AUTOMATEDLOGIC® CORPORATION

LSBASE, LSPLUS, and LSFLUSH

Installation and Operation Instructions

9211_ins_alc_ls_b_pl_f

Printed February 22, 2001

General Information

Automated Logic Corporation®'s (***ALC***) LogiStat series of sensors, part of the InterOp™ system, are designed for use with S-line and U-line controllers -part of a native BACnet™ system architecture. All LogiStat sensors feature attractive low profile enclosures with a discrete communication jack that provides direct access to the controller network for maintenance. Please contact ***ALC*** for compatibility questions, benefits and features of the various models, or ordering information.

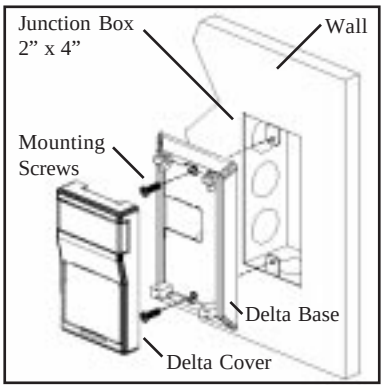
The LogiStat line of sensors incorporates a thermistor to measure the local temperature. Thermistors are resistive elements, and therefore, are NOT polarity sensitive. ***ALC*** recommends using 22 AWG twisted pair for wire all connections. ***ALC*** also recommends that wiring for these units not be run in the same conduit as line voltage wiring or with wiring used to supply inductive loads such as motors, generators, and coils.

See the *Terminations* section for diagrams of the general layout of the circuit board contained within the LSBASE and LSPLUS room units, and the general layout of the circuit board and wall plate that make up the LSFLUSH. Some components shown may not be present, depending on the exact configuration ordered.

Mounting

LSBASE and LSPLUS

1. Secure the base to the junction box using the #6-32 x 1/2" mounting screws provided.
2. For drywall installation, pre-drill two 3/16" holes 3.275" apart on center. Insert the drywall anchors and secure the base using the #6 x 1" sheet metal screws provided.
3. Terminate the unit as shown in the *Terminations* section.
4. Attach the cover by latching it to the top of the base.
5. Rotate the cover down and secure it by backing out the lock down screws using a 1/16" allen wrench until they are flush with the bottom of the cover.

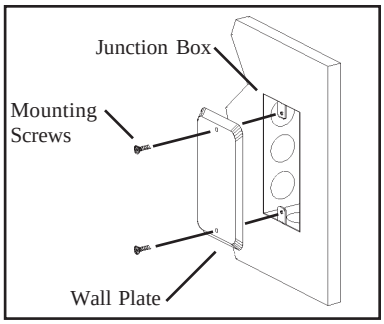


For areas where wall temperature error is of concern, an adhesive backed, foam insulating pad may be used with this unit. Call ***ALC*** for details or to place an order.

LSFLUSH

- Mounting hardware is provided for junction box and drywall installation.

1. Terminate the unit as shown in the *Terminations* section.
2. Secure the aluminum or stainless steel plate to the junction box using the 6-32 x 1/2" mounting screws provided.
3. For drywall installation, pre-drill two 3/16" holes 3.275" apart on center. Insert the drywall anchors and secure the aluminum or stainless steel plate using the 6 x 1" sheet metal screws provided.



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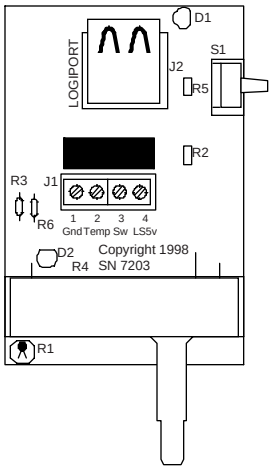
Termination

LSBASE Terminal Connections:

Terminal		*Alt. Name*	Lead Color	Function
1	Gnd	*GND*	Black	Ground (sensor)
2	Temp	*Tx*	Green	Room temperature (sensor)
3	Sw	*Rx*	Yellow	Stat Type
4	LS5v	*PWR*	Red	Power for APT

LSPLUS Terminal Connections:

Terminal		*Alt. Name*	Lead Color	Function
1	Gnd	*GND*	Black	Ground (sensor, setpoint, TLO, LED)
2	Temp	*Tx*	Green	Room temperature (sensor)
3	Sw	*Rx*	Yellow	Setpoint adjust and TLO
4	LS5v	*PWR*	Red	Power APT and LED

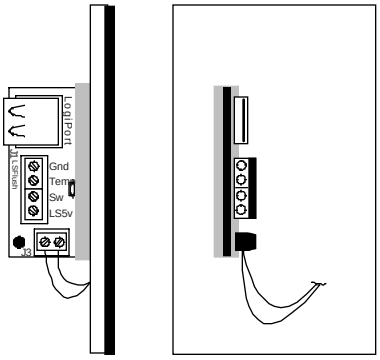


LSBASE and LSPLUS Board

LSFLUSH Terminal Connections:

Terminal	*Alt. Name*	Lead Color	Function
Gnd	*GND*	Black	Ground (sensor)
Temp	*Tx*	Green	Room temperature (sensor)
Sw	*Rx*	Yellow	Stat Type (TLO if present)
LS5v	*PWR*	Red	Power for APT

The terminal designations were changed in March, 1999.
The old designations (Alt. Name) are shown above in *italics*.



LSFLUSH Board and Wall Plate

Trouble Shooting

If the unit does not respond properly, please go through the following steps:

1. Set a meter to the "Ohms" setting
2. Disconnect the room unit from the system

Sensor

3. Measure the resistance between terminals 1 and 2
4. Compare the resistance reading to the resistance listed in the output table.
5. If the sensor reads significantly lower or 0 Ohms, then the sensor is shorted
6. If the sensor reads significantly higher or OL (overload) then the sensor is open.
7. If the sensor reads properly, verify that the controller is operating correctly.

Setpoint and Override

8. Measure the resistance between terminals 1 and 3.
9. The resistance should range from 4.75 kΩ to 24.75 kΩ (± 10%) as the slide pot is moved from left to right.
10. Pushing the override switch should cause the resistance reading to go to approximately 0 Ω.

Thermistor Output Table

Deg F	Deg C	10K-2
		10,000 ohms @ 77F (25C)
50	10.0	19,903
55	12.8	17,439
60	15.6	15,313
62	16.7	14,546
64	17.8	13,822
66	18.9	13,139
68	20.0	12,493
70	21.1	11,884
72	22.2	11,307
74	23.3	10,762
76	24.4	10,247
77	**25.0**	**10,000**
78	25.6	9760
80	26.7	9298
82	27.8	8862
84	28.9	8448
86	30.0	8056
88	31.1	7685
90	32.2	7333
95	35.0	6530
100	37.8	5826

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