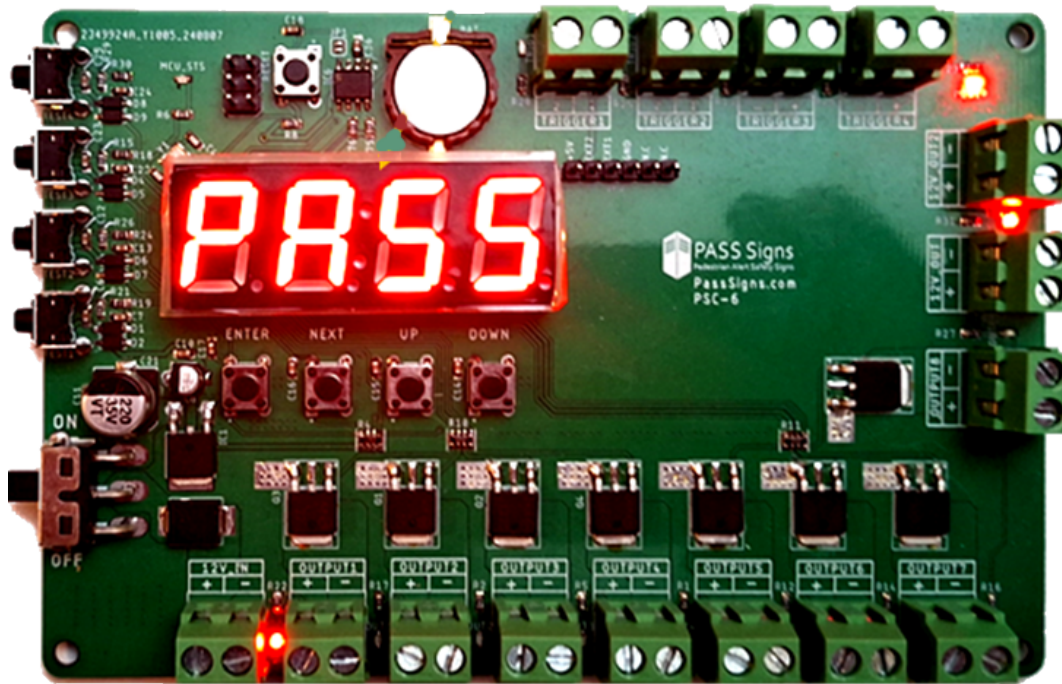


PSC-6 Timed Traffic Controller Board

Wiring and Programming Guide

Board Layout



Quick Features

- (8) timed 12VDC outputs programmed for either flashing or constant output
- (4) dry-contact input override terminals for lane priority operation
- Programmable 1, 2, 3, or 4 lane timed traffic-light sequencing
- Programmable all-red delay between lane changes
- Individual active timer for each traffic light direction
- (2) 12VDC auxiliary output power terminals for sensors or accessories
- 12VDC power input

Purpose of the Board

The PSC-6 Timed Traffic Controller Board is used to control red and green traffic lights for timed lane sequencing. The controller allows traffic from one, two, three, or four lanes to take turns moving through an intersection, alley exit, parking ramp, truck yard, private roadway, or controlled access point.

This timed version is different from the standard PSC-6 sensor-based traffic-control program. Instead of relying primarily on queue logic from vehicle sensors, this program runs a repeating timed sequence. Each lane receives a programmed green-light time, followed by an all-red delay before the next lane turns green.



Application Examples:

- Parking garage intersections
- One-way or two-way parking ramps
- Truck yards and industrial sites
- Private road intersections
- Controlled alley exits
- Gate entrances and exits
- Internal facility traffic control
- Timed traffic-light sequencing where sensors are optional

Traffic Light Output Wiring

The PSC-6 Timed Traffic Controller uses the eight 12VDC outputs to control up to four red/green traffic lights. Each traffic light direction uses one red output and one green output.

Traffic Light	Red Output	Green Output
Light 1	Output 1	Output 2
Light 2	Output 3	Output 4
Light 3	Output 5	Output 6
Light 4	Output 7	Output 8

Input Override Wiring

Inputs 1 through 4 are dry-contact override inputs. Each input corresponds to the matching lane. When an enabled input is triggered for more than approximately 400 milliseconds, the controller interrupts the normal timed sequence and gives priority to that lane.

Input	Override Lane
Input 1	Light 1
Input 2	Light 2
Input 3	Light 3
Input 4	Light 4

Power and Safety Notes

- Input Power: 12VDC power input.
- Outputs: 12VDC outputs. Do not exceed the board or power supply output rating.
- Auxiliary Power: 12VDC auxiliary power may be used for sensors or accessories within rated limits.
- Trigger Inputs: DRY CONTACT ONLY. Do not apply voltage to the trigger inputs.

CAUTION: Do not apply voltage to trigger inputs. Trigger inputs are dry-contact inputs only. Applying voltage to the trigger inputs can damage the board and void the warranty.

Basic System Operation

At startup, the controller places all traffic lights in a safe red condition. The controller then begins the timed traffic sequence based on the number of lanes programmed in P001.

Example: 4-Lane Operation

- All lights start red.
- Light 1 red turns off and Light 1 green turns on.
- Light 1 remains green for the programmed Light 1 Active Timer.
- Light 1 green turns off and Light 1 red turns on.
- All lights remain red for the programmed delay time.
- Light 2 turns green for the programmed Light 2 Active Timer.
- The process continues through Light 3 and Light 4.
- After the last programmed lane is complete, the sequence returns to Light 1.

Example: 2-Lane Operation

If the system is programmed for two lanes, only Light 1 and Light 2 are used. Lights 3 and 4 remain unused.

Sequence: Light 1 green - all red delay - Light 2 green - all red delay - repeat

Input Override Operation

Inputs 1 through 4 can be used as lane override inputs. When an enabled input is triggered for more than approximately 400 milliseconds, the controller interrupts the normal timed sequence.

- Input is triggered.
- All lights turn red.
- The programmed all-red delay runs.
- The matching lane turns green.
- If the input remains triggered, the matching lane stays green.
- When the input returns to normal, the lane turns red.
- The all-red delay runs again.
- The controller returns to the normal timed sequence.

PSC-6 Programming Guide

PSC-6 is a programmable controller.

BATTERY MUST BE IN PLACE TO HOLD PROGRAMMED TIMES.

Board Start Up:

The 4-digit display will display PASS at startup. The controller loads the saved programming values, places all lights red, and begins the timed traffic sequence.

Entering Program Mode:

- Press and hold the ENTER and NEXT buttons together for approximately 3 seconds.
- P001 will display on the 4-digit display.
- Release the buttons. The board includes a short ignore-button delay so the menu does not immediately jump to the next program step.
- Press NEXT to move to the next program step.
- Press UP or DOWN to change the value for the displayed program step.
- Press ENTER to save the selected value.

Exiting Program Mode:

- Press and hold the DOWN button for approximately 3 seconds.
- Program Mode will also exit automatically after a period of no button activity.
- The board returns to normal timed operation using the saved settings.

Programming Button Functions

Button	Function
ENTER	Enter programming with NEXT; save selected value
NEXT	Move to the next program step
UP	Increase or change selected value
DOWN	Decrease or change selected value; hold to exit programming

Quick Programming

Program Step	Description	Default	Range / Options
P001	Number of traffic lanes	2	1-4
P002	All-red delay before next light turns green	003 sec	000-030 sec
P003	Light 1 Active Timer	010 sec	000-120 sec
P004	Light 2 Active Timer	010 sec	000-120 sec
P005	Light 3 Active Timer	010 sec	000-120 sec
P006	Light 4 Active Timer	010 sec	000-120 sec
P007	Input 1 Override Behavior	ON	ON / OFF
P008	Input 2 Override Behavior	ON	ON / OFF
P009	Input 3 Override Behavior	ON	ON / OFF
P010	Input 4 Override Behavior	ON	ON / OFF
P011	Output 1 Mode	CnST	CnST / FLSH
P012	Output 2 Mode	CnST	CnST / FLSH
P013	Output 3 Mode	CnST	CnST / FLSH
P014	Output 4 Mode	CnST	CnST / FLSH
P015	Output 5 Mode	CnST	CnST / FLSH
P016	Output 6 Mode	CnST	CnST / FLSH
P017	Output 7 Mode	CnST	CnST / FLSH
P018	Output 8 Mode	CnST	CnST / FLSH

Display Notes: CnST means constant steady output. FLSH means flashing output. Flashing mode uses approximately 1 second ON and 0.75 second OFF.

Detailed Programming Guide

P001 - Number of Traffic Lanes

This setting determines how many lanes are used in the timed sequence. 1 = Light 1 only, 2 = Light 1 and Light 2, 3 = Lights 1 through 3, 4 = Lights 1 through 4. Default: 2.

P002 - All-Red Delay Before Next Light Is Active

This setting determines how long all traffic lights remain red between green-light changes. This delay allows traffic to clear before the next direction receives a green light. Range: 000-030 seconds. Default: 003 seconds.

P003 - Light 1 Active Timer

This setting determines how long Light 1 stays green during normal timed operation. Range: 000-120 seconds. Default: 010 seconds.

P004 - Light 2 Active Timer

This setting determines how long Light 2 stays green during normal timed operation. Range: 000-120 seconds. Default: 010 seconds.

P005 - Light 3 Active Timer

This setting determines how long Light 3 stays green during normal timed operation. This setting is only used when P001 is set to 3 or 4. Range: 000-120 seconds. Default: 010 seconds.

P006 - Light 4 Active Timer

This setting determines how long Light 4 stays green during normal timed operation. This setting is only used when P001 is set to 4. Range: 000-120 seconds. Default: 010 seconds.

P007 - Input 1 Override Behavior

This setting determines whether Input 1 can override the timed sequence and activate Light 1. Options: ON or OFF. Default: ON.

P008 - Input 2 Override Behavior

This setting determines whether Input 2 can override the timed sequence and activate Light 2. Options: ON or OFF. Default: ON.

P009 - Input 3 Override Behavior

This setting determines whether Input 3 can override the timed sequence and activate Light 3. Options: ON or OFF. Default: ON.

P010 - Input 4 Override Behavior

This setting determines whether Input 4 can override the timed sequence and activate Light 4. Options: ON or OFF. Default: ON.

P011 Through P018 - Output Flash or Constant Mode

These settings determine whether each output turns on steady or flashes when active.

Program Step	Output	Default
P011	Output 1	CnST
P012	Output 2	CnST
P013	Output 3	CnST
P014	Output 4	CnST
P015	Output 5	CnST
P016	Output 6	CnST
P017	Output 7	CnST
P018	Output 8	CnST

Display	Meaning
CnST	Constant steady output
FLSH	Flashing output

Programming Examples

Two-Lane Timed Operation: P001 = 2, P002 = 003, P003 = 010, P004 = 010. Operation: Light 1 green for 10 seconds - all red for 3 seconds - Light 2 green for 10 seconds - all red for 3 seconds - repeat.

Four-Lane Timed Operation: P001 = 4, P002 = 005, P003-P006 = 015. Operation: Light 1 green - all red - Light 2 green - all red - Light 3 green - all red - Light 4 green - all red - repeat.

Flashing Red Outputs: Set P011, P013, P015, and P017 to FLSH if the red traffic-light outputs should flash when active.

Default Board Settings

Program Step	Default
P001	2 lanes
P002	003 seconds
P003-P006	010 seconds
P007-P010	ON
P011-P018	CnST

CAUTION: THIS IS AN ELECTRICAL CONTROL DEVICE AND SHOULD ONLY BE INSTALLED OR SERVICED BY AN EXPERIENCED TECHNICIAN.

Incorrect wiring can cause equipment damage, improper traffic-light operation, electrical hazards, bodily harm, and voided warranty. Do not apply voltage to trigger inputs. Trigger inputs are dry-contact inputs only.