

USER GUIDE

NOTE: Fully test all datalogging and associated equipment before field installation.

LIMITATION OF REMEDIES

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INTRODUCTION

The FS-15AC float sensor is a cost effective way to obtain accurate fluid level information over a 15 foot operating range. This level sensor can be easily connected to any Lakewood Datalogger which will record data ranging from once a day to once per second.



FS-15 AC FLOAT SENSOR

WIRING THE FS-15AC TO A DATALOGGER

The FS-15AC has 2 methods of connecting to a datalogger. When connecting to a UL-16 datalogger, a screw terminal connection will be used. The three wires coming from the FS-15AC represent the following

*Green = Signal / Analog Input *Black = Analog Ground *White = 2.5 Volts



WIRING A FS-15AC TO A TERMINAL BOARD

NOTE: Ensure the screw terminal is not closed onto the wire jacket after tightening. A light tug on the wire once closed will confirm the wire is secure. When connnecting to a DPX Datapac, CPX Chartpac or RX datalogger unit an Input plug connection will be used. The wire assignments as before with the terminal board follow the same naming conventions, and in this case are color coded to the Input plug.

*Green = Signal / Analog Input *Black = Ground *White = 2.5 Volts



STANDARD INPUT PLUG (IP-X)



COLORED TERMINAL ASSIGNMENTS

USING THE RUBBER BOOT COVER FOR AN INPUT PLUG

The rubber boot cover can be used to keep the spring terminals protected from the environment. To seal the cover, tighten the tywrap on the closed end of the boot around the wire. Cut off tail end of tywrap.



INPUT PLUG BOOT ON WIRES

Once the wires have been clamped down and the rubber boot cover is returned from its inside out position, the rubber boot can be slid over the spring terminals.



SEALED BOOT

CONNECTING THE INPUT PLUG TO A DATALOGGER

Now that the FS-15AC wires are connected to the Input plug and the boot has been sealed it is ready to be connected to one of the Datapac, Chartpac or RX Analog inputs.



FS-15AC CONNECTED TO AN RX UNIT

SETTING UP THE FS-15AC CABLE

The FS-15AC uses a counter weight and float buoy system attached to a 6 inch beaded cable. It is designed to measure a 0-15 ft range. Setting up the beaded cable can be done using these steps.

1) Open the merette with the allan wrench provided.



ALLAN WRENCH AND MERETTE

2) Loop the cable through the counter weight and back through merette. Secure screw on merette.



COUNTER WEIGHT



SECURED BEADED CABLE

NOTE: There may be sharp edges from trimmed beaded cable. A metal file should be used to get rid of any burrs.

3) Unscrew threaded strain relief at the top of the float and put cable through. Then tie a small loop at the end of the cable.



CABLE WITH LOOP

4) Last, insert cable with loop into float assembly. Tighten strain relief.



CABLE INSERTED INTO FLOAT



STRAIN RELIEF TIGHTEND ON CABLE

SETTING UP THE FS-15AC PULLEY SYSTEM

The FS-15AC Pulley uses a set screw to hold it in place on the potentiometer.



FS-15AC FLOAT SENSOR POTENTIOMETER



PL-6 PULLEY WITH SET SCREW

NOTE: Be sure not to over tighten set screw as threads may become damaged

FINAL SETUP FOR THE FS-15AC

Now that the FS-15AC has been assembled and mounted, the cable with its attached components are ready to be installed. Place the beaded cable into the grooves on the pulley. The potentiometer's readings will increase as it is turned to the right (clockwise). This means that the float assembly should be mounted on the left side of the FS-15AC float sensor. The most common way to set up the FS-15AC is to preset the potentiometer to 0.5V. Using this as a zero point should provide about 3 feet buffer to help prevent the sensor from being damaged if for any reason it gets to the stop point. It is also a good idea to connect a tether of some kind like a (fishing line) to the counter weight end of the cable and anchor it to something solid like the base of where the FS-15AC is mounted. This precaution is taken in the event that the cable slips off of the pulley.

The FS-15AC also can be housed by a hydrometric station (HSX) The HSX offers security and protection from the elements and vandalism.



OBTAINING TECHNICAL SUPPORT

Technical support can be obtained by contacting Lakewood Systems directly. Please feel free to contact us if you have any questions or concerns. The following contact information can be used to obtain technical support:

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