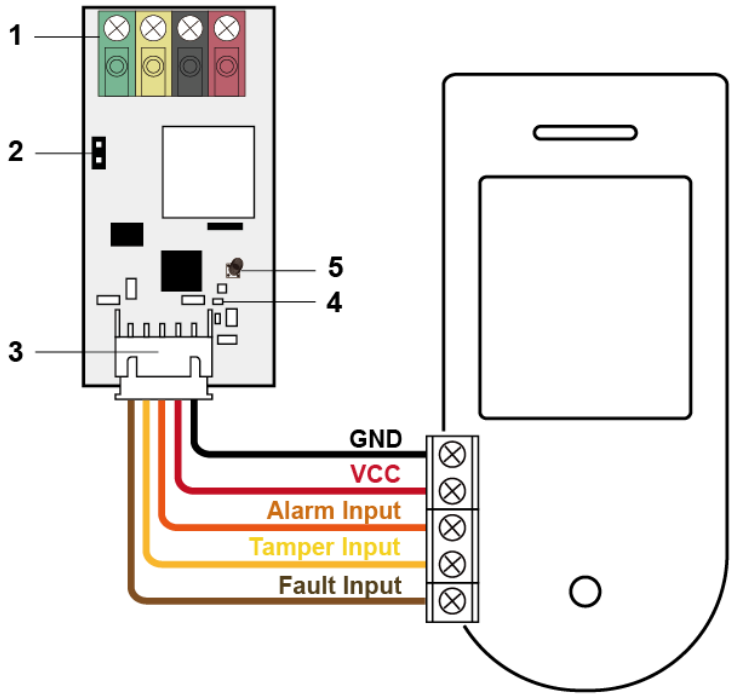
Universal Interface Module (UIM-1-BUS)

UIM-1-BUS is a Universal Interface Module that is designed to connect any wired detectors with dry contact to the Hybrid Panel and provide the connected detector with power source.

Designed with 3 inputs, UIM-1-BUS is capable of transmitting alarm/tamper/fault signals from the connected wired detector to the hybrid panel, therefore enabling devices without BUS terminal to conveniently and flexibly be integrated with the Alary System.

Parts Identification



1. BUS Terminal

2. Terminal Resistor Jumper Switch

When the Universal Interface Module is connected as the furthest BUS device on a BUS line, please set the terminal resistor jumper switch of UIM-1-BUS and the first BUS device's (usually Hybrid Panel's) terminal resistor jumper switch to ON to serve as terminating resistors. The connected BUS line's communication ability will be enhanced.

Jumper On
The jumper link is inserted, connecting the two pins.

Jumper Off
The jumper link is removed or "**parked**" on one pin.

- If the jumper is ON, the communication ability will be enhanced.
- If the jumper is OFF, the communication ability is in normal level.

3. 5-wire Connector

Wire Color	Function	Power Supply / Signal
Black	GND	Common wire
Red	VCC	
Orange	Alarm Input	Reports Alarm Signals
Yellow	Tamper Input	Reports Tamper Signals
Brown	Fault Input	Reports Fault Signals or Masking Signals for detector with Anti-masking function

4. LED Indicator (Red)

- The Red LED will flash once when UIM-1-BUS is powered.
- The Red LED will flash once when the Test Button is pressed.
- The Red LED will flash three times when a signal is transmitted under fault condition or test mode.

- The Red LED will flash three times whenever the tamper of the connected detector is triggered or restored.
- The LED will not light up or flash in normal operation mode.

5. Test Button

- Press the Test Button to enter test mode for 3 minutes.

Features

Power Supply

- UIM-1-BUS is powered by the Hybrid Panel through the BUS Terminal, and can provide 6.2V-13.5V, a maximum of 200mA power to the connected detector.

Signal Transmission

- UIM-1-BUS has 3 inputs that can receive alarm signals (orange wire), tamper signals (yellow wire) and fault/masking signals (brown wire) from the connected detector and report them to the Panel over BUS.

Caution ⚠

- Wiring of the module should only be performed by certified technicians with proper knowledge and training in electric equipment.
- Before installation or any maintenance work, make sure the power supply has been disconnected.

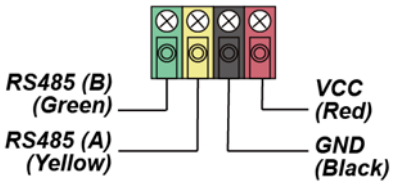
Wiring the Universal Interface Module

- Connect the wires to the desired detector according to FIG. 1 below.

Black	GND
Red	VCC
Orange	Alarm Input
Yellow	Tamper Input
Brown	Fault Input

- Before connecting the BUS cable, make sure the power is switched off.
- To assist with BUS cable connections, the terminal blocks on each BUS system module are color-coded.

Red	VDD
Black	GND
Yellow	485A
Green	485B



- Multiple BUS devices can be connected in series to the Hybrid Panel. For optimal communication of the connected BUS line devices, ensure the terminal resistor jumper switches of the first (usually the Hybrid Panel) and the furthest BUS devices on a BUS line are set to ON to serve as terminating resistors. Be sure to only enable the aforementioned 2 jumper switches, and do not set the jumper switches to ON for any other BUS devices in between.
- Incorrect connections will result in failure or malfunction. Inspect wiring and ensure proper connections before applying the power.

<NOTE>

☞ When re-installing the BUS terminal, make sure to install the blocks in the same way and direction as the picture below to avoid potential hazards.

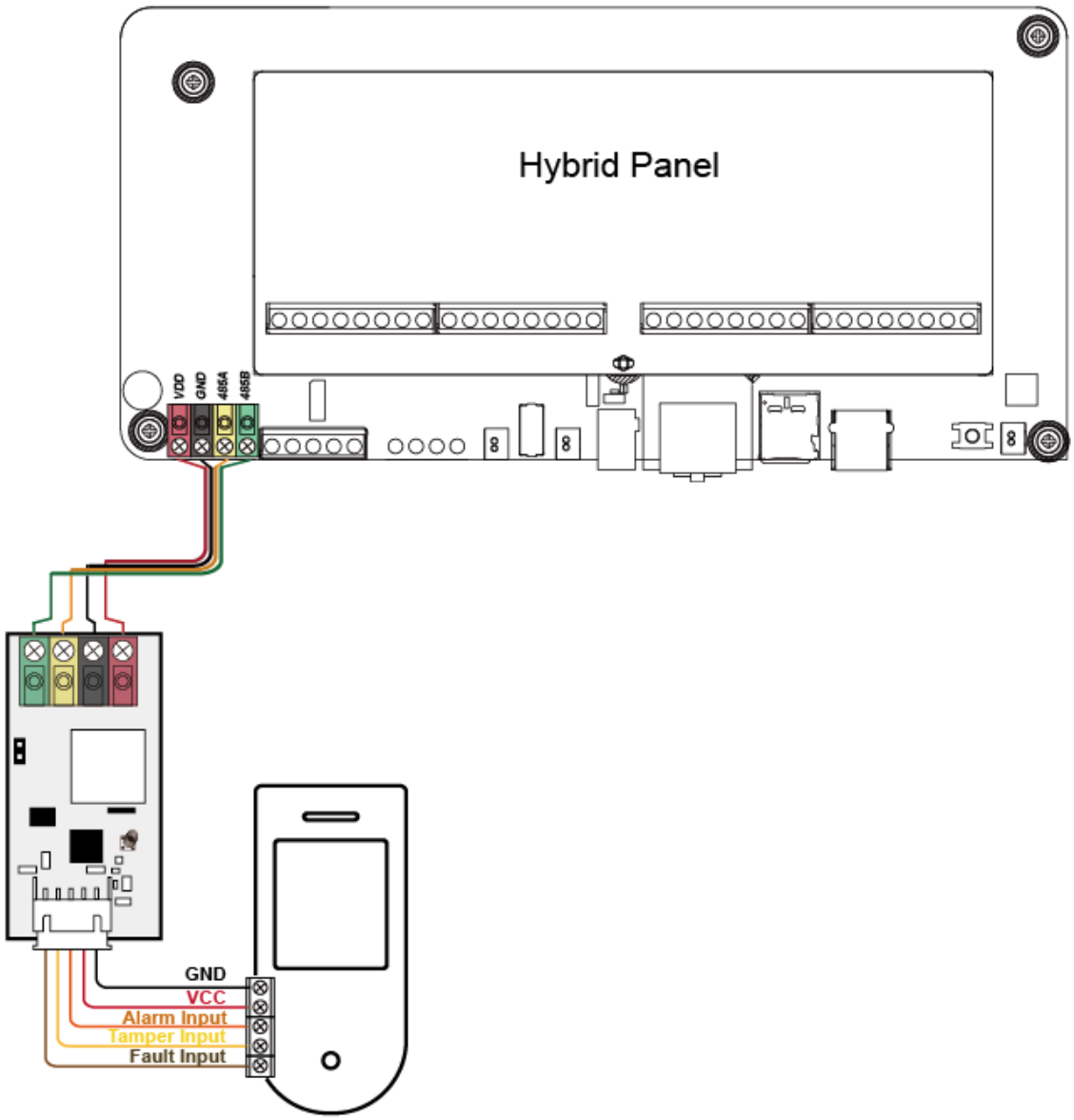


FIG. 1

- ***Learning UIM-1-BUS into the Hybrid Panel***

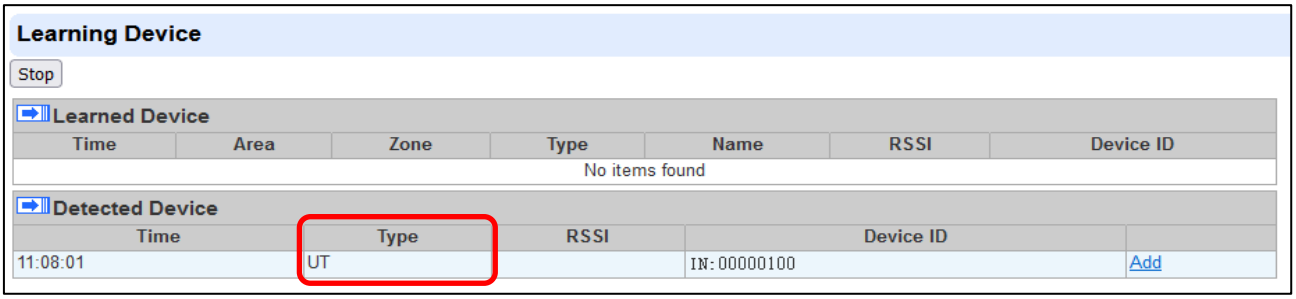
Please follow the steps below to learn the device into the Hybrid Panel.

Step 1. Connect the module to the Panel. Then power the Panel on.

Step 2. On the Panel's webpage, click "**Learning**" to enter learn page.

Step 3. Click "**Start**" to enter learning mode.

Step 4. The Module is recognized as "UT" of its device type. Click "**Add**" to include the Module into the Panel.

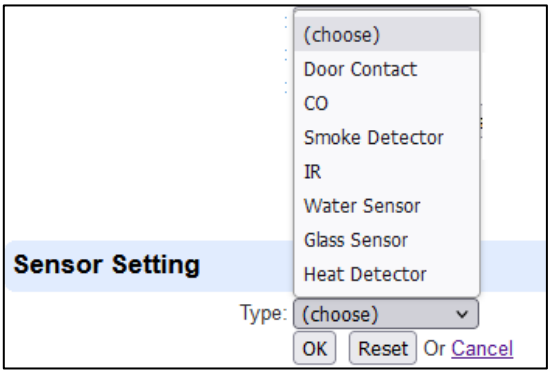


Step 5. If the Module is successfully learnt into the Panel, it will be displayed in the "Learned Device" section.

Step 6. After being learnt into the Panel, go to the Device Edit page and select the correct device type for the connected wired detector to enable the corresponding alarm reporting.

<NOTE>

☞ The device type cannot be re-selected once it is set. To re-select the device type, you will need to delete the learnt-in device and re-learn the device in.



- ***Supervision***
  - After installation, the Universal Interface Module will automatically transmit supervisory signals periodically to the Control Panel at random intervals of 20-30 seconds.
  - If this signal is not received, the Control Panel will indicate that the particular Universal Interface Module is experiencing an out-of-order problem.

- ***Identification***

To identify the location of a single wired device (i.e., the Universal Interface Module) in the whole BUS system, the “Identify” function allows users to locate the Module from the Panel’s webpage after the Module is learnt into the Control Panel.

Step 1. On Hybrid Panel’s webpage, click “Identify” under the device list after the device column entry.

Step 2. If UIM-1-BUS receives the signal from the Hybrid Panel, the webpage will display a success message and UIM-1-BUS’s LED indicator will flash 10 times to confirm and notify the user of where it is.

<NOTE>

☞ If a timeout message is displayed on the webpage, it means UIM-1-BUS did not receive the signal from the Panel.

Please check whether the wire connection between the Panel and UIM-1-BUS is connected properly.

- ***Walk Test***
  - To make sure the Universal Interface Module is able to communicate with the Panel after it is learned-in, place the Control Panel in **Walk Test** mode, hold the Module at the desired location, and press the Test button to transmit a test signal to the Control Panel. If the test signal can be received, the Panel will display the Module’s information accordingly, indicating the desired location for the Module is appropriate.

- ***Test Mode***
  - Under Normal Mode, press the Test Button to transmit a test signal to the Control Panel. The Module will enter Test Mode for 3 minutes.
  - Under Test Mode, the LED will flash 3 times whenever the Module is activated.
  - Each additional press of Test Button will reset the Test Mode period to another 3 minutes.