WAVETRONIX Click 512 Vehicle Alert User Guide

Click 512 Vehicle Alert
QUICK START GUIDE

The Click 512 monitors lane, speed, length, and class information from a SmartSensor HD and then compares the detected data to a set of predetermined threshold values. For more information about this product, visit wavetronix.com.

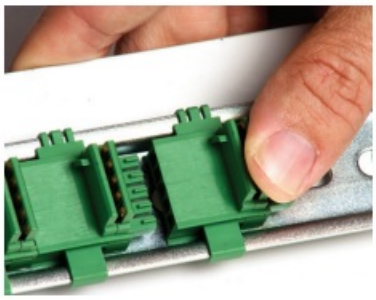
Contents

Mount the device

The Click 512 mounts over a T-bus for power and communication:

1. If the Click 512 was shipped with the T-bus connector attached, remove the connector from the module.

2. Snap the connector onto the DIN rail by positioning it over the rail with the male connector pointing to the right. Hook one arm over the edge of the DIN rail and press down on the other arm until it snaps into place.

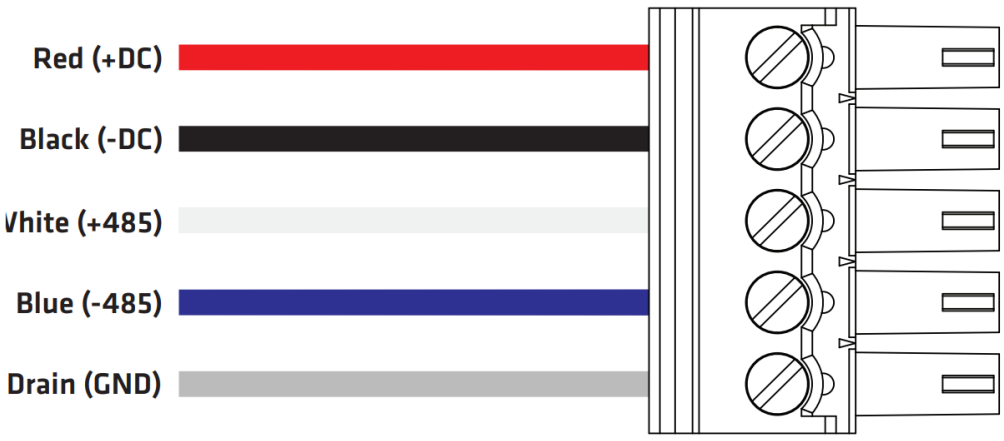


3. Connect the T-bus connector to the rest of the T-bus by sliding them together until you hear them snap into place.
4. Mount the Click 512 onto the DIN rail: position it properly over the T-bus connector, hook the lip over the lower edge of the DIN rail, and use a rocking motion to snap the module into place.

Wire power and communication

If you are using a Click 200 surge protector with the Click 512, power and communication are provided to the Click 512 through the T-bus (see the Click 200 Quick Start Guide). If you don't have a Click 200 surge protector, use the following steps to wire power and communication into Click 512:

1. Plug a T-bus 5-screw terminal block into the first T-bus connector.
2. Wire DC power (10–30 V) from the power supply into the first screw terminal on the 5-screw terminal block; wire -DC into the second screw terminal.
3. Connect RS-485 communication (+485, -485, and GND) to either the remaining three screw terminals on the 5-screw terminal block or to the screw terminals in the pluggable screw terminal block on the top of the Click 512 (see labels for correct wiring).



The Click 512 has three other communication ports.

- RJ-11 jack – Connect a jumper cable here for RS-485 communication
- DB-9 connector – Connect a straight-through cable here for RS-232 communication
- RS-232/RS-485 terminals – On top of device; usually not used

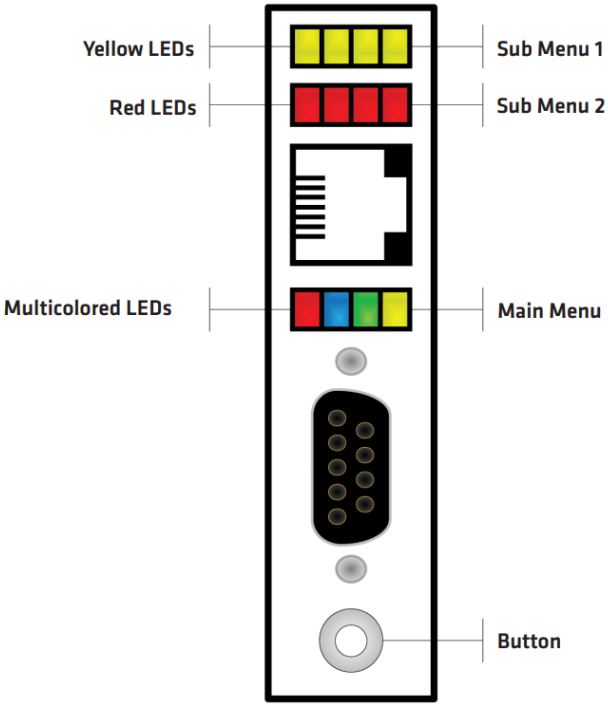
Wire contact closures

Vehicle information from the SmartSensor HD can be monitored through either digital output on the first block on the bottom of the device. If you are wiring output 1 directly to a contact closure input device, wire the output O1+ and O1- (common ground) to the input terminals. Do the same for output 2, and if you are using outputs 2–8, you will need to wire to a Click 100/112/114 contact closure card. If you need to wire to a relay, consider Click 120.

Once in Device Setup mode (see part 6), ensure that the contact closure device can communicate with Click 512. If you are using a Click 100 or Click 112/114, set it up in AC (Actuation) mode. Once the contact closure device is set up, wire into the contact closure output terminals on the device.

Use on-device configuration features

Next, use the Click 512's configuration feature to make sure it is wired and working properly. The device has four LEDs that monitor device activity and help you select tasks and operating modes. It also has two banks of LEDs: one of the yellow LEDs that represent submenu 1 and one of red for submenu 2. Check the LEDs to make sure the device has power.



The Click 512 also has a push-button, labeled Mode Switch, used for selecting tasks and operating modes.

LED activity indicating functions:

Red – The device has power

Yellow – Device is transmitting data

Green – The device is receiving data

The blue LED has no activity-indicating function.

How to use the push-button to navigate through mode and task menus

Select a task or operation function by navigating through the main menu (multicolored LEDs) and the submenus (yellow and red LEDs) using the push-button as described below:

1. Enter the main menu and cycle through it by holding the push button down.

2. Release the push-button once the cycle reaches the desired mode.
3. Press the push button again to select the mode. Once selected, the mode will either start running or the first submenu (yellow LEDs) will start.
4. Hold the push button to cycle through the first submenu.
5. Release the push-button once the desired sub-menu selection is displayed.
6. Press the push button again to select the function. The function will now run.

Device Setup mode

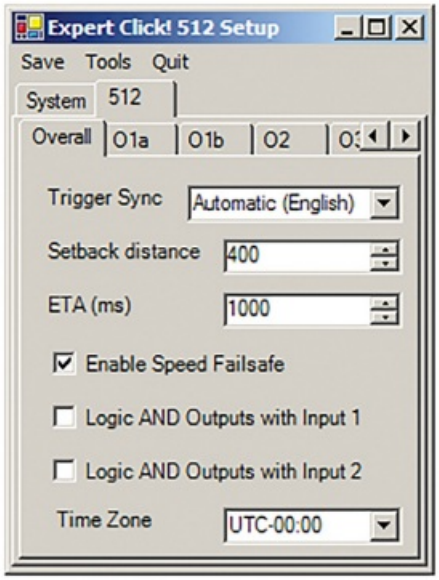
Click Supervisor is used to configuring Click 512. Follow these steps to install and connect to Click Supervisor:

1. Download the setup files from **www.wavetronix.com** (under Support) and double-click on the file to run the setup wizard.
   Follow the steps to install.
2. Manually copy the 512 driver files into the “Program Files\ClickHome\512” directory.
3. Using the DB-9 connector on the front of the module, make a connection between Click 512 and the computer. Use Device Setup mode to configure threshold values and other settings using Click Supervisor:
4. Hold the push button down, then release it when the green LED comes on.
5. Press the push button to select. The red and green LEDs will turn on.
6. Run Click Supervisor and select Communication. This screen lets you pick the type of connection, serial, or IP. The Click 512 must be configured using serial communication.
7. Click Settings to make any necessary changes to the settings, such as the port. Click OK to return to the communication screen, then click Connect. Keep the Click ID set to 0.
8. In the next screen, Click Supervisor will display all the devices it discovers. When Click 512 appears, select it and click Select. Click Supervisor will connect to the device.
9. Click Setup Click and select Expert from the driver list.
10. When the driver is loaded, click on the 512 tab. You will then see tabs labeled Overall, O1a, O1b, O2, O3, O4, …O8. Use the Device Setup mode to:
11. Autobaud the contact closure card (see the Quick Start Guide)
12. Select Actuation mode.

Configure the module

Overall Tab

- Trigger Sync – Sets the method of trigger synchronization. The Automatic (English) option is recommended.
- Setback Distance – Distance between the sensor and a downstream location on the roadway. The typical distance maybe 400 feet between the sensor and a downstream warning sign.
- ETA – Enter the ETA at which the output should activate; for example, 2000 ms before reaching a warning sign. Enter “0” if you are not using the ETA trigger method.



Output Tabs

- Lower/Upper Lane Limit – Allows you to filter which lanes are mapped to this output.
- Max Speed – Sets the default value for the maximum speed threshold.
- Max Length – Sets the default value for the maximum length threshold.
- Duration – An output stays on for at least the number of milliseconds specified here.
  For example, if the output activates with an ETA of 2000 ms, you may want the duration to be 2000 ms so that the output stays on until the motorist reaches a warning sign.

Run mode

Once the device has been configured, set it to Run mode to start retrieving vehicle data. In run mode, Click 512 listens to data from the SmartSensor HD on the RS-485 T-bus port and compares the detected values to the thresholds set in Click Supervisor.
Note. By default, the Click 512 communicates to SmartSensor HD at 9600 bps.

1. Hold the push button down, then release it when the blue LED turns on.
2. Press the push button to select. The red and blue lights will turn on, and the yellow light will flash.
3. As the device listens to the SmartSEnsor HD, one of the two submenu LEDs will light up”

- Yellow 1-4 – These LEDs light up when outputs 1–4 are activated.
- Red 1-4 – These LEDs activate when outputs 5–8 are activated.

Serial Convert mode

Serial Convert mode is the third menu option. This mode acts as a serial converter between all the different communications ports, which may be useful for debugging communication links.

1. Hold the push button down, then release it when the yellow LED turns on.
2. Press the push button to select. The red and yellow LEDs will turn on. The model is now running.

Reset

To rest the Click 512, follow the steps below.

1. Hold the push button down, then release it when the red LED starts flashing.
2. Press the push button to select. The first yellow LED will turn on to let you use that submenu.
3. Hold down the push button again to cycle between the following options:

   Yellow 1 – Resets all settings except Serial Number and XML variable map.

   Yellow 2 – Resets all settings except Serial Number.
4. Release when you reach the one you want. Press the push button to select.

   After the device is reset, it will return to the last mode that it was in.

WX-500-0196
www.wavetronix.com
801.734.7200

Documents / Resources

	WAVETRONIX Click 512 Vehicle Alert [pdf] User Guide Click 512, Vehicle Alert, Click 512 Vehicle Alert, Alert

References

- Wavetronix
- Wavetronix