



This manual covers the following models:

- **R251S** (Requires a Wired Sensor Capable Thermostat)



Caution:

Equipment damage hazard

Do not operate the cooling system if the outdoor temperature is below 50° F (10° C) to prevent possible compressor damage.

Table of Contents **Page**

Mounting Locations	2
Sensor Mounting & Setup	3
Wiring	4
Resistance Chart	5
Specifications & Contact Us	6

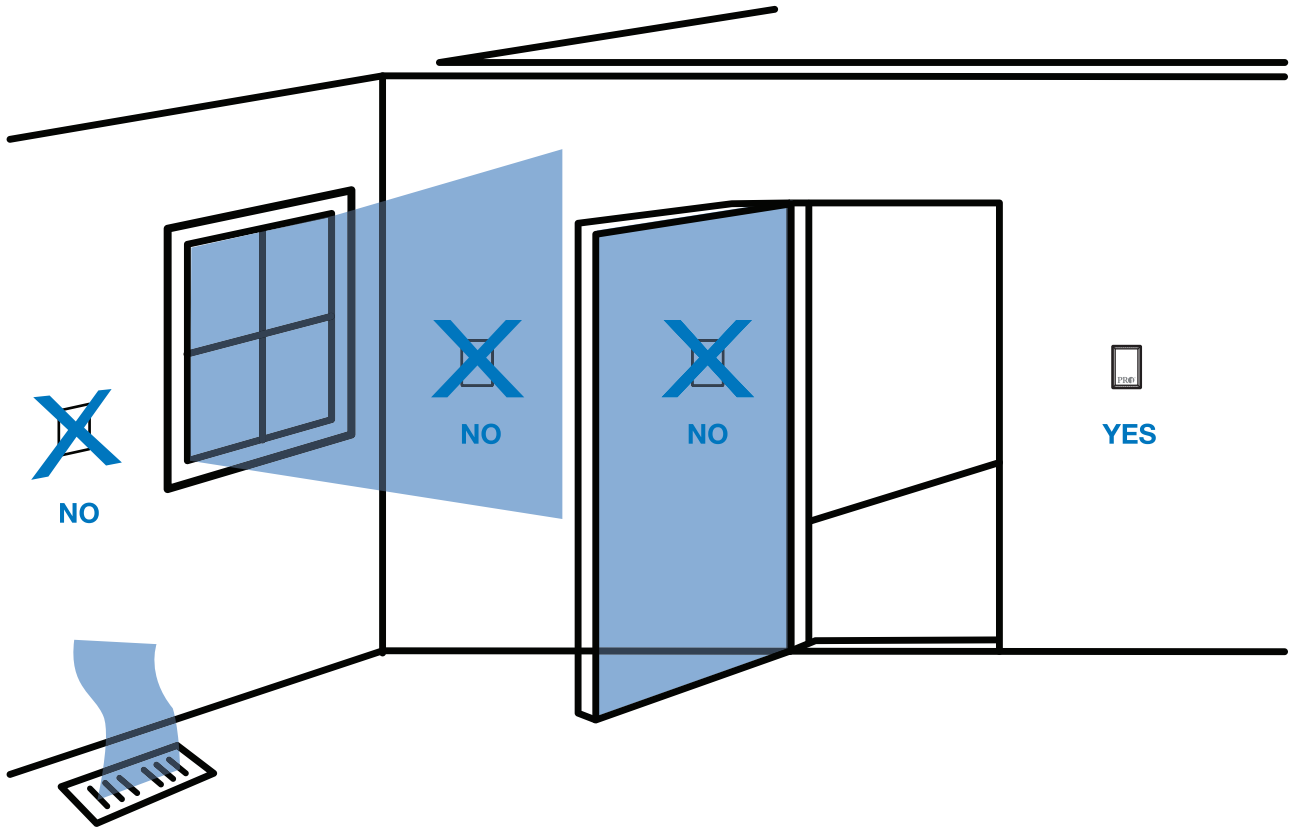
Need Help?

For assistance with this product please visit <http://www.pro1iaq.com> or call Pro1 Customer Care toll-free at 888-Pro1iaq (776-1427) during normal business hours (Mon-Fri 9 AM - 6 PM Eastern)

Una versión española de este manual puede ser descargada en www.pro1iaq.com

Remote Sensor Locations

The remote sensor should be mounted or placed approximately 4 to 5 feet above the floor. Select an area with average temperature and good air circulation.



Do not mount or place Remote Sensors in locations:

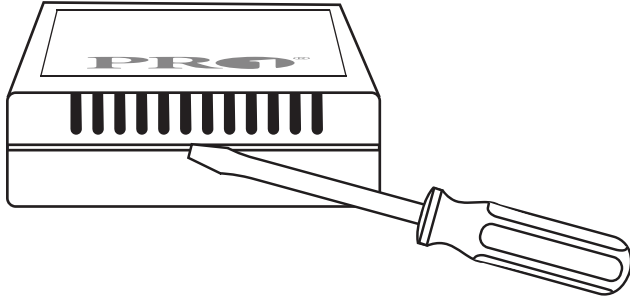
- Close to hot or cold air ducts.
- That are in direct sunlight.
- With an outside wall behind the thermostat.
- In areas that do not require conditioning.
- Where there are dead spots or drafts (in corners or behind doors).
- Where appliances could radiate heat.
- Near or on hot appliances.

Wired Range

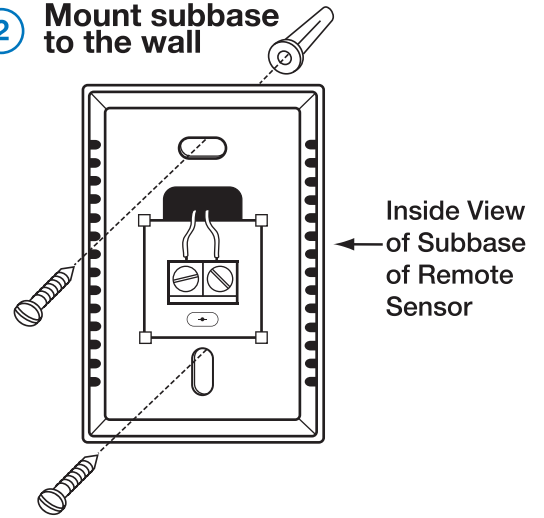
The range between the R251S and the wired sensing master thermostat is up to 300 feet. The R251S should be installed using 18 AWG thermostat wire.

Wall Mount

- 1 Remove the cover of the R251S.

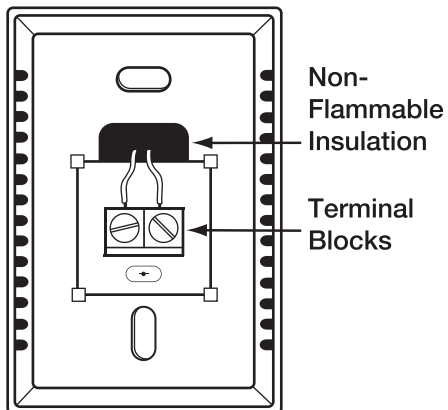


- 2 Mount subbase to the wall

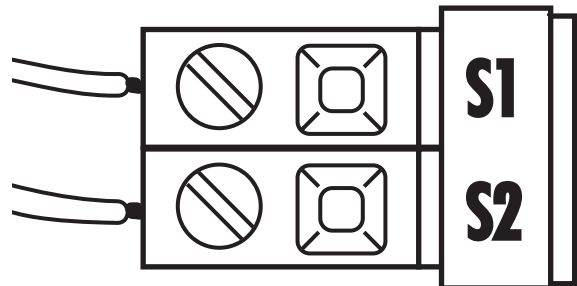


Connecting to a Wired Sensor Capable Thermostat

- 1 Loosen the terminal block screws. Insert wires, then retighten terminal block screws.



- 2 Connect the R251S to the S terminal blocks on the Wired Sensor Capable Thermostat.



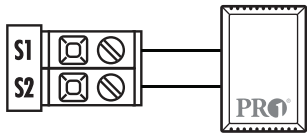
- 3 Place non-flammable insulation into wall openings to prevent drafts.

NOTE: Refer to your Wired Sensor Capable Thermostat manual for setup.

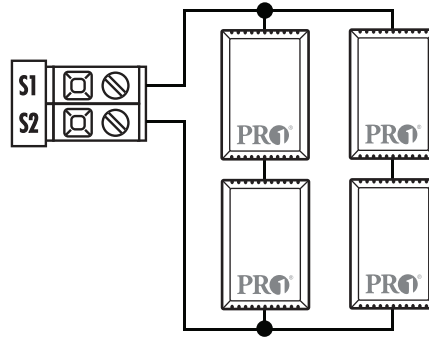
Wiring

You can connect 1, 4, 9, or 16 R251S remote sensors to a Wired Sensor Capable Thermostat to achieve a more accurate temperature average throughout a space. The following diagrams illustrate the proper ways to wire the R251S remote sensor. Use 18 AWG thermostat wire when installing.

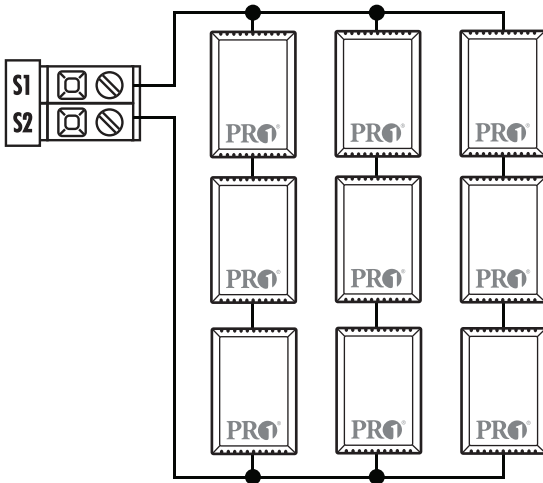
1 R251S



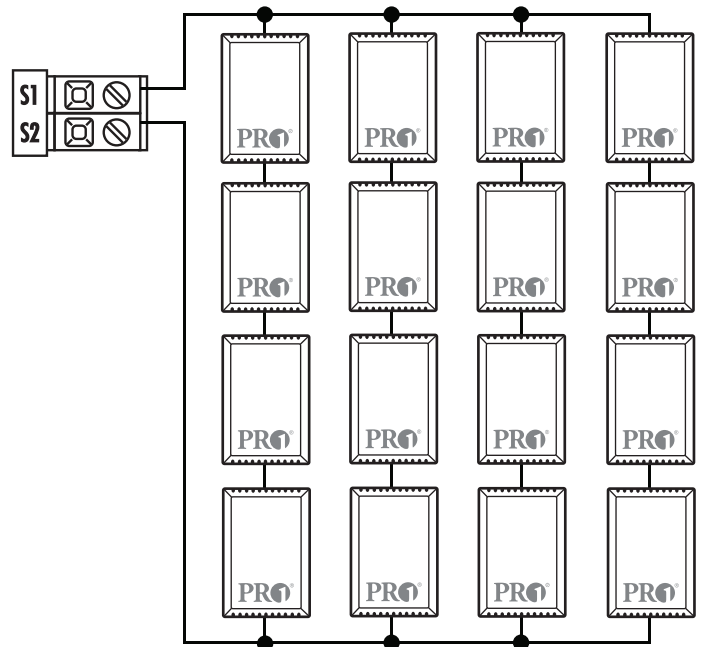
4 R251S



9 R251S



16 R251S



Specifications

R251S Wired Sensor

Operating temperature	32°F to +105°F (0° to +41°C)
Operating humidity	90% non-condensing maximum
Dimensions of sensor	1.5"W x 2.75"H x 0.75"D
Resistance Range	Up to 300 feet

100K Thermistor Output Table

°F	°C	Ohms	°F	°C	Ohms	°F	°C	Ohms
-39	-39.44	3916295	37	2.78	302466	113	45.00	41303
-37	-38.33	3627711	39	3.89	285206	115	46.11	39434
-35	-37.22	3362274	41	5.00	269035	117	47.22	37660
-33	-36.11	3117987	43	6.11	253877	119	48.33	35976
-31	-35.00	2893035	45	7.22	239664	121	49.44	34376
-29	-33.89	2685770	47	8.33	226331	123	50.56	32843
-27	-32.78	2494694	49	9.44	213819	125	51.67	31399
-25	-31.67	2318444	51	10.56	201971	127	52.78	30027
-23	-30.56	2155781	53	11.67	190946	129	53.89	28722
-21	-29.44	2004274	55	12.78	180588	131	55.00	27481
-19	-28.33	1865595	57	13.89	170853	133	56.11	26300
-17	-27.22	1737397	59	15.00	161700	135	57.22	25177
-15	-26.11	1618827	61	16.11	153092	137	58.33	24107
-13	-25.00	1509102	63	17.22	144992	139	59.44	23089
-11	-23.89	1407512	65	18.33	137367	141	60.56	22111
-9	-22.78	1313405	67	19.44	130189	143	61.67	21188
-7	-21.67	1226184	69	20.56	123368	145	62.78	20308
-5	-20.56	1145306	71	21.67	117000	147	63.89	19469
-3	-19.44	1069620	73	22.78	110998	149	65.00	18670
-1	-18.33	1000019	75	23.89	105338	151	66.11	17907
1	-17.22	935383	77	25.00	100000	153	67.22	17180
3	-16.11	875329	79	26.11	94963	155	68.33	16486
5	-15.00	819505	81	27.22	90208	157	69.44	15824
7	-13.89	767589	83	28.33	85719	159	70.56	15187
9	-12.78	719284	85	29.44	81479	161	71.67	14584
11	-11.67	674319	87	30.56	77438	163	72.78	14008
13	-10.56	632442	89	31.67	73654	165	73.89	13458
15	-9.44	593086	91	32.78	70076	167	75.00	12932
17	-8.33	556739	93	33.89	66692	169	76.11	12430
19	-7.22	522842	95	35.00	63491	171	77.22	11949
21	-6.11	491217	97	36.11	60461	173	78.33	11490
23	-5.00	461699	99	37.22	57594	175	79.44	11051
25	-3.89	434134	101	38.33	54878	177	80.56	10627
27	-2.78	408383	103	39.44	52306	179	81.67	10225
29	-1.67	384316	105	40.56	49847	181	82.78	9841
31	-0.56	361813	107	41.67	47538	183	83.89	9473
33	0.56	340581	109	42.78	45349	185	85.00	9121
35	1.67	320895	111	43.89	43273	187	86.11	8783

Contact Us

Pro1 IAQ Inc.

1111 S. Glenstone
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Springfield, MO 65804

Toll-free: 1-888-Pro1iaq (776-1427)

Toll Number (Outside the USA): 330-821-3600

Web: <http://www.pro1iaq.com>

Hours of Operation: Monday - Friday 9 AM - 6 PM Eastern

Warranty Registration:

Your new Pro1 wired sensor has a 5 year limited warranty. You must register your warranty within 60 days of installation. You can register your new sensor in 2 ways.

① Go to www.pro1iaq.com, select warranty registration and fill out a short registration form.

- or -

② Complete the form below and mail it to the address shown.



Pro1 IAQ Warranty Registration:

Name: _____

Address: _____

City: _____

State: _____

Zip: _____

Thermostat Model: _____

Date Installed: _____

Complete form and mail to:

Pro1 IAQ Inc.

1111 S. Glenstone
Suite 2-100
Springfield, MO 65804