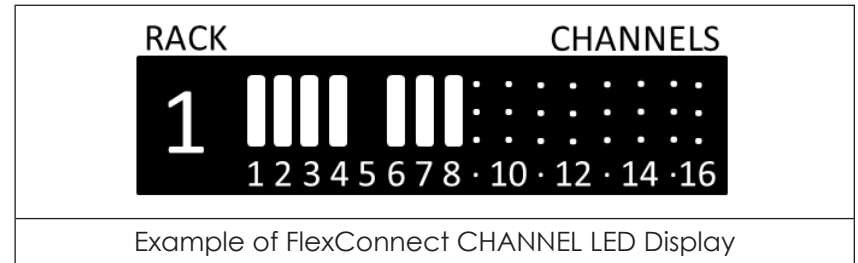
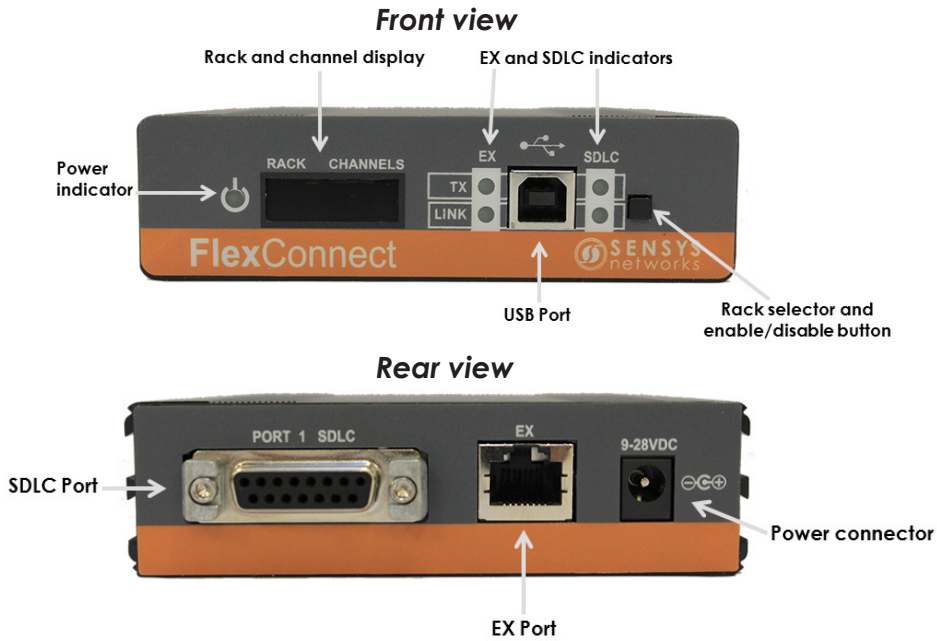


1 Power Up and Configure



CHANNEL LED Display Legend		
Display	Meaning	TS2 Diag Response
	channel disabled	watchdog failure
	no call	none
	call	none
	recall due to all sensors in fault	open circuit
	recall due to some sensors in fault	excessive inductance

Power Up and Configure

To power up and configure the FlexConnect, perform the following steps:

1. Plug in the FlexConnect via the power connector in the back of the device.
2. Press and release the push button in the front of the device to select and display the rack you want. The rack number (1-4) and the channel (1-16) display in RACK CHANNELS. The display shows the status of each rack of 16 channels (one at a time).
3. Press and release the push button to advance to the next rack.

Note: Racks are enabled and disabled by holding the push button down for more than one second.

After 10 minutes of operation the display automatically turns off until the push button is again pressed.

The orientation of the display can be changed by holding the push button down for more than 10 seconds.

2 Connect to APCC or CC Card

Requirements

FlexConnect requires the following firmware and software:

- AP firmware v1.8.9 or later
- APCC firmware v2.10.3 or later
- TrafficDOT software v2.12.2 or later



Connect to Access Point

Connect Offline Mode

Select a row to auto-fill connection form.
APs found on the network:

Host	IP address	Channel
apeg386	192.168.2.13	channel: 5 5
apeg309	192.168.2.79	channel: 13 6
apeg306	192.168.2.47	channel: 7 5
apeg336	192.168.2.110	channel: 0 1
apeg385	192.168.2.9	channel: 8 1

Refresh List

Reset to Default Connection Settings

IP address:

TCP Port:

HTTP Port:

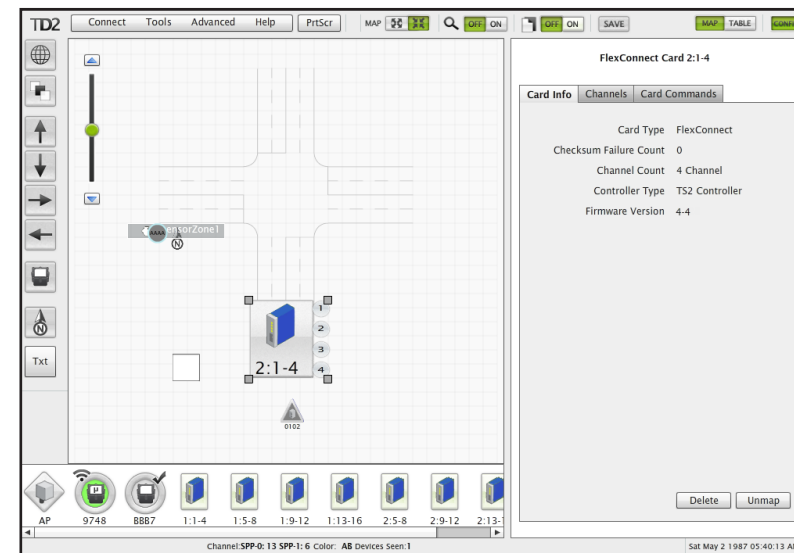
Load Map Data:

Ignore Sensor Data:

Language:

Role:

Auto Connect (if directly connected to AP) **Connect**



Connect Cables

Connect to APCC or CC Card via EX port with a Cat5 cable.

Note: Remove existing EX cards from the daisy chain.

Reset CC card dip switch Shelf I.D. and Slot I.D. settings to default.

Run TrafficDOT

Connect to laptop with a Ethernet cable and click on the TrafficDOT icon to start the configuration program.

Type in IP Address

Select an *IP Address* from the list of APCCs and Access Points and click **Connect**.

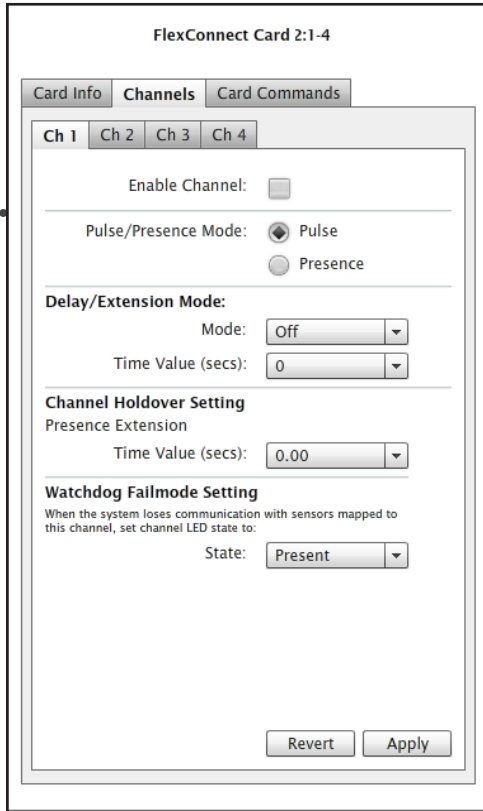
Note: Ensure Master 170 is enabled on the APCC or AP after connection.

Open FlexConnect Config Panel

Click on the FlexConnect icon in the tray to open the *Controller Card Configuration Panel*.

Note: Each icon represents four channels of a rack.

3 Configure Channels



FlexConnect Card 2:1-4

Card Info Channels Card Commands

Ch 1 Ch 2 Ch 3 Ch 4

Enable Channel:

Pulse/Presence Mode: Pulse Presence

Delay/Extension Mode:

Mode:

Time Value (secs):

Channel Holdover Setting

Presence Extension

Time Value (secs):

Watchdog Failmode Setting

When the system loses communication with sensors mapped to this channel, set channel LED state to:

State:

Revert Apply

Configuring Channels

1. Click the **Channels** tab.
2. Select **Enable Channel**.
 - *Enabled* – the channel is operational; sensor event data collected by the APCC/ access point is transmitted to the controller.
 - *Disabled* – the channel is not operational. (When a channel is disabled, the watchdog failure diag response is transmitted to the controller.)
3. Select **Pulse/Presence Mode**.
 - *Pulse* – the channel places a call for 0.125 seconds each time the leading edge of a vehicle is detected. The factory default setting is pulse mode.
 - *Presence* – the channel places a call while a vehicle is detected.
4. Select **Delay/ Extension Mode**.
 - *Delay* – defers the onset of the call by a specified duration. If a vehicle moves off of the sensor before the specified delay expires, the call is not placed. *Delay* is expressed in seconds from zero to 15.
 - *Delay+ 16* – *Delay+ 16* is expressed in seconds from 16 to 31.
 - *Extension* – increases the duration of the call by a specified increment. *Extension* is expressed in half-seconds from zero to 7.5.
5. Select **Presence Extension** to 0.0. Do not change.
6. Select Watchdog Failmode Setting **State**.
 - The Watchdog Failmode parameter sets the channel to *Present* or *Not Present* when the system loses communication with sensors mapped to a particular channel.

Note: Watchdog Failmode Setting displays only in Advanced Mode.
7. Click **Apply**.

Recommendations

The recommended Channel settings for FlexConnect is:

- **Watchdog Failmode Setting** - Present

4 Connect to Controller

Connect

Connect SDLC to controller (refer to *TS2 Controller Configuration*). If no spare port is available use FLEX-CONN-ACC-1 Y-Cable.

Important:

- Ensure SDLC Link LED blinks at a rate of 1 Hz.
- Ensure SDLC TX LED blinks each time there is a message transmission.
- Ensure EX Link LED is blinks at a rate of 1 Hz.
- Ensure EX TX LED blinks each time there is a message transmission.

TS2 Controller Configuration

- FlexConnect Rack 1 equates to the Controller's Detector BIU 1 for Detectors 1 - 16
- FlexConnect Rack 2 equates to the Controller's Detector BIU 2 for Detectors 17 - 32
- FlexConnect Rack 3 equates to the Controller's Detector BIU 3 for Detectors 33 - 48
- FlexConnect Rack 4 equates to the Controller's Detector BIU 4 for Detectors 49 - 64
- For most applications only need one Detector BIU turned on in the controller which provides 16 channels of detection.
- If Detector BIU 1 is already in use, utilize Detector BIU 2.
- TS2 controller must be configured accordingly by authorized staff.