

CHLORPDS and MULTI POOL CONTROL BOX

Installation, Operation, and Maintenance Manual

FOR MULTI POOL NEXGEN



CHLORPDSAC40



Multi Pool Controller



CHLORPDS5

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Note: This manual is subject to change at any time based on system improvements, design changes, authorized modifications, or new information. Please consult ChlorKing for the latest revision.

Manufacturer:
ChlorKing Inc
2935 Northeast Parkway
Atlanta, GA 30360
1-800-536-8180

SECTION 1 DESCRIPTION

1.1 GENERAL INFORMATION

The ChlorKing® CHLORPDS is designed to feed sodium hypochlorite to multiple pools from one NEXGEN. Up to six pools can be chlorinated with one NEXGEN. Each additional pool will require one CHLORPDS. The system consists of a peristaltic pump and a Multi Pool Control Box controlled by the NEXGEN. Each system can be controlled by a chemical feed controller.

1.2 PRINCIPALS OF OPERATION

CHLORPDS

The CHLORPDS utilizes peristaltic pumps to chlorinate additional bodies of water. The CHLORPDS (Pump Dosing System) is plumbed from the NEXGEN to the pool circulation system return line.

Multi Pool Control Box

The Multi Pool Control Box is connected to the NEXGEN and CHLORPDS. When an additional pool needs sanitizer the chemical feed controller activates the Multi Pool Control Box. The Multi Pool Control Box signals the NEXGEN that an additional pool needs sanitizer. The NEXGEN starts, and turns on the CHLORPDS, which feeds the pool.

1.3 ADDITIONAL ITEMS REQUIRED

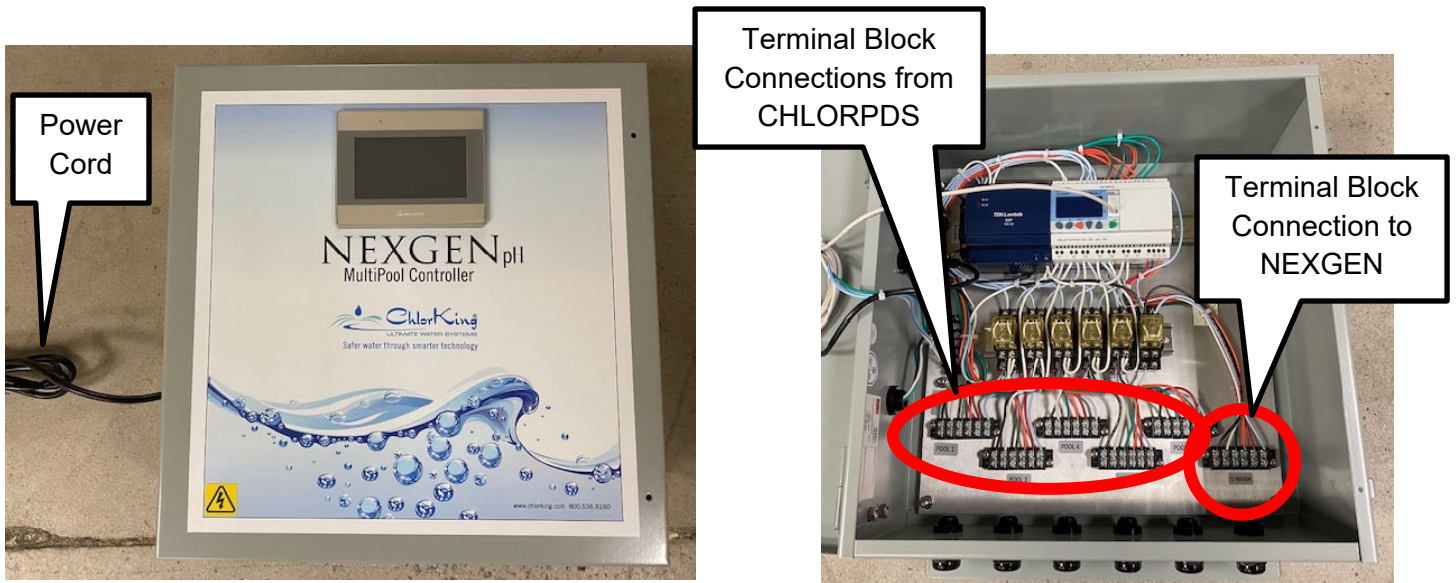
½ inch PP or PE tubing

Appropriate hardware for mounting surface

6 conductor 18 awg SOOW or SJTOW cable or as required by code.

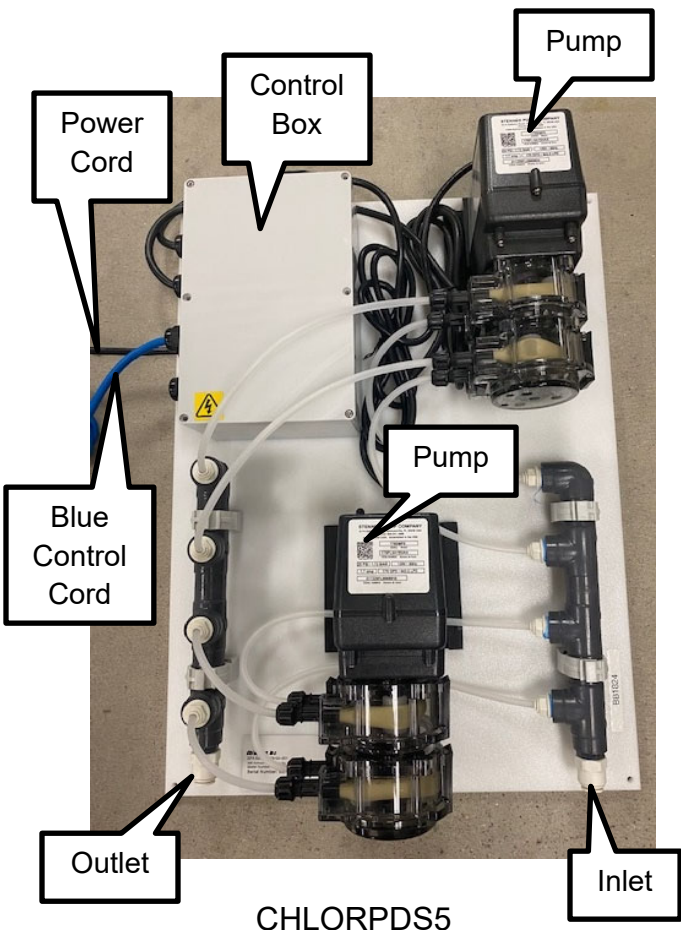
3 conductor 18 awg SOOW or SJTOW cable or as required by code.

1.4 COMPONENT IDENTIFICATION



5 Pool Control Box

5 Pool Control Box



CHLORPDS5



CHLORPDSAC40

1.5 GENERAL SPECIFICATIONS

Model Designation	Sodium Hypochlorite Dose Rate	Pounds per Day Sodium Hypochlorite Dose	Rated Pressure	Rated Flow	Chemical Feed Diameter
CHLORPDS5	Up to .12 GPM	4.6	25 PSI	.25 GPM	½ inch
CHLORPDSAC 40	Up to 2 GPM	5-40	25 PSI	0-2 GPM	½ inch

ELECTRICAL REQUIREMENTS:

Model Designation	Voltage Supply (AC)	Phases	Frequency	Amps
CHLORPDS5 Power	120	1	60Hz	5
CHLORPDSAC40	230	1	50/60Hz	1.5
CHLORPDS Control Cord	120	1	60Hz	1
Multi Pool Control Box	120	1	60Hz	10

DIMENSIONS

CHLORPDS
L 18" x H 24"

CHLORPDSAC40
L 16" x H 22"

Multi Pool Control Box
L 16" x H 16"

SECTION 2 INSTALLATION

2.1 UNPACKING

Units are shipped from the factory. In the event of damages during shipping, it is the responsibility of the customer to notify the carrier immediately and to file a damage claim. Open the crate or packaging carefully and examine all material inside.

2.2 STORAGE

When storing units, use the original packaging and store under a shelter to protect the contents from weather.

2.3 SAFETY CONSIDERATIONS

**IMPORTANT SAFETY INSTRUCTIONS
READ AND FOLLOW ALL INSTRUCTIONS**

SAVE THESE INSTRUCTIONS

WHEN INSTALLING, OPERATING, AND MAINTAINING THIS EQUIPMENT, KEEP SAFETY CONSIDERATIONS FOREMOST. USE PROPER TOOLS, PROTECTIVE CLOTHING, AND EYE PROTECTION WHEN WORKING ON OR INSTALLING THE EQUIPMENT. FOLLOW THE INSTRUCTIONS IN THIS MANUAL AND TAKE ANY ADDITIONAL SAFETY MEASURES APPROPRIATE. BE EXTREMELY CAREFUL IN THE PRESENCE OF HAZARDOUS SUBSTANCES.

THE PERSONNEL RESPONSIBLE FOR INSTALLATION, OPERATION, AND MAINTENANCE OF THIS EQUIPMENT MUST BE FULLY FAMILIAR WITH THE CONTENTS OF THIS MANUAL.

ANY SERVICING OF THIS EQUIPMENT MUST BE DONE WITH THE UNIT FULLY OFF AND DISCONNECTED FROM THE POWER SOURCE AND ALL PRESSURE BLED FROM THE LIQUID LINES.

WARNING

- CONNECT THE EQUIPMENT ASSEMBLY TO A CIRCUIT PROTECTED BY A GROUND-FAULT CIRCUIT-INTERRUPTER.
- ONLY A CERTIFIED TECHNICIAN MAY INSTALL AND SERVICE THE **CHLORKING® CHLORPDS**.
- MODIFYING THE **CHLORKING® CHLORPDS** IN ANY WAY MAY CAUSE BODILY INJURY AND WILL VOID THE WARRANTY.
- DO NOT ALLOW CHILDREN TO OPERATE THE **CHLORKING® CHLORPDS**.
- ONLY REPLACE COMPONENTS WITH THOSE SPECIFIED BY THE MANUFACTURER.
- WHEN INSTALLING THE SYSTEM, ENSURE THAT POWER IS LINKED TO THE MAIN PUMP POWER SOURCE FOR THE POOL TO ENSURE THAT THE **CHLORKING® CHLORPDS** NEVER OPERATES WHEN THE PUMPS ARE OFF.
- THE SYSTEM HAS THE POTENTIAL TO RELEASE HIGH DOSES OF CHORINE. USE CAUTION WHEN HANDLING, SERVICING, OR OPERATING THE EQUIPMENT.
- CORD CONNECTED AT TIME OF MANUFACTURE
 - DANGER – Risk of injury
 - Replace damaged cord immediately
 - Do not bury cord

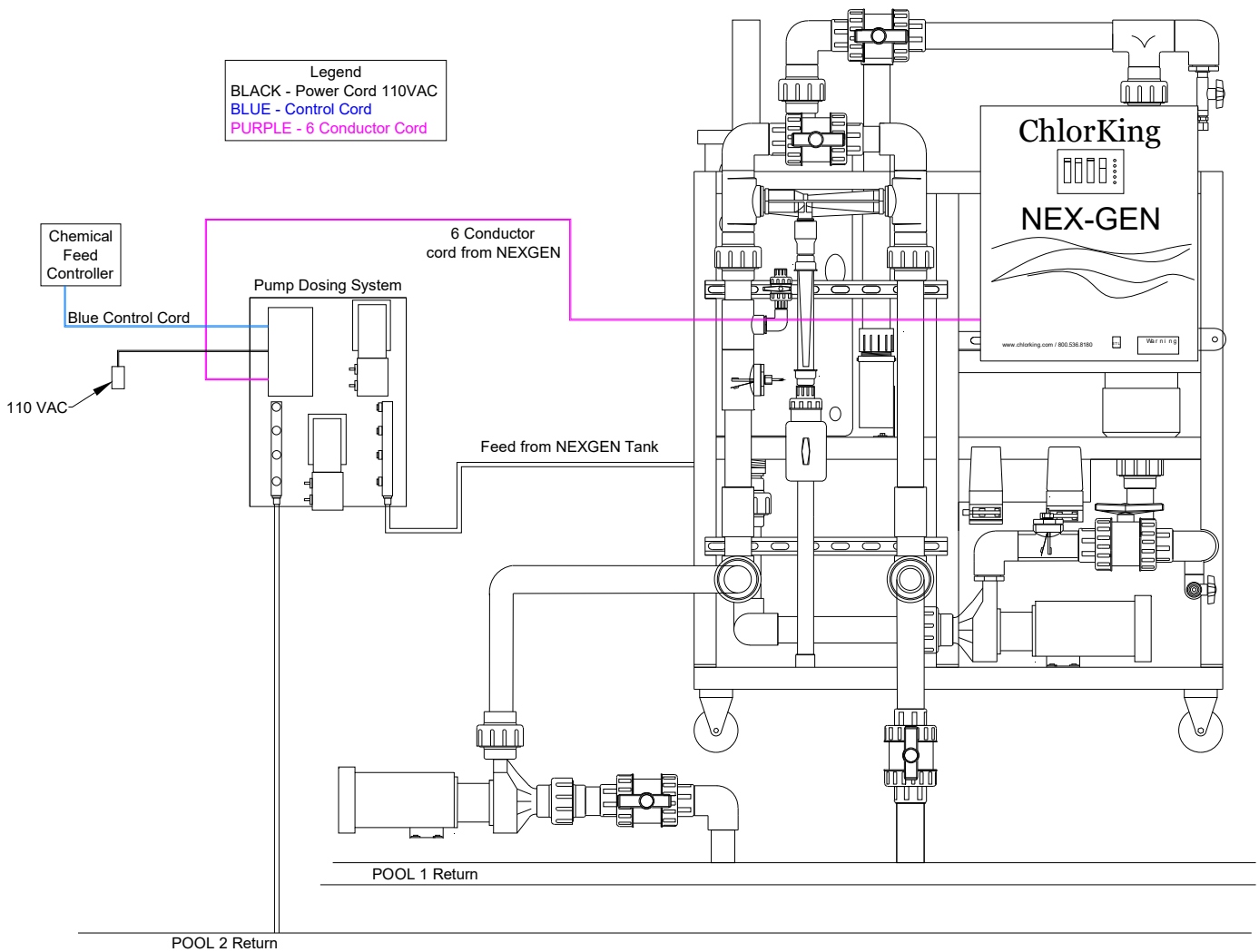
2.4 PLAN AHEAD

Almost every pump room encountered is different. It is imperative to have prior knowledge of the facility in which the unit is to be installed and to evaluate what type of tools, wall anchors, etc. will be needed to make the installation as problem free as possible.

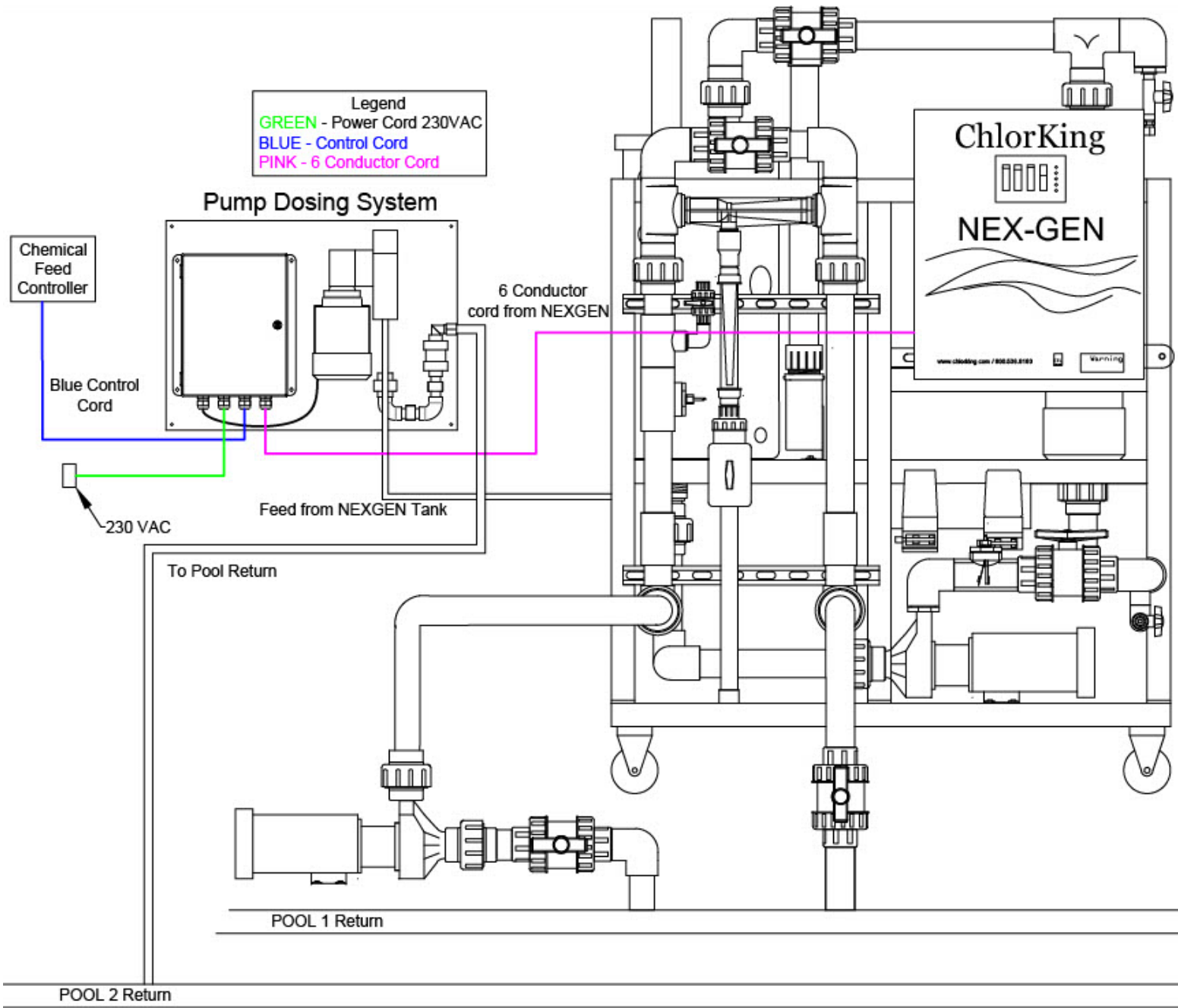
The Five Pool Controller and CHLORPDS5 will need to be installed within 6 feet of a 120 VAC electrical outlet and within 10 feet of a chemical feed controller. The CHLORPDSAC40 will need to be installed no higher than the NEXGEN tank and as close to the NEXGEN as possible.

2.5 SYSTEM DIAGRAM

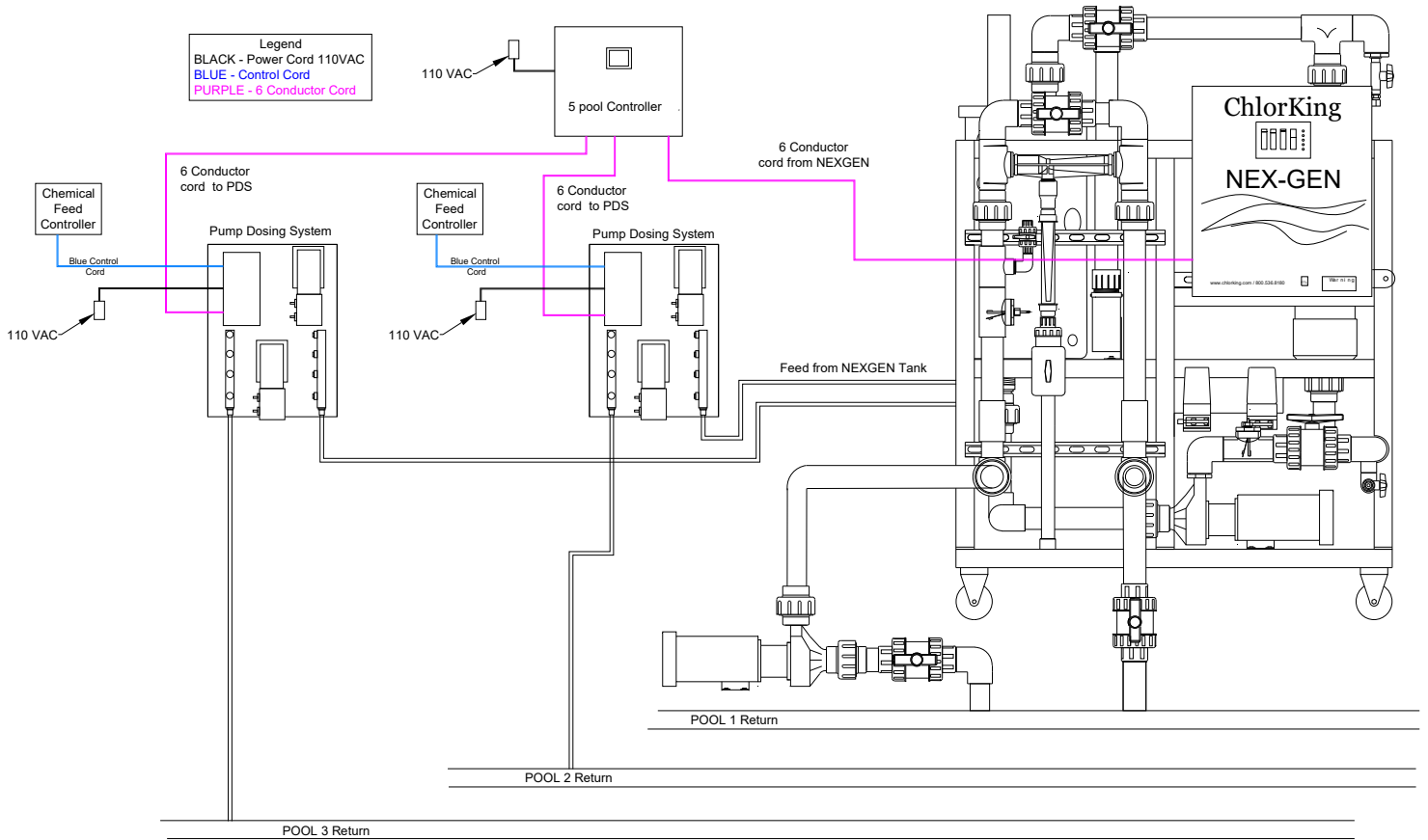
One Additional Pool CHLORPDS5



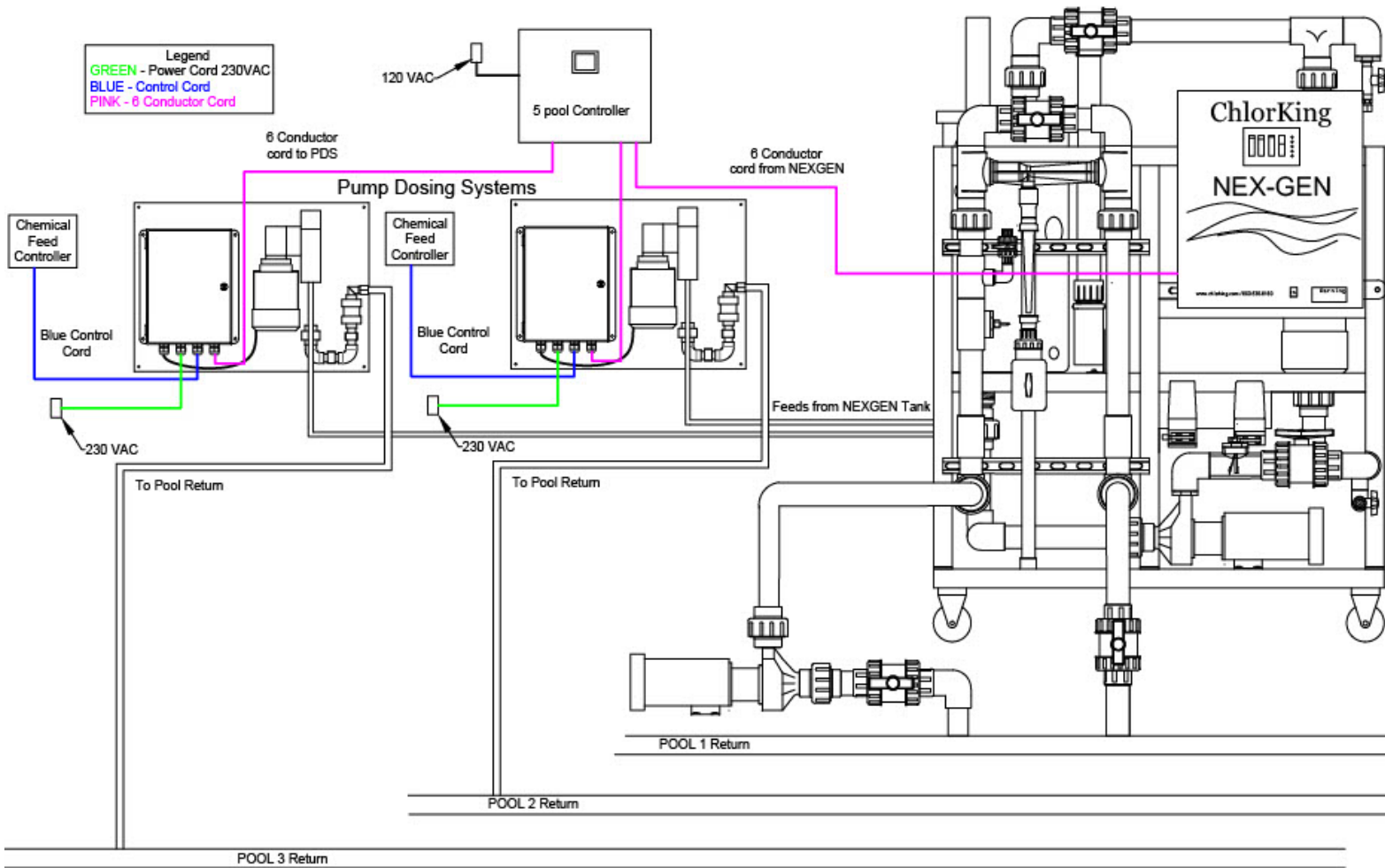
One Additional Pool CHLORPDSAC40A



Multiple Pools CHLORPDS5



Multiple Pools CHLORPDS40A



2.6 CHLORPDS INSTALLATION

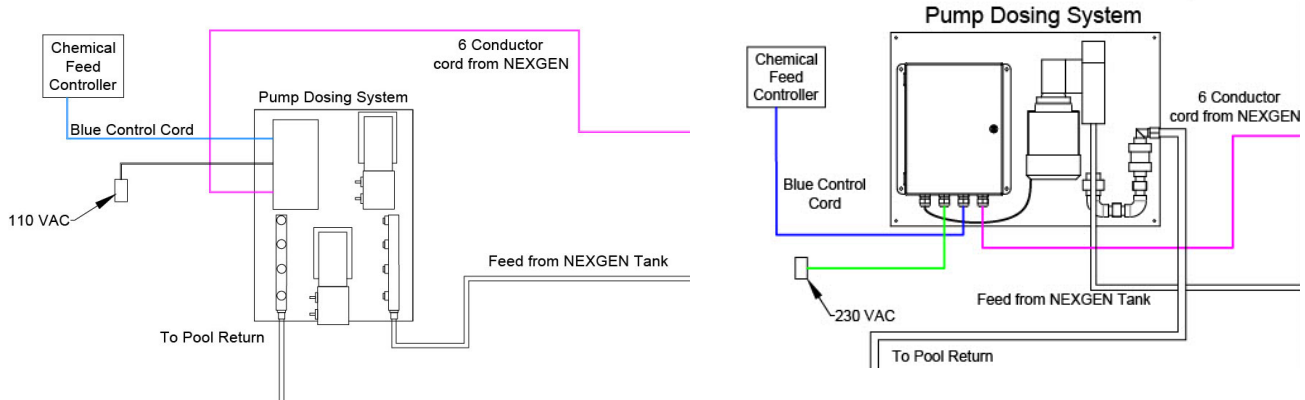
Locate a space on the wall in the pump room that will accommodate the dimensions of the CHLORPDS. Install in an easy to access location. Using a level, mark where the panel will be located. On a concrete wall installation, mark the wall (using a dot) where the first concrete anchor hole will be drilled. Install the system directly to the mounting surface.

NOTE: Pressure at the pump outlet must not exceed 25 psi.

Use ½ inch PP or PE tubing to plumb the line from the NEXGEN production tank to the CHLORPDS suction side and from the CHLORPDS pressure side to the pool return line. The line to the pool return should be plumbed as the last thing before the water returns to the pool.

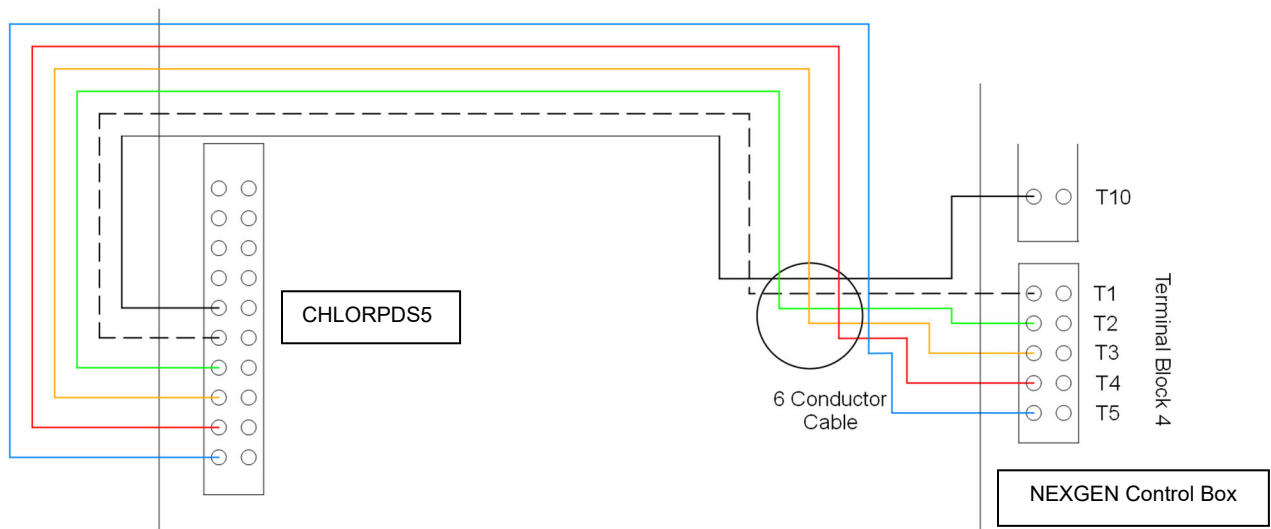
2.7 CHLORPDS WIRING FOR ONE ADDITIONAL POOL

The CHLORPDS5 has a 6 foot black power cord that plugs into a 15a outlet. The CHLORPDS40A is hard wired to 230 VAC. Both units use a 10 foot **blue control cord** that plugs into a chemical feed controller.

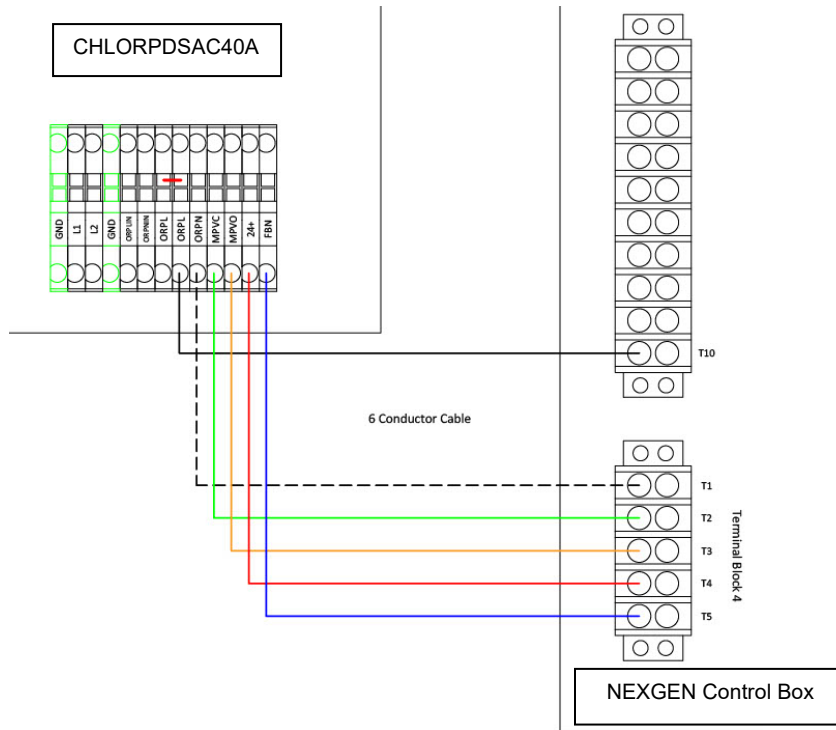


Connect a 6 conductor 18awg SJTOW or SOOW cable (not supplied) from the CHLORPDS to the NEXGEN.

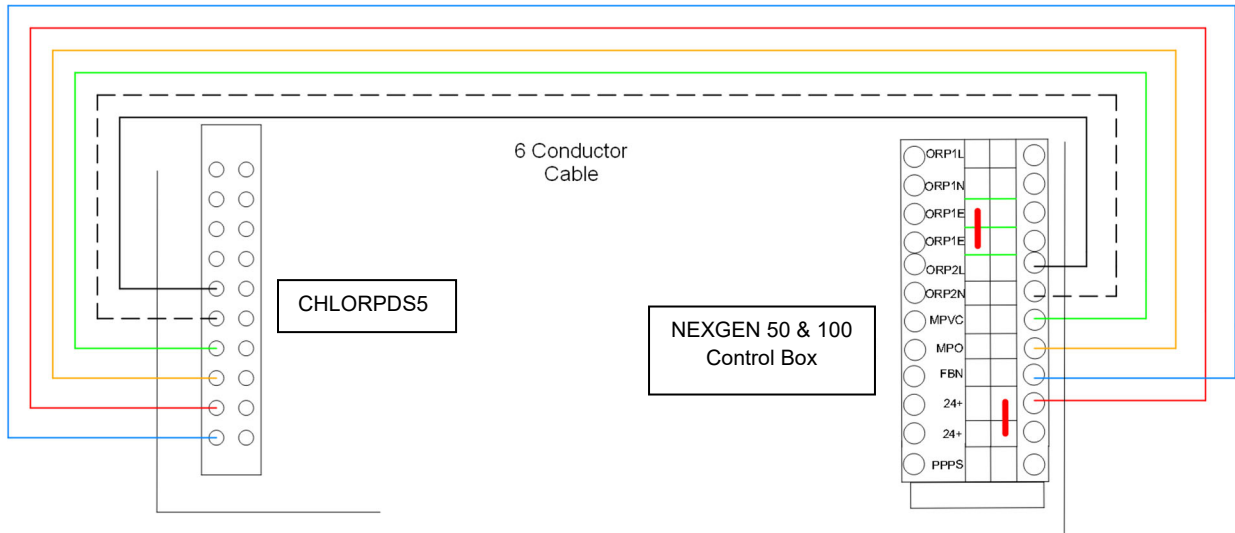
CHLORPDS5 CONNECTION DIAGRAM FOR NEXGEN10, 20, 40, AND 80



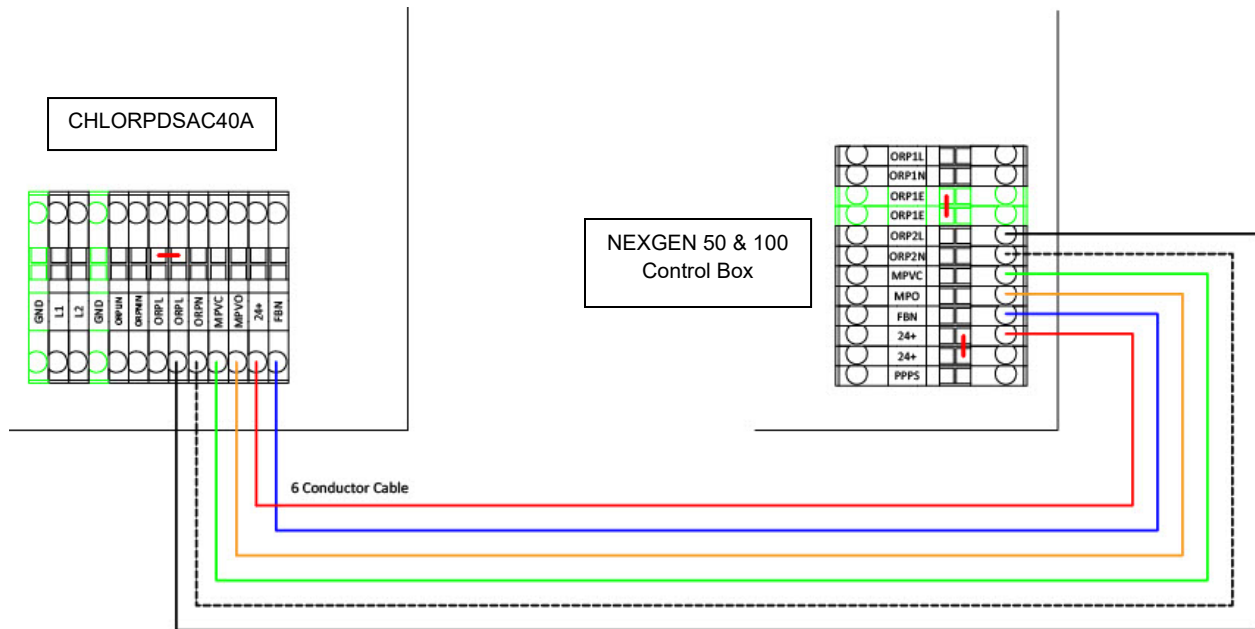
CHLORPDSAC40A CONNECTION DIAGRAM FOR NEXGEN10, 20, 40, AND 80



CHLORPDS5 CONNECTION DIAGRAM FOR NEXGEN50 and 100



CHLORPDSAC40A CONNECTION DIAGRAM FOR NEXGEN50 and 100



2.8 FIVE POOL CONTROLLER INSTALLATION

Locate a space on the wall, in the pump room, that will accommodate the dimensions of the Five Pool Controller. Install in an easy to access location. Using a level, mark where the box will be located. On a concrete wall installation, mark the wall (using a dot) where the first concrete anchor hole will be drilled. Install the controller directly to the mounting surface.

2.9 FIVE POOL CONTROL BOX WIRING

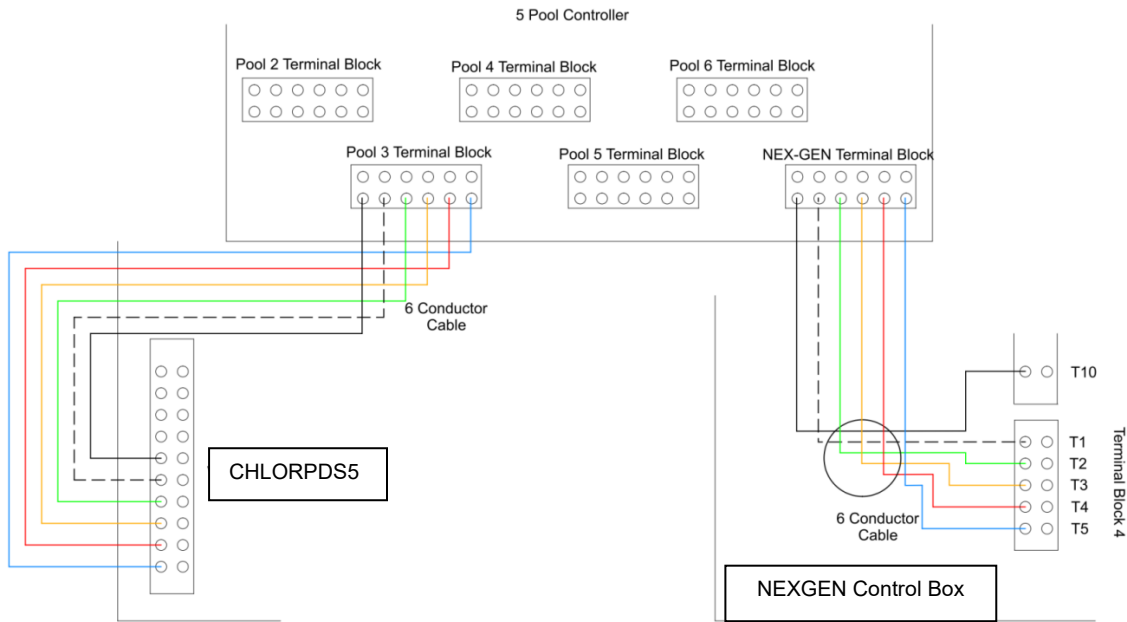
The 5 Pool Control Box has a 6 foot black power cord that plugs into a 15a outlet.

2.10 CHLORPDS WIRING FOR MULTIPLE POOLS

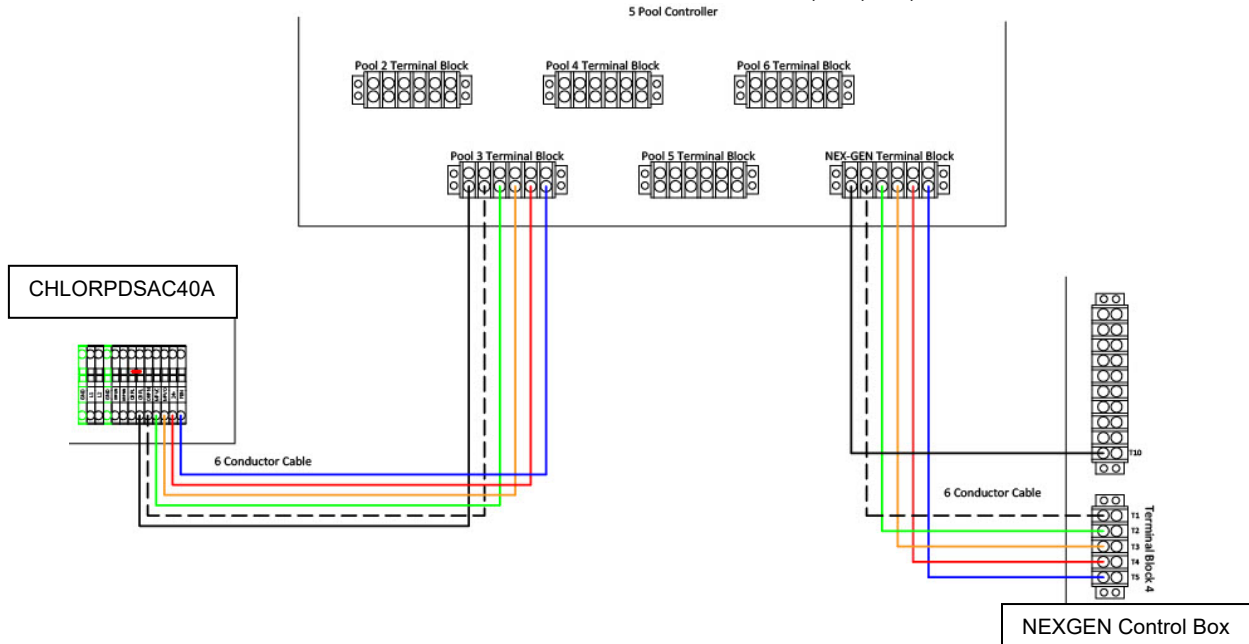
The CHLORPDS5 has a 6 foot black power cord that plugs into a 15a outlet. The CHLORPDS40A is hard wired to 230 VAC. Both units use a 10 foot **blue control cord** that plugs into a chemical feed controller.

Disconnect power from the NEXGEN, the CHLORPDS, and the 5 Pool Control Box. Connect an 18awg, 6 conductor SJTOW or SOOW cable from the terminal block inside of the CHLORPDS control box to the Pool 2, 3, 4, 5, or 6 Terminal Block inside of the 5 Pool Controller. Repeat this process for all additional pools. Connect an 18awg, 6 conductor cable from the NEXGEN Terminal Block inside of the 5 Pool Controller to the terminal block inside of the NEXGEN for a second pool. See diagrams below for NexGen10, 20, 40, and 80. See diagrams on the next page for NexGen50 and 100.

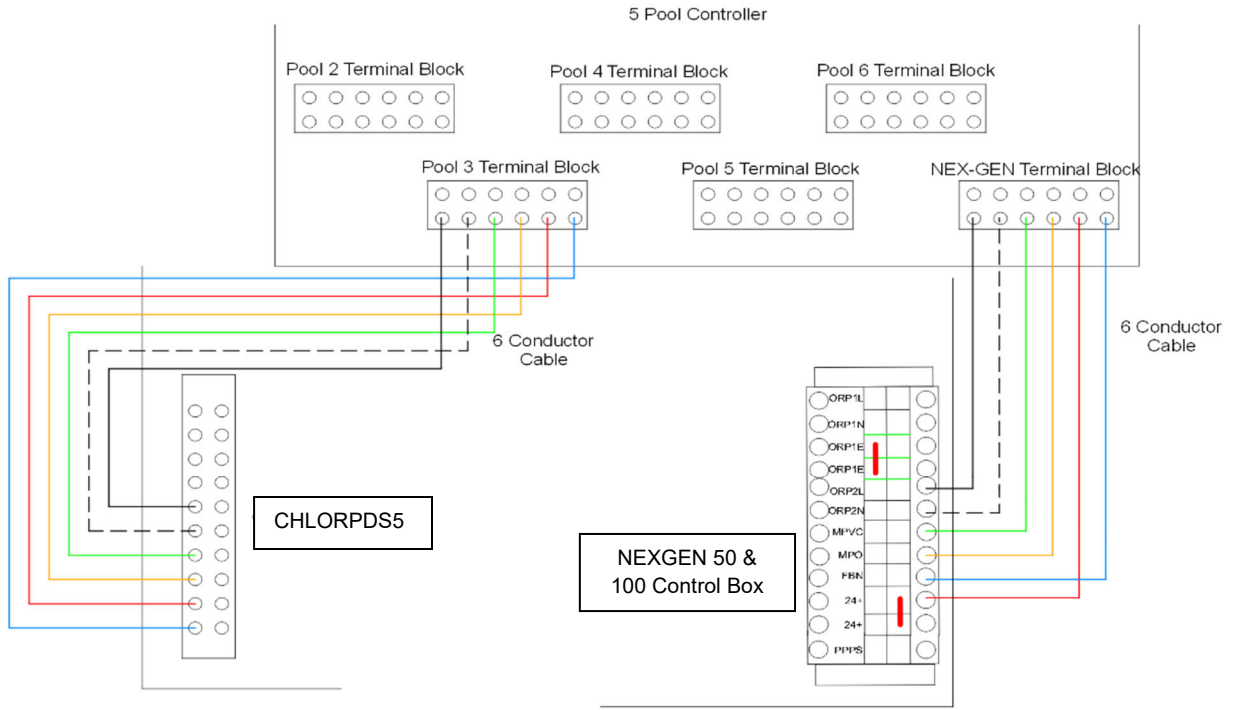
CHLORPDS5 CONNECTION DIAGRAM FOR NEXGEN10, 20, 40, AND 80



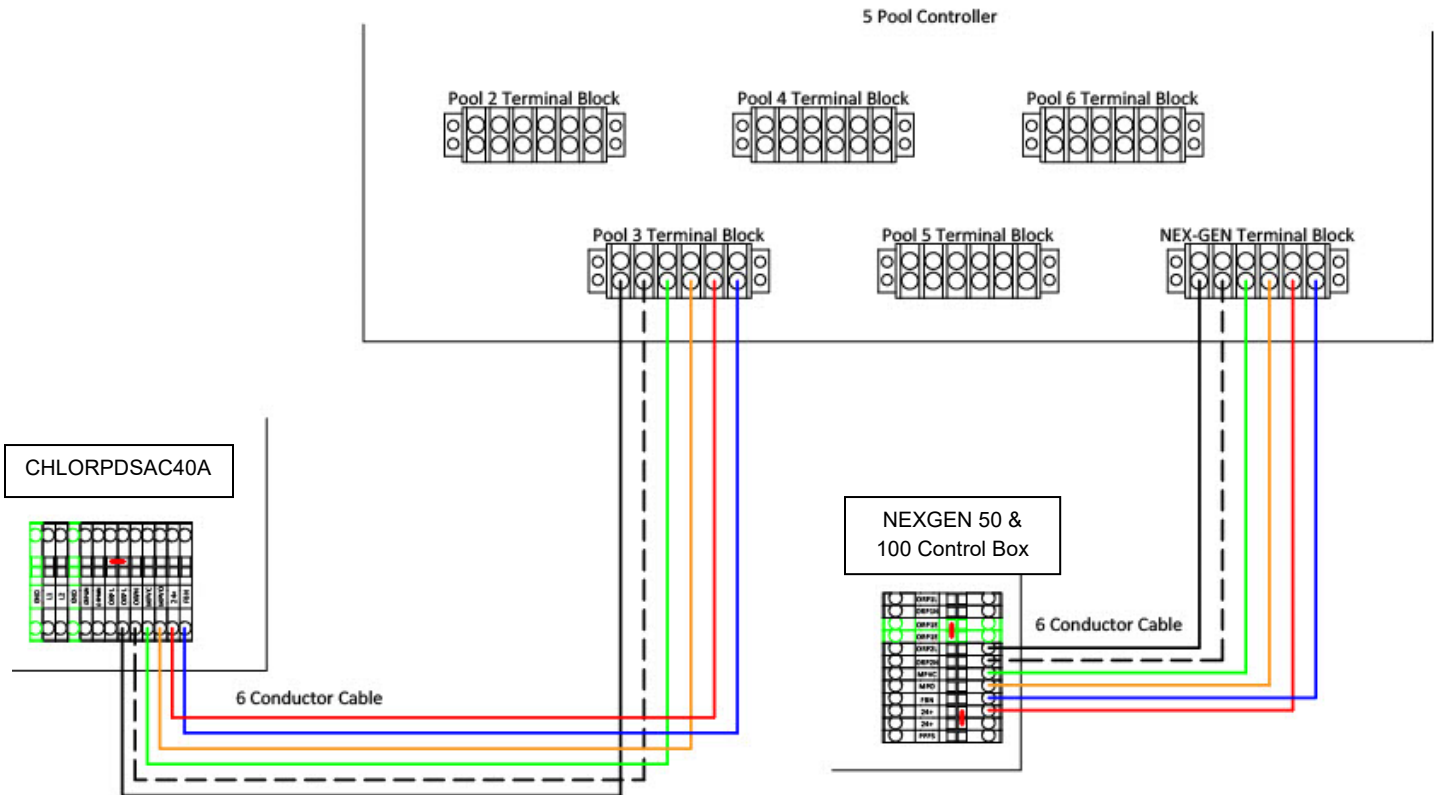
CHLORPDSAC40A CONNECTION DIAGRAM FOR NEXGEN10, 20, 40, AND 80



CHLORPDS5 CONNECTION DIAGRAM FOR NEXGEN50 and 100



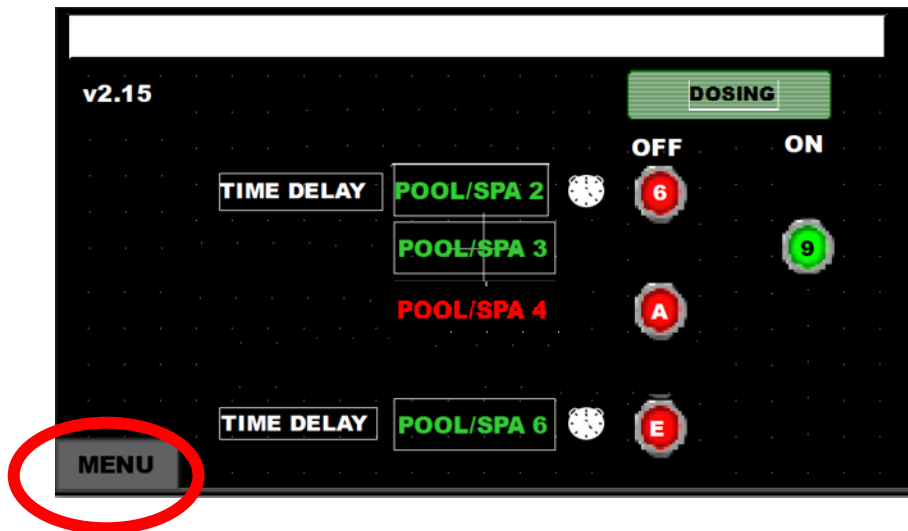
CHLORPDSAC40A CONNECTION DIAGRAM FOR NEXGEN50 and 100



SECTION 3 USING THE TOUCH SCREEN

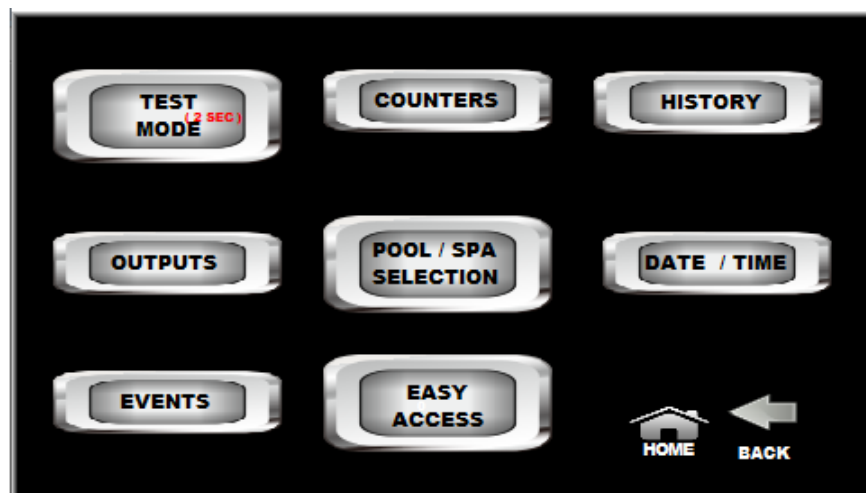
3.1 THE HOME SCREEN

The HOME screen displays the status of up to 5 additional pools. In this example pool 2, 3, 4, and 6 are active. Pool 5 has been disabled and is not use. Pool 2 and 6 will activate after a one-minute time delay. Pool 3 is on and pool 4 is off. Chemical dosing status is displayed by green and red circles. Green indicates a pool that is being dosed. Red indicates a pool that is not being dosed. The number or letter inside of the green and red circle indicates the input on the microcontroller and is used for troubleshooting.



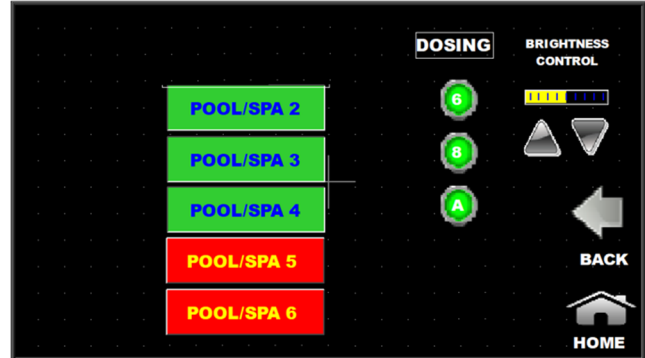
3.2 THE MENU

The MENU button is used to access a menu of features, monitors, and settings available in the 5 Pool Control Box. These include Test Mode, Counters, History, Outputs, Pool / Spa Selection, Date / Time, Events, and Easy Access.



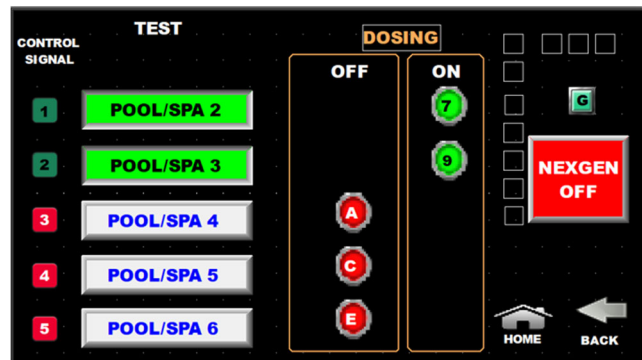
3.3 POOL / SPA SELECTION

To select a pool or spa for activation and display on the home screen, press the MENU button then press the POOL / SPA SELECTION button. The screen below will be displayed showing the selection status of pools 2 through 6. A pool or spa shown in GREEN has been selected for activation and display on the HOME screen. A pool or spa in RED is not activated and will not be shown on the HOME screen. To activate or deactivate a pool or spa, press the button associated with that pool or spa and its status will change from inactive, RED, to active, GREEN, or from active, GREEN to inactive, RED.



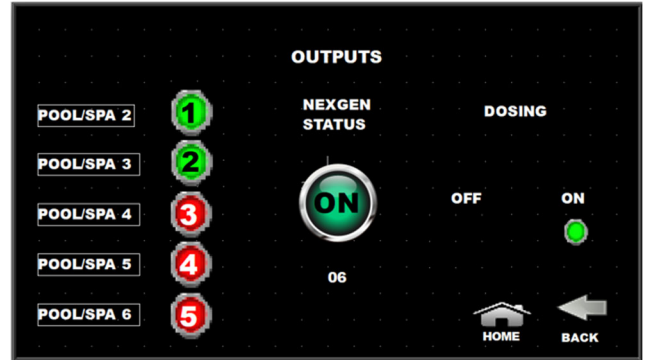
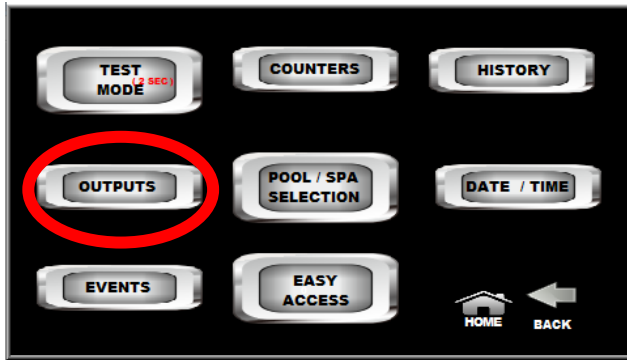
3.4 TEST MODE

TEST MODE is used to test, start, or stop the CHLORPDS pump manually and test the signal to the NEXGEN. To access TEST MODE from the HOME screen, press MENU then press and hold TEST MODE for 2 seconds. The TEST MODE screen will appear. The NEXGEN system must be on for TEST MODE to function. A NEXGEN that is on will be indicated by a GREEN "G". The control signal for the valve under test must also be on. When the control signal is on the Control Signal icon will turn from RED to GREEN. Once these 2 conditions are met, valves can be operated by pressing the POOL/SPA button desired. When the valve opens, the RED dosing icon will move to the next column and turn GREEN. To test the additional pool request to the NEXGEN, press the RED NEXGEN OFF button. The button should turn GREEN. The NEXGEN should respond by displaying the Feeding Pool 2 Icon.



3.5 OUTPUTS

Active and inactive OUTPUTS can be viewed by pressing MENU then OUTPUTS from the HOME screen.



3.6 COUNTERS

The COUNTER screen tracks the total and daily run time and number of feed cycles for each pool. To access the COUNTERS screen, press MENU then COUNTERS from the HOME screen. To reset a counter, press RESET and select the Pool / Spa you wish to reset.



	TOTAL RUN TIME	DAILY RUN TIME	DOSING CYCLES	
POOL/SPA 2	##### hr	#### min	####	HOME
POOL/SPA 3	##### hr	#### min	####	RESET
POOL/SPA 4	##### hr	#### min	####	
POOL/SPA 5	##### hr	#### min	####	BACK
POOL/SPA 6	##### hr	#### min	####	

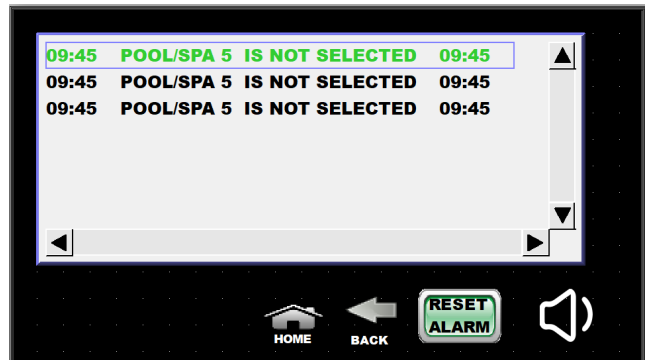
3.7 HISTORY

The HISTORY for each pool can be accessed from the HOME screen by pressing MENU then HISTORY and then selecting the pools HISTORY that is of interest. The HISTORY screen contains every event by date.



3.8 EVENTS

The EVENT screen records events that are system faults. The screen is also used to reset a fault or alarm. To access the EVENT, press MENU, EVENTS.



3.9 STARTING AND OPERATING THE SYSTEM

Activate the CHLORPDS by plugging the blue cord into an outlet or by activating the feed function on a chemical feed controller.

3.10 FLOW RATE INFORMATION

The total flow through the NEXGEN plus all active CHLORPDS assemblies cannot exceed the total rated flow of the NEXGEN. For example, a NEXGEN 20 has a total flow rate of 1GPM. The NEXGEN can be adjusted to .5GPM and a CHLORPDS10 CHLORPDSs can be used at .5GPM for a total flow of 1GPM. $.5 + .5 = 1\text{GPM}$

NEX-GEN 10 = .5GPM

NEX-GEN 20 = 1GPM

NEX-GEN 40 = 2GPM

NEX-GEN 80 = 4GPM

CHLORPDS = .12GPM

CHLORPDS10 = .5GPM

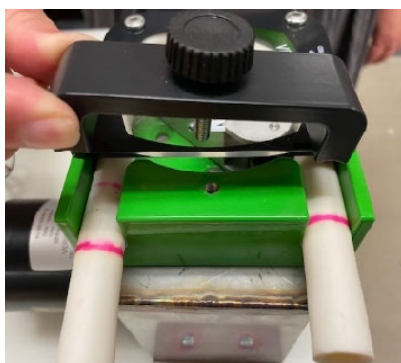
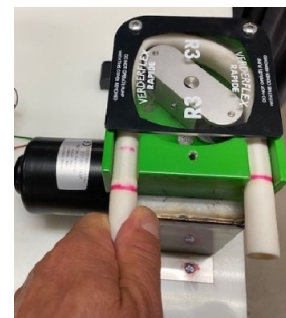
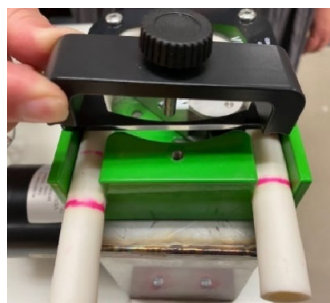
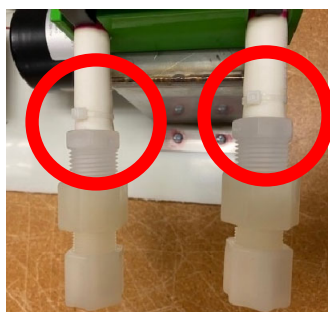
CHLORPDS20 = 1 GPM

SECTION 4 MAINTENANCE

The CHLORPDS will need pump tubes replaced on a routine basis. The frequency of replacement is determined by the quantity of sodium hypochlorite fed through the system. Suggested replacement cycle is every 6 months.

4.1 REPLACING A TUBE

1. Cut the cable ties and remove the tube fittings.
2. Remove the clamp.
3. Run the pump and carefully pull the tube out.
4. Carefully feed the new tube through the inlet.
5. Fit the tube clamp loosely, ensure that 1-3/4 inches of tube protrudes from the pump.
6. Tighten the tube clamp, replace the tube fittings, and cable ties.
7. Power and check for leaks.



SECTION 5 WARRANTY INFORMATION

The ChlorKing® CHLORPDS carries a limited 1-year warranty

During the warranty period the customer shall return the defective component, freight prepaid, accompanied by the original invoice or proof of purchase, and ChlorKing® shall at its sole discretion elect to repair or replace the defective component and return it to the customer, freight pre-paid.

ChlorKing® accepts no responsibility other than to repair or replace a defective component, and this warranty specifically excludes product failure due to accidental damage, abuse, misuse, and negligence, damage due to non-compliance of the operating manual or unauthorized alterations or modifications to the system. ChlorKing® accepts no responsibility and is not liable for any extended warranties or variations to this warranty offered by re-sellers of ChlorKing® systems.



Warranty Registration Card

Please complete and return to activate ChlorKing® warranty
Please mail or fax to ChlorKing® inc. P.O. Box 80823, Atlanta, GA, 30366 Fax: 770-685-6576

Dealer Name: _____

Address: _____ City: _____

State: _____ Zip: _____ Tel: _____

Installation site of equipment: _____

Address: _____ City: _____

State: _____ Zip: _____

Date of purchase: _____ Serial number: _____

1. Pool size: _____ 2. Pool finish: _____

3. Indoor / Outdoor: _____ 4. Heated: Yes / no

5. Filter Type: _____ 6. Pool Age: _____

7. New or existing pool: _____ 7. Controller installed: Yes / No

8. If controller installed, what make and model: _____