washlink SYSTEMS

TImer Controller

Tech Guide

Document Revision: v1.0.1

18805 Adams Ct., #110 ~ Morgan Hill, CA 95037, USA ~ +1-408.924.0808 ~ www.washlinksystems.com ~ support@washlinksystems.com

WASHLINK SYSTEMS TIMER CONTROLLER TECH GUIDE

This document provides comprehensive operational procedures for the Washlink Systems Timer Controller (WSTC).
In this manual, we will discuss the Installation, Setup and Operation of the WSTC.

If further assistance is needed, please contact the Distributor from which the product was purchased.

When calling for assistance, you must have the following information available:

UL Number: _____

Distributor Name: _____

Operation Basics

When the input goes high for longer then the on delay timer, it will turn on the corresponding output for the duration of the time the input is high plus the off delay for that output

Input 1 operates output 1
Input 2 operates output 2
Input 3 operates output 3
Input 4 operates output 4

Note: All inputs have debounce on and debounce off controls

Note: All outputs have on delay and off delay timer controls

Installation

The Washlink Systems WSTC should be mounted securely to a stable and permanent wall.
Choose a location in the equipment room that is easily accessible and provides protection from the elements.

Power Requirements

The Washlink Systems WSTC requires 120vac (15A max) branch circuit protection for PLC.
This power circuit is provided by the customer.
This circuit should be connected to **Fuse 101 PLC**.

Warning:	All electrical work should be performed by a qualified and licensed electrician. All electrical work should meet or exceed National and Local codes and ordinances.
Warning:	Risk of electrical shock. More than one disconnect may be required to be de-energized before servicing equipment.
Warning:	To reduce the risk of fire, connect only to a 120vac circuit provided with 15a maximum branch circuit protection in accordance with the NEC, ANSI/NFPA 70 and local code authorities.
Warning:	Bonding between conduit connection is not automatic and must be provided as part of the installation.

Inputs

The WSTC Input power is supplied by the input power 24vac terminal.
All inputs are normally open.

Warning:	All Inputs are 24vacc. **Any other voltage will damage the Controller and void warranty.**
Note:	An interface relay may be needed to give the correct input contact type

Outputs

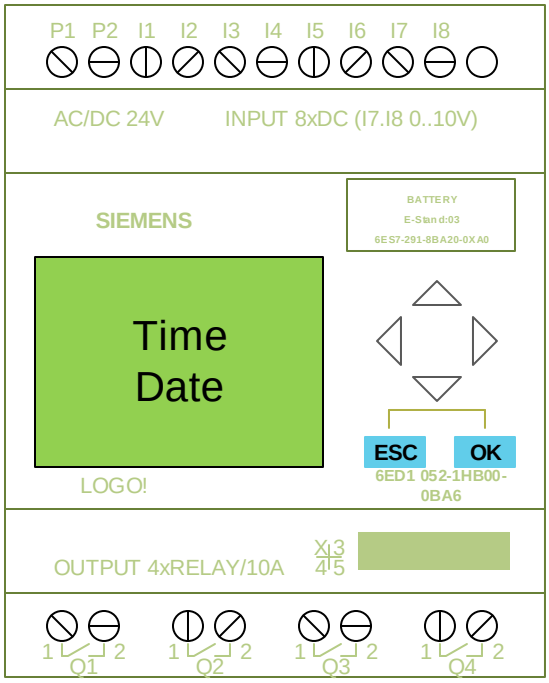
Each of the WSTC outputs have a double pole double throw isolation relay.
Each output relay has a test button as well as a manual override switch.
The green indicator light on each relay will be illuminated when coil power is present.
The devices to be wired to each relay are the responsibility of the customer.

INPUT	PLC INPUT TERMINAL	CONTACT TYPE	DESCRIPTION
1	I1	N.O.	Will operate output 1
2	I2	N.O.	Will operate output 2
3	I3	N.O.	Will operate output 3
4	I4	N.O.	Will operate output 4
5	I5	N.O.	Future
6	I6	N.O.	Future
7	I7	N.O.	Future
8	I8	N.O.	Future

FUNCTION	RELAY	PLC OUTPUT TERMINAL	DESCRIPTION
1	1	Q1	Turns on with input 1
2	2	Q2	Turns on with input 2
3	3	Q3	Turns on with input 3
4	4	Q4	Turns on with input 4

User Interface

The next page show how to use the HMI user interface, it will show the following;
-Adjust Time of Day Clock
-Adjust the Relay Timers
-Adjust the Operating Time Clock



Programming

To get into programming mode, press the ▼ button until the time and date screen appears. fig1
When the Time and Date screen appears, press the ESC button and the following screen will appear. fig2

fig1

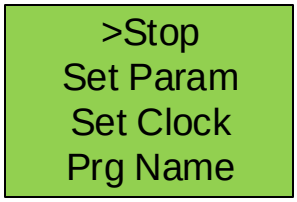


fig2

Setting Time & Date

Use the ▼ button and scroll to Set Clock and the press the OK button. fig2

Use the ◄► buttons to scroll between fields and adjust the values, then press OK . fig3

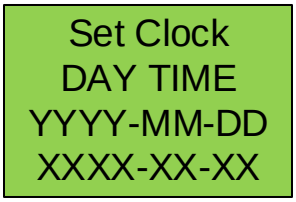


fig3

Setting Relay On Delay and Off Delay

Each input has a separate On Delay and Off Delay for the Relay it controls.
There are two settings;

On Delay, amount of time to delay before activating Relay.
Off Delay, amount of time the Relay is activated for after the input goes low.

<u>While in Programming Mode;</u>

Scroll using the ▼ button until you get to set Parm and then press the OK button. fig4

Use the ◄► buttons to scroll between fields and adjust the values, then press OK.

On Delay Time = T fig5
(if you want 2.0 seconds on delay T=02:00s)
Off Delay Time = T fig6
(if you want 0.5 seconds on delay T=00:50s)

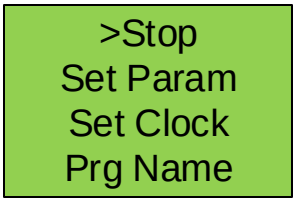


fig4

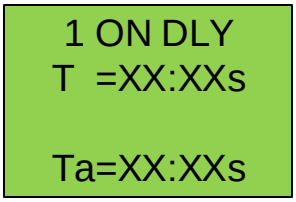


fig5

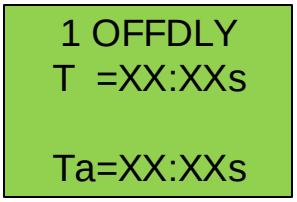


fig6

Programming Operating Time Clocks

The Time Clocks will allow you to set different operating times for different days of the week.
There are thee time clock and the settings are as follows;

D = what days of the week to enable the system
On = time of day to enable the system
Off = time of day to enable the system

While in Programming Mode;

Scroll using the ▼ button until you get to set Param and then press the OK button. fig7

Use the ◄ ► buttons to scroll between fields and adjust the values, then press OK. fig8

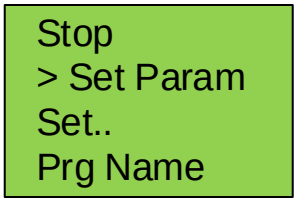


fig7

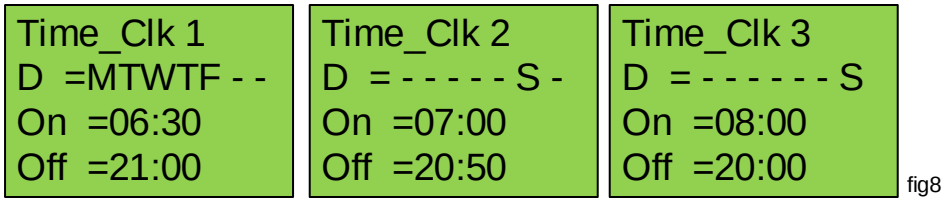


fig8

NOTE: Time_Clk 4 MUST have Pulse set to Off. Fig9

To exit the programming mode, press ESC unitl the time and date message screen appears. Fig10

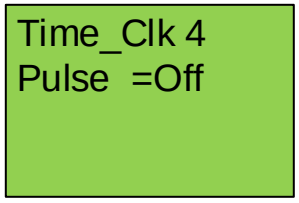


fig9

fig10