WAV-0110 (Wireless Outdoor Sensor)

Technical Data Sheet

Submittal: HBX WAV-0110

Project: [ ]

HBX Control Systems Inc. - Specification

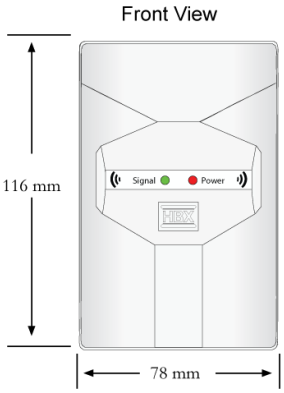
Part 1: WAV-0110 Product

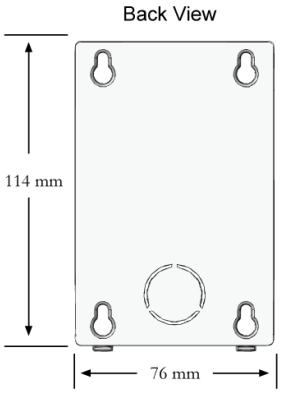
1. The control must allow wireless communication between a base unit and an outdoor unit at a maximum open air distance of 2000'.
2. The control must allow for numerous thermistor options built in (500, 5k, 10k, 12k) which are dipswitch selectable.
3. The control must be capable to use an external 10k ohm thermistor on the outdoor unit.
4. The control must be capable to pair up to a maximum of five (5) base units to one (1) outdoor sensor.
5. The control must allow for the outdoor unit to be powered by 2x AA alkaline batteries.
6. The control must be capable of operating at a temperature range of: -20°F to 225°F.

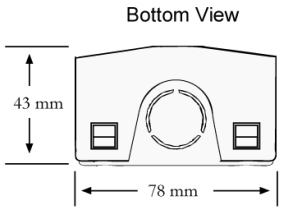
Part 2: Acceptable Products

1. HBX WAV-0110

Part 3: Physical Dimensions







***Dimensions are the same for both units.**

Part 4: Technical Data, Main Parts & Labels

Inputs/Outputs:

1 x Power Contact: 24VAC
2 x Contact output

Supplied Parts:

1 x Base Unit (WAV-0111)
1 x Outdoor unit (WAV-0112)
2 X AA Batteries (installed in outdoor unit)
1 x 2.5mm terminal screwdriver

Weight:
0.177kg

Dimensions:
(116mm x 76mm x 43mm)
Dimensions are the same for both units

RF Info:
Contains IC: 7693A-24J40MB
Contains FFC ID: 0A3MRF24J40MB

Storage:
+10°C to 40°C

Dipswitches:

The dipswitches enable you to configure the Wireless Outdoor Sensor to work with different thermistor curves.

Dip 1 ON only: 500 Ohms

Both ON: 12k Ohms

Dip 2 ON only: 5k Ohms

Both OFF : 10k Ohms*
***Default Setting**

THERMISTOR OUTPUT CURVES

Dip 1 ON only: 500 Ohms

Temp (°C)	Temp (°F)	Resistance (Ω)
-29	-20	426
-26	-15	433
-23	-10	440
-21	-5	447
-18	0	454
-15	5	461
-12	10	469
-9	15	476
-7	20	483
-4	25	490
-1	30	497
2	35	504
4	40	511
7	45	519
10	50	526
13	55	533
16	60	540
18	65	547
21	70	554
24	75	561
27	80	568
29	85	576
32	90	583
35	95	590

Dip 2 ON only: 5k Ohms

Temp (°C)	Temp (°F)	Resistance (Ω)
-30	-22	88340
-20	-4	48487
-10	14	27648
0	32	16325
10	50	9952
20	68	6247
25	77	5000
30	86	4028
40	104	2662
50	122	1801
60	140	1244
70	158	876

Both OFF : 10k Ohms*
*Default Setting

Temp (°C)	Temp (°F)	Resistance (Ω)
-29	-20	166342
-23	-10	115710
-18	0	86463
-12	10	61711
-7	20	47052
-1	30	34367
4	40	26686
10	50	19903
16	60	15000
21	70	11942
27	80	9164
32	90	7401
38	100	5774
43	110	4727
49	120	3743
54	130	3099
60	140	2488
65	150	2011
71	160	1693
77	170	1385
82	180	1177
88	190	974
93	200	836

Both ON: 12k Ohms

Temp (°C)	Temp (°F)	Resistance (Ω)
-29	-20	162502
-23	-10	119526
-18	0	88748
-12	10	66496
-7	20	50262
-1	30	38311
4	40	29441
10	50	22804
16	60	17905
21	70	14157
27	80	11268
32	90	9025
38	100	7274
43	110	7153
49	120	4810
54	130	3945
60	140	3252
65	150	2649
71	160	2201
77	170	1836
82	180	1538
88	190	1294
93	200	1092

SUPPORTED PRODUCT EXAMPLES

Setting	Boiler Model		Control Model
5K	• Viessmann Vitodens- 100W		• Heat Timer (excluding EPU-CH)
10K	• Laars Mascot • Laars Neotherm • Viessmann (excluding Vitodens-100W) • Lochinvar • Camus • ATH • Navien • Buderus GB Series	• Allied SG, AAA & Electric • IBC SL, VFC • Slant/Fin CHS • NTI Trinity & Vmax • Raypak • RBI • Smith Boiler	• Honeywell AQ2000 • Uponor CCN • Taco iWorx • HBX Controls
12K	• Peerless Purefire • IBC DC & HC Series • Triangle Tube Prestige Solo & ACVMax • HTP Elite	• Allied HSE • Bosch Greenstar • Weil-McLain Ultra Series 3, Evergreen & 97+ • Slant/Fin Lynx • Slant/Fin Jaguar	