

INITIAL START UP (Time Set Menu)

On power up, enter the current **DATE** and **TIME**

- NOTE:** 1) The **CYCLE TIMER** must be "OFF" prior to making changes to scheduler settings
2) The **CYCLE TIMER** must be turned "ON" after changes have been implemented

SCHEDULER SETTINGS (Cycle Timer Set Menu)1) **CYCLES PER DAY** (# of Starts per Day)

- The number of times a day (or within the cycle window) the engine starts
- The minimum setting is one, maximum setting is 24

2) **RUN DURATION**

- Period of time engine runs for each cycle
- Minimum setting is 6 minutes

3) **RUN DAYS**

- Days of the week for which the scheduler is active
- Each day selected independently

4) **CYCLE WINDOW**

- Period of time during a day (24 hour period) when the scheduler is active
- The default time is 12:00am to 11:59pm
- The window can be limited to a smaller range such as 9:00am to 5:00pm

OPERATION

- 1) With the **CYCLE TIMER** (ON), the controller starts and runs engine according to selected routine.
- 2) With **CYCLE TIMER** (OFF), the controller is in "Manual" mode.
 - In "Manual" mode, the engine is started by pressing the ENTER button as instructed on the display
 - The engine is stopped by pressing the ENTER button as instructed on the display
- 3) A manual engine shutdown **DISABLES** the **CYCLE TIMER**. The **CYCLE TIMER** must be turned (ON) to re-activate the auto start routine.

SLEEP MODE

- 1) In both "Manual" and "CYCLE TIMER" modes, the controller goes into a **SLEEP MODE** after 2 minutes to reduce power consumption.
- 2) In **SLEEP MODE**, the display goes blank and the yellow or red LED blinks every 10 seconds.
 - In "Manual" mode, the yellow LED blinks every 10 seconds
 - In "CYCLE TIMER" mode, the red LED blinks every 10 seconds
- 3) Pressing any of the buttons wakes the controller and turns on the display.
- 4) The controller wakes to start and run the engine according to the selected routine.

MENU ACCESS AND NAVIGATION**ENTER MENU**

Hold down MENU button and press ENTER button to access menus

NAVIGATE MENU

Press the MENU button to scroll available menu
Press the UP button to enter a menu
Press the DOWN button to reverse direction
Press the ENTER button to select a menu setting

EXIT MENU

Hold down MENU button and press ENTER button to exit menu

AVAILABLE MENUS

Fault Clear Menu - Clear faults

Cycle Timer Set Menu - Scheduler Settings

Cycle Timer Enable (ON/OFF)

(NOTE: Turn ON after any setting changes or fault resets)

Cycles per Day

Run Duration

Run Day of the Week (ON/OFF)

Cycle Window Start Time

Cycle Window End Time

Time Set Menu - Set Current Day and Time

Day (Select Day)

Clock Time (Enter Current Time)

Module Configuration Menu (Password Protected)

Display Contrast %

Display Backlight %

Hourmeter

Output Relay Setup Menus

Auto Start Configuration Menu (Password Protected)

Auto Start Delay Period

Pre Heat Time

Crank Time

Rest Time

Crank Cycles

Fault Bypass Period

FAULTS

- 1) Fault shut downs for Low Oil Pressure, High Water Temp, Over Crank
- 2) A **FAULT RESET** is required to clear faults (Fault Clear Menu)
- 3) The **CYCLE TIMER** needs to be turned (ON) after a fault is cleared

EXAMPLE #1 (Current Day = Monday, Current Time is 1:15pm)

- 1) 12 starts per day
- 2) 30 minute run time
- 3) Cycle Window = 12:00am to 11:59pm
- 4) Operate 7 days a week (M,T,W,Th, F, S, Su)

The controller starts the engine 12 times per day or every two hours. The engine runs for 30 minutes per start. The start times are 12:00am, 2:00am, 4:00am, 6:00am, 8:00am, 10:00am, 12:00noon, 2:00pm, 4:00pm, 6:00pm, 8:00pm and 10:00pm. This routine continues 7 days a week. With a current time of 1:15pm the next start time is 2:00pm.

Day	12mid	1am	2am	3am	4am	5am	6am	7am	8am	9am	10am	11am	12noon	1pm	2pm	3pm	4pm	5pm	6pm	7pm	8pm	9pm	10pm	11pm
Monday	█		█		█		█		█		█		█		█		█		█		█		█	
Tuesday	█		█		█		█		█		█		█		█		█		█		█		█	
Wednesday	█		█		█		█		█		█		█		█		█		█		█		█	
Thursday	█		█		█		█		█		█		█		█		█		█		█		█	
Friday	█		█		█		█		█		█		█		█		█		█		█		█	
Saturday	█		█		█		█		█		█		█		█		█		█		█		█	
Sunday	█		█		█		█		█		█		█		█		█		█		█		█	

Run Time █

Set Up Time
1:15pm

First Cycle
Starts at 2:00pm

EXAMPLE #2 (Current Day = Monday, Current Time = 1:15pm)

- 1) 8 starts per day
- 2) 30 minute run time
- 3) Cycle Window = 9:00am to 5:00pm
- 4) Operate Monday through Friday only (M,T,W,Th, F)

The controller starts the engine 8 times per day between the hours of 9:00am and 5:00pm. The engine runs for 30 minutes per start. The start times are 9:00am, 10:00am, 11:00am, 12:00noon, 1:00pm, 2:00pm, 3:00pm and 4:00pm. The routine is active only from Monday through Friday. With a current time of 1:15pm, the next start time is 2:00pm.

Day	12mid	1am	2am	3am	4am	5am	6am	7am	8am	9am	10am	11am	12noon	1pm	2pm	3pm	4pm	5pm	6pm	7pm	8pm	9pm	10pm	11pm
Monday										█	█	█	█	█	█	█								
Tuesday										█	█	█	█	█	█	█								
Wednesday										█	█	█	█	█	█	█								
Thursday										█	█	█	█	█	█	█								
Friday										█	█	█	█	█	█	█								
Saturday																								
Sunday																								

Run Time █

Set Up Time
1:15pm

First Cycle
Starts at 2:00pm

