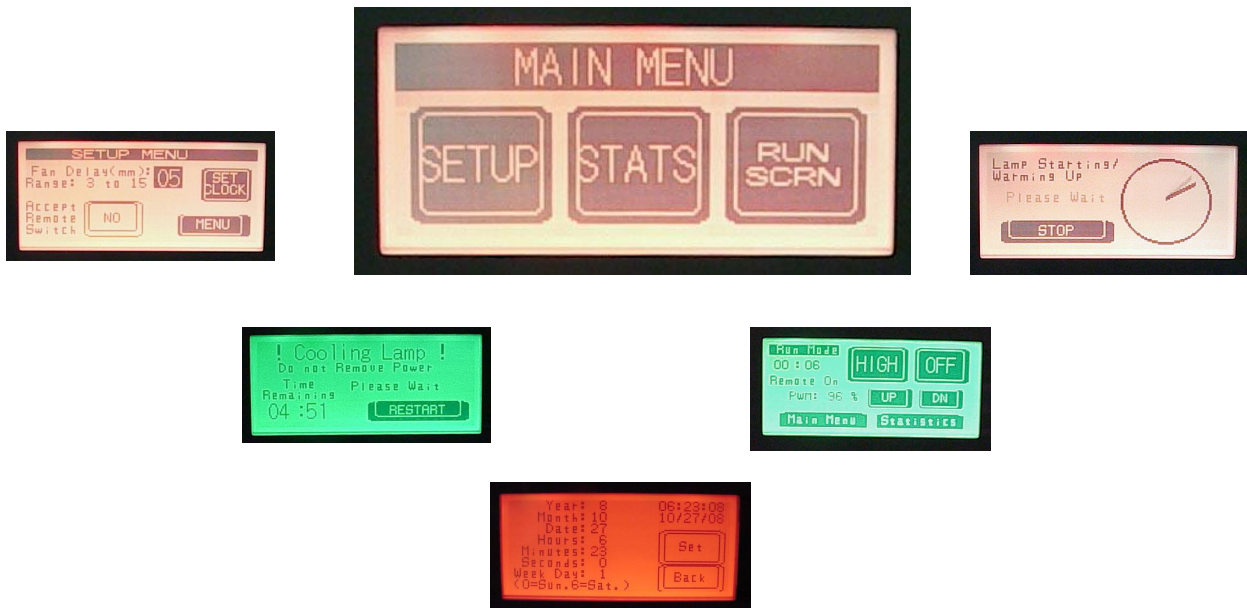


PLC Touch Screen

Quick Start User's Guide



Please refer to the Users guide for the VersaCure system for installation of lamp and lamp housing orientation.

After complete, refer to this guide for information on the operation of our optional PLC Touch Screen Control.

GETTING STARTED

Connect power cable to power outlet and connect yellow lamp cable to lamp housing.



Locate Main Power Switch (rear panel)

Switch on Main Power. You should hear the power supply fan start, and also the main PLC screen should illuminate.

After the Boot Screen, the following Main Menu will appear:



From this interface you can access three functions:

- Setup (Operator Customization)
- Stats (Statistical Job Data)
- Start Lamp (turns on the UV Lamp)

SETUP MENU

Touch Setup on the MAIN MENU and the following display is shown:



From here you can adjust and set;

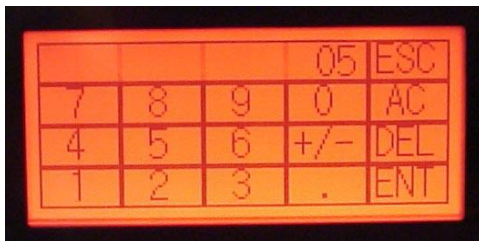
- Lamp Housing Fan Off Timer
- Set the Clock
- Accept Remote Switching for On Off

Lamp Housing Fan Off Timer

(This is factory preset for 5 minutes.)

When the lamp is switched off, the Lamp Housing Cooling Fan will remain on for the preset amount of time. Adjusting this time higher will help if you are having re-strike issues with hot lamps. Medium Pressure Mercury Vapor Lamps do not hot re-strike, so they need to be adequately cooled prior to attempting. Failure to do so will result in reduced lamp life and possible Lamp Failure Alarms.

To adjust the time, simply touch the time currently shown in the black box to open the numerical input screen. (time is in minutes, from 1 – 15)



- Type the new number and touch Enter (ENT).
 - *This will return you to previous menu*
- To return without changing touch Escape (ESC)
 - *This will return you to previous menu*
- To correct a single digit mistyped, touch Delete (DEL)
- All Clear(AC) to remove entire numeric input (multiple digits)

SET CLOCK



Selecting this will take you to the Clock Setup Screen



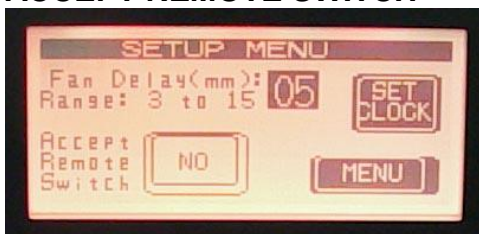
Touch the number in any row that you wish to change, and the Numerical input screen will open again.

The format is numeric as follows:

| | | | |
|-------------|---|----------------|---------------------------------------|
| Year input | 00 – 99 | for display of | xx/xx/00 – xx/xx/99 (assumes =/>2000) |
| Month input | 01 – 12 | for display of | 01/xx/xx – 12/xx/xx |
| Date input | 01 – 31 | for display of | xx/01/xx – xx/31/xx |
| Hours | 00 – 23 | for display of | 00:xx:xx – 23:xx:xx |
| Minutes | 00 – 59 | for display of | xx:00:xx – xx:59:xx |
| Seconds | 00 – 59 | for display of | xx:xx:00 – xx:xx:59 |
| Weekday | 0=Sun / 1=Mon / 2=Tue / 3=Wed / 4=Thu / 5=Fri / 6=Sat | | |

- Set** will accept your entries and modify the time and or date
- Back** will leave without changes and return to previous menu

ACCEPT REMOTE SWITCH



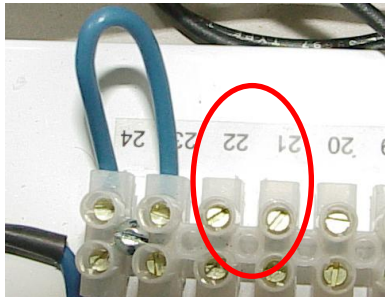
You have the ability to either allow remote switching or prevent. By touching the button next to Accept Remote Switch, it will toggle between Yes or No

Remote Switching Continued

If Yes is selected, the touch screen Lamp On button will be active and also a remote switch terminal will be active. You can switch on and off at either location when Yes is selected.

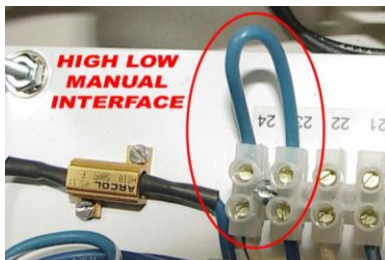
Inside the Power supply, a momentary signal needs to be seen across points (21,22) to make the action occur

(To access the inside of the power supply please refer to POWER SUPPLY ACCESS section at the end of this manual)



If No is selected, the state of 21/22 will be ignored and lamp On Off will only be available from the touch screen.

Another useful terminal interface is remote High Low dimming.



You can activate High or Low from the touch screen during lamp operation (see the “operating your lamp” section) or you can also switch the lamp setting remotely to toggle between High and Low using terminals 23/24

An example for use of this circuit would be for shuttered lamp housings. Our shuttered lamp housings use a pneumatic cylinder to actuate the shutters. We do not furnish an air source or an air solenoid switch to instruct the shutters when to open or close. Since this is integrated by you, that same signal used to close the shutter doors should be used to send a momentary signal to 23/24. Then, when you open the shutter doors, the switch at 23/24 should again receive a momentary signal, to return the power setting to that of the main panel.

WARNING: If a momentary remote switch is added to the High Low, there is no override available in the touch screen menu to disable the remote switch. Also, because this is an extension of the panel control, it only switches the current condition to the opposite condition. Therefore, if using the remote High Low as intended (to switch to low power when shutters close) ensure that during normal operation with Shutters Open the High Low setting on the panel is NEVER switched to LOW on the Panel. Doing so would mean that when the shutters close, the lamp will go to High Power, instead of Low Power, resulting in possible equipment damage.

MAIN MENU



STATS

By touching STATS you enter the Statistical data counters screen



COUNTER MENU

LAMP LIFE



By touching LAMP LIFE on the COUNTER MENU you will go to the LAMP LIFE timer. This should be reset to "0" (zero) whenever you install a new lamp. This timer helps you keep track of the operating hours on your lamp for replacement and maintenance scheduling.

To reset, hold the Reset button for 3 seconds, until the Life counter clears.
To return to Previous Menu, touch RETURN.

COUNTERS

Another useful user data function is the counters menu



These counters are not user adjustable and will self zero, (they are for information only.)

JOB Total time the system has been in use during this power on cycle.
It will clear/reset upon main power off.

Daily Total time the system has been operated in the past 24 hours 0:00 AM to 23:59 PM

Weekly Total time the system has been in operation Sunday through Saturday.

Monthly Total time the system has been in operation for the current month.

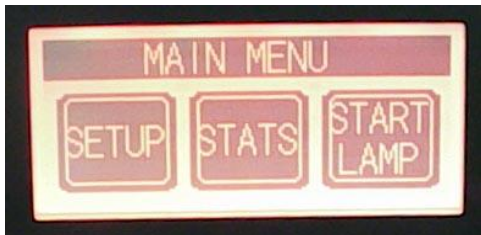
OPERATING YOUR LAMP

Be sure that;

- Power cable is plugged into proper power outlet
- Lamp is installed in the lamp housing
- Yellow quick disconnect cable is connected to lamp housing

If you need assistance with lamp housing preparation, and or lamp installation, please refer to the VersaCure system Users Guide.

Turn on main Power



When ready, touch START LAMP



At this point lamp ignition and startup is automated, the lamp starting screen is displayed and the lamp should have ignited and is warming up. (the lamp cooling fan will not be running, this will begin automatically once the lamp is warmed up.

In the event of an ignition failure, the power supply will automatically attempt re-strike. The screen will not change during this process.

If the lamp strike is successful, the power supply screen will change green and the display turns into the Run Screen Display (Below left) but, if the lamp fails to ignite after about 2 minutes the Lamp Fail Screen Display will be shown (Below right). Shortly after the green screen appears, the lamp fan will also start.



RUN MODE

Once the lamp is ignited and warmed up, the power supply allows user interaction with the lamp for control of intensity.



The Run Mode Screen provides the following adjustments:

Variable Lamp output from 40% to 100% (full power 100% is the same as 96%)

The set value is displayed on the screen above next to “PWM:” In the example above, the display shows 96% which is full power. PWM is the type of control signal that modifies the lamp output. (Pulse Width Modulation)

Power Adjustment Values:

| Analog Range | Digital Output |
|--------------|-----------------|
| 40% | Low Power Limit |
| 41 – 45% | 45% Power Level |
| 46 – 50% | 50% |
| 51 – 55% | 55% |
| 56 – 60% | 60% |
| 61 – 65% | 65% |
| 66 – 70% | 70% |
| 71 – 75% | 75% |
| 76 – 80% | 80% |
| 81 – 85% | 85% |
| 86 – 90% | 90% |
| 91 – 95% | 95% |
| 96 – 100% | 100% |

So in actuality, the lamp intensity is not fluid as it would be in an analog environment, it increases in 5% steps. In other words 46, 47, 48, 49 and 50 on the display are all actually 50% light output.

To adjust lamp intensity, you touch either the UP or DN Key.

Instant LOW power

To toggle between HIGH Power and LOW Power, you use the HIGH LOW Key

As shown above, the power supply is currently on HIGH power. Touching this key will switch the power supply to LOW power (and the key now will display LOW)

IMPORTANT NOTES:

When you make adjustments to the output of the lamp using the UP and DN Keys, this value is your HIGH power limit setting. 40% is always the default LOW power limit.

Therefore Toggling between HIGH and LOW does not mean between 40% and 100%, it means toggling between 40% and the upper user preset limit.



RUN MODE – Important Notes, Continued

If the user sets the Variable output to 40%, then HIGH LOW will have no effect.
 If the user sets the Variable output to 70%, then HIGH LOW Toggles between 40% and 70%

If the HIGH LOW Key displays LOW, adjusting the UP DN will have no effect on the lamp, until the Key is switched back to HIGH

ADDITIONAL MENU NAVIGATION

On the Run Mode Screen, there are two additional selections Main Menu and Statistics.

By Touching Main Menu, the Lamp will remain on but you can browse to other menus. When the lamp is on the Main Menu will look like this:



A Button called RUN SCR� replaces the Start Lamp button. Since the lamp is already started, you would select RUN SCR� to return to the Run Mode Screen.

STATS and SETUP are the same as previously described.



From the Run Mode Screen you can also quickly access Statistics by selecting that menu option.

And finally to shut off the lamp, select OFF

RUN MODE – Continued

After you select OFF, another screen will appear:



As described on page 3, you can set the Lamp Cool down Fan timer anywhere from 1 – 15 minutes.

When you shut the lamp off, leave the main power on until the cooldown time has elapsed. Once it completes its cooling cycle, you can safely shut down the main power, or restart the lamp.

WARNING: Never try to restart a hot UV lamp. These types of lamps will not hot re-strike, but the power supply will be happy to try.

Unsuccessful ignitions cause carbon deposits to build up on the lamps electrodes, resulting in premature failure.

POWER SUPPLY ACCESS

Inside the power supply is a fuse which if blown will require opening to box to change.

To open the box:

1. Remove the 4 corner screws from the back panel.
2. With the back panel completely loose, grab the handle on the top of the power supply and pull back toward the back panel. It will slide out of the channel in the front frame and you can now lift off the entire black shroud.