

iNS Setup Box

Operation Manual



Specifications:

Size: 6.8" Length
 4 ½" Width
 2" Height

Weight: 1 lb.

Operating Temperature: 0° C to +50° C

Operating Voltage: 24V DC

Description:

The iNS Setup Box (iNS-SUB) is a special tool that provides a convenient method of operating one Polara iNS/iDS/iNavigator 3-Wire Push Button Station in a bench top environment, where it can be setup and tested before installation on the street. The iNS Setup Box simulates the operation of a standard pedestrian signal head with an iPHCU3W/S installed. The iNS Setup Box is also able to simulate the function of the Ped Call interface.

Note: The iNS-SUB can also operate an iN2/iNS2/iDS2 PBS, that can also be used as a 3-Wire PBS. Most setup, programming, and testing can be performed in this mode (except for cabinet programming - which only happens in a 2-Wire connection mode). Connect the unit as a 3-Wire to the iNS-SUB.

Setup:

Plug the green terminal block from the end of the connector cable (included in hardware kit) into the back of the iNS Setup Box as shown (Fig. 1).



Fig. 1 (Back)

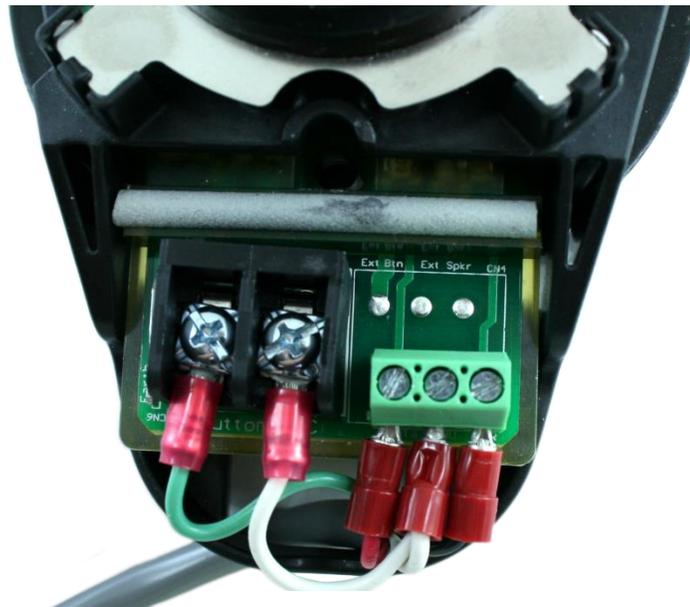


Fig. 2 (Red - White - Black)

Connect the other end of the cable to the iNS/iDS/iNavigator PBS as shown (Fig. 2). Tighten the screw terminals on the PBS terminal blocks until the connections are firmly held in place.

The iNS Setup Box is now ready to be powered on by plugging the power supply into the back on the unit.

Operation:

When the iNS/iDS/iNavigator PBS is first powered up, its red LED will blink for a few seconds as it performs a self-test. Once finished, the unit is ready for operation/setup. See corresponding System Manual for details. At this point, the unit can be configured using an iPad with the Polara iOS app or by using a computer with a Polara iN-DGL (iNav Bluetooth Dongle) and the Polara PC App.

When powered up, the iNS Setup Box will start-up in **Manual** mode as indicated by the white LED on the front panel. In **Manual** mode, the white, yellow and red pushbuttons on the front panel are used to simulate a WALK, CLEARANCE, or DON'T WALK interval respectively. When any of the three buttons are pushed, the selected interval will remain in effect until a different button is pushed. This allows you to test the desired configurations implemented in the PBS at your own pace.

If you would prefer that the iNS Setup Box cycle through the three different pedestrian intervals automatically, press the blue pushbutton on the front panel to put the iNS Setup Box into **Auto** mode as indicated by a blue LED. In **Auto** mode, the WALK interval will remain active for 6 seconds, the CLEARANCE interval will remain active for 8 seconds, and the DON'T WALK interval will remain active for 12 seconds before repeating the cycle.

Note: *The default setting of the iNS Setup Box is to use the flashing DON'T WALK signal to represent the CLEARANCE interval which is typically the most common configuration found on an intersection. Some intersections may be setup to have a flashing WALK signal represent the CLEARANCE interval. It is desirable to have the iNS Setup Box exactly emulate the function of the intersection in which the PBS is to be installed. Because of this, the iNS Setup Box can easily be configured to operate with a flashing WALK signal for the CLEARANCE interval. To do this, in either Manual or Automatic mode, hold the yellow "CLEARANCE" pushbutton on the front of the iNS Setup Box and simultaneously press the white "WALK" pushbutton. You will now notice that during the CLEARANCE interval, the WALK signal will flash during CLEARANCE rather than the red DON'T WALK signal. To switch back to a flashing DON'T WALK signal during CLEARANCE, press the yellow "CLEARANCE" pushbutton and simultaneously press the red "DON'T WALK" push button. The iNS Setup Box will now flash the DON'T WALK signal during the CLEARANCE interval. This function will reset to flashing DON'T WALK during the CLEARANCE interval on the next power on of the iNav Setup Box.*

External Button Terminals:

The external button terminals on the 3-Wire iNS/iDS/iNavigator PBS provide a contact closure whenever the button on the unit is pushed. In addition, the external button terminals detect a contact closure for a button push when an external button is connected to the terminals. These functions can be verified while the unit is connected to the iNS Setup Box. If you press the PBS's button and observe the "PED" LED on the front of the iNS Setup Box, the "PED" LED should be illuminated for the duration of the press. If you press the "PED" button on the front of the iNS Setup Box while the PBS's button LED is off, the button LED should illuminate and stay on until the unit enters the Walk interval.

When setup and configuration of the PBS is complete, simply unplug/power off the iNS Setup Box and disconnect the PBS. The PBS is now fully configured with the desired settings and is ready to install at the intersection.