ColorLogic Network Module

for

PRO LOGIC™

Automation and Chlorination

Installation and Operation Manual

for

AQL-COLOR-MODHV

GOLDLINE CONTROLS
A HAYWARD COMPANY

www.goldlinecontrols.com

IMPORTANT SAFETY INSTRUCTIONS

Before installing or servicing this electrical equipment, turn power supply OFF.

WARNING – **Read and follow all instructions in this owner's manual and on the equipment. Failure to follow instructions can cause severe injury and/or death.**

WARNING – This product should be installed and serviced only by a qualified professional.

CAUTION – All electrical wiring MUST be in conformance with all applicable local codes, regulations, and the National Electric Code (NEC).

ATTENTION INSTALLER – THIS MANUAL CONTAINS IMPORTANT INFORMATION ABOUT THE INSTALLATION, OPERATION, AND SAFE USE OF THIS PRODUCT THAT MUST BE FURNISHED TO THE END USER OF THIS PRODUCT. FAILURE TO READ AND FOLLOW ALL INSTRUCTIONS COULD RESULT IN SERIOUS INJURY.

WARNING – **Risk of Electric Shock.** All electrical wiring MUST be in conformance with all applicable local codes, regulations, and the National Electric Code (NEC). Hazardous voltage can shock, burn, and cause death or serious property damage. To reduce the risk of electric shock, do NOT use an extension cord to connect unit to electric supply.

WARNING – Ground Fault Circuit protection must be used in the circuit, however, all electrical wiring MUST be in conformance with all applicable local codes, regulations, and the National Electric Code (NEC).

IMPORTANT - Reference NEC codes for all wiring standards including, but not limited to, grounding, bonding and other general wiring procedures.

WARNING – **Networked ColorLogic Lights and related electrical connections are receiving electrical power at all times, even when the lights are OFF! Turn off power at the main breaker before servicing ColorLogic lights.**

Introduction

This manual contains information for the proper installation and operation of the ColorLogic Network Module (AQL-COLOR-MODHV). The instructions in this manual **MUST** be followed precisely. **Failure to install according to defined instructions will void the warranty.**

Compatibility

The AQL-COLOR-MODHV is compatible with all Goldline Controls Pro Logic PS controls operating with software version 4.00 or greater and whose enclosures provide a cutout for installation. Refer to the Installation section of this manual to verify compatibility with your Pro Logic.

The ColorLogic Network Module will only operate with Generation 4 or later Hayward ColorLogic 120VAC pool/spa light(s).

Description

The ColorLogic Network Module is used with the Pro Logic to fully control the color, speed, motion and brightness of pre-set light shows in a compatible Hayward ColorLogic pool/spa light(s). After installing the ColorLogic Network Module and enabling the function in the Pro Logic, the user can program various parameters to fully customize their pool/spa light(s) operation.

The ColorLogic Network Module can be used to control up to 32 pool or spa lights simultaneously. This method of control features 2 user defined programs; five fixed colors and eleven color-changing shows. All fixed colors and shows can be modified or changed. The factory set colors and shows are listed in the Program Table below and can also be found on the color laminated card included with the Network Module. A color chart can be found on the same card and will help when programming colors for the ColorLogic lights.
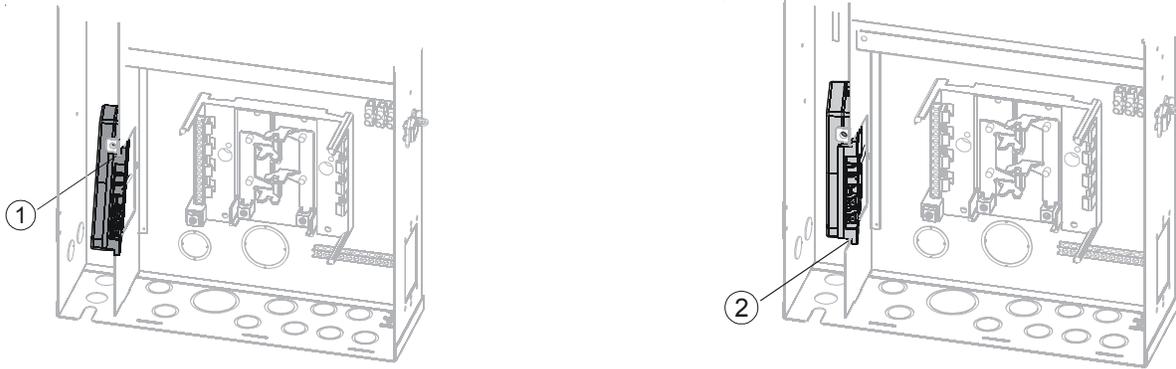
Program Table

Number	Function	Name	Description
1	Show	Voodoo Lounge	Fast Color Show
2	Fixed Color	Deep Blue Sea	Fixed Color
3	Fixed Color	Afternoon Skies	Fixed Color
4	Fixed Color	Emerald	Fixed Color
5	Fixed Color	Sangria	Fixed Color
6	Fixed Color	Cloud White	Fixed Color
7	Show	Twilight	Slow Color
8	Show	Tranquility	Blue/ Cyan/White Fade
9	Show	Gemstone	Blue/Green/Magenta
10	Show	USA!	Red/White/Blue Switch
11	Show	Mardi Gras	Fast Random Fade
12	Show	Cool Cabaret	Slow Random Fade
13	Show	Rainbow	Rainbow
14	Show	Harmony	Blue/Green Fade
15	Show	Custom Fade	Uses the 5 fixed colors from 2-6
16	Show	Custom Chase	Uses the 5 fixed colors from 2-6

NOTE: The Custom Fade and the Custom Chase light shows will
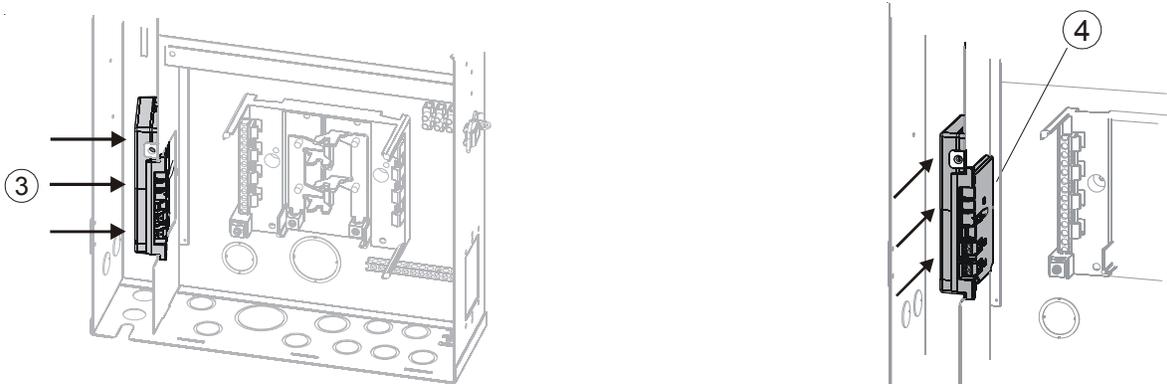display the 5 fixed colors in the following order: 2, 3, 4, 6, 5

Installation

Installation of the ColorLogic Network Module requires that it be mounted and wired inside of the Pro Logic enclosure. The module is designed to mount into a cutout in the wall of the enclosure. If your enclosure does not provide this cutout, the Pro Logic is not compatible with the ColorLogic Network Module. The following information offers detailed instructions on how to mount and wire the ColorLogic Network Module to the Pro Logic pool control. Before performing any installation steps, remove power completely to the Pro Logic's subpanel. Remove the front panel and follow the instructions below.

Mounting

1. Remove the plastic plate at the cutout where the Network Module will be mounted. If there is no cutout, your Pro Logic enclosure will not support the installation of the Network Module. Contact Goldline Technical Support at 908-355-7995 for more information. Holding the Network Module at an angle, insert the top front of the module into the designated area shown in step 1 above.

2. Keeping the front of the Network Module in its place, move the top rear of the module into the cutout as shown in step 2.

3. With the top of the Network Module in contact with the cutout, swivel the bottom of the module so it inserts into the cutout completely. Refer to step 3.

4. The Network Module can now be "snapped" into place by pushing down as shown in step 4. Before pushing down, you may have to raise the module slightly to get the bottom channel of the module to fit securely into the cutout.

Wiring

Follow the local code, NEC (CEC) codes and the circuit breaker manufacturer's rating requirements regarding the size and temperature rating for wiring.

The ColorLogic Network Module uses 120VAC power line communications to individually control each networked light. For successful communications, the same bus must be used to power both the Network Module and any networked light(s). This is not a concern when using just one circuit breaker (see diagram on page 3 and 4) but must be considered if the installation requires two or more. The diagram on page 5 show an installation using two circuit breakers. The communications signal is passed from the Network Module, through the bus, and on to the lights. If these two specific circuit breaker positions are not available in your installation, be sure to located the two circuit breakers on the same bus. Refer to the diagram on page 4 for installations up to 8 ColorLogic lights and page 5 for installations up to 16 lights. Contact Goldline at 800-343-0826 for installations requiring more than 16 lights.
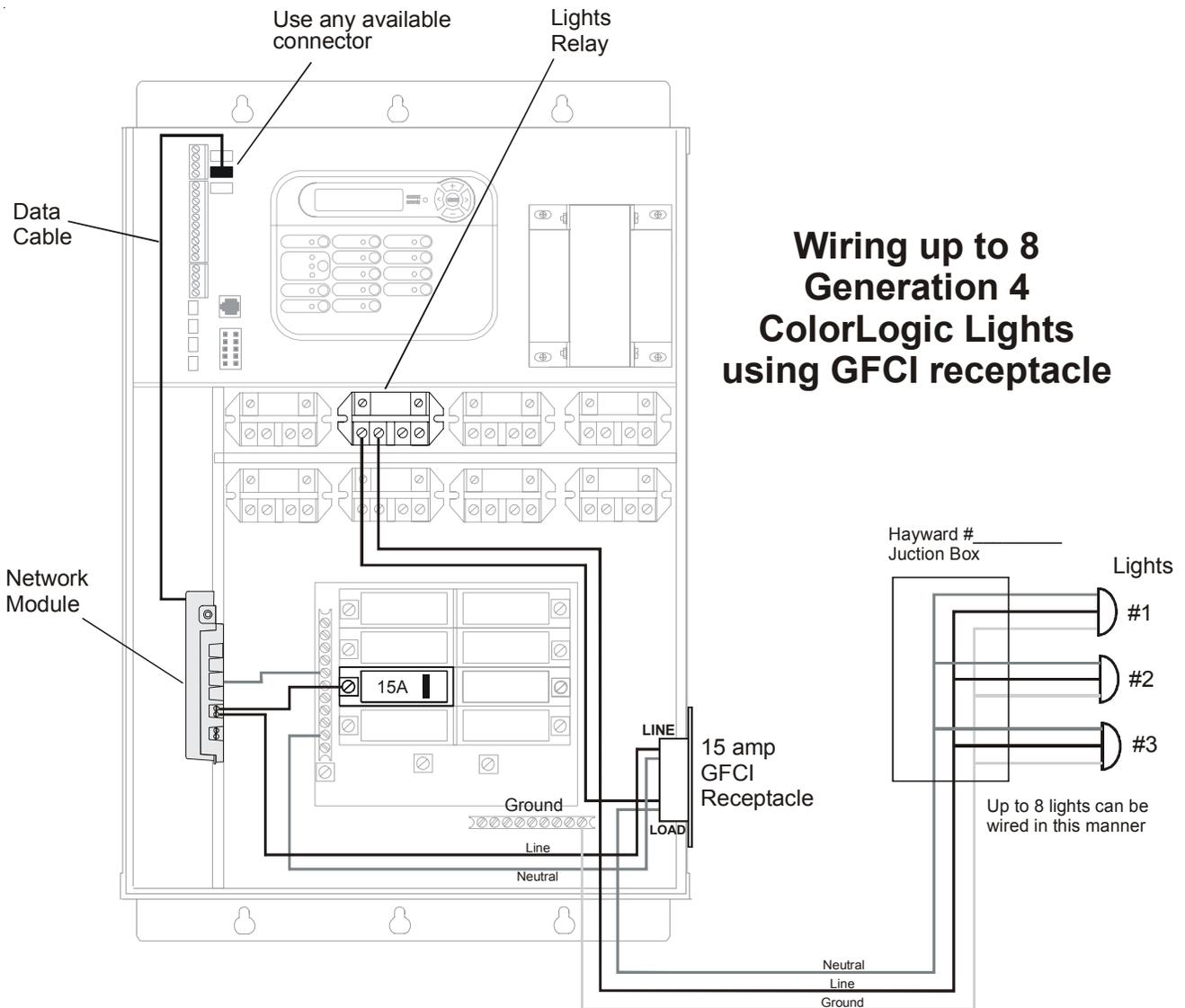
Install and make wiring connections to the ColorLogic Generation 4 pool lights according to their included manual. The connection to the Pro Logic and ColorLogic Network Module is shown on the following pages. Ground Fault Circuit protection must be used when connecting ColorLogic lights to the Pro Logic. A GFCI receptacle or GFCB circuit breakers can be used.
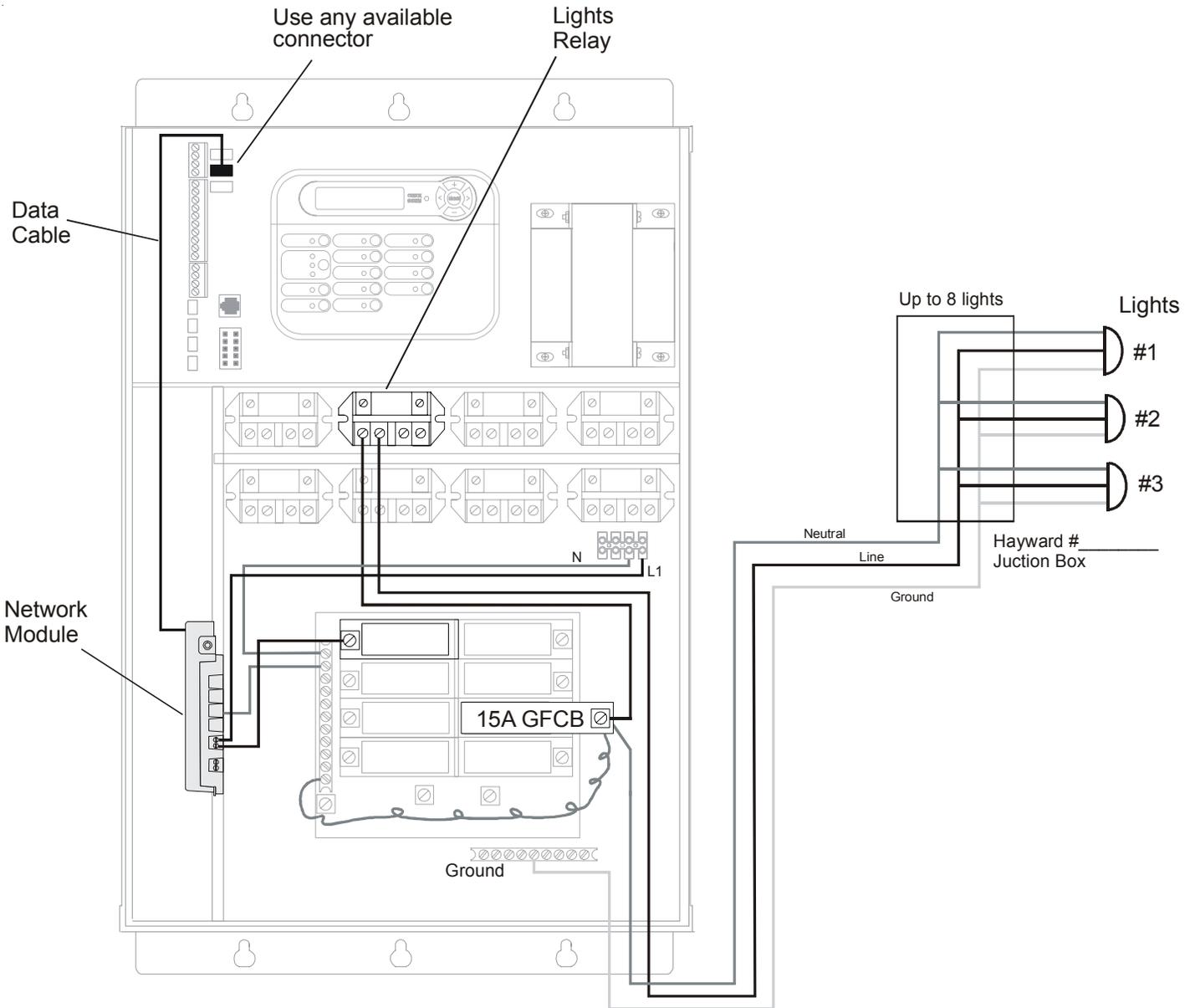
When using a Ground Fault Circuit Interrupter (GFCI) receptacle: A 15 amp GFCI receptacle can be used for installations of up to 8 lights. Install the GFCI in the cutout on the lower right side of the Pro Logic and wire the GFCI and ColorLogic lights according to the drawing on the bottom of this page.

When using a Ground Fault Circuit Breaker (GFCB): A 15 amp GFCB can be installed into to the Pro Logic's subpanel to power up to 8 ColorLogic lights (see page 4). Use two GFCB's for installation up to 16 lights (page 5). Be sure not to use more than 8 lights on each GFCB. Refer to the chart below for compatible circuit breakers.
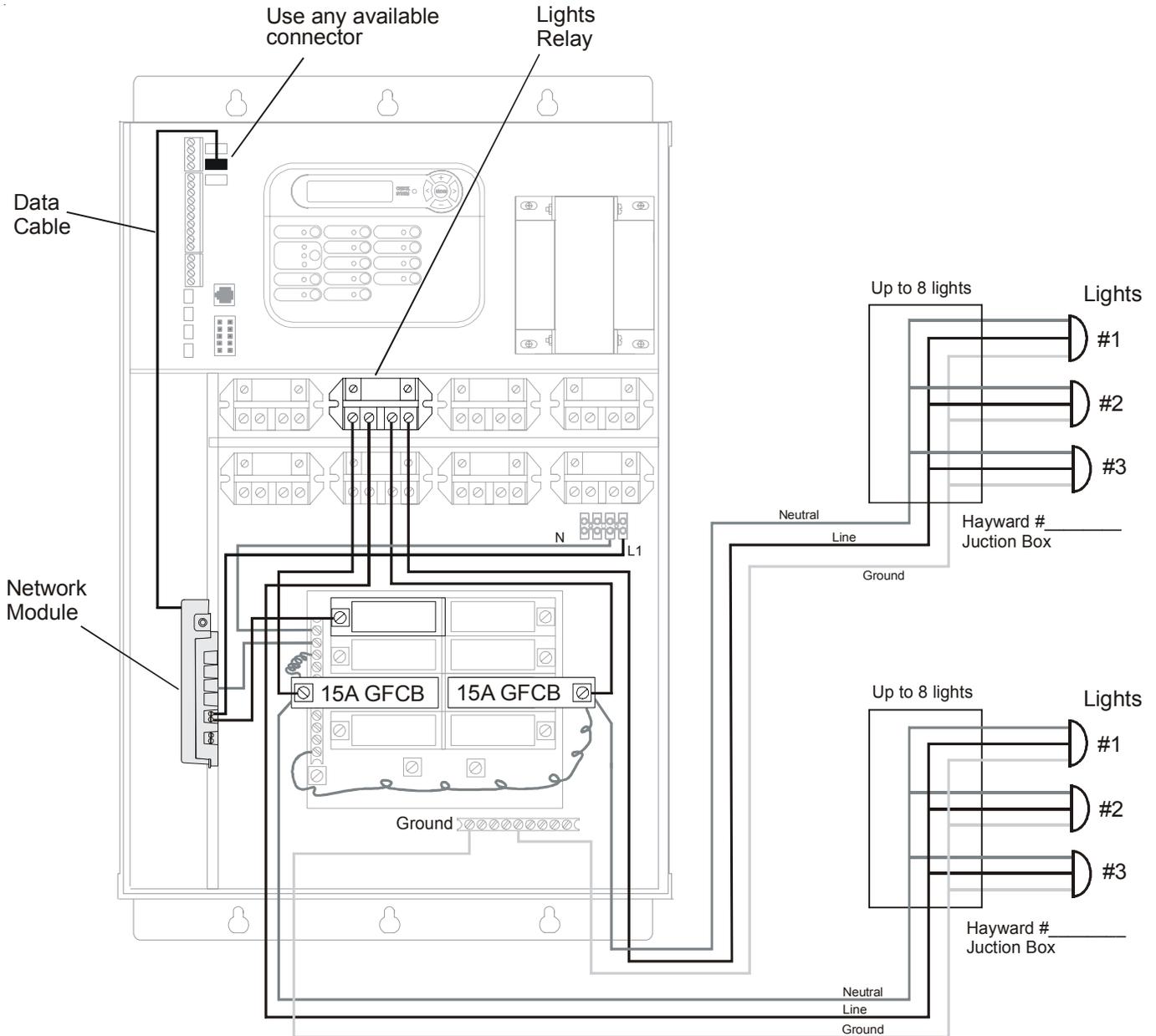
SUITABLE LISTED BREAKERS							Tightening Torque
Manufacturer	**Single**	**Double**	**Twin**	**Quad**	**GFCB**	**Filler Plates**	
Siemens	QP	QP	QT	QT	QPF	QF3	25lb-in
Murray	MP-T	MP-T	MH-T	MH-T	MP-GT	LX100FP	25lb-in

WARNING - Networked ColorLogic Lights and related electrical connections are receiving electrical power at all times, even when the lights are OFF! Turn off power at the main breaker before servicing ColorLogic lights.

Use any available connector

Lights Relay

Data Cable

Wiring up to 8 Generation 4 ColorLogic Lights using GFCI receptacle

Network Module

15A

Hayward #_____
Juction Box

Lights

#1

#2

#3

Up to 8 lights can be wired in this manner

LINE

15 amp GFCI Receptacle

LOAD

Ground

Line

Neutral

Neutral
Line
Ground

Use any available connector

Lights Relay

Data Cable

Network Module

Up to 8 lights

Lights

#1

#2

#3

N

L1

15A GFCB

Ground

Neutral

Line

Ground

Hayward #_____
Juction Box

**Wiring up to 8 Generation 4
ColorLogic Lights using GFCB**

Use any available connector

Lights Relay

Data Cable

Network Module

Up to 8 lights

Lights

#1

#2

#3

Neutral

Line

Ground

Hayward #_____
Juction Box

N

L1

15A GFCB

15A GFCB

Ground

Up to 8 lights

Lights

#1

#2

#3

Hayward #_____
Juction Box

Neutral

Line

Ground

Wiring up to 16 Generation 4 ColorLogic Lights using two GFCB's

NOTE: When using more than one circuit breaker to power Generation 4 ColorLogic Lights, be sure that the breakers AND the Network Module feed are on the same phase of power.
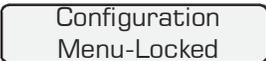
Configuration

After the Network Module has been installed and wired, the Pro Logic must be configured and programmed to operate the ColorLogic networked lights.

ColorLogic Configuration

During ColorLogic configuration, the Pro Logic will find all networked lights in the system and assign an identification number to each using the prefix "LT". After all lights are found, the user has the option of using the default LT number or changing to one that is different. For installations using multiple lights, it may be helpful for the user to use a diagram of the pool/spa and label each light with its corresponding LT number. Use pages 15-17 for this purpose. Refer to this diagram when programming light shows and fixed colors.

Configuration of the ColorLogic Networked lights takes place within the Pro Logic's Configuration Menu. Instructional screens and button functions are shown below and follow the same convention as the Pro Logic manuals. For more detailed information about using the Pro Logic menu system, refer to the Pro Logic Operation Manual.
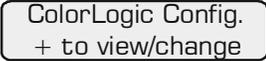
To access the Configuration Menu

> **Configuration Menu-Locked**

MENU Press repeatedly until "Configuration Menu" is displayed
< > Press BOTH buttons SIMULTANEOUSLY for 5 seconds to unlock

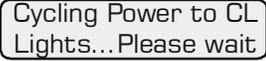> **Configuration Menu-Unlocked**

< > Move to configuration menu items

Advance to the ColorLogic Configuration Menu. NOTE: The configuration menu automatically "locks" after 2 minutes if no buttons are pressed.

Stop any running light show(s) before entering the ColorLogic Configuration Menu. Do not attempt to send any commands from a remote control or from the Pro Logic local display keypad while configuring ColorLogic lights. Once the ColorLogic configuration process begins, there is no way to exit and the process must be completed.

> **ColorLogic Config. + to view/change**

+ Push to activate ColorLogic options
< > Move to previous/next configuration menu

> **Find ColorLogic + to Start**

+ Search for ColorLogic lights connected to Network Module
< > Skip to "Identify Colorlogic", if lights have previously been found
  If not, move to previous/next menu item

> **Cycling Power to CL Lights...Please wait**

Power cycles the ColorLogic light(s), may take 1 minute or more (do not press any buttons while waiting)

> **Searching 3 light(s) found**

Search for ColorLogic light(s), may take up to 5 minutes

> **Find Completed 3 light(s) found**

< > Push any button to advance

> **Identify ColorLogic LT1**

+ − Assigns numbers to the ColorLogic lights found
< > Move to next ColorLogic light found

Find ColorLogic Lights

With the ColorLogic Network Module installed and the ColorLogic light(s) properly wired, push the "+" button to start the search process. The Pro Logic will search for all ColorLogic lights that are connected to the Pro Logic. Progress of the search will be shown on the display. Note that the search process will take more time when multiple lights are installed (up to 5 minutes). When the search is finished, all lights will flash red, green, and blue and the number of lights found will be displayed. If the number of lights found is not correct, check the wiring and refer to the Troubleshooting section of this manual. After all lights are found, push the "<" or ">" to advance to the Identify screen.

Identify ColorLogic

NOTE: For applications that involve multiple lights, it may be helpful to draw a simple diagram of your pool/spa and record the LT number for each light location.

After all lights are found, each light will need to be assigned an identification number. These numbers will be shown as LT1, LT2, LT3..., depending on how many lights are found. The number will identify the light for all future programming of shows, colors, etc.

The Pro Logic will assign default LT numbers to the lights that are found. During this process, the ColorLogic light will blink and the default number will be displayed. If the default number is not desired, use the "+" or "-" buttons to choose an alternative unique LT number up to the actual number of lights that were found. When the number is acceptable, push the ">" buttons to advance to the next light and select another LT number. Continue until all lights have been assigned an LT number then push the ">" to exit the ColorLogic configuration menu. All lights should now be off.

NOTE: Once a light has been assigned, you can go back and view the assignment using the left arrow ("<") , but you can not make a change unless the ColorLogic lights configuration is reset.

Resetting ColorLogic Lights Configuration

The ColorLogic lights configuration can be reset if desired. Use this procedure when:

-adding a light to the system
-removing a light from the system
-re-assigning an LT number to an existing light

To reset the ColorLogic lights configuration:

Configuration Menu-Locked	**MENU** Press repeatedly until "Configuration Menu" is displayed	
	< > Press BOTH buttons SIMULTANEOUSLY for 5 seconds to unlock	
Configuration Menu-Unlocked	**<** Push the left arrow TWICE	
Reset ColorLogic to Default Press +	**+** Initiate reset of all ColorLogic configuration parameters	
Are you sure? + to proceed	**+** Reset all ColorLogic configuration parameters	
ColorLogic reset Confirmed	**< >** Move to next menu item	

NOTE: When resetting ColorLogic, be sure not to confuse the Default Configuration reset with the ColorLogic Configuration reset. If the Default Configuration is reset, all pool control functions of the Pro Logic will require re-programming.

Aux Configuration

Any Aux output can be configured to control a ColorLogic fixed color or light show (Aux1 is used as the example below). A virtual Aux output can also be used on Pro Logic Virtual models (see the Pro Logic manual for more information). A ColorLogic light can be assigned to more than one Aux and if more than one show is desired, additional Aux outputs can be configured.

Aux1 Config. + to view/change	**+** Push to access Aux options
	< > Move to previous/next configuration menu
Aux1 Name Pool Light 2	**+ -** Rotates between all available names
	< > Move to next menu item
Aux1 Function Manual On/Off	**+ -** Rotates between Manual On/Off (default), Countdown Timer or Timeclock
	< > Move to next menu item

for manual on/off, countdown timer and timeclock functions only

Aux1 Relay ColorLogic	**+ -** Toggle to ColorLogic
	< > Move to next menu item
Aux1 Assign LT1: NO	**+ -** Toggle between No (default) and Yes
	< > Move to next menu item

If Yes is selected

Aux1 Sequence LT1: 1st	**+ -** Allows selection of sequence number
	< > Move to next menu item

Aux1 Function

To assign any Aux to control a ColorLogic program, the Aux function must be set to Manual On/Off, Countdown Timer, or Timeclock. If any other selection is made, the Aux will not be able to control the ColorLogic light(s). Refer to the Pro Logic manual for more information on how these functions operate.

Aux1 Relay

Use the "+" and "-" buttons to select "ColorLogic". Note that the Aux relay will continue to function even though the Aux function has been assigned to control a fixed color or light show. It will energize and de-energize when the ColorLogic program is started and stopped. This allows the user to wire other features that can be started/stopped at the same time as the lights.

Aux1 Assign

The Pro Logic displays the ColorLogic lights that have been found and allows the user to select whether to include them on this Aux when operating fixed colors or light shows. Advance through all lights (identified by their LT numbers) and select "Yes" or "No". The corresponding light will blink during this process.

Aux1 Sequence

The Pro Logic allows the user to select the order in which the lights will illuminate during a light show. For each light (identified by their LT number), select the order placement (from "1st" to "32nd") using the "+" and "-" buttons. The corresponding light will blink during this process. When displaying a fixed color, all assigned lights will be illuminated at the same time.

Programming

After configuring the Pro Logic, the Aux output must be programmed to operate the assigned ColorLogic lights. Light shows and fixed colors are programmed differently and will require different input from the user. Programming the ColorLogic lights takes place within the Settings Menu of the Pro Logic control. To enter the Settings Menu, push the "Menu" button until "Settings" is displayed. Push the "<" or ">" buttons until the desired Aux is displayed then follow the sequence below.

Light Shows

Aux1 Settings + to view/change	**+** Push to access the Aux Settings **< >** Move to previous/next setting menu
Aux1 Program 1 Voodoo Lounge	**+ −** Rotates between all available light shows and fixed lights **< >** Move to next menu item
Aux1 Speed X1	**+ −** Rotates between all available speed selections **< >** Move to previous/next menu item
Aux1 Motion +0.2	**+ −** Rotates between all available motion selections **< >** Move to previous/next menu item
Aux1 Brightness 100%	**+ −** Adjusts brightness setting **< >** Move to previous/next settings menu

Aux1 Program

Select the desired ColorLogic program using the "+" or "-" buttons. If a fixed color is desired, skip to page 9 for programming information. The Pro Logic will rotate between all factory default selections. Description of the ColorLogic programs can be found on the color laminated card included with the ColorLogic Network Module as well as page 1 in this manual. NOTE: The Custom Fade and the Custom Chase light shows will display the 5 fixed colors in the following order: 2, 3, 4, 6, 5

Aux1 Speed (not available for Fixed colors)

After a program has been selected, the Pro Logic will prompt the user for the desired speed. This is the speed at which the entire sequence will run. Use the "+" and "-" buttons to increase or decrease this speed. The selectable range is 1/16 to x16 (default is x1). The maximum speed for the Harmony and Rainbow light shows is x4, regardless of setting. Note that a programmed light show will restart when a change is made to the speed.

Aux1 Motion (not available for Fixed colors)

The motion selection affects two aspects of a light show; the order in which the lights are illuminated and the fixed delay between each light in the sequence. The overall effect is to change the amount of motion or flow across the lights.

When set to OFF, there is no delay and all lights will illuminate at the same time. When motion is set to a positive value (+0.2 to +1.2), the order of illumination will start from the lowest LT number and advance to the highest. As the value is increased, the delay between each light is increased.

If a negative motion value is selected (-1.2 to -0.2), the illumination sequence will be the opposite (highest LT to lowest). As the value is decreased, the delay between each light is increased. Note that a programmed light show will restart when a change is made to motion.

Aux1 Brightness

Use the "+" or "-" buttons to adjust the brightness of the light show from 20% to 100% in 20% increments (default is 100%). Note that a programmed light show will restart when a change is made to brightness.

Fixed Colors

Aux1 Settings + to view/change	**+**	Push to access the Aux Settings
	< >	Move to previous/next settings menu

Aux1 Program 2 Deep Blue Sea 1	**+ −**	Rotates between all available light shows and fixed lights
	< >	Move to next menu item

2 Deep Blue Sea 1 +/- to change color	**+ −**	Changes color of fixed light
	< >	Move to previous/next menu item

2 Custom Color 75 +/- to change color	**+ −**	Changes color of fixed light
	< >	Move to previous/next menu item

2 Custom Color 75 Press + to reset	**+**	Push to reset color to the factory setting
	< >	Move to previous/next menu item

Are you sure? + to proceed	**+**	Push to proceed
	< >	Move to next menu item

2 Deep Blue Sea 1 Reset Confirmed	**< >**	Move to next menu item

Aux1 Brightness 100%	**+ −**	Adjusts brightness setting
	< >	Move to previous/next settings menu

Aux1 Program
Select the desired fixed color using the "+" or "-" buttons. A description of these selections can be found on the color laminated card included with the ColorLogic Network Module and on page 1 of this manual. The fixed colors will be displayed in the following order: 2, 3, 4, 6, and 5. The number on the right of the fixed color name is the color location in the color chart diagram located on the color laminated card.

Changing Colors
Select the desired fixed color and press "+" or "-" to change the color. The name will change to "Custom Color" and the number to the right will change to a new value. Refer to this number and the color chart to determine the desired color. Press ">" to save the new color.

NOTE: If any of the factory fixed colors are changed, Program 15 (Custom Fade) and Program 16 (Custom Chase) will use the new fixed color in their light shows.

Reset Color
After a custom color is saved, the option to reset back to the factory set color is displayed. This allows the user to "undo" changes and return back to the original default color. Push "+" to reset the color back to the factory default fixed color shown on the Program Table on page 1 and progress through the displays to confirm.

Aux1 Brightness
Use the "+" or "-" buttons to adjust the brightness of the fixed color from 20% to 100% (100% is default).

Operation

AUX Button

After all light shows and fixed colors are programmed, the assigned Aux function is used to run the ColorLogic programs. Refer to the information below on how each function will run the ColorLogic light shows and fixed colors.

Manual On/Off - Pressing the AUX button will start the ColorLogic program. The program will continue to run until the button is pressed again.

Countdown Timer – the ColorLogic program will start when the AUX button is pressed and will turn off automatically after a programmed time (see Timers Menu in the Pro Logic Operation manual). The AUX button can also be used to turn the output off.

Timeclock – the ColorLogic program will start and stop at the times set for the aux timeclock in the Timers Menu (see Pro Logic Operation manual).

The AUX button can be used to override the timeclock function. If a ColorLogic program has been turned on manually with the AUX button, the show will remain on until the AUX button is pushed again or the timeclock function shuts it off. For example, if the Aux output has been programmed to run a light show from 8:00pm - 10:00pm, pushing the AUX button will override this function and start the show immediately. The show will remain on until the AUX button is pushed again or the timeclock function shuts it off at 10:00pm.

LIGHTS Button

When the LIGHTS button is pushed, all networked lights will turn on using only white light. The display will confirm by showing the following message:

```
ColorLogic Lights
   All White On
```

This is a fast easy way to provide maximum illumination to the pool area. If a light show or fixed color(s) is running when the LIGHTS button is pressed, the LED indicator for associated AUX button will remain on and any other functions assigned to that aux will continue to run until the aux output turns off either manually or automatically.

When the LIGHTS button is pushed again, all lights will turn off and the display will show the following:

```
ColorLogic Lights
   All White Off
```

To resume the original light show or fixed color(s), toggle the associated AUX button off and back on.

LIGHTS LED

The LIGHTS LED will normally be on at ALL times, indicating that the lights relay is on and the ColorLogic 4.0 lights are receiving power. Unlike conventional lights, the ColorLogic 4.0 lights require power at all times and rely on communications from the Network Module to determine whether to turn on or off. Therefore, the lights relay and LIGHTS LED will always be on unless the Pro Logic is in Service mode or System Off mode. NOTE: The LIGHTS button has no affect on the LIGHTS LED indicator.

System Off Mode

When the Pro Logic is in the System Off mode, all of its outputs are kept in the off state. The Lights relay is off and no power is supplied to the ColorLogic 4.0 lights. When the System Off mode is exited, the Pro Logic returns to normal operation and the Lights relay will automatically be turned on again, restoring power to the ColorLogic 4.0 lights. The lights, however, will not be able to accept any commands from the Pro Logic, including on/off, until they finish their power-up cycle. This can take up to 3 minutes while the lights cycle through white, red, green and blue.

Service Mode

When the Pro Logic enters the Service mode, it shuts all of its outputs off. This means that the Lights relay is off and no power is supplied to the ColorLogic 4.0 lights. In this mode, all of its outputs are under manual control, and can individually be turned on/off by pushing the appropriate button on the local display (remote displays can only turn outputs off, not on, in the Service mode). If a light show or fixed color(s) is desired, the LIGHTS button must be pressed and the lights must have time to finish their power-up cycle (up to 3 minutes) before attempting to press AUX button. After the power-up cycle is complete, lights shows and fixed colors can be started and stopped using their associated AUX buttons. When the Service mode is exited, the Lights relay will automatically be turned off then on, restoring power to the ColorLogic 4.0 lights. The lights, however, will not be able to accept any commands from the Pro Logic, including on/off, until they finish their power-up cycle.

Light Shows

The ColorLogic Lights system provides a higher level of control over pool/spa light shows than previous products. You can modify the operation of existing light shows by adjusting the brightness, speed, and by adding motion effects to the show. In addition, you can create custom light shows by changing the colors displayed for shows two through six. Moreover, the light shows and customization is specific to each Aux button that is assigned to the ColorLogic Lights system.

Once the ColorLogic Lights have been installed and configured with the Pro Logic pool controller, control of the lights is a two step process. In the first step, specific lights must be assigned to an Aux button using the "Configuration" menu. The assignment to the Aux button includes a Sequence number which will be used for shows that use motion. In the second step, the specific details of the light show can be set up using the "Configuration" and "Settings" menu.
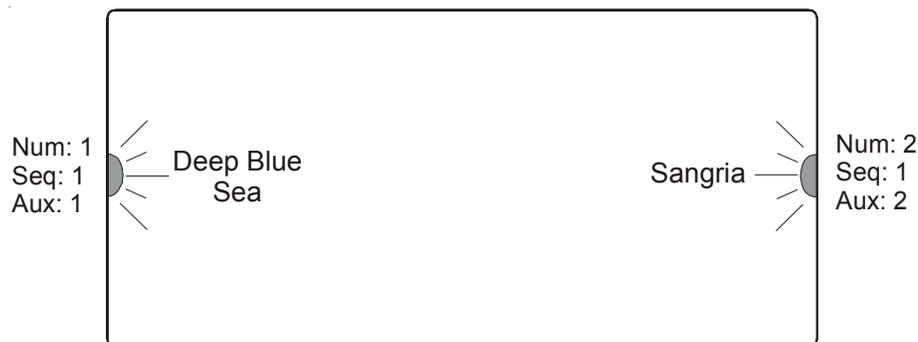
Examples

Note the terms below when reviewing the following examples.

Num – this is the light number which is assigned to the light when it is installed. This number identifies each light and is unique from 1 to the number of lights in the pool. Ex. LT1, LT2,... etc.

Seq – this is the sequence number assigned to the light when it was assigned to an Aux using the configuration menu. This tells what position it has in shows that move. Several lights can have the same sequence number, depending on the motion effects that are desired. A typical setup is to choose the sequence number to be the same as the light number. If you will not be using shows that move, the sequence numbers are not important.
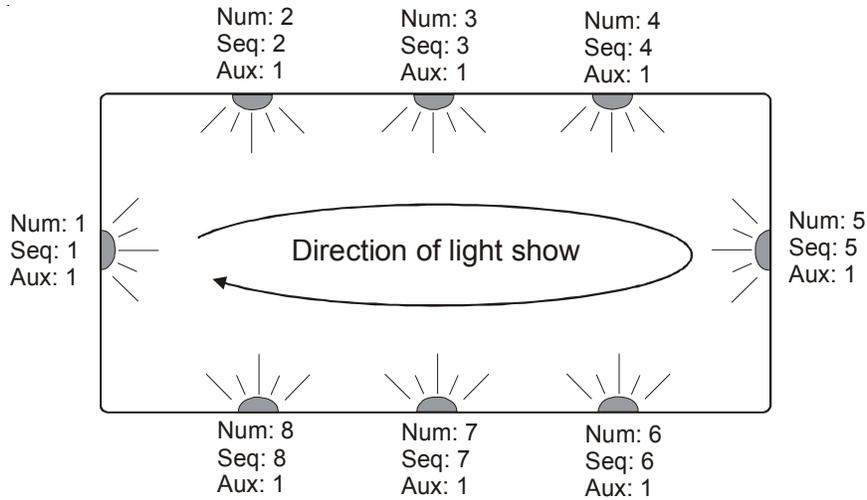
Aux – this is the Aux button to which the light is assigned. Note that several lights can be assigned to each Aux button. Also, a single light can be assigned to several Aux buttons. You can set up your pool so that each Aux button can run a different light show or a separate group of lights.

In Example 1, Light 1 is assigned to Aux 1 (using the configuration menu) and set up to show the Deep Blue Sea fixed color using the settings menu. Light 2 is assigned to Aux 2 and set up to show the Sangria color. Deep Blue Sea and Sangria are both non-moving shows and will produce fixed colors. If Aux 1 and Aux 2 are turned on, the side of the pool with the Light 1 (Deep Blue Sea) will be blue and the side of the pool with Light 2 will be red (Sangria)
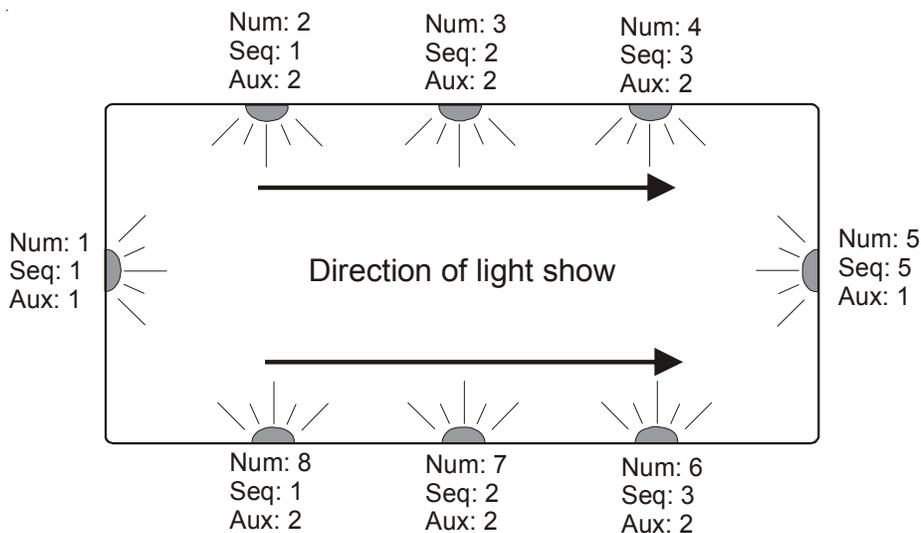

Example 1:   Pool with two lights (one at each end of the pool)

In Example 2, the pool has eight lights which are identified as 1-8 using a clockwise rotation around the pool starting from the left. The light numbers are specified when the lights are installed using the ColorLogic configuration process (refer to the "Identify ColorLogic" section on page 6). All lights are assigned to Aux 1 and use their light number as their sequence number. The lights are set up to run USA light show with motion using the settings menu. When Aux 1 is turned on, the USA light show will start with Light 1 and move around the pool to Light 8. Each light will cycle through red, white, and blue. In addition, the show will appear to move around the pool as the lights show will start at different times based on the sequence number and speed of the show.

Num: 2
Seq: 2
Aux: 1

Num: 3
Seq: 3
Aux: 1

Num: 4
Seq: 4
Aux: 1

Num: 1
Seq: 1
Aux: 1

Direction of light show

Num: 5
Seq: 5
Aux: 1

Num: 8
Seq: 8
Aux: 1

Num: 7
Seq: 7
Aux: 1

Num: 6
Seq: 6
Aux: 1

Example 2: Lights set up to move around the pool

In this example, the sequences assigned to lights configured with Aux 2 are paired on both side of the pool. Lights 1 and 5 are not assigned to Aux 2. The settings menu will be used to select the custom chase light show for Aux2 with motion set to 1.0 and the speed will be set to x2 for more rapid change. The custom chase will use the fixed colors set for light shows 2 through 6. The actual color desired for each of these shows (i.e., 2 though 6) can be changed and the color selected for show 6 will be off. When the show begins, the colors will move from the left end of the pool to the right. Adjust the motion and speed settings as desired.

Num: 2
Seq: 1
Aux: 2

Num: 3
Seq: 2
Aux: 2

Num: 4
Seq: 3
Aux: 2

Num: 1
Seq: 1
Aux: 1

Direction of light show

Num: 5
Seq: 5
Aux: 1

Num: 8
Seq: 1
Aux: 2

Num: 7
Seq: 2
Aux: 2

Num: 6
Seq: 3
Aux: 2

Example 3: Lights set up for runway effect.

FAQs

Even when the lights are off, why does the Lights indicator on the Pro Logic control panel always turn on whenever the Pro Logic is turned on?
The Lights indicator reflects the state of power to the lights and power is always applied to the lights when the pool controller is on. The Lights indicator is on to indicate that power is applied to the lights. The lights run a light show, turn on, or turn off under program control which is initiated from the Pro Logic. In general, lights will have power applied even if the lights are not displaying visible light.

Can the Lights relay be configured when used with a ColorLogic Lights Generation 4.0 (CLLG4) system?
No. The Pro Logic automatically assigns the Lights relay to the CLLG4 system and enables power to the light. Lights are always powered when the pool controller is powered on. To force this relay off, use Service Mode or System Off mode.

How does the Lights button work?
The Lights button is used for emergency white lighting of the pool. The Lights button sends a command to toggle the light state. The lights will either turn on (full white) or off. If you press the button and the lights remain off, press the button again to turn the lights on full white. If you press the button and the lights stay on, press the button again to make the lights turn off. Normal color operation of the lights is done through Aux buttons.

Can lights be assigned to multiple Aux buttons?
Yes. Moreover, different light shows can be set up for each Aux button. For instance, a light can be assigned to Aux 1 and Aux 2. Aux 1 can be set to Voodoo Lounge while Aux 2 can be set to Deep Blue Sea.

What happens when lights are assigned to multiple Aux buttons?
Lights process the command associated with the last button which was turned on. For example, assign lights to Aux 1 and Aux 2 and then Aux 1 set up to run Deep Blue Sea, and Aux 2 set to run Emerald. Press Aux 1 and the light will run Deep Blue Sea, and then press Aux 2 and the light will run Emerald. Both Aux 1 and Aux 2 indications (LEDs) will be illuminated. If you then press Aux 1, its LED will turn off but the light will still be running the Aux 2 show (i.e., Emerald). If you press Aux 2, the light show (i.e., Emerald) will turn off and the Aux 2 LED will also be turned off.

If Aux 1 and Aux 2 are both off and you press Aux 1 (to start Deep Blue Sea) and then Aux 2 (to start Emerald), the lights will remain in the Emerald show. If you then press Aux 2 to stop Emerald, the light will turn off along with the Aux 2 LED. The Aux 1 LED will still be illuminated when this happens. The Aux 1 LED can be turned off by pressing the Aux 1 button again.

Do all lights have to be assigned to the same Aux button?
No. A subset of lights can be assigned to any Aux button. For instance, if you are using a Pro Logic with eight Aux buttons, pool lights can be assigned to Aux 4 and spa lights can be assigned to Aux 5. If Aux 4 and Aux 5 are set up this way, different light shows can be assigned to Aux 4 and Aux 5. Moreover, if lights are separated between pool and spa, both the pool and spa lights can run different light shows at the same time. Another Aux can run all the lights at once.

Can light show settings be changed while a show is running?
Yes. The settings for a show can be changed while a show is running. If you pause a few seconds between key presses, you will be able to see the effect of the changes while the show is running. For instance, if you are adjusting the speed parameter (using the settings menu) while a show is running, you can see the effect of speeding or slowing down the show.

How do lights go from stand alone mode to program control mode?
Lights are originally shipped in stand alone mode. This mode allows the light shows to be controlled using power line interrupts (toggling power to the light) and is similar to the previous generation lights. The lights automatically go into program control mode when they are configured with a Pro Logic pool controller and AQL-COLOR-MODHV.

How do lights go from program control mode to stand alone mode?
Lights which have been installed and configured with a pool controller can be returned to stand alone mode by using the "Reset ColorLogic" option in the Pro Logic configuration menu.

Can I mix ColorLogic 4.0 lights with ColorLogic 2.5 lights in stand alone mode?
No. The timing of light shows in version 4.0 lights is not the same as version 2.5 lights. The lights will not perform at the same speed or intensity.

Troubleshooting

ColorLogic Lights system is not recognized by the Pro Logic and no ColorLogic menu options are shown.
Verify that the green Lights indicator automatically turns on upon applying power to the Pro Logic. If the indicator does not turn on, the Pro Logic is not communicating with the Network Module which means you should check the RS-485 connection (i.e., the four wire connection) between the Pro Logic main board and the Network Module.

Lights occasionally dim and brighten?
Generation 4 ColorLogic lights have internal thermal protection and will automatically dim the LEDs if the light temperature rises to 70ºC or greater. The light will go back to normal brightness as soon as the condition is corrected.

How can I tell if the lights are operating correctly?
Power off the lights for at least one minute. Once power is applied to the light, it should immediately turn on an all white light for approximately fifteen seconds. If the light is installed with a pool controller and has been configured with a working Network Module, the light will flash red, green, and blue before turning off after fifteen seconds of white has been displayed. For larger systems, this cycle of red, green and blue can last up to 3 minutes. If the light is set up to run in a stand alone mode, it will start the light show after the fifteen seconds of white light.

Lights are not found during the "Find ColorLogic Lights" operation.
This occurs if the lights are not wired correctly. The lights and Network Module must be on the same power phase. Refer to the wiring diagram for more details.

Lights that are found do not blink during the identification process.
One common source of this problem is improper wiring. Verify that the lights and Network Module are on the same phase. Refer to the wiring diagram for more details. Use the "Left Arrow" to return to the previous light and then continue to identify the lights using the right arrow.

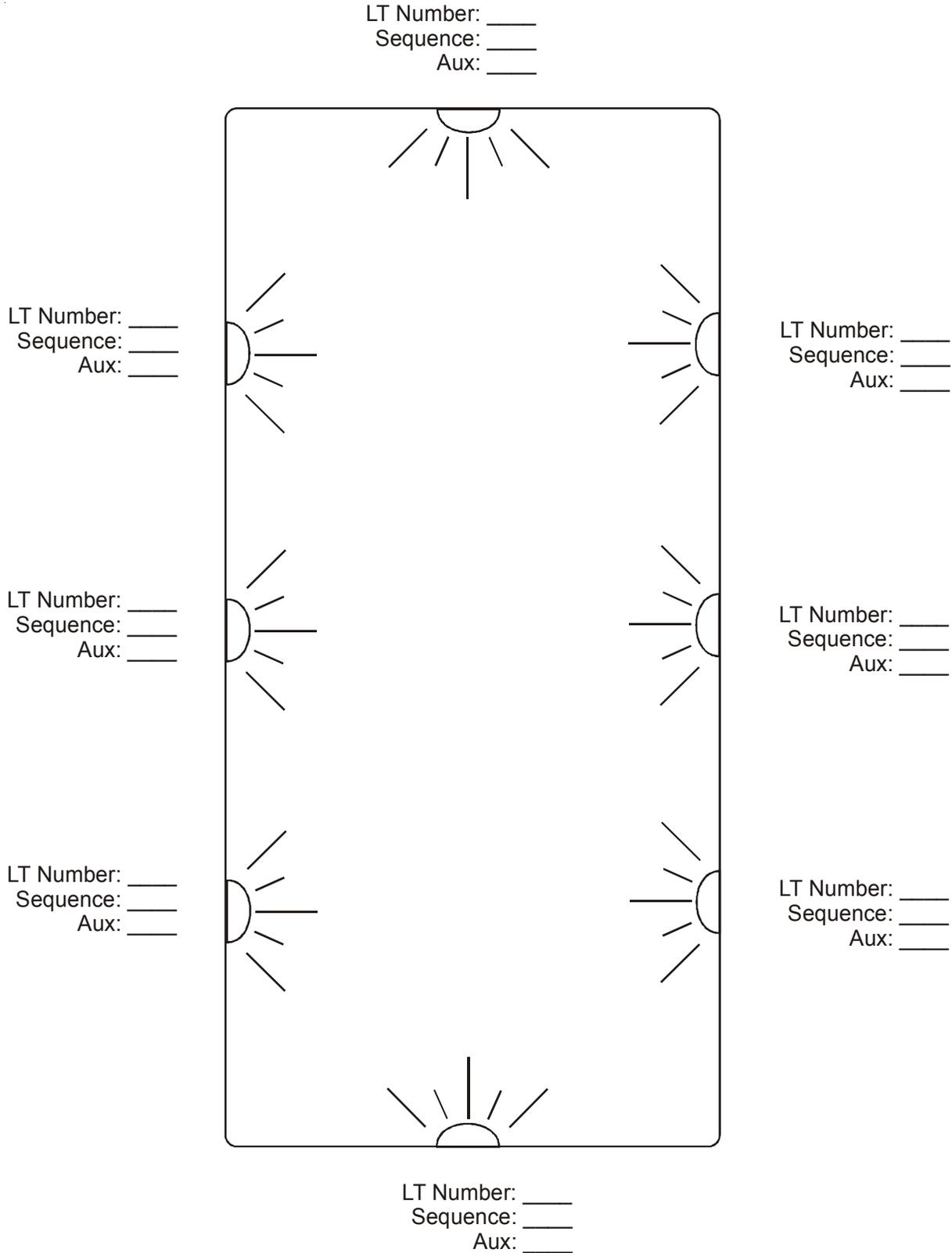**Multiple lights blink at the same time during the identification process.**
During the identification process only a single light should be blinking at any given time. Each time the right arrow is pressed, a command is sent to turn off the current light and to start the next light blinking. If two lights are blinking, previous light did not process the command to turn off. Use the "Left Arrow" to return to the previous light and then continue to identify the lights using the right arrow.

Lights are running different shows when they should all be running the same show.
Each light maintains a local set of information which identifies the AUX buttons it is assigned to. Each light also maintains a local copy of the actions (e.g., which light show to run when an AUX button is pressed) it takes in response to the AUX button. If the settings menu is adjusted when a light is powered off or not connected to the network, information can get out of sync with the other lights. When this happens, the corrective action is to adjust the settings for the AUX while the light is powered on.
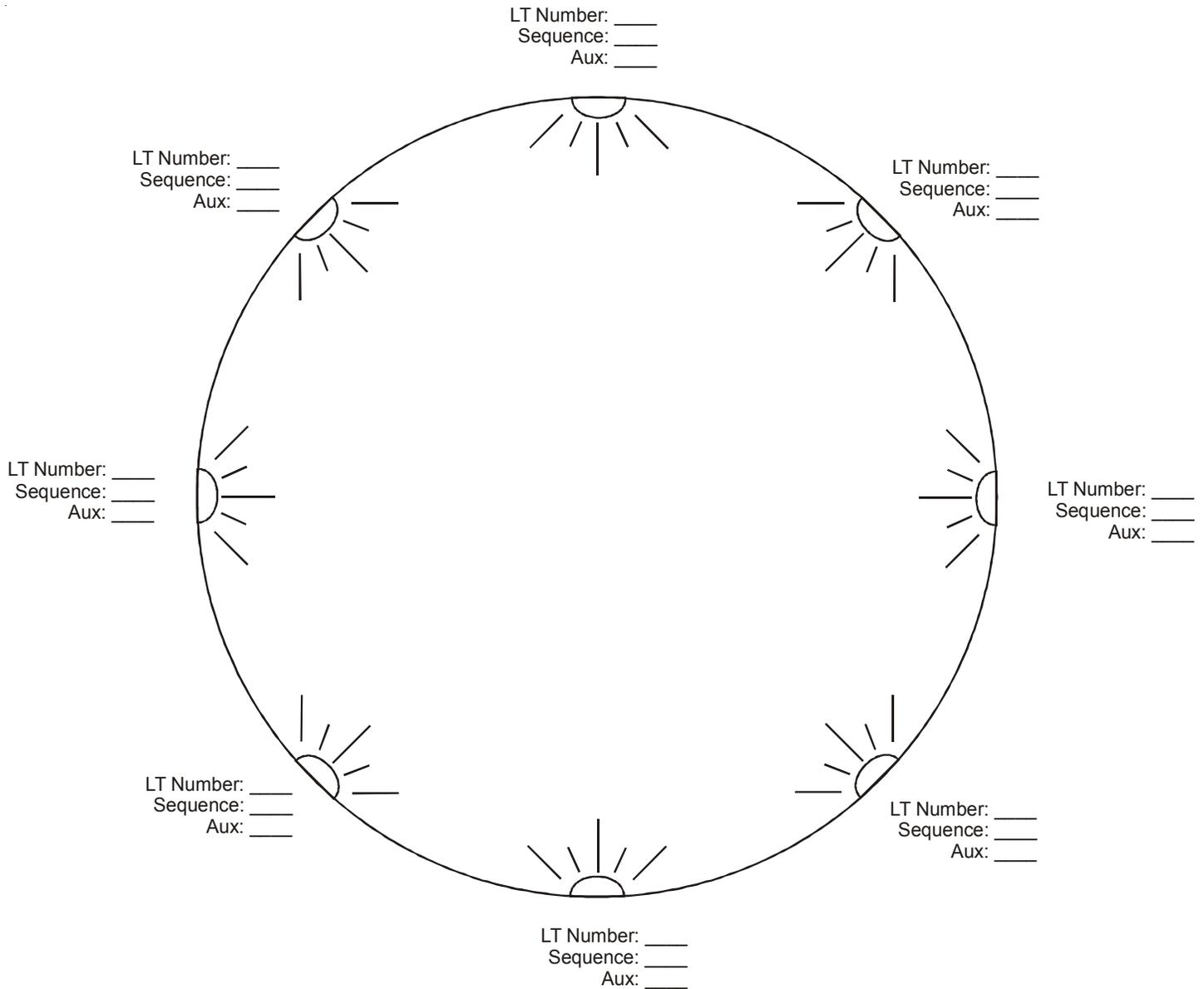
Rectangular Pools

If the diagram below resembles your pool, shade in the appropriate lights and fill out the corresponding information. Modify the drawing by add additional lights or information, if necessary. It may be easier to hand draw your pool using the blank space on page 17. If so, be sure to add all of your lights and labeling information to your drawing. This diagram will aid in programming and will be a useful references for any future changes.

LT Number: ____
Sequence: ____
Aux: ____

LT Number: ____
Sequence: ____
Aux: ____

LT Number: ____
Sequence: ____
Aux: ____

LT Number: ____
Sequence: ____
Aux: ____

LT Number: ____
Sequence: ____
Aux: ____

LT Number: ____
Sequence: ____
Aux: ____

LT Number: ____
Sequence: ____
Aux: ____

Round Pools

If the diagram below resembles your pool, shade in the appropriate lights and fill out the corresponding information. Modify the drawing by add additional lights or information, if necessary. It may be easier to hand draw your pool using the blank space on page 17. If so, be sure to add all of your lights and labeling information to your drawing. This diagram will aid in programming and will be a useful references for any future changes.

LT Number: ____
Sequence: ____
Aux: ____

LT Number: ____
Sequence: ____
Aux: ____

LT Number: ____
Sequence: ____
Aux: ____

LT Number: ____
Sequence: ____
Aux: ____

LT Number: ____
Sequence: ____
Aux: ____

LT Number: ____
Sequence: ____
Aux: ____

LT Number: ____
Sequence: ____
Aux: ____

LT Number: ____
Sequence: ____
Aux: ____

Irregular Shaped Pools

Hand draw your pool below. Label the location of each light and fill out all corresponding information as shown on the previous two pages. This diagram will aid in programming and will be a useful references for any future changes.

LIMITED WARRANTY (effective 01/01/09) Goldline warrants its Aqua Rite, Aqua Rite Pro, Aqua Logic, Pro Logic and E-Command products to be free of defects in materials and workmanship, under normal use and service for a period of three (3) years. This warranty is applicable from the initial date of installation on private residential swimming pools in the US and Canada. The warranty is not transferable and applies to the original owner only.

Aqua Trol, commercial installations, installations outside of the US and Canada, accessory products and replacement parts are covered under the terms of the warranty for a period of one (1) year.

Proof of purchase is required for warranty service. If written proof of purchase is not provided, the manufacturing date code will be the sole determinant of the date of installation of the product.

To obtain warranty service or repair, please contact the place of purchase or the nearest Goldline authorized warranty service center. For more information on authorized service centers please contact the Hayward/Goldline Technical Service Support Center (61 Whitecap Road, North Kingstown RI, 02852) or visit the Goldline web site, www.goldlinecontrols.com.

WARRANTY EXCLUSIONS:
1. Material supplied or workmanship performed by others in process of installation.

2. Damage resulting from improper installation including installation on pools larger than the product rating.

3. Problems resulting from failure to install, operate or maintain the product(s) in accordance with the recommendations contained in the owners manual(s).

4. Problems resulting from failure to maintain pool water chemistry in accordance with the recommendations in the owners manual(s).

5. Problems resulting from tampering, accident, abuse, negligence, unauthorized repairs or alternations, fire, flood, lightning, freezing, external water, degradation of natural stone used in or immediately adjacent to a pool or spa, war or acts of God.

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