MODEL 112 Control Panel

Single phase, simplex motor contactor control.

The Model 112 control panel provides a reliable means of controlling one 120, 208, or 240 VAC single phase pump in pump chambers, sump pump basins, irrigation systems and lift stations. Two control switches activate a magnetic motor contactor to turn the pump on and off. If an alarm condition occurs, an additional alarm switch activates the audio/visual alarm system.

PANEL COMPONENTS

 Enclosure measures 8 x 8 x 4 inches (20.32 X 20.32 X 10.16 cm). Choice of NEMA 1 (steel for indoor use), or NEMA 4X (ultraviolet stabilized thermoplastic with removable mounting feet for outdoor or indoor use).

* Options selected may increase enclosure size and change component layout.

- 2. Magnetic Motor Contactor controls pump by switching electrical lines.
- **3.** HOA Switch for manual pump control (mounted on circuit board).
- 4. Green Pump Run Indicator Light (mounted on circuit board).
- 5. Float Switch Terminal Block (mounted on circuit board).
- 6. Alarm and Control Fuses (mounted on circuit board).
- 7. Alarm and Control Power Indicators (mounted on circuit board).
- 8. Ground Lug
- 9. Circuit Breaker (optional) provides pump disconnect and branch circuit protection.

STANDARD ALARM PACKAGE

- Red Alarm Beacon provides 360° visual check of alarm condition. Note: NEMA 1 style utilizes a door mounted indicator in lieu of a beacon.
- **11. Alarm Horn** provides audio warning of alarm condition (83 to 85 decibel rating).

Note: NEMA 1 style utilizes an internally mounted buzzer in lieu of horn.

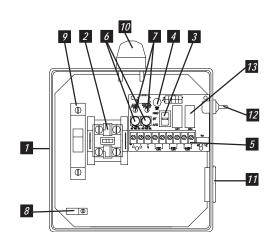
- **12. Exterior Alarm Test/Normal/Silence Switch** allows horn and light to be tested and horn to be silenced in an alarm condition. Alarm automatically resets once alarm condition has been cleared.
- 13. Horn Silence Relay (mounted on circuit board).

NOTE: other options available.

FEATURES

- Entire control system (panel and switches) is UL Listed to meet and/ or exceed industry safety standards
- Dual safety certification for the United States and Canada
- Standard package includes three 20' SJE SignalMaster[®] control switches
- Complete with step-by-step installation instructions
- Five-year limited warranty





Model Shown 1121W914X





112 1 W 1 2 4 H 6A17A
MODEL 112
0 = select options or no alarm package
I = Indoor, NEMA 1 (metal) W = Weatherproof, NEMA 4X (engineered thermoplastic)
STARTING DEVICE
9 = magnetic motor contactor 120/200/240V
PUMP FULL LOAD AMPS
1 = 7-15 FLA
2 = 15-20 FLA 3 = 20-30 FLA
PUMP DISCONNECTS
0 = no pump disconnect 4 = circuit breaker 120V (select STARTING DEVICE option 9 above)
120/208/240V (select STARTING DEVICE option 1 above) FLOAT SWITCH APPLICATION
H or L = pump down or pump up (select 17 option)
X = no floats WITH alarm package
WITHOUT alarm package OPTIONS Listed below
ENCLOSURE UPSIZE - If you selected 3 or more of the \star options, or one $\star\star$ option , add a one-time enclosure upsize fee would apply.
1A Red beacon only / no audio CODE DESCRIPTION (must select 1E if floats included) 11C NEMA 1 alarm panel (must select option 6A)
IC Horn only / no visual I1D NEMA 4X alarm panel (must select option 6A) (must select 1E if floats included) ★★14B Main disconnect (rotary style, mounted through door, non-fused)
□ 1E Alarm float □ 3A Alarm flasher
→ 3B Manual alarm reset → 15A Control / alarm circuit breaker
▲ 4A Redundant off 16A 10' cord in lieu of 20' (per float) (select option 4D if floats included) 16B 15' cord in lieu of 20' (per float)
→ 4B Red redundant off indicator & alarm 16C 30' cord in lieu of 20' (per float) (must select 4A also) 16D 40' cord in lieu of 20' (per float)
□ 4D Redundant off float □ 17A SJE SignalMaster® / mounting strap ● (per float)
$\square \star$ 5A Thermal cutout/heat sensor auto \square 17C Sensor Float [®] / internally weighted \blacktriangle (per float)
reset (for pumps w/thermal switch leads) 17D Sensor Float [®] / externally weighted ▲ (<i>per float</i>) ★★5E Seal failure circuit & red indicator (2 wire) 17E Sensor Float [®] Mini / pipe clamp ▲ (<i>per float</i>)
Matrix 6A Auxiliary alarm contact, form C Image: TF Sensor Float® Mini / externally weighted ▲ (per float) Image: TF Sensor Float® A Contact 17F Sensor Float® Mini / externally weighted ▲ (per float) Image: TF Sensor Float® A Contact 17J Sensor Float® / pipe clamp ▲ (per float)
■ ★ 8C Event (cycle) counter
→ ★ 9_A Pump overload door mounted specify amperage after number 9 followed by letter "A". 19U HOA (Hand/Off/Automatic) switch and pump run light through
Example: 912A = 12 amp pump. door mounted ★★0-25 FLA 19X Door mounted pump run indicator
★★ 25-30 FLA 21A SJE PumpMaster [®] in lieu of on/off switches ●
10E Lockable latch - NEMA 1 21C Super Single [®] in lieu of on/off switches ▲
■ ★10F Lightning arrestor (select pump circuit breaker) ■ ★10K Anti-condensation heater ■ Mechanically-activated ■ Mechanically-activ
If additional features are required, call the factory for a quote on an Engineered Custom control panel.
SAMPLE
MODEL 112 1 W 9 1 4 H 3A 8A 17A
Alarm Package Enclosure Rating
Starting Device Pump Full Load Amps
Pump Disconnect
Options: Flasher, Elapsed Time Meter,
SJE SignalMaster® / pipe clamp

SJE SIGNALMASTER® Control Switch

Mechanically-activated, narrow-angle float switch designed to activate pump control panels and alarms.

This narrow-angle sensing device is used to accurately monitor liquid levels in:

- potable water
- water

sewage applications

The SJE SignalMaster® control switch is not sensitive to rotation.

Normally Open Model (high level)

The control switch turns on (closes) when the float tips slightly **above** horizontal signaling a high level, and turns off (opens) when the float drops slightly below horizontal.

Normally Closed Model (low level)

The control switch turns on (closes) when the float tips slightly **below** horizontal signaling a low level, and turns off (opens) when the float tips slightly above horizontal.

FEATURES

- Passed NSF Standard 61 protocol by an approved Water Quality Association laboratory.
- Mechanically-activated, snap action contacts.
- High impact, corrosion resistant, polypropylene float housing.
- Not sensitive to rotation.
- Control differential of 1.5 inches (4 cm) above or below horizontal.
- Yellow colored cap for easy identification of normally open control switch.
- White colored cap for easy identification of normally closed control switch.
- UL Listed for use in water and sewage.
- CSA Certified.
- Five-year limited warranty.

Hydraulic

MEMBER

Quality

OPTIONS

This switch	is	avai	lab	le:
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- CE certified unit available upon request.
- for normally open (high level) applications or normally closed (low level) applications.
- in standard cable lengths of 10, 15, 20, or 30 feet and 3, 5, 6, or 10 meters (longer lengths available)
 - with two mounting options that allow for flexibility in installation:
 - Mounting Clamp: for applications where the switch can be attached to a discharge pipe or similar mounting device.

Externally Weighted: for applications where the switch can be suspended from above.

SPECIFICATIONS

- CABLE: flexible 18 gauge, 2 conductor (UL, CSA) SJOW, water-resistant (CPE)
- **FLOAT:** 2.74 inch diameter x 4.83 inch long (7.0 x 12.3 cm) high impact, corrosion resistant, polypropylene housing for use in sewage and water up to 140°F (60°C)
- MAXIMUM WATER DEPTH: 30 feet (9 meters), 13 psi (90 kPa)
- ELECTRICAL: 5 amp, 125/250 VAC, 50/60 Hz

NOTE: This switch is not recommended for controlling:

- electric loads less than 100 milliamps, 12 VAC
- non-arcing electric loads



PO Box 1708, Detroit Lakes, MN 56502 1-888-DIAL-SJE • 1-218-847-1317 1-218-847-4617 Fax email: sje@sjerhombus.com www.sjerhombus.com 107

