

6.6.4 UV Control System

The UV disinfection system is controlled by a local control panel dedicated to the UV system. The panel has a touchscreen interface for monitoring the operation of the UV system as well as change setpoints. No control of the UV system is provided through SCADA. This section provides an overview of the control screens at the UV system local control panel. For additional details, go to the UV System Manufacturers Manual.

UV Disinfection System Control Screens

The UV disinfection System is controlled through the local control panel located in the UV building. This panel communicates with a PLC located in the UV Building control room to provide the monitoring of the UV system within SCADA.

Navigation Screen

The Main Screen of the UV system is the navigation screen (**Figure 6.6.4-1**). This screen is a touchscreen so access to each of the control and monitoring screens is done by touching the appropriate button.

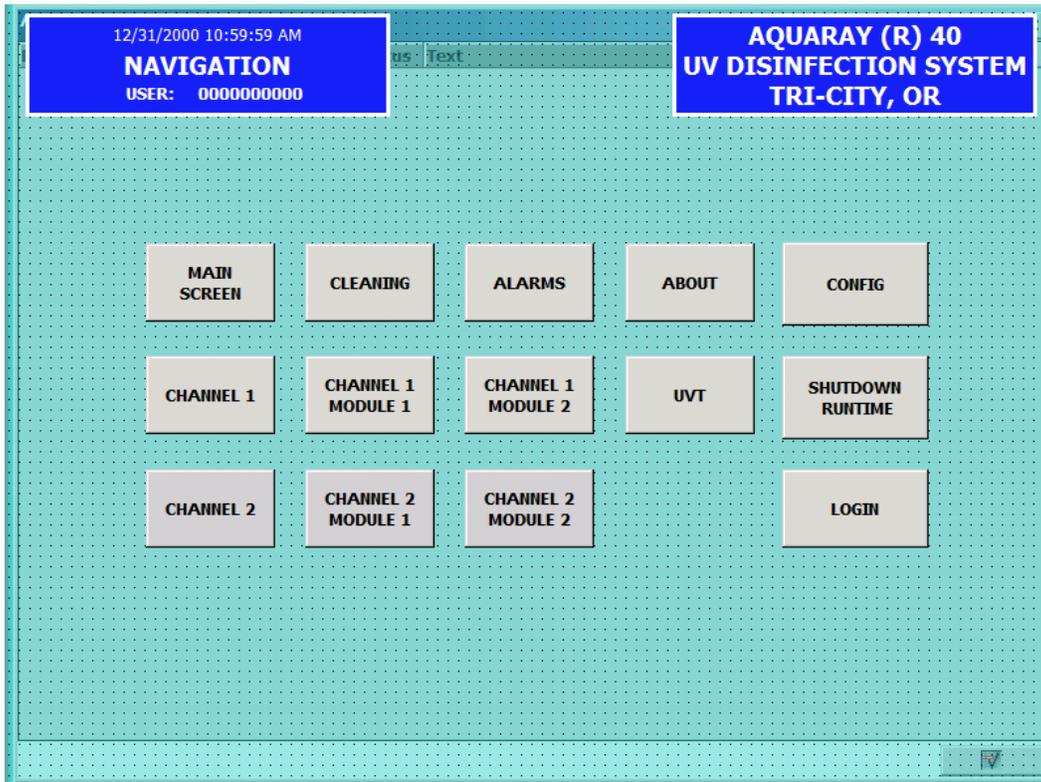


Figure 6.6.4-1 – UV System Navigation Screen

UV Disinfection Main Screen

The Main Screen (**Figure 6.6.4-2**) is accessed by touching the Main Screen button. This screen shows the status of each of the screen channels, the flow through each channel and the number of rows of lights that are on in each channel.

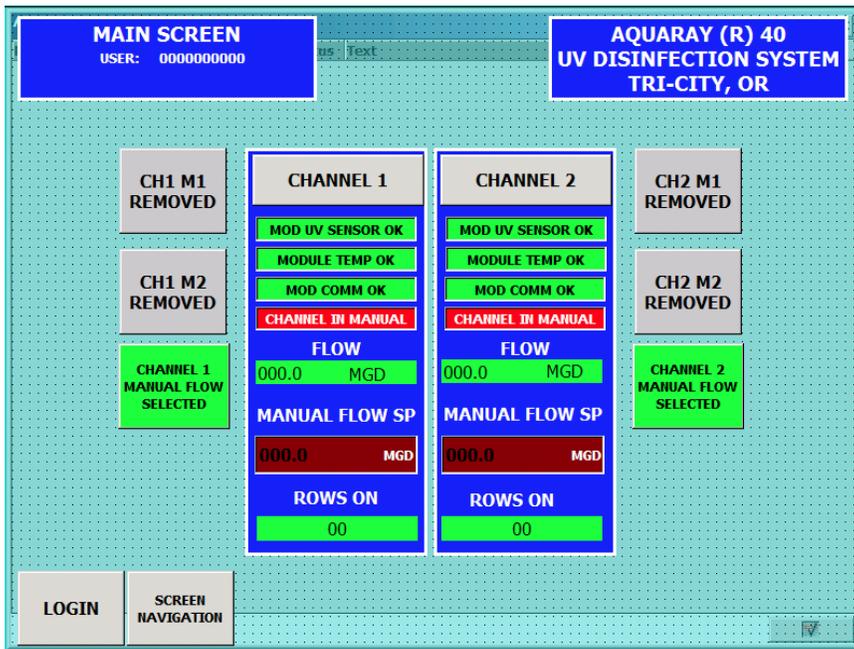


Figure 6.6.4-2 – Main Screen

UV Disinfection Channel Screen

The channel screen provides a summary of the units in the channel. The screen shows the number of rows of lights that are on and the number of lights that are out as shown in **Figure 6.6.4-3**.

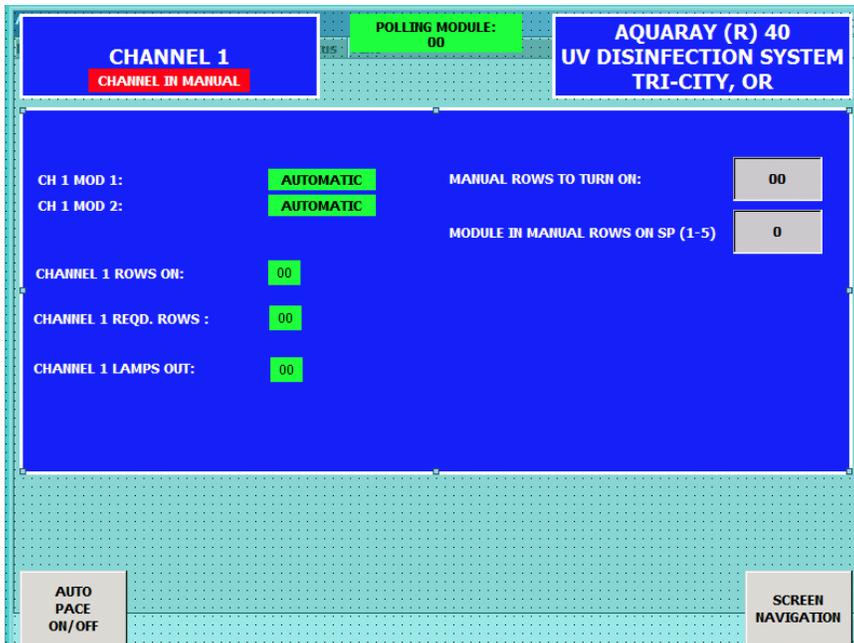


Figure 6.6.4-3 – Channel Screen

UV Disinfection Module Screen

The module screen (**Figure 6.6.4-4**) provides the most detailed information for each of the UV modules. On this screen, the status of each of the lamps is shown. If the lamp is currently on, the lamp will be red. In addition, the number of ON/OFF cycles and the

total hours on each lamp is shown. If there is a communication failure with the DCA card, this will be shown with the Row communication failure alarm.

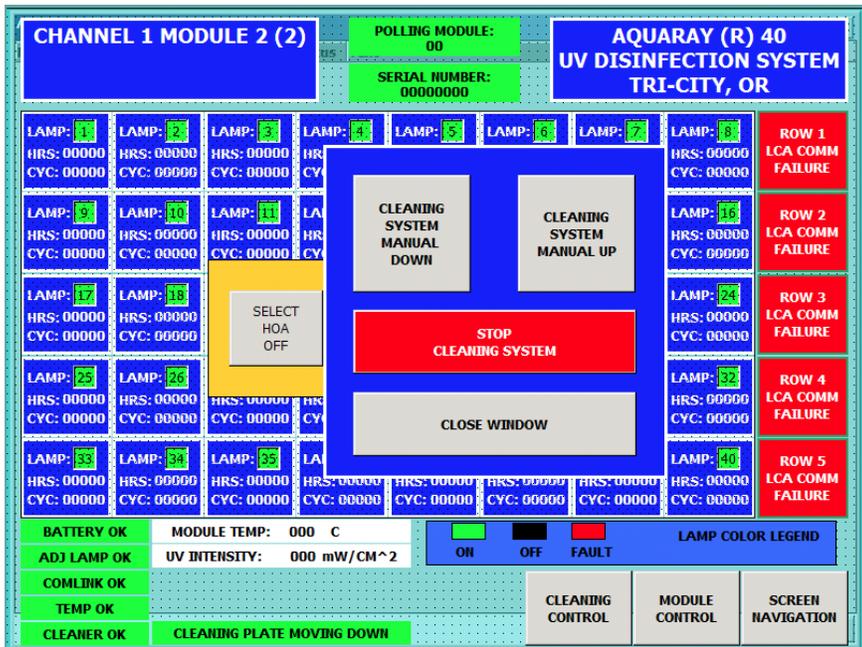


Figure 6.6.4-4 – Module Screen

UV Dosage Screen

The dosage screen (**Figure 6.6.4-5**) is where the UV dosage is set. The first option is to set the dosage to local or SCADA **<1>**. This button set the dosage to be controlled by the local set point when in local or by the SCADA Set point with dosage is set to REMOTE.

The UV selection button **<2>** provides the option to set the UV Transmittance input to the control system to the UV Transmittance Analyzer when set to AUTO and to a local set-point when in LOCAL. The LOCAL UV Transmittance set-point is entered into the Manual UV% input box **<3>**.

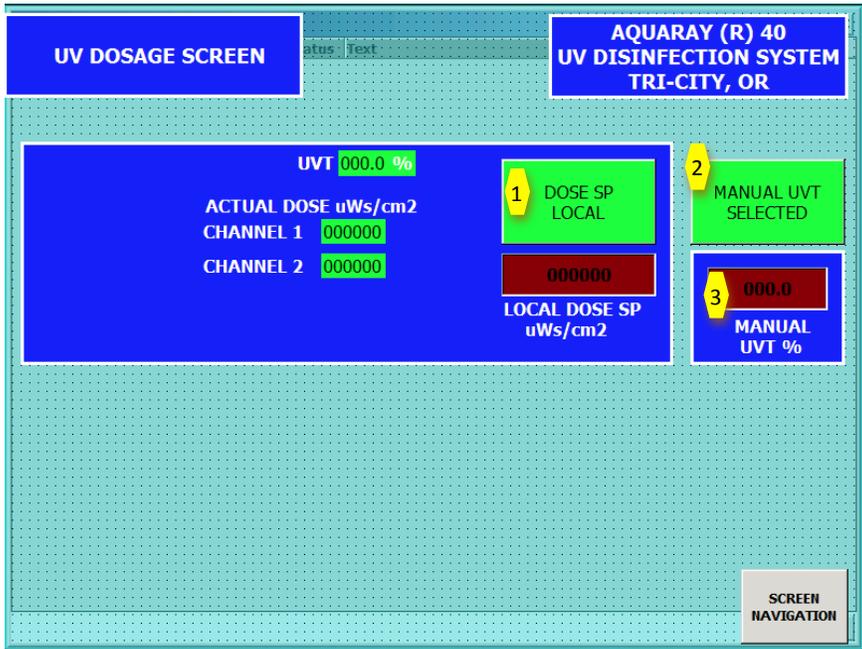


Figure 6.6.4-5 – UV Dosage Screen

Automatic Cleaning Screen

The UV sleeves are periodically cleaned by the wiper system. The Automatic Cleaning screen (**Figure 6.6.4-6**) provides for the input of the desired cleaning intervals in hours.

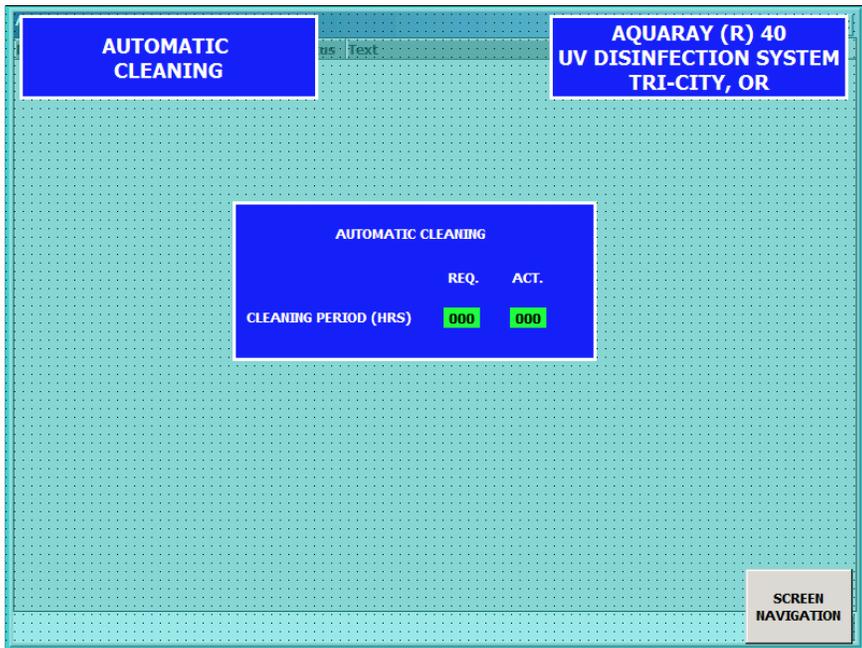


Figure 6.6.4-6 – Cleaning Screen

Alarm Screen

The alarm screen (**Figure 6.6.4-7**) shows any alarms and the status of the alarms for the UV system.

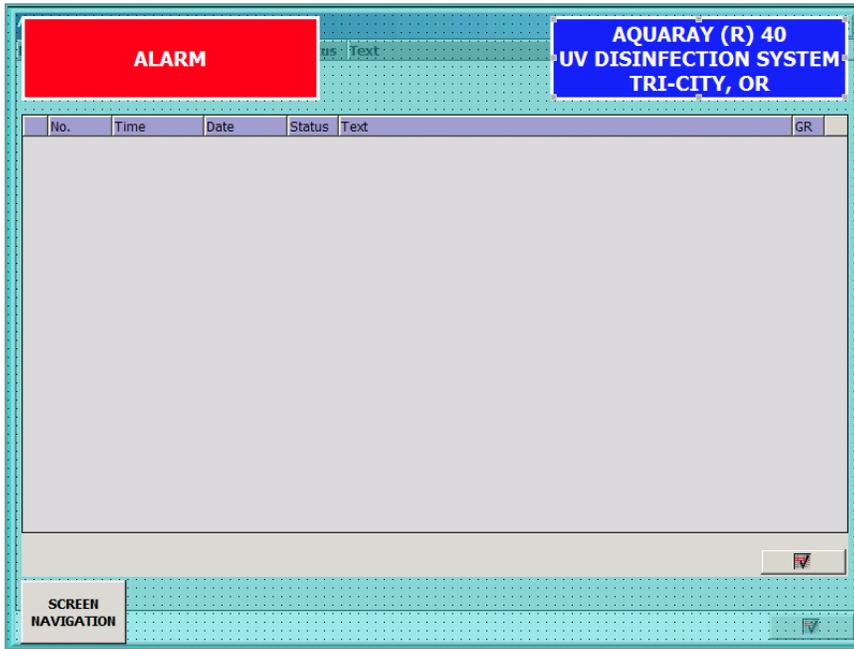


Figure 6.6.4-7 – Alarm Screen