models available with the option Gen 1 Upfitter Interface Module

#### **ISSUE / DESCRIPTION:**

#### Purpose:

To describe the optional Upfitter Interface Module (UIM), UIM hardware, UIM software, and user's guides.

### **Upfitter Interface Module overview:**

The UPFITTER INTERFACE MODULE (UIM) is an electronic control module that provides output signals for aftermarket equipment (such as lift buckets, cranes, motors, salt spreaders, snow plows, etc.) via customer programmable logic based on switch inputs and vehicle CAN bus messages. The operation of such equipment is limited to the load parameters of the UIM. The UIM does not come pre-programed for use. It must be configured by the Upfitter for aftermarket equipment.

The UIM is configured using the UIM Project Editor, which is compatible with Windows 7 and Windows 8 Operating Systems. The user must obtain the UIM Project Editor installation package by downloading it from the Ford Fleet website (<u>http://www.fleet.ford.com/login/</u>). The UIM Project Editor allows the user to program the application logic for each UIM output based on UIM inputs and CAN signals. A standard Type B Universal Serial Bus (USB) 2.0 cable is required (not included) to connect the user's PC to the UIM, to download the application logic. The upfitter created application may be loaded to UIM when it is mounted in vehicle, or the UIM can be removed and software bench loaded.

In order to successfully create and implement an Upfitter application, these other documents and material may be required:

- The UIM (pre-installed in the vehicle when ordered, or may be purchased separately.) Replacement UIM's are available through the dealership.

#### -The UIM Read Me first

(https://www.lom.ford.com/launchomatic/launch/view.jsp?chronicleId=0900cad982b42889&docbase=edmsna1)

-UIM project examples file

(https://www.lom.ford.com/launchomatic/launch/view.jsp?chronicleId=0900cad982b42b3a&docbase=edmsna1) - UIM Project Editor User Manual

(https://www.lom.ford.com/launchomatic/launch/view.jsp?chronicleId=0900cad982b42887&docbase=edmsna1)

- UIM Owner's Manual

(https://www.lom.ford.com/launchomatic/launch/view.jsp?chronicleId=0900cad982b42888&docbase=edmsna1)

- Windows based UIM Project Editor software (see <u>Downloading Software</u>) (<u>http://www.fleet.ford.com/login/</u>)

- The UIM 16-way harnesses 9 (two blunt cut 3' harnesses with connectors). Replacement harnesses are available through the dealership.

- A standard Type B Universal Serial Bus (USB) 2.0 cable (not included- must be provided by the upfitter)



Left: UIM as mounted in the 2017MY Super Duty, and interface cables (included) and USB cable (Not included) Right: UIM connectors

### Downloading Software from the Ford Fleet website:

The Windows based UIM project editor software is available through the Ford Fleet website (<u>http://www.fleet.ford.com/login/</u>). Existing Ford Fleet website users may use their current login. New users should follow the instructions listed on "creating an account" via the link provided. If you have questions or need further assistance with the Ford Fleet Website, contact the Ford Fleet Customer Information Center at:

1-800-34-FLEET (1-800-343-5338). Monday-Friday 8:30 AM-5 PM EST Or Contact Ford Fleet via <u>email</u> (<u>http://www.fleet.ford.com/contact-us/customer-information-center/email-us/</u>)

**Note:** Ford Motor Company is not responsible for debugging or verifying the function of the customer created UIM program files. It is the responsibility of the upfitter to ensure proper function of the software created to complete their upfit.

### UIM signals:

The UIM receives 28 high speed CAN "read only" signals from various vehicle systems, providing upfitter access for aftermarket equipment needs. In addition, the upfitter may provide up to 9 additional inputs. These messages and inputs may be selected by the upfitter in the Project Editor to program the UIM outputs for aftermarket equipment. Note that the UIM has no interaction with vehicle feature functions (with the exception of horn chirp). It is strictly designed to provide outputs for aftermarket equipment.

The UIM provides the following:

- 9 configurable inputs (active low or active high), (blunt cut pigtail connector\*)
- 7 Low side driver output pins (blunt cut pigtail connector\*)
- 8 High side driver output pins (blunt cut pigtail connector\*)
- 25-30 HSCAN signals (descriptive names in the Project Editor)
- \*Pigtails with 3 foot jumpers are provided for I/O's to connect to aftermarket devices.

Note: The UIM provides output signals only, and not intended to directly power any aftermarket device. Customer must use external relays to drive any equipment.

The following are some of the high-speed CAN messages available in to the UIM. See the UIM Project Editor's manual for more information.

Message	Message	
Engine Coolant Temp	Rear Left Door Status	
Engine Status	Rear Right Door Status	
Outside Air Temp	Driver Door Status	
A/C Compressor Clutch Status	Hood Status	
Cruise Control Mode Status	Tire Pressure Monitoring System Status	
Vehicle Speed	Air Conditioning (A/C) Request	
Engine Speed (RPM)	Driver Seat Buckle Status	
Transmission Oil Temp	Passenger Seat Buckle Status	
Automatic Transmission Gear Status	Restraints Indicator Lamp (RIL) Status	
Door Lock Status	Crash Event Severity	
Ignition Status	Oil Pressure Lamp Status	
Crash Event Status	Malfunction Indicator Lamp (MIL) Status	
Passenger Door Status	Vehicle Battery Voltage	
Odometer Reading	Fuel Level	

## 2017 MY Super Duty UIM location:

The UIM will be available as an orderable option (order code 18A) on the 2017 MY Super Duty. The module is located in the interior of the vehicle on the passenger side behind and below the Lower the glove compartment. To access the UIM: 1. Release the retainers and remove the insulation panel.





Refer to the Body Builder Layout Book for additional guidelines and recommendations. If you have any questions, please contact the <u>Ford Body Builders Advisory Service</u> as shown in the header of this bulletin.