

# Click 304 USB to Serial

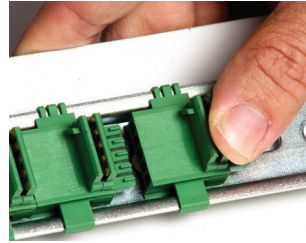
## INSTALLATION QUICK START GUIDE

The Click 304 converts half-duplex RS-232 communication to RS-485 communication and vice versa. For more information about this product, visit [wavetronix.com](http://wavetronix.com).

### 1 Mount the device

Each device mounts over a T-bus for power and communication:

- 1 If the device 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 device 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.



### 2 Wire power and communication

If you are using a Click 200 surge protector, power and communication are provided to the device 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 the device:

- 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 +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 device (see labels for correct wiring).



The Click 304 has a few other communication ports.




- **DB-9 connector** – Connect a straight-through cable for RS-232 communication
- **RJ-11 jack** – Connect a jumper cable for RS-485 communication

### 3 Use on-device configuration features

Next, use the device's configuration features to make sure it's wired and working properly. The Click 304 has three LEDs that monitor activity and help you select operating modes, as well as a push-button, labeled Mode Switch, also used for operating modes.








- 1 Check LEDs to make sure the device has power.
- 2 Autobaud device to make sure it can talk to the sensor or other attached serial devices (see table).

#### LED activity indicating functions:

-  **Red** – Shows device has power
-  **Yellow** – Shows device is transmitting data
-  **Green** – Shows device is receiving data

Hold the push-button to cycle through modes, then release when the desired mode is reached.

#### LED operating mode indicating functions

Selection	Operating mode	Running	Completed
	<b>Autobaud</b> – Release push-button when green LED is solid to autobaud to sensor.		 Failure  Success
	<b>Reset</b> – Release push-button when red LED is blinking to reset to factory defaults.		

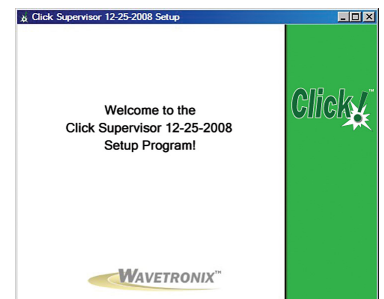
**Note.** On some devices, the yellow LED may replace the green LED in the autobaud process—that is, the yellow LED selects the autobaud process, is one during the autobaud process, etc.

## 4 Install Click Supervisor

**Note.** Your device is now fully functional. If you don't wish to make any other changes to configuration, you don't need to follow the rest of the steps. However, the device can be further configured using Click Supervisor, software available from Wavetronix. Click Supervisor will enable you to view and change certain settings that mostly help in identifying your device.

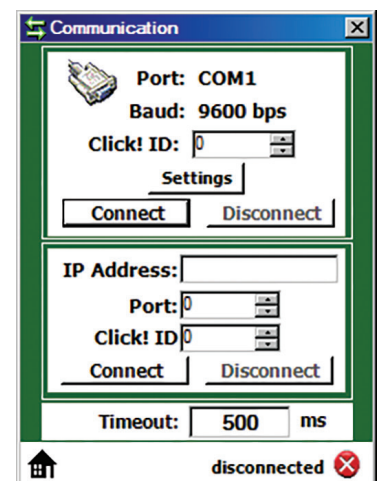
If you would to install Click Supervisor, follow these steps:

- 1 Download the setup file from [www.wavetronix.com](http://www.wavetronix.com) (under **Support**).
- 2 Double-click on the file to run the setup wizard. Follow the steps to install.



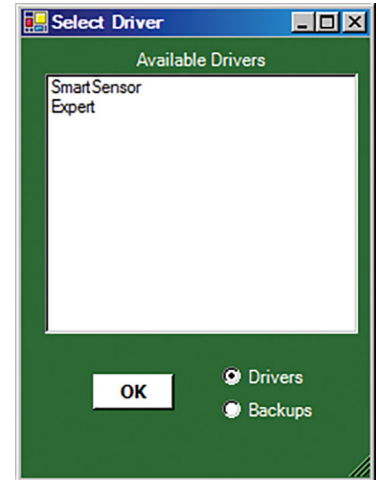
## 5 Make a connection

- 1 Make sure there is a connection between the device and the computer that Click Supervisor is on. This can be through the DB-9 connector on either module, the USB port on the Click 305, or through another device also on the T-bus.
- 2 Run Click Supervisor and select **Communication**. This screen lets you pick the type of connection you want to make, serial or IP. The devices will most likely be configured using serial communication.
- 3 Click **Settings** to make any necessary changes to the settings, such as the port or the baud rate. Click **OK** to return to the Communication screen, then click **Connect**. Keep the Click ID set to 0.
- 4 In the next screen, Click Supervisor will display all the devices it discovers. When the device appears, select it and click **Select**. Click Supervisor will connect to the device.



## 6 Select a driver

- 1 Select Setup Click on the main screen. You will see the following two drivers:
  - **SmartSensor** – This driver is used if you plan on connecting from a TOC to your device to your sensor. You can use this driver to view and change certain basic functional and informational settings such as baud rate, device description and device location.
  - **Expert** – This driver exposes all device settings, and should be used only when you are instructed to by Wavetronix Technical Services.
- 2 Select the driver you want and click **OK**.

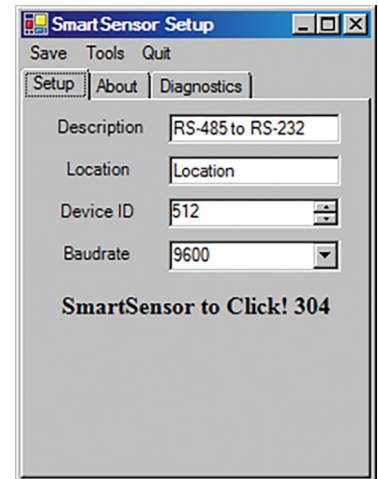


## 7 Configure the module

As mentioned in Part 5, your device can function properly without any settings being changed in Click Supervisor. The settings listed below can be changed if you prefer, but it is not necessary to do so.

### SmartSensor Driver

- **Device ID** – Changes the ID number associated with the device. By default this is the last five digits of the serial number.
- **Baud rate** – If connecting to a sensor, this must match the sensor's baud rate.
- **Description/Location** – For informational/identification purposes only. These settings do not affect the operation of the device.



## 8 Verify the connection

To verify the serial connection on the Click 304:

- 1 Connect a straight-through cable between the DB-9 connector on the front of the Click 304 and your computer.
- 2 Follow the steps in Part 6 of this document to make a connection to the Click 304 using Click Supervisor. If you can talk to the device while physically connected to it, the serial connection is working properly.