

NOTE: FOR CIRCUIT BREAKER SELECTION, FOLLOW THESE GUIDELINES:
220VAC SYSTEMS: 10A
110VAC SYSTEMS: 15A

110/220 VAC

NOTE: FLUSH VALVE RECEIVES A PWM VOLTAGE AT 50% DUTY CYCLE (EFFECTIVE 12V)

NOTE: DIVERSION VALVE RECEIVES FULL VOLTAGE (24V) FOR 1 SECOND, THEN SWITCHES TO PWM OUTPUT AT 17-20% DUTY CYCLE

NOTE: FOR RESISTOR SELECTION, FOLLOW THESE GUIDELINES:
RUN RESISTOR: NP-1000C: 47Ω
NP-700C: 175Ω
SERVICE RESISTOR: NP-1000C: 330Ω
NP-700C: 500Ω

NOTE: 22AWG SINGLE STRAND BARE WIRES (TYP. 4)

NOTE: PRE-MADE SHIELDED CABLE. DO NOT MODIFY

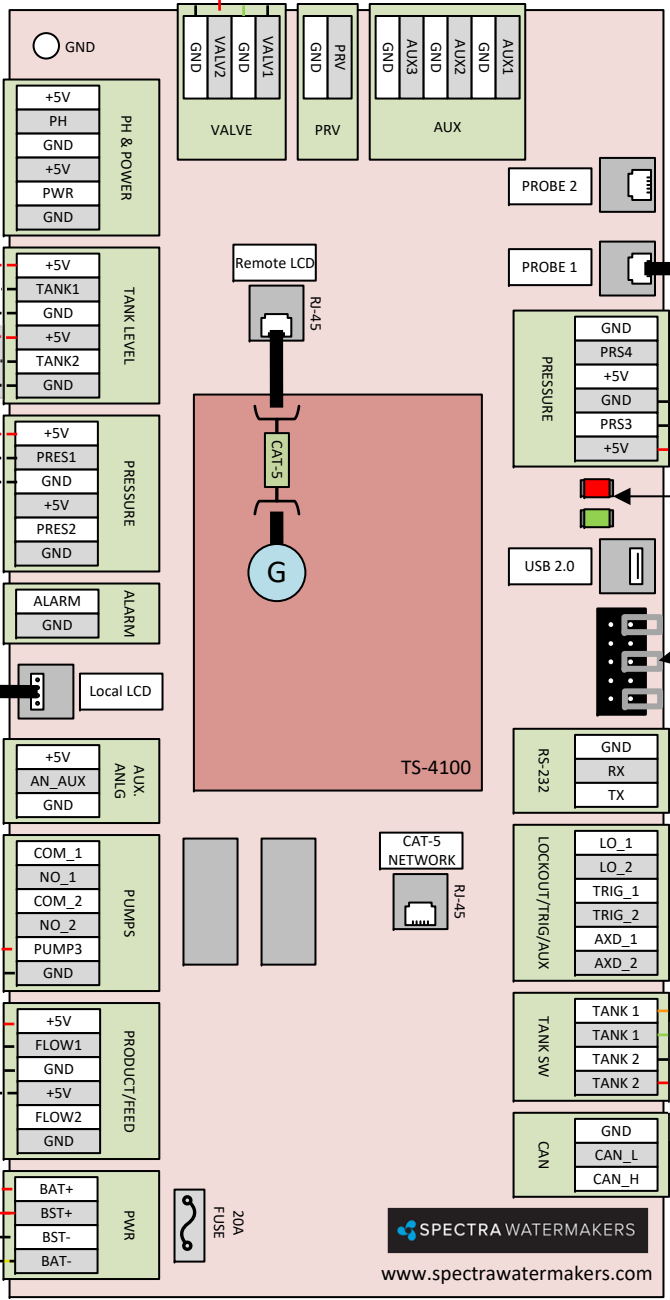
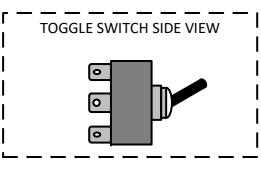
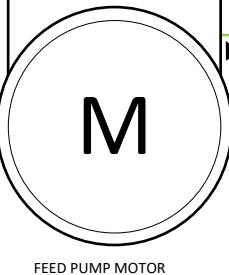
NOTE: YELLOW WIRES PROVIDED BY MOTOR MANUFACTURER. DO NOT MODIFY. SHOWN IN RED FOR CLARITY

NOTE: BRAIDED SHIELDING GROUND AND MOTOR CABLE INTERNAL GROUND ATTACHED TO MOTOR HOUSING GROUND

NOTE: SEE DETAIL 1 FOR SWITCH FUNCTIONALITY SCHEMATIC

NOTE: CONTROL BOARD SIGNAL COMMUNICATION LED LIGHTS

NOTE: MAKE CERTAIN THAT NO JUMPERS ARE CONNECTED. JUMPERS ARE OFFSET.

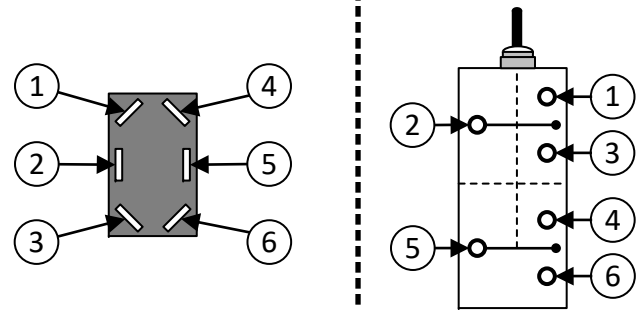


FEED PUMP SPEED CONTROLLER (KBVF DRIVE)

POWER SOURCE RECTIFIER (110/220 VAC TO 24 VDC)

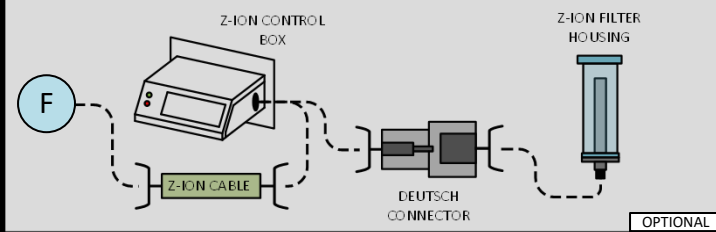
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Detail View 1: DPDT Switch Operational Schematic



RUN (AUTO): MIDDLE – NO CONNECTIONS MADE
RUN (MANUAL): UP – PIN 2 TO PIN 3, PIN 5 TO PIN 6
RUN (SERVICE): DOWN – PIN 2 TO PIN 1, PIN 5 TO PIN 4

Detail View 2: Z-Ion Wiring/Connection (Optional)



List of Symbols: KEY

BLK	WIRE COLOR LABEL – INDICATES A BLACK WIRE
RED	WIRE COLOR LABEL – INDICATES A RED WIRE
WHT	WIRE COLOR LABEL – INDICATES A WHITE WIRE
GRN	WIRE COLOR LABEL – INDICATES A GREEN WIRE
YEL	WIRE COLOR LABEL – INDICATES A YELLOW WIRE
ORG	WIRE COLOR LABEL – INDICATES AN ORANGE WIRE
BLU	WIRE COLOR LABEL – INDICATES A BLUE WIRE
	WIRE GAUGE LABEL – INDICATES A GAUGE FOR A CABLE OF MULTIPLE WIRES, FORMATED AS (WIRE GAUGE)-(NUMBER OF WIRES IN CABLE)
	WIRE GAUGE LABEL – INDICATES A GAUGE FOR A SINGLE WIRE
	CAT5 ETHERNET CONNECTION PORT
	USB CONNECTION PORT
	LCD-JST CONNECTION PORT
	WIRING NODE – WIRE BUTT SPLICE CONNECTION
	FUSE – NECESSARY SIZING INFORMATION CALLED OUT ON WIRING DIAGRAM
	CABLING – JST AND CAT5 PRE-FABRICATED CABLES
	WIRING – SINGLE WIRE BLACK OR WHITE – TYPICAL COMM COLOR
	WIRING – SINGLE WIRE RED – TYPICAL ENERGIZED COLOR
	WIRING – SINGLE WIRE YELLOW – TYPICAL NEUTRAL COLOR
	WIRING – SINGLE WIRE GREEN – TYPICAL GROUNDING COLOR
	WIRING – SINGLE WIRE ORANGE – TYPICAL POWER SIGNALING COLOR
	WIRING – SINGLE WIRE BLUE – TYPICAL POWER SIGNALING COLOR
	NOTATION – WIRE CONTINUITY SYMBOL INDICATES CONTINUITY BETWEEN MATCHING ALPHABETIC SYMBOLS – LARGE ALPHABETIC CIRCLE

Revision History: NP-700/1000C-110/220VAC

Rev No:	Date:	Description:
A	01/02/2023	Initial Wiring Diagram for Newport - 700/1000 Connect Systems, 110V/220VAC

Newport-700/1000C-110/220VAC

Revision: A
 Rev Date: 01/04/2023
 Print Date: 01/04/2023
 Drawn by: LSS
Katadyn Desalination

Control System:
 • V3.0 Firmware
 • 110V/220VAC Input Voltage

Applicable System Numbers:
 • NP-700C-110V
 • NP-700C-220V
 • NP-1000C-110V
 • NP-1000C-220V