

# Control Panel Instructions

## Time & Date Settings and Contrast Adjustment

DCN: EIN-CP-SET-469

Rev: 9.1

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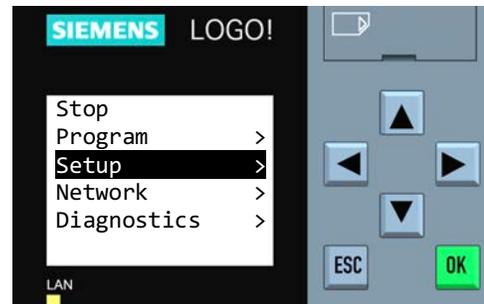
This line of control panels includes an easy-to-use programmable logic unit that incorporates many timing and logic functions. Setting the time and date is typically not required for panel operation, but if the clock is set, time stamps will be shown on alarm screens. The time and date can be set by following the instructions shown below. The readability of the display may vary with temperature and ambient light. If the screen is difficult to read, adjusting the contrast is recommended. Instructions for adjusting the contrast are shown on the next page.

To adjust the settings, use the four arrow keys located on the face of the unit (up, down, left, and right), along with the “ESC” key and the “OK” key. Follow the steps, below:

### Setting Time and Date:



**Step 1:** Press  $\blacktriangledown$  repeatedly until the display does not change. To begin the configuration process, press the “ESC” key.



**Step 2:** Press  $\blacktriangledown$  twice to select “Setup”. Then press the “OK” key.

**Warning:** Do not select “Stop”. Doing so may erase the panel programming. If this is selected by accident, press the “ESC” key to cancel.



**Step 3:** Press  $\blacktriangledown$  twice to select “Clock” and then press “OK”.

**Warning:** Do not select “Switch to OP”. Doing so will remove the ability to set the clock. If this is selected by accident, the password to set the mode back to ADMIN is “LOGO”.



**Step 4:** Press  $\blacktriangledown$  to select “Clock” and then press “OK”.



**Step 5:** To select the value to be changed, press ◀ or ▶. To change a value, press ▲ or ▼. When finished, press the “OK” key.

**Note:** Time is in military format.

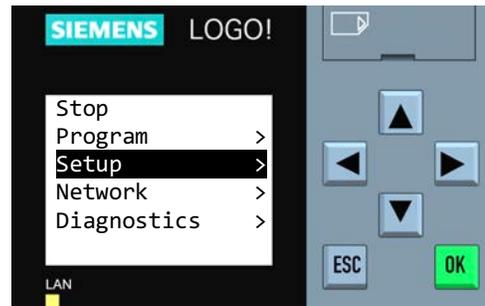


**Step 6:** Exit by pressing the “ESC” key three times. Then press the “OK” key.

### Changing LCD Settings:



**Step 1:** Press ▼ repeatedly until the display does not change. To begin the configuration process, press the “ESC” key.



**Step 2:** Press ▼ twice to select “Setup”. Then press the “OK” key.

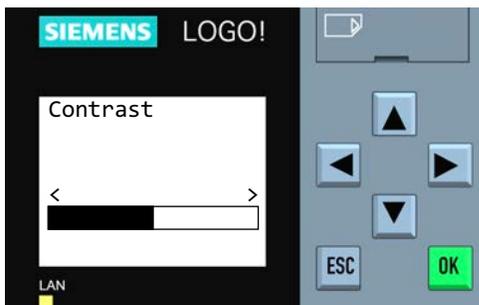
**Warning:** Do not select “Stop”. Doing so may erase the panel programming. If this is selected by accident, press the “ESC” key to cancel.



**Step 3:** Press ▼ three times to select “LCD” and then press “OK”.



**Step 4:** Press “OK” to select “Contrast”.



**Step 5:** To adjust the contrast, press ◀ or ▶. When finished, press the “OK” key.



**Step 6:** Exit by pressing the “ESC” key three times.

# EAS-PLCS1 PTROTS LAA UV Setting Inst.

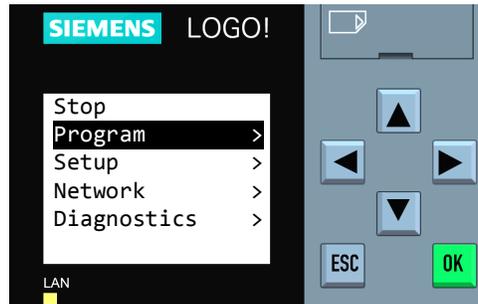
This control panel includes an easy-to-use programmable logic unit that incorporates many timing and logic functions. Some operational parameters may need changing for your particular application. The following block types have been used with your control panel:

Block Names	Description	Factory Default	Time Range	Block Type
HL Alm Delay	High Level Alarm Delay	5 seconds	MM:SS	Timer
Off Time	Timer Off Time	60 minutes	MM:SS	Timer
On Time	Timer On Time	40 seconds	MM:SS	Timer
Ovr Off Time	Override Timer Off Time	30 minutes	MM:SS	Timer
Ovr On Time	Override Timer On Time	40 seconds	MM:SS	Timer
Min Ovr Time	Minimum Override Time	90 minutes	MM:SS	Timer

## Changing Adjustable Parameter Blocks:



**Step 1:** Press ▼ repeatedly until the display does not change. To begin the configuration process, press the “ESC” key.



**Step 2:** Press ▼ on the unit to select “Program”. Then press the “OK” key.

**Warning:** Do not select “Stop”. Doing so may erase the panel programming. If this is selected by accident, press the “ESC” key to cancel.



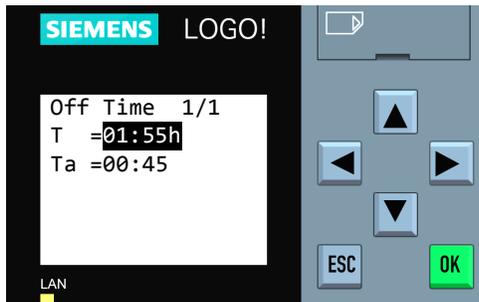
**Step 3:** Press “OK” to select “Set Parameter”.



**Step 4:** Press ▲ or ▼ to select the desired parameter to adjust and press “OK”. Continue to **Step 5** on the following pages for the specific block type being edited.

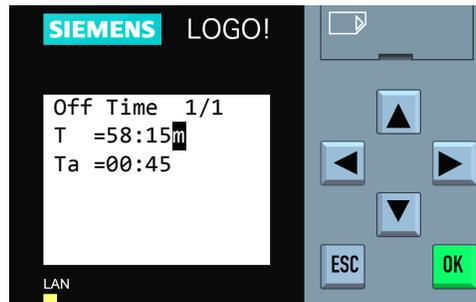
## Changing Adjustable Parameter Timer Blocks:

Timer blocks have three time base units that can be used; s = seconds, m = minutes, h = hours. If an **h** appears after the timer setting then the time will be HH:MM (e.g. 01:55h = 1 hour and 55 minutes). If an **m** appears after the timer setting then the time will be MM:SS (e.g. 05:00m = 5 minutes and 0 seconds). If an **s** appears after the timer setting then the time will be SS.ss (e.g. 25:13s = 25.13 seconds).



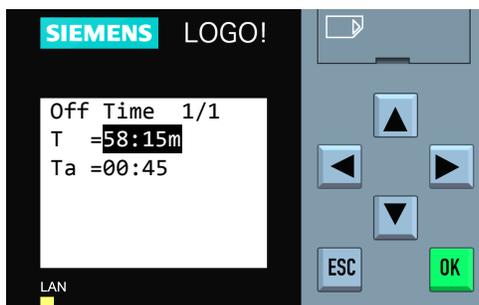
**Step 5:** The first line indicates the set value for the parameter. In this example, the set time is 1 hour and 55 minutes, “**T=01:55h.**” To change the set value for the parameter, press the “**OK**” key.

The second line indicates, in real time, how much time has elapsed for the cycle that is currently in process. The current value of the parameter is 45 minutes, “**Ta=00:45.**”



**Step 6:** The cursor will blink in the set value. To select the digit to be changed, press ◀ or ▶. To change the value of a digit, press ▲ or ▼.

In this example, the set value has been changed from 1 hour and 55 minutes to 58 minutes and 15 seconds. (The timebase can be changed from hours = h to minutes = m or seconds = s by moving the cursor to the far right and pressing ▲ or ▼).



**Step 7:** When the desired time value has been entered, press the “**OK**” key. The new time value will now be in effect.



**Step 8:** To edit additional parameters, go back to the parameter list by pressing the “**ESC**” key once and return to **Step 4**. When all edits are complete, exit parameter mode by pressing the “**ESC**” key four times.

# EAS-PLCS Reference Chart

Program Code: MI103-80

## Input Functions (Timed Dose):

1. RO & Low Level Alarm Float
2. Timer On & Off Float
3. Override Timer On & Off Float
4. High Level Alarm Float
5. Push to Silence
6. UV Fault
7. Alarm Test Switch
8. Low Air Switch

## Conditions for activation:

Float in up position  
Float in up position  
Float in up position  
Float in up position  
Pushbutton is pressed  
UV unit is operating properly  
Test switch is activated  
Air pressure is low

## Output Functions:

1. Pump
2. Level Light
3. Audible Alarm
4. General Alarm

## Condition for activation:

Pump is called to run  
Alarm light is activated  
Audible alarm is activated  
Alarm condition exists

## Built In Screens:

Built in screens include: time & date, digital inputs, and digital outputs. To view these screens, press the down arrow repeatedly until a built in screen appears, then use the left and right arrow keys to change between screens.

## Alarm and System Data Screens:

Alarm screens appear during alarm conditions. System data screens include float status, pump run data, and alarm activity. Screens with a "T" in the lower right contain totalized values. Screens with a "R" in the lower right contain resettable values. To change between these screens, press the up and down arrow keys.

## Selecting Blocks for Viewing or Adjusting:

To begin the process to set parameters, press the down arrow repeatedly until the last screen is shown, then press 'ESC'.

<b>Parameter Name:</b>	<b>Description:</b>	<b>Time Range:</b>	<b>Block Type:</b>
HL Alm Delay	High Level Alarm Delay	MM:SS	Timer
Off Time	Timer Off Time	MM:SS	Timer
On Time	Timer On Time	MM:SS	Timer
Ovr Off Time	Override Timer Off Time	MM:SS	Timer
Ovr On Time	Override Timer On Time	MM:SS	Timer
Min Ovr Time	Minimum Override Time	MM:SS	Timer

# EAS-PLCS1 PTROTS LAA UV Operation

This control panel includes an easy-to-use programmable logic unit that incorporates many timing and logic functions. This document describes the operation of the panel.

## Alarm and Data Screens:

Alarm and data screens have been included with the panel to assist with panel monitoring and troubleshooting. The following alarm and data screens have been included in your panel. Navigation between the screens is accomplished by using the up and down arrow keys. See “Screen Navigation” section for more details.

Screen	Description	Data Type*
<b>Alarm Screens†</b>		
1	High level alarm	
2	Low air alarm	
3	UV failure alarm	
4	Low level alarm	
<b>Data Screens</b>		
5	Float status (default screen, see fig 1)	
6	Pump cycles at top of screen and pump run time beneath	T
7	High level alarms at top of screen and low level alarms beneath	T
8	Override cycles at top of screen and timer float events beneath	T
9	Power faults at top of screen and hours in service beneath	T
10	Pump cycles at top of screen and pump run time beneath	R
11	High level alarms at top of screen and low level alarms beneath	R
12	Override cycles at top of screen and timer float events beneath	R
13	Power faults at top of screen and time since reset beneath	R

† Alarm screens will only be displayed when alarms are active and include a date and time stamp of when the alarm started.

\* Screens with “T” in the lower right corner have totalized values for the data. Screens with “R” in the lower right corner have resettable data and display the accumulated values since the last reset. To reset the accumulated values, hold the silence button on the panel for 10 seconds.

## Float Status and Timer Mode Screen:

This default screen will display the condition of the floats. If the floats are lifted out of sequence, this screen will display “Float Error” while showing the float status.

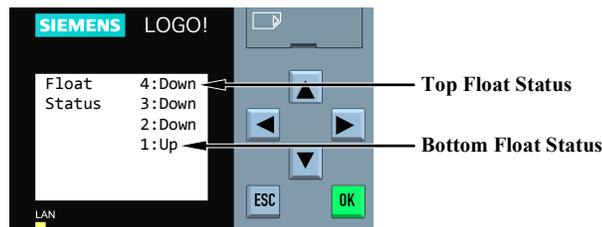


Figure 1. Float Status and Timer Mode Screen

## Digital Input and Digital Output Screens:

The unit will activate various inputs and outputs as it operates (see Figure 2).

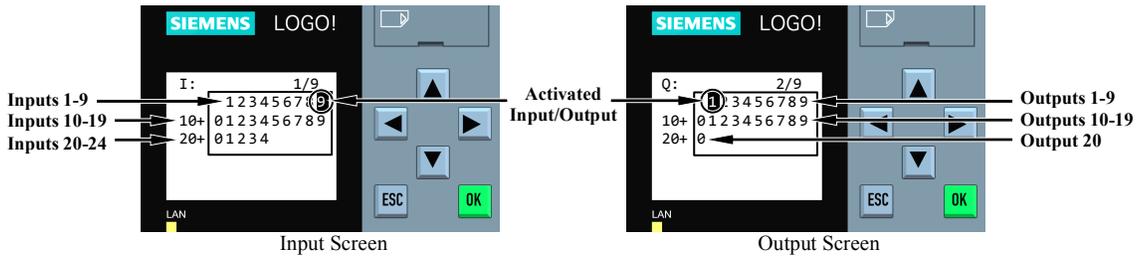


Figure 2. Input & Output Screens

Knowing what conditions cause the inputs and outputs to activate can be a helpful installation and troubleshooting tool. The input functions will vary based on the mode of operation of the panel. The following inputs and outputs have been used with your panel:

#	Functions:	Activation Conditions:
<b>Inputs</b>		
1	Redundant Off & Low Level Alarm Float	Float in up position
2	Timer On & Off Float	Float in up position
3	Override Timer On & Off Float	Float in up position
4	High Level Alarm Float	Float in up position
5	Push To Silence	Pushbutton is pressed
6	UV Status	UV unit is operating properly
7	Alarm Test Switch	Test switch is activated
8	Low Air Switch	Air pressure is low
<b>Outputs</b>		
1	Pump	Pump is called to run
2	Level Alarm Light	Level Alarm Light is activated
3	Audible Alarm	Audible Alarm is activated
4	General Alarm	Alarm condition exists

## Screen Navigation:

The screens are arranged in the order shown in Figure 3 below. To move between screens, use the four arrow keys. The screens of interest are shown in bold. Additional built-in screens will be present, but do not contain useful information.

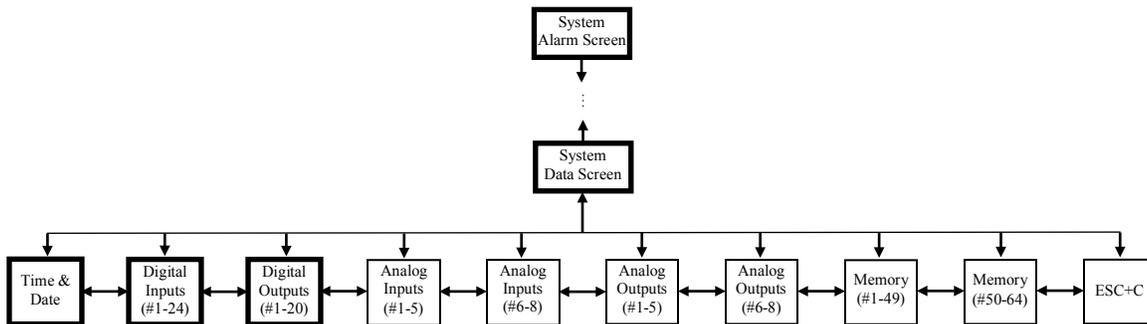


Figure 3. Screen Layout

## **Panel Operation:**

Your control panel can perform the float functions listed below. Depending on the number of floats for your application, some functions may be omitted or combined. See the “Setting Instructions” for this panel for information on how to change the adjustable parameters.

**High Level Alarm:** This float activates the alarm light (steady) and audible alarm when lifted for longer than the high level alarm delay. The audible alarm may be silenced by pressing the illuminated PUSH TO SILENCE button on the front of the control panel. The alarm light (steady) will remain on until the float is lowered, and the audible alarm will reactivate in 12 hours if condition is not corrected.

**Override Timer On & Off (Optional):** This float activates the override timer function when lifted for more than two seconds. This timer function controls the pump cycles during high flow conditions. The override timer function will remain active until the float has lowered and the override timer minimum run time is completed. When the override timer function has been completed, normal timer operation will resume.

**Timer On & Off:** This float activates the timer function when lifted. The timer will be activated while the float is up and will be deactivated 30 seconds after the float is lowered. This timer function controls the pump cycles during normal flow conditions. Note: The timer will start with its off cycle.

**Redundant Off & Low Level Alarm:** This float turns off the pump when lowered for more than two seconds. This float is a secondary off float, which will operate if the Timer On & Off float fails. Pumping will be disabled in both the automatic and manual modes. This float also activates the alarm light (steady) and audible alarm. The audible alarm may be silenced by pressing the illuminated PUSH TO SILENCE button on the front of the control panel. The alarm light will remain on until the float is lifted, and the audible alarm will reactivate in 12 hours if condition is not corrected.

**UV Failure Alarm:** The contact input from a remote UV unit should maintain a closed contact. When the contact opens, it activates the alarm light (flashing) and audible alarm. The audible alarm may be silenced by pressing the illuminated PUSH TO SILENCE button on the front of the control panel. The alarm light will remain flashing until the condition is corrected.

**Low Air Alarm:** The air switch should maintain an open contact when air flow is normal. When a low air condition is detected, the contact closes and activates the alarm light (flashing) and audible alarm. The audible alarm may be silenced by pressing the illuminated PUSH TO SILENCE button on the front of the control panel. The alarm light will remain flashing until the condition is corrected.