2 Wire Navigator Accessible Pedestrian Signal Advanced Options

Configuring the Navigator Central Control Unit

Note: Most configurations will not require any default settings to be changed and is primarily applicable for advanced customizing.

To download the current settings within the Navigator Central Control Unit as a starting point, press the READ SETTINGS button under the Central Control Unit key group. You will see the first menu item. Each of the General Purpose Inputs uses five menus to set up, so forty of the menu items are assigned to setting up the Inputs only. The remaining ten menu items are for configuring the General Purpose Outputs, and Timers.

Configuring the General Purpose Inputs

INPUT #1 FUNCTION INPUT #2 FUNCTION

All Inputs are typically driven by the general purpose traffic controller outputs. This allows complete timing coordination of all pedestrian operations within the intersection.

This input can be assigned to control various volume or custom message functions. The MUTE function can be used to silence the intersection at night to eliminate possible complaints from nearby residents; the VOLume OveRide ALL function can also be used in similar situations. The other Volume Override functions provide further flexibility over specific situation requirements.

Also two Special or Custom Messages can be played. All of these features can be assigned to a single phase, combination of phases or all phases.

The Special or Custom Messages can be used to enhance pedestrian safety. For example Message #1 default says: "Emergency Vehicle Approaching, Clear Intersection Immediately". The message can be triggered by the signal from a Preemption Sensor, which should give Blind Pedestrians advance notice before the Emergency Vehicle actually reaches the intersection. Message #2 default says: "Train is Approaching, Clear Tracks Immediately". The message can be triggered by the Train Preemption signal, which should give Blind Pedestrians advance notice before the Train actually reaches the Rail-road Crossing. The VOLume OverRide levels for the selected input determine the volume of the Special Message.

Note: Other custom messages can also be programmed in these two locations!

The choices for this input function are as follows: NONE, MUTE, VOLume OverRide ALL (Functions), VOLume OverRide WaLK Sound, VOLume OverRide LOCate Sound, CuSTOM MesSaGe #1, CuSTOM MesSaGe #2 (Default =NONE)

INPUT #1 CONTROLS INPUT #2 CONTROLS

This function controls which phase(s) the function is applied to. For example if a single crosswalk is to be controlled then choose the appropriate phase A, B, C

or D. If you want to reduce the volumes at night but only want to do so on the phase(s) that are adjacent to a nearby residence you could do so. The choices for this input function are as follows: A, B, C, D, AB, CD, ALL (ABCD) (Default = ALL(ABCD))

IN#1 VOLume OveRide MINimum IN#2 VOLume OveRide MINimum

This function overrides the minimum volume level for the specified function. The Auto Volume adjustment will not go below this setting. This volume level is adjustable from 0% to 100% of the maximum volume output in 5% steps. (21 choices) (Default = 5%)

IN#1 VOLume OveRide MAXimum IN#2 VOLume OveRide MAXimum

This function overrides the maximum volume level that the specified function. The Auto Volume adjustment will not go above this setting. This volume level is adjustable from 0% to 100% of the maximum volume output in 5% steps. (21 choices) (Default = 80%)

INPUT #1 TRIGGER INPUT #2 TRIGGER

This function specifies whether the input is Normally off or Normally on. This adds to the flexibility of how the function is to be triggered on either control signal presence or absence. As a side note all of the General Purpose Inputs share a single common that can also be hardwired to the traffic controller common or +24DC supply to accomplish a functional equivalent. The choices are: NORM OFF, NORM ON (Default = NORM OFF)

Using the General Purpose Inputs

The General Purpose Inputs (GPIn) have a recommended input of 12-36V AC or DC. The Inputs are optically isolated. These connections are located on cable #3.

Normally the GPIn's are triggered by the application of voltage to the input. If you need an input to trigger on the absence of a voltage input, then set the input polarity to Normally ON (see CCU configuration).

If your input signal is a contact closure, you may use the +22 volt output from the CCU as a voltage source as in the following examples:



Fault Output

The Fault Output is a contact closure as shown



This can be used to trigger an alert if there is an available means of doing so.

Any detected fault in the Navigator II system will activate the fault output. This includes blown fuses or software hangs in the CCU. During a fault, as long as there is a line voltage present, the PED outs will close, effectively putting the system in PED recall. The status indicators on the CCU front panel will show this condition.