LAFFERTY EQUIPMENT MANUFACTURING, INC.
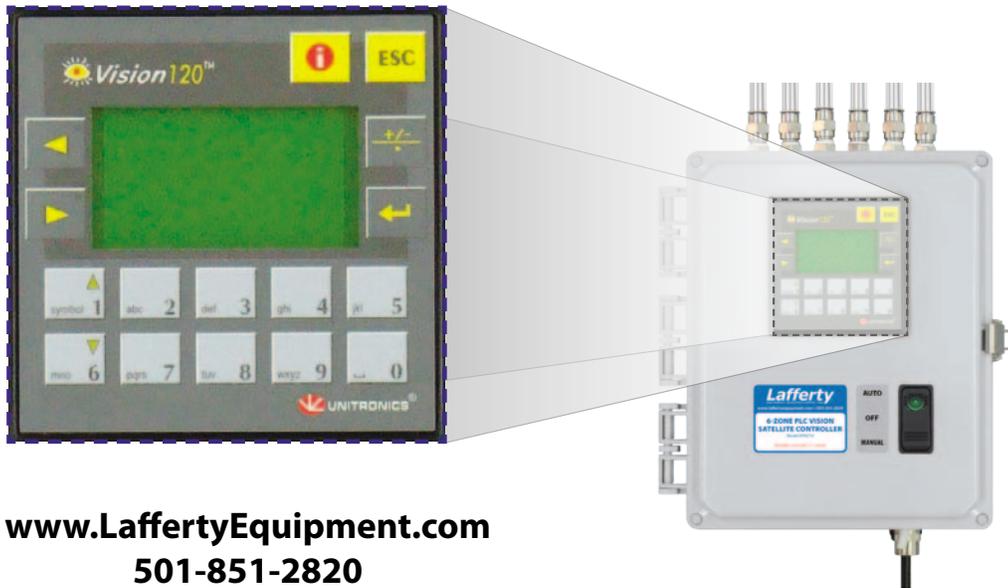# Program Settings Instructions

#976710   6-Zone PLC Vision Satellite Controller

www.LaffertyEquipment.com
501-851-2820

- The PLC Vision Central System Controller is for facilities that need independent control of up to six zones.

- The following Lafferty Satellite Entryway Foam Sanitizers are designed specifically for use with this controller:

Venturi Satellites: *Each requires a dedicated container of chemical concentrate.*	**Pump Fed Satellites**: *Each receives pre-diluted chemical from a central chemical feed system.*
• 976734 Vision Satellite Entryway Foam Sanitizer	• 976724 Vision Satellite PF Entryway Foam Sanitizer
• 976735 Vision Satellite Entryway MV Foam Sanitizer	• 976725 Vision Satellite PF Entryway MV Foam Sanitizer
• 976736 Vision Satellite HV Entryway Foam Sanitizer	• 976726 Vision Satellite PF Entryway XV Foam Sanitizer

• A Programmable Logic Controller (PLC) provides menu-driven, computerized control for finely setting the timing and duration of foam sanitizing on a 24/7/365 basis, independently for up to six zones with up to 10 satellites per zone.

Includes manual override feature for deactivation or activation of the system during any of the cycles, without affecting the programming

Set-Up and Operation Overview

Passwords

- **Administrator password** — Required to set up and change the parameters of the entryway foam sanitizing operation.

- **User password** — Required so the system can be set to Manual Mode for a specified period of time. — *Example: During scheduled maintenance foam sanitizing may be required outside normal facility operational hours.*

PLC Automatic Operational Modes

The PLC is programmed to display one of three automatic Modes, depending upon the time, day and parameters set.

"Auto" Mode: Operating automatically with all pre-set parameters during normal facility operational hours

"Standby" Mode: Operating automatically with all pre-set parameters, but temporarily shut down as the time or day is outside normal facility operational hours.

"Holiday" Mode: Operating automatically with all pre-set parameters, but temporarily shut down as a pre-set holiday puts the time or day outside normal facility operational hours.

PLC Manual Operation Mode

To allow for foam sanitizing application for special circumstances during times when the system is programmed to be idle, the unit can be activated in Manual Mode for a specified period of time. Activating Manual Mode will override Standby and Holiday Modes without changing the pre-set parameters.

6-Zone PLC Vision Satellite Controller
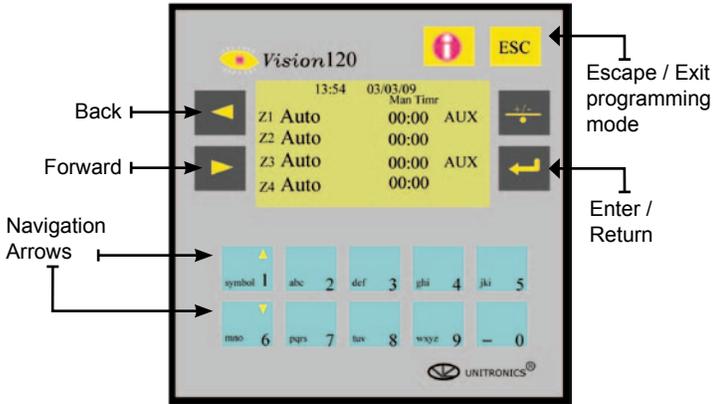
① PASSWORDS

The Vision PLC has two levels of password control:

- Administrator (ADM) - required for all set up of and changes to operating parameters
- User – for activating "Manual" Mode In periods outside normal facility operation hours

The PLC is supplied with the passwords pre-set at:

- Administrator (ADM) – 2820
- User – 3719

These passwords may be changed or retained at the preference of the Administrator.

Back ◄

Forward ►

Navigation Arrows

Escape / Exit programming mode

Enter / Return

Administrator Password Set-up/Change

- ℹ Password entry press 2 times
- **Enter Admin Password** — Enter Admin Password
- **XXXX** — ↵ to Confirm Password
- **Functions: Set Zone** — ▲ Up 2 times – Go to Functions: Set **Admin** Password
- **Functions: Set Admin Pass** — ↵ Enter "Set Admin Password"
- **Admin Password xxxx** — Enter new password
- ↵ Confirm Password
- **Functions: Set Admin Pass** — ▼ Press down arrow to go to other Functions

OR
- ESC Exit to Operational Mode

User Password Set-up/Change

- ℹ Password entry press 2 times
- **Enter Admin Password** — Enter Admin Password
- **XXXX** — ↵ to Confirm Password
- **Functions: Set Zone** — ▲ Up 1 time – Go to Functions: Set **User** Password
- **Functions: Set User Password** — ↵ Enter "User Password"
- **User Password xxxx** — Enter new password
- ↵ Confirm Password
- **Functions: Set User Password** — ▼ Press down arrow to go to other Functions

OR
- ESC Exit to Operational Mode

② REQUIRED SETTINGS FOR OPERATION – (Set through the Administrator Function, only)

- **Set Clock:**

  Set the unit's clock to the current time and date, using the 24 hour and MM/DD/YYYY format.

Set/Change Clock

- ℹ Password entry press 2 times
- **Enter Admin Password** — Enter Admin Password
- **XXXX** — ↵ to confirm Password
- **Functions: Set Zone** — ▲ Up 3 times
- **Functions: Set Clock** — ↵ Enter clock set function
- **Time: 16:05:00**
  Date: 02/29/2009 — Set Hour, Minute, Seconds; Month, Day and Year. Press "Enter/Return" to move from clock to the calendar function
- ↵ Return to Functions: Set Clock
- ▼ Down 3 times — Go to Functions: Set Zone to select Zone # for other settings shown at right (See ♦.)

  OR
- ESC Exit to Operational Mode

- **Cycle Time by Zone:**

  ON Time (seconds) – Length of time that foam will be applied (typically :08 to :10 / up to :99 sec.)

  OFF Time (minutes) – Length of time between foam applications (typically 8-10 min. / up to 99 min.)

Set/Change Cycle Time by Zone

- ℹ Password entry press 2 times
- **Enter Admin Password** — Enter Admin Password
- **XXXX** — ↵ to confirm Password
- **Functions: Set Zone** ♦ — ↵ **Set Zone X** — Enter Zone #
- **Functions: Set Zone** — ▼ Down 1 time then ↵
- **Zone x** *(zone # entered above)*
  Cycle on: 10 sec
  Cycle off: 08 min — Enter times (Press Enter to move from 1st to 2nd line)
- ↵ **Enter Functions: Set Cycle Time** — ▲ Up 1 Time — Go to Set Zone OR Down — Go to other functions OR
- ESC Exit to Operational Mode

- **Days of the Week:**

  Enter the days of the week and the times of the day that correspond to normal facility operational hours. These are the time periods when the foam sanitizer will operate in Auto Mode.

Set/Change Days of Week

- ℹ Password entry press 2 times
- **Enter Admin Password** — Enter Admin Password
- **XXXX** — ↵ to Confirm Password
- **Functions: Set Zone** ♦ — ↵ **Set Zone X** — Enter Zone #
- **Functions: Set Zone** — ▼ Down 2 times — Go to Set Days in week
- **Functions: Set Days in Wk.** — ↵ **Set Days of Wk. - Sunday** — ↵ Enter Sunday time set
- **Sunday** Zone 1
  Time on 0800
  Time off 1700 — ↵ Enter times in 24 Hour time **ONLY** (Press Enter to move from 1st to 2nd line)

  Entering all zeroes in both fields indicates the facility is not operating that day.

- **Set Days of Wk. - Sunday** — ▼ Down 1 time
- **Set Days of Wk. - Monday** — ↵ Enter Monday time set
- **Monday** Zone 1
  Time on 0800
  Time off 1700 — ↵ Enter times in 24 Hour time **ONLY** (Press Enter to move from 1st to 2nd line)

  REPEAT FOR THE REMAINING DAYS OF THE WEEK
- ◄ Back to Functions
- ESC Exit to Operational Mode

  OR
- ▲ Up 2 times — Go to Set Zone Function (♦) to select another zone

  This system is now operational in accordance with specific zone settings.

3 OPTIONAL SETTINGS FOR ENHANCED OPERATION

Note: Optional Settings can be set through the Administrator function only.

- **Auxiliary Cycles:**

  An Auxiliary Cycle can be set for times when extra amounts of foam sanitizer are needed — for example, prior to, during, and after breaks and during known times of heavy traffic.

  The Auxiliary Cycle overrides the standard Cycle at the times designated. Up to 22 auxiliary time periods can be set up for each day and are typically set for about 15 seconds of foaming and 3-5 minutes between applications.

Set/Change Auxiliary Cycle

- Password entry press 2 times
- **Enter Admin Password**
- Enter Admin Password
- **XXXX**
- to confirm Password
- **Functions: Set Zone** ◆
- **Set Zone X**
- Enter Zone #
- **Functions: Set Zone**
- Down 3 times — Go to Fnct: Set auxiliary time
- **Functions: Set aux time**
- Enter set auxiliary time
- **Zone X** *(zone # entered above)*
  Cycle on   15   Sec
  Cycle off   5   Min
- Use Numeric key pad to enter times
  (Press Enter to move from 1st to 2nd line)
- ↵
- **Functions: Set aux time**
- Down 1 – Go to Set Auxiliary Period Times (Details in next column – ◀.)
  OR
- Up 3 times — Go to Function: Set Zone (◆) to select another zone
  OR
- ESC Exit to Operational Mode

Set/Change Auxiliary Period Times

- Password entry press 2 times
- **Enter Admin Password**
- Enter Admin Password
- **XXXX**
- to confirm Password
- **Functions: Set Zone** ◆
- **Set Zone 1** *(or last set zone)*
- Enter Zone #
- **Functions: Set Zone**
- Down 4 times — Go to Fnct: **Auxiliary Period time**
- **Functions: Aux Period time** ◀
- Enter set Period 1
- **Aux Cycle Period 1**
- Arrow Up or Dwn to select Period 1
- ↵
- **Zone X** *(zone # entered above)*
  Start   0000
  Stop   0000
- Enter times in 24 Hour time **ONLY**
  (Press Enter to move from 1st to 2nd line)
- **Aux Cycle Period 1**
- Down 1 – Go to Period 2
- **Aux Cycle Period 2**
- ↵
- **Zone X** *(zone # entered above)*
  Start   0000
  Stop   0000
- Enter times in 24 Hour time **ONLY**
  (Press Enter to move from 1st to 2nd line)
- *Repeat for other Periods or other Zone Periods, as needed.*
- ◀ Back to Functions – OR
- ESC Exit to Operational Mode

- **Holiday / Shut-down Times:**

  Up to 16 named or numbered periods can be programmed for times when the facility will not be operating normal hours. Some Holiday names are pre-entered, but the actual dates and times must be set up. Any date and time can be set for any of the named holidays or numbered shut-down periods.

Set/Change Holiday Times

- Password entry press 2 times
- **Enter Admin Password**
- Enter Admin Password
- **XXXX**
- to confirm Password
- **Functions: Set Zone** ◆
- Down 5 times – Go to Functions: Holiday Settings
- **Functions: Holiday settings**
- Enter Set Holidays
- **Set HOLIDAYS**
  New Year's Day
- Set times, New Year's Day. *Enter all zeros to de-activate this setting.*
  (Press Enter to move from number set to number set.)
- **START   HH:mm   MM/dd**
  END   HH:mm   MM/dd
- Enter times in 24 Hour time **ONLY** & Date in U.S. format (Month/Day).
- **Set HOLIDAYS**
  New Year's Day
- Down 1 – Memorial Day
- **Set HOLIDAYS**
  Memorial Day
- Set times, Memorial Day
- **START   HH:mm   MM.dd**
  STOP   HH:mm   MM.dd
- Enter times in 24 Hour time **ONLY** & Date in U.S. format (Month/Day).
- *Repeat for other 14 Holidays / periods as needed.*
  OR
- ◀ Back to Functions – OR
- ESC Exit to Operational Mode

- **Strobe Time:**

  An optional **strobe** may be installed to alert personnel in advance of foam application. These settings define the number of seconds between the strobe's activation and the beginning of foam application (typically set at between 5 & 15 seconds). The strobe will be deactivated at the end of the foaming application.

Set/Change Strobe

- Password entry press 2 times
- **Enter Admin Password**
- Enter Admin Password
- **XXXX**
- to confirm Password
- **Functions: Set Zone** ◆
- **Set Zone 1** *(or last set zone)*
- Enter Zone # for the zone you wish to adjust
- **Functions: Set Zone**
- Down 6 times – Go to Function **Strobe time**
- **Function: Strobe Time**
- ↵
- **Strobe Time   Zone X**
  00   sec   Before
- Numeric key pad to enter time in seconds
- Return to Functions: Strobe Time
- Down 1 – Go to set Functions: External Eye
- *(See next page, item 4 – Optional Photocell for further instructions.)*
- Up to return to other Functions
  OR
- ESC Exit to Operational Mode

Optional External Sensor / Electric Eye Mode:

The system can be set to function with an optional Photocell (electric eye / infrared sensor) or other external sensor —"Ext/Eye" mode. **Only** the Clock and Auxiliary Cycle need to be set when the Ext/Eye mode is used. *See setting details on page 4.*

④ OPTIONAL PHOTOCELL

Note: Optional Settings can be set through the Administrator function only.

- The Auxiliary Cycle must be set up **before** activating the Ext/Eye Mode.

- This setting is for use with an optional photocell (or other external 24V DC sensor trigger). *(Please consult Lafferty before installing photocells or other external inputs.)*

- Activation of the unit by an external trigger initiates a single Auxiliary Cycle of foam sanitizing.

- If Ext/Eye is enabled, the unit will produce foam each time the photocell is tripped, regardless of the time of day, day of the week or whether the day has been designated as a holiday. However, the unit will not provide additional foaming cycles for periods that have already been designated as heavy traffic periods and covered by the Optional Auxiliary Cycle (see instruction 3, previously).

Once the <u>Clock</u>, the <u>Auxiliary Cycle</u> and the <u>Ext/Eye mode</u> have been set, no other cycle or day settings are required.

Set/Change Ext/Eye

🛈 Password entry press 2 times

Enter Admin Password

⬚⬚⬚⬚⬚ Enter Admin Password

XXXX

↵ to confirm Password

Functions: Set Zone ♦

↵ **Set Zone 1** *(or last set zone)*

⬚⬚⬚⬚⬚ Enter Zone # for the zone you wish to adjust

↵ **Functions: Set Zone**

⬇ Down 7 times – Go to Function **External Eye**

Function: External Eye

↵ Use the Enter/Return key to toggle between On / Off

Function: Ext / Eye

⬆ Up to return to other Functions OR

ESC Exit to Operational Mode

⑤ DAYLIGHT SAVINGS TIME SETTINGS

- Default setting is for U.S. time. Follow steps below to change settings.

- To disable DST, enter zero for times and select blank for wk., day, month.

Daylight Savings Time

🛈 Password entry press 2 times

Enter Admin Password

⬚⬚⬚⬚⬚ Enter Admin Password

XXXX

↵ to confirm Password

Functions: Set Zone

⬆ Up 4 times – Go to Functions: Daylight Savings Time

Functions Daylight Savings Time

↵ to set Daylight Savings Time

Daylight savings time edit Start xxxx (wk) (---day) IN (month) End xxxx 1st (---day) IN (month) Offset 100 HHMM

⬆ Press 5 to allow editing

⬚⬚⬚⬚⬚ Enter the Start time in 24 Hour time **ONLY**

↵ to move to week and day and month. The item to be set will be highlighted in ⬛black

⬆ Use Up and Down arrows to ⬇ scroll through options.

Week: 1st; 2nd; 3rd; 4th; Last, blank

Day: Sunday, Monday, etc., blank

Month: January, February, etc., blank

⬚⬚⬚⬚⬚ Enter the End time in 24 Hour time only

↵ to move to week and day and month. The item to be set will be highlighted in ⬛black

⬆ Use Up and Down arrows to ⬇ scroll through options as noted above.

⬚⬚⬚⬚⬚ Enter the Offset time in HHMM format to set the time difference between Standard and Daylight times. (One hour = 0100.)

↵ to confirm settings

ESC Exit 1 time — Return to Functions

OR

ESC 2 times — Go to Operational Mode

For Daylight Savings Time start & stop dates see this web site: www.worldtimezone.com/daylight.html

⚫ OPERATING INSTRUCTIONS

- **PLC AUTOMATIC OPERATION**

  Once the clock, cycle time and days of the week have been set up for **each zone**, the system is operational.

- **PLC MANUAL OPERATION**

To allow for foam sanitizing application for special circumstances during times when the system is programmed to be idle, the unit can be activated in Manual Mode for a specified period of time. Activating Manual Mode will override Standby and Holiday Modes without changing the pre-set parameters and will produce foam according to the parameters set for the CYCLE TIME in step 2 of the set up instructions. This will continue for the specified Manual Mode time period and the unit will then revert to whichever mode it would normally be in at that time of the day or day of the week.

The User Password enables access to set the unit to Manual Mode and to specify the time period that the unit will stay in Manual Mode in 30 minute increments.

Set / End Manual Mode

🛈 Password entry press ONE time

Enter USER Password

⬚⬚⬚⬚⬚ Enter USER Password

XXXX

↵ to confirm Password

(Depending on the day or the time of day, one of the three following messages will appear.)

MANUAL	Zone x
AUTO	
Manual time	00:00

MANUAL	Zone x
Standby	
Manual time	00:00

MANUAL	Zone x
Holiday	
Manual time	00:00

The number for the Zone designation will be blinking. Enter the number for the Zone you wish to manually control.

(Continued in next colummn.)

↵ to confirm the Zone number

⬆ Up to increase time in 30-minute increments

⬇ Down to decrease time in 30-minute increments

(To end Manual Mode, decrease the time to zero.)

▶ Forward Arrow to set Manual Mode time.

The second line of the display will change to "Manual Mode" to confirm manual activation.

MANUAL	Zone x
Manual Mode	
Manual time	00:00

ESC Exit to Operational Mode

To set manual control for additional zones, repeat the steps shown above, entering a different zone number each time.

To end Manual Mode, follow details above and decrease the Manual Mode time to zero.