

## IMPORTANT INFORMATION

# FLASHING SIGN SYSTEMS



**Your guide to connect and  
configure your  
Flashing Sign System.**

**No Internet Connection  
Required!**

**Before proceeding:** Make sure the Power Connection Terminal inside the battery box has been inserted properly and the power has been applied to the system before continuing on in this guide to connect.

***NOTE:*** Once power is applied, TC Connect will be **active for 2 hours**. Should additional time be needed or if future changes need to be made - reset power by carefully removing the POWER CONNECTION TERMINAL. After 20 seconds re-insert.

*Refer to your Flashing Sign Installation Manual for connection details.*

Applies to units running firmware V3

## Connect to the System's Wi-fi

Open to view your Wireless Network Connections on your browser-enabled device.

1. Locate and select **TraffiCalm\_Setup\_XXXXXX** from the list of available wi-fi networks.
2. Enter security key / password:  
**Tr@ffiCalm** (case-sensitive)

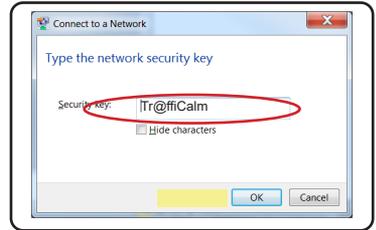
Select: **OK or CONNECT**

Select: **OK or Connect**

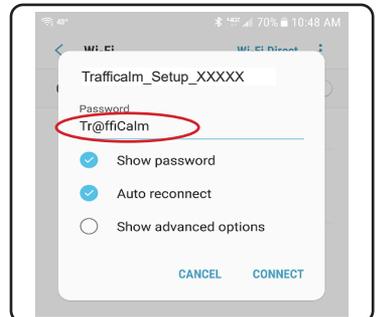
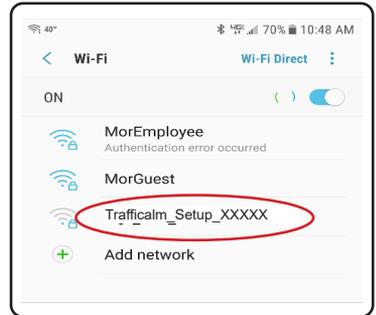
Example panes shown are  
**Windows-Based PC**  
and  
**ANDROID Device**

*TC Connect is also compatible with Apple devices. (not shown)*

### PC Procedure



### Mobile Procedure



## <System Initiation>

You've now connected to the device's wi-fi. Note that the system does not have Internet connection, so your device will likely not be able to connect to web-sites, email, or perform other web-required functions. No Internet connection is required to configure the system.

Open your web browser of choice (Chrome, Safari, Edge, etc...) and navigate to:

# *setup.trafficalm.com*

### Page 1 Downloadables

After you get logged in, you'll be given the option to download the software manual (this booklet), the installation manual (the other booklet), or to just continue.

This may come in handy if you have lost any of the documentation provided with the product, and for future generations to reflect on when things like books are "old fashioned" and AI drives your car for you.



## 〈System Initiation〉

This is a big decision. Consider what type of sign you'll be highlighting, or what safety measure you'll be accomplishing.

Here are some examples...

**Push 2 Cross**- pedestrian crossing where a push button activates flashing signs or RRFBs

**Chevron**- curve warning system that illuminates the chevron signs through a curve

**All Flash**- one or a bunch of signs flash at the same time based on an activation event

**High Water**- a high water sensor activates remotely placed signs when roads flood

If you don't know what system type you'll be utilizing, consult the designer or engineer of the project.

Select system option from the following choices:

**Push 2 Cross** - for push-button activated applications (ex. pedestrian crossing)

**Chevron** – for sequencing curve warning applications

**All Flash** – for all other applications

**Conflict Intersections** - Where detections in one direction of traffic affect mobility in an intersecting direction of traffic

**High Water** - Where a water sensor or probe activates flashing signs.

Note: Depending on your selection, the setup utility will adapt accordingly. Jump to the following pages to proceed:

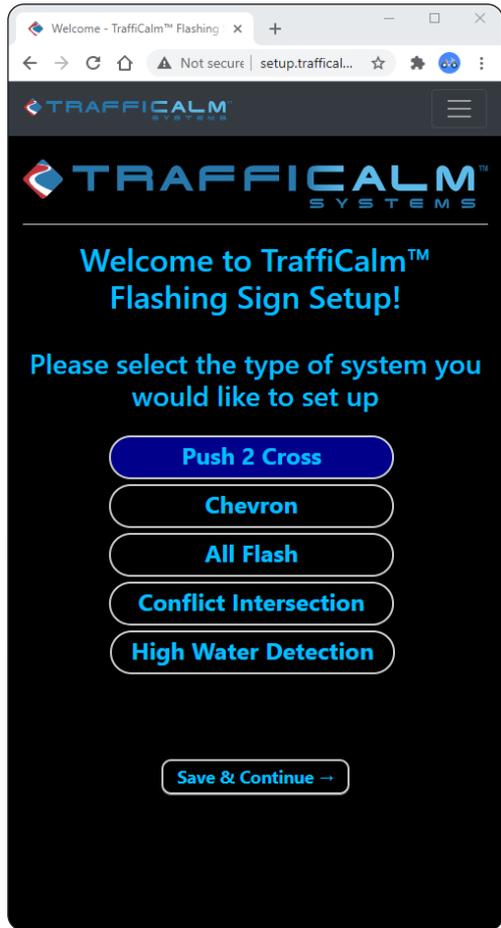
**Push 2 Cross Pg 5**

**Chevron Pg 7**

**All Flash Pg 12**

**Conflict Intersection Pg 15**

**High Water Detection Pg 19**



# (Push 2 Cross System Setup)

## Login

With the system type selected, you will need to log in to ensure security

Enter login password:

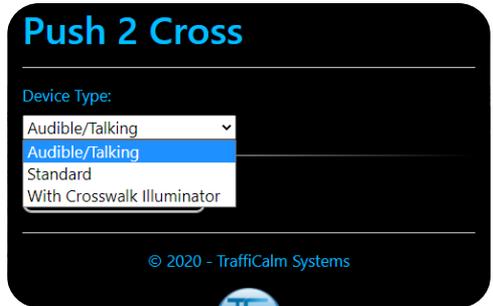
**Tr@ffiCalm** (case-sensitive)

Select: **login**



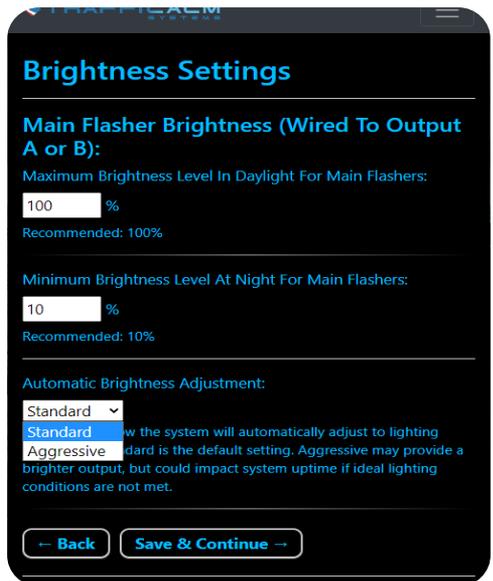
## P2C.1 - Operating Mode

Three options are given- a standard push button, or audible/talking type button, or where a crosswalk illuminator will be used.



## P2C.2 - Brightness Settings

The system will automatically adjust its brightness output based on sensed ambient light. These settings allow you to tweak the automatic adjustment behavior.



# <Push 2 Cross System Setup>

## P2C.3 - Flasher Settings

### Main Flasher Settings

Select flash characteristics that are displayed resulting from a pressed button

### Time to Cross in Seconds

Amount of time the system will continue to flash for after the button is pressed

**Flasher Settings**

Note: Select 60 FPM, "Standard Flash", and Single or Unison output for 2009 MUTCD Compliance.

Note: Select 120 FPM, "RRFB Flash", and Alternating output for 2018 MUTCD Compliance when using an RRFB Flasher.

**Main Flasher Settings:**  
\*Not Affected by scheduler

Flasher Rate:  
120 FPM

Flasher Pattern:  
RRFB Flash

Flasher Output:  
Alternating

Time To Cross In Seconds (Flash Time):  
10

- Back Save & Continue ->

## P2C.4- Collaboration Setup

### Adding Collaborators

Add Collaborators to the Push 2 Cross group by typing in the 6 digit identifier found on the product label

Add as many connected Collaborators as are installed on the cross walk, do not include the controller or signs connected to other controllers

**Collaboration Setup**

Enter the 6 character code from each collaborator that you want to be part of the controller's group

Collaborator 1  
ex. 0B4654

Collaborator 2  
ex. 0B4654 X

+ Add Collaborator

*This concludes P2C Setup*

# {Sequential Chevron System Setup}

## Introduction to Chevron System Setup

TraffiCalm Flashing Sign System tech is a revolutionary advancement in roadside signage. Given its flexibility, a particularly suiting application is Sequential Chevrons (or advanced curve warning)

These systems can prove complex in their nature, but the TC Connect Setup Wizard makes setup easy

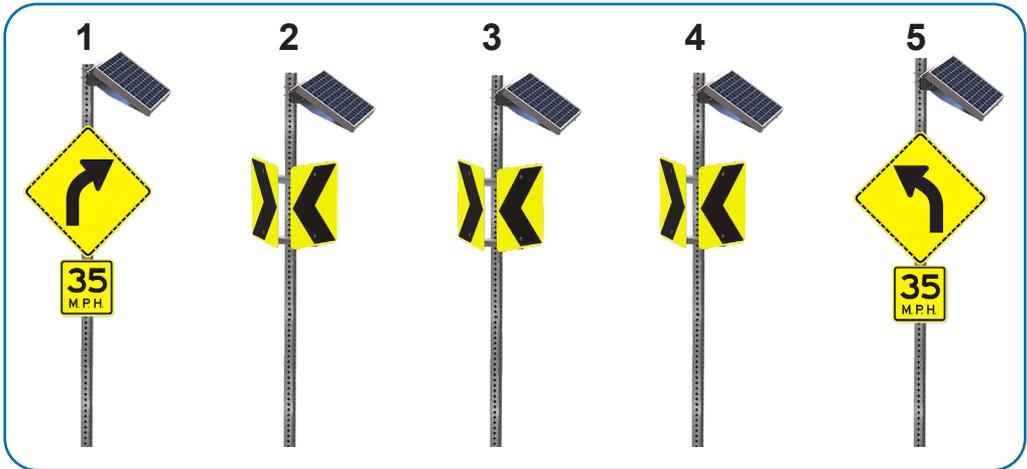
The diagram below displays the most complex application of Sequential Chevrons- radar activation in dual directions

In relation to the setup wizard, each unit will be identified as follows:

Unit 1 (Warning Sign): Controller with Radar detector (PN: M75-SA300-RDR0) activates a single warning sign and all chevrons on the left side

Units 2, 3, and 4 (Chevrons): Collaborator (PN: M75-SA300-CLBX) repeats sequential activation of either chevron (right and left)

Unit 5 (Warning Sign): Collaborator (PN: M75-SA300-CLBX) with Radar detector activates a single warning sign and all chevrons on right side



## Notes

The Controller does not need to be in position 1, but it does need to be in the position where a Radar detector is located (1 or 5 in the above example)

When installing, Chevrons sequencing AWAY from the controller must be connected into Flasher A. Chevrons sequencing TOWARD the controller must be connected into Flasher B. Confusion on this point will result in the appearance of sequence malfunction

# (Sequential Chevron System Setup)

## Login

With the system type selected, you will need to log in to ensure security

Enter login password:

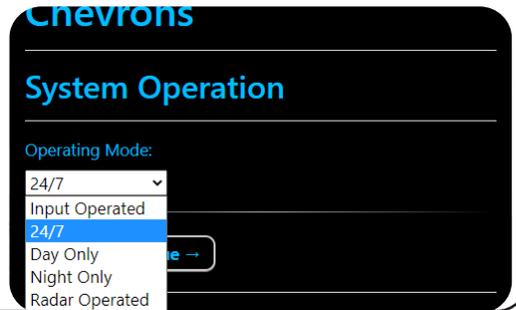
**Tr@ffiCalm** (case-sensitive)

Select: **login**



## Chevron.1 - System Operation

Select what activates the flashing or sequencing of the signs flashers.



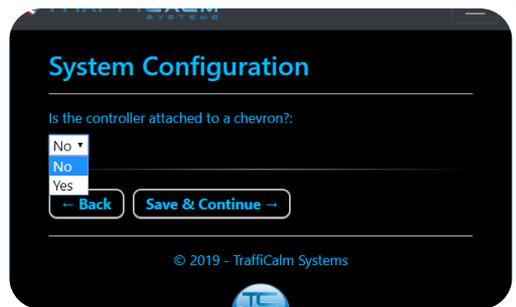
## Chevron.2 - Controller Function

Select whether the Controller is

connected to a Chevron or not

**Yes** - The Controller is connected to a Chevron

**No** - The Controller is connected to warning sign or no sign



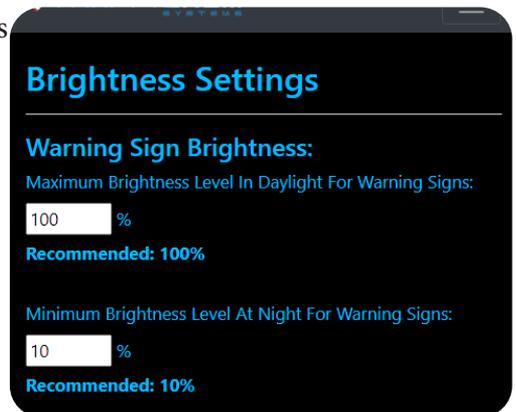
## Chevron.3 - Brightness Settings

### Warning Brightness

Note that brightness settings directly correlate to battery performance. Optimal settings are suggested

### Chevron Brightness

See comments above



## Chevron.4 - Flasher Settings

### Warning Sign Setup

#### Speed Required To Activate System

Set to the lowest detection speed required to activate

#### Activate Curve Ahead Warning

Toggles warning sign activation

#### Warning Sign Flasher Rate

60 FPM is considered MUTCD compliant, all others are non-compliant

#### Warning Sign Flasher Pattern

Standard Flash is considered MUTCD compliant, all others are non-compliant

#### Warning Sign Flasher Output

Selects Flasher Output Channel (A or B)

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## Flasher Settings

**Note: Select 60 FPM (Flashes Per Minute), "Standard Flash", and Single or Unison output for 2009 MUTCD compliance.**

Speed Required To Activate the System:  
25 Select the minimum speed an object must be going to trigger the follow

Activate Curve Ahead Warning Sign At This Speed?  
Yes

Warning Sign Flasher Rate:  
60 FPM

Warning Sign Flasher Pattern:  
Standard Flash

Warning Sign Flasher Output:  
Unison Output

Chevron Flasher Cycle Period:

## Chevron.5 - Flasher Settings, cont'd

### Chevron Sign Setup

#### Chevron Flasher Cycle Period

Set how long the sequence will take to complete. Set low for a for a fast sequence, set high for a slow sequence (dictated by expected road speed)

#### Chevron Flasher Pattern

Toggles flash settings. Unison flash is considered MUTCD compliant. Set to Sequencing for sequencing function

Warning Sign Flasher Output:  
Unison Output

Chevron Flasher Cycle Period:  
How long it takes a single flash pattern to complete  
5 second(s)

Chevron Flasher Pattern:  
Standard Unison Flash

Speed Required To Activate the EXCESSIVE SPEED ALERT:

## Chevron.6 - Flasher Settings, cont'd

### Flasher Hold Time

Dictates how long the system will continue flashing after last radar detection.

Standard Unison Flash

Flasher Hold Time:  
The amount of time that the system will repeat its flasher pattern after an activation  
10 second(s)

← Back Save & Continue →

# (Sequential Chevron System Setup)

## Chevron.7 - Flasher Settings, cont'd

### Excessive Speed Escalation

This group of settings produces an “escalated” flash pattern if the selected speed threshold is detected by the Radar (if equipped).

Speed Required To Activate the EXCESSIVE SPEED ALERT:  
When this speed is exceeded, the following settings will be temporarily used, intensifying the warning to drivers

35

Warning Sign Flasher Rate:  
60 FPM

Warning Sign Flasher Pattern:  
Standard Flash

Warning Sign Flasher Output:  
Unison Output

Chevron Flasher Cycle Period:  
How long it takes a single flash pattern to complete  
3 second(s)

Chevron Flasher Pattern:  
Standard Unison Flash

## Chevron.8 - Collaborators

### Chevron Setup

Add Collaborators to the chevron group by typing in the 6 digit identifier found on the product label

Add as many chevron connected Collaborators as are installed on the curve section, do not include the controller or signs connected to Warning signs

### Chevron Subset Size

It is possible to “cap” the number of chevrons activated in sequence. Any additional signs will activate simultaneously with another sign. For example- if a group contains 8 chevrons, but the Subset Size is set to 4, units 1 and 5 will activate together, followed by 2 and 6, followed by 3 and 7, followed by 4 and 8. Long curves may benefit from this setting to maintain driver visibility.

**Enter the value of the number of signs in a subset.**

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## Chevron Setup

Add Chevrons to the system by entering the 6 character code from each chevron in the physical order in which they are located, starting from the controller

Note: If the controller is attached to a chevron, do not include it in this list

Chevron 1  
ex. 0B4654 ▲▼ ✕

Radar Attached

+ Add Chevron

Chevron Subset Size: 1

Ex. 7 Chevrons with a subset size set to 5 = 1, 2, 3, 4, 5, 1, 2. Each identical number will be lit at the same time.

← Back Save & Continue →

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Connect WiFi

## Chevron.9 - Collaborators, cont'd

### Warning Sign Setup

“Warning Sign” Collaborators differ from “Chevron” Collaborators in that they are connected to the warning sign typically found at the entrance to a curve

Add Collaborators to the Warning group by typing in the 6 digit identifier found on the product label

Add as many warning sign connected Collaborators as are installed on the curve section, do not include the controller or signs connected to chevron signs

### Warning Sign Location

Select where the Warning Sign is in relation to the Controller

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### Warning Sign Setup

Add Warning Signs to the system by entering the 6 character code from each collaborator and selecting where they are located

**Warning Sign 1**

ex. 0B4654 ▲ ▼ ✕

Warning Sign Location:

Same end as controller ▾

Radar Attached

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**Warning Sign 2**

ex. 0B4654 ▲ ▼ ✕

Warning Sign Location:

Same end as controller ▾

Radar Attached

[+ Add Warning Sign](#)

*This concludes Chevron Setup*

*To configure a schedule, select scheduling from the top menu, see page 21*

# (All Flash System Setup)

## All Flash System Setup

### All Flash.1 - Operating Mode

Select operating mode from the following choices:

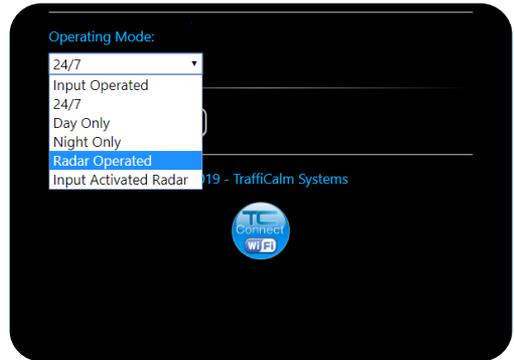
**Input Operated** - Only operates by device wired into Controller or Collaborator Input

**24/7** - System operates 24/7

**Day Only** - System operates during ambient daylight hours only.

**Night Only** - System operates during ambient no light hours only.

**Radar Operated** - Radar detected operation



### All Flash.2 - Brightness Settings

Flashing Signs automatically adjust to ambient light, however the Brightness Settings can be used to dial in day and nighttime output, and how quickly the sign responds to ambient light.

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**Note for US customers:** The settings below may cause your device to deviate from 2009 MUTCD compliance. Concerning settings are noted in the configuration utility window.

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### All Flash.3 - Flasher Settings (minimum speed settings, for radar activation)

#### Minimum Speed Required to Flash:

Select the Minimum Speed (in MPH) from this pull-down menu in which the LED Flashers will begin to flash.

#### Flasher Rate

Select the FPM (Flash Per Minute) rate of the LED Flasher Rings.

#### Flasher Output

Refer to *Installation Manual for Wiring Connections*

Select the desired Flasher Output.

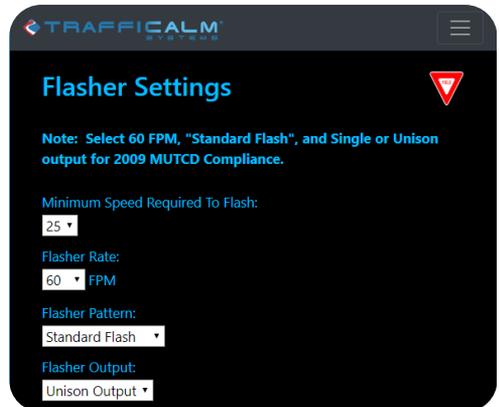
**UNISON:** Activates both Flashers or Beacons simultaneously

**A Only:** Activates Flasher or Beacon wired into Terminal A

**B Only:** Activates Flasher or Beacon wired into Terminal B.

**Alternating:** Alternates a flashing sequence between Flashers or Beacons wired into both Terminal A and B.

**Off:** Flasher Output OFF



#### Flash Patterns

Select the desired Flash Patterns.

- \* Standard Flash
- \* Bright Pop-Flash
- \* Pulse Flash
- \* Solid On

# All Flash.4 - Flasher Settings (excessive speed settings)

## Excessive Speed Required to Flash:

Select the Excessive Speed (in MPH) from this pull-down menu in which the LED Flashers will begin to flash upon detection.

The LED Flashers will not activate below this threshold.

*The next (3) fields (Flasher Rates, Flasher Output, and Flasher Pattern) will be applied when the Excessive Speed Threshold has been detected.*



## Flasher Rate

Select the FPM (F)lash (P)er (M)inute rate of the LED Flasher Rings.

Default setting is 60 FPM.

## Flasher Output

Refer to *Installation Manual for Wiring Connections*

Select the desired Flasher Output.

**UNISON:** Activates both Flashers or Beacons simultaneously.

**A Only:** Activates Flasher or Beacon wired into Terminal A.

**B Only:** Activates Flasher or Beacon wired into Terminal B.

**Alternating:** Alternates a flashing sequence between Flashers or Beacons wired into both Terminal A and B.

**Off:** Flasher Output OFF.

## Flash Patterns

Select the desired Flash Patterns.

- \* Standard Flash
- \* Bright Pop-Flash
- \* Pulse Flash
- \* Solid On

## Flasher Hold Time

Input the desired Hold Time (in seconds).

This will set the run time of the LED Flashers each time the speed thresholds have been met or exceeded.

When all **minimum** and **excessive** speed settings have been completed:

Select: **“Apply”**

Select: **“Next”**

## All Flash.5 - Collaboration Settings

Each Flashing Sign System consists of a single Controller and one or more Collaborators paired in a group.

Identify the collaborator ID number found behind the solar panel and insert this number in the Collaborator Field.

If “Advanced Settings” are not selected, the Collaborator will Copy Controller Settings as previously set in steps 5 & 6.

**Select “+Add Collaborator” if more than one Collaborator is used.**

Select “Apply Settings”

Select “Next”

### Activation Settings

Advanced Settings allow the user to apply settings independent from those of the Controller.

#### **Flasher Only/Input Activated:**

Only listens for commands given by the Controller or directly connected input, but not a radar

#### **Radar Activated**

Activates when a radar input is detected

#### **Input/Sensor and Radar Activated**

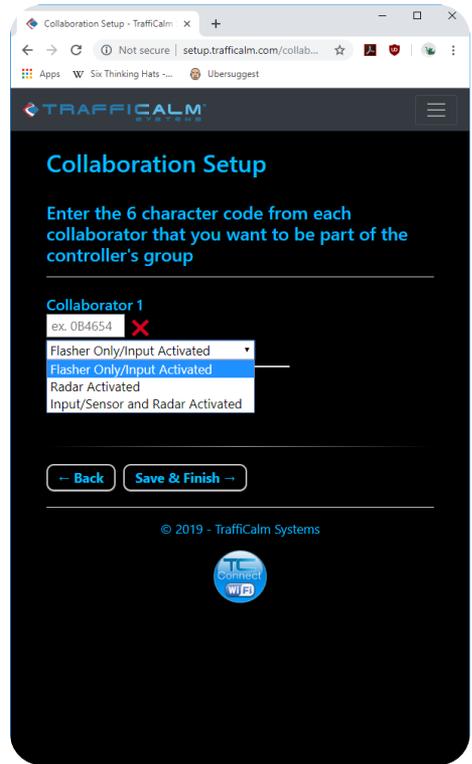
Requires activation from both a radar and an input

When complete:

**Select “+Add Collaborator” if more than one Collaborator is used.**

Select “Apply Settings”

Select “Next” to continue



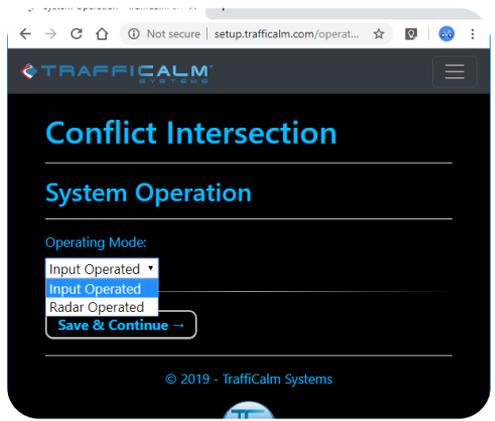
*This concludes All Flash Setup  
To configure a schedule,  
select scheduling from the  
top menu, see page 21*

# Conflict Intersection System Setup

## CIWS.1 - System Operation

### What activates your system?

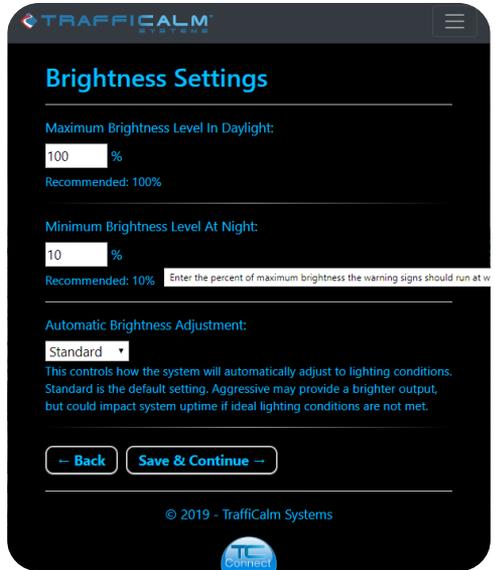
Select from inputs or radars.  
Examples of inputs include push buttons, environmental sensors, and height detectors



## CIWS.2 - Brightness Settings

### How bright do you want it?

Select the maximum brightness, minimum brightness, and adjustment method based to best adapt the signage to the installation



# Conflict Intersection System Setup

## CIWS.3 - Flasher Settings

### How do you want to warn drivers?

Select a minimum detected speed, flasher rate (flashes per minute), flasher pattern (boring to exciting), and which outputs to fire off with the above settings.

### Flasher Settings

Note: Select 60 FPM, "Standard Flash", and Single or Unison output for 2009 MUTCD Compliance.

Minimum Speed Required To Trigger Radars:

25 ▾

Flasher Rate:

60 ▾ FPM

Flasher Pattern:

Standard Flash ▾

Flasher Output:

Unison Output ▾

Flasher Hold Time In Seconds:

10

## CIWS.4 - Collaboration Setup

### The Hard Part

This is where the setup of the intersection begins. Each collaborator's id must be entered, along with selecting the input type used at the collaborator (ie. if a radar is attached, select radar). Finally, each collaborator must be given an alias. You get to pick the alias, just remember it.

The next screen will use these names to build out the system matrix

### Collaboration Setup

Enter the 6 character code from each collaborator that you want to be part of the controller's group

#### Collaborator 1

ex. 0B4654 ✖

Flasher Only/Input Activated ▾

Alias: ex. 5th & Main

+ Add Collaborator

← Back

Save & Continue →

## CIWS.5 - Trigger Groups

### The Really Hard Part

This set of selections dictates which collaborator's trigger the output on other collaborators (or the controller). See the next page for an illustration depicting a conflict system.

### Trigger Groups

#### 5th & Main Triggers Output To:

5th & Main

Controller

#### Controller Triggers Output To:

5th & Main

Controller

← Back

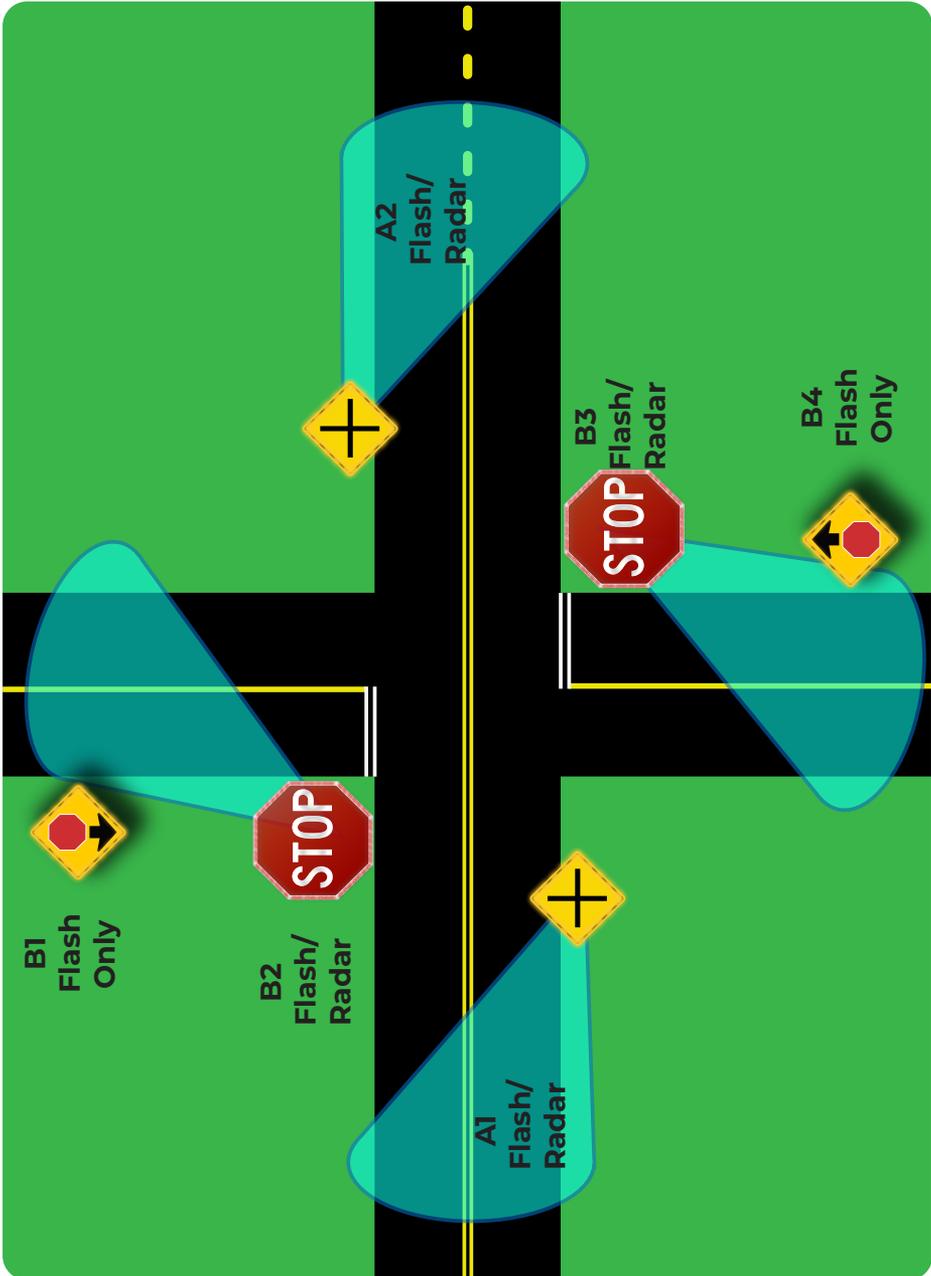
Save & Finish →

*This concludes Conflict Intersection Setup*

# Conflict Intersection System Setup

## A CIWS System, Illustrated

In the example below, a detection at either radar A1 or A2 will trigger flashing signage at any of the B units. Radar Detection at B2 or B3 can trigger flashing signage at B2, B3, A1, and/or A2. This accomplishes the goal of warning opposing drivers of each other's presence





*Super nice setup for inspiration*

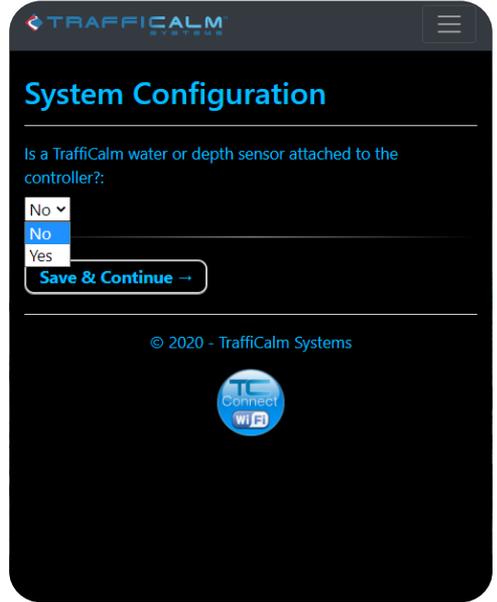
# High Water Detection Setup

## High Water.1 - Configuration

**You've got a water sensor what's it hooked up to?**

If the sensor is connected to the Controller, select Yes. If it's connected to a Collaborator, select NO.

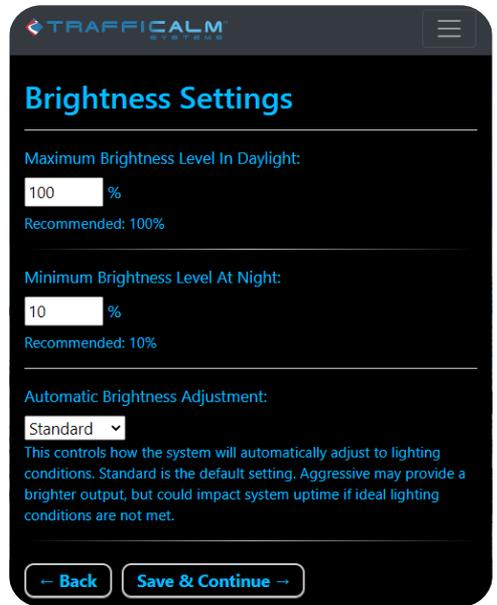
This helps the software deliver relevant options as you work through the configuration.



## High Water.2 - Brightness

**On this screen you can select the brightness settings for the flashing sign ring output.**

The system will accommodate for ambient light based on solar panel voltage or a photo (light) sensing device.



## High Water.3 - Flash Settings

### What does the system do when the water rises?

Because the water sensor can not only detect the presence of water, but also its depth, it is possible to increase or modify the warning method, or select another output port (A or B) based on actual conditions.

**Flasher Settings**

Note: Select 60 FPM, "Standard Flash", and Single or Unison output for 2009 MUTCD Compliance.

Minimum Water Level Required To Flash:  
1 in.

Flasher Rate:  
60 FPM

Flasher Pattern:  
Standard Flash

Flasher Output:  
Unison Output

Water Level Required To Trigger A Secondary Flash Pattern:  
24 in.

Flasher Rate:  
60 FPM

Flasher Pattern:  
Standard Flash

Flasher Output:  
Unison Output

[← Back](#) [Save & Continue →](#)

## High Water.4 - Collaborators

### Add wirelessly triggered, remote collaborators.

This is where the setup of the system begins. Each collaborator's id must be entered, along with selecting the input type used at the collaborator (Flasher only or TrafficCalm water/depth sensor attached).

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**Collaboration Setup**

Enter the 6 character code from each collaborator that you want to be part of the controller's group

[+ Add Collaborator](#)

[← Back](#) [Save & Finish →](#)

*This concludes High Water Detection Setup*

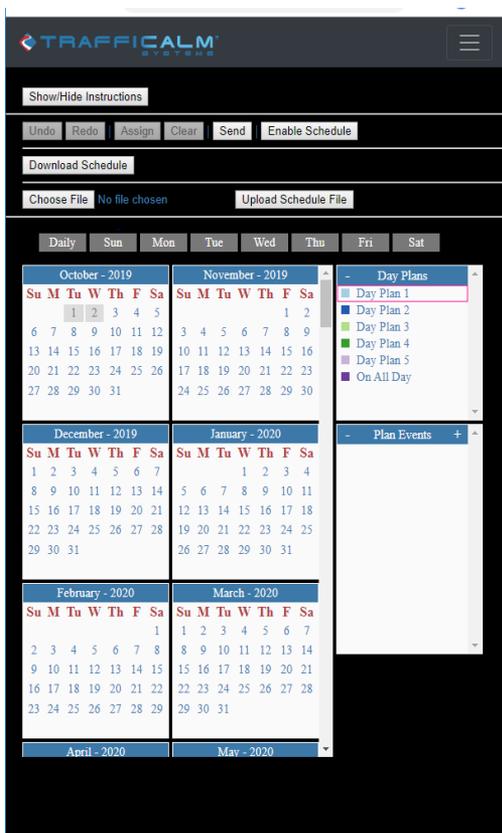
## Scheduling Intro

The built in Flashing Sign Scheduler allows you to schedule OFF or ON behavior to occur throughout the day

Start by setting up events to happen on a day plan, then apply the day plan to either the daily button, the day buttons (Sun, Mon, etc.) or specific calendar days

Once completed, select to send the schedule to the Controller, then select to enable the schedule

The schedule will now activate on the Controller and all Collaborating group members



### Scheduling Details

**Undo**- removes last action or application of a day plan

**Redo**- redacts the undo function

**Assign**- For Apple users, applies the day plan to selected day button or date

**Clear**- removes day plan from selected day button or date

**Send**- Sends the schedule to the group

**Enable Schedule**- starts the schedule operation

**Daily**- day plans assigned to the Daily button occur every day, repeating forever.

**Sun, Mon, Tues...**- day plans assigned to the Day buttons occur on that specific day, repeating forever

**Calendar**- day plans assigned to specific calendar dates will occur on that day ONLY, with no repetition

To apply a day plan, simply drag and drop the day plan to the desired day or date. Additionally, a range of dates may be selected; use the Assign button to apply the selected day plan to the selected dates

Note to some Apple IOS users, the drag and drop action may not function properly. In this case, use the Assign button to apply day plans to days or dates.

**Download Schedule** - Downloads developed schedule to phone, tablet, or PC for future use on other systems

**Choose File/Upload Schedule File** - Open and send a downloaded schedule to save time.





For Any Further Assistance  
Please Call our Technical Service  
Department at: 855-738-2722

Revision	Reason	Owner/Date
A	Initial release for Gen 3 devices	AP 20201105
B	Clarified Functionality	AP 20201117

