

NET/X™ WIRELESS BACKPLATES



for use with Net/X™ Network Thermostats

WBM-1a for GE11-NX and HP21-NX Thermostats

WBM-1 for ALL Net/X Thermostats (shipping Jan 2009)

GENERAL DESCRIPTION

The WBM-1a and WBM-1 wireless communicating backplates are designed to replace the passive backplates of Net/X™ thermostats. Based on state-of-the-art wireless mesh network technology, the backplates work seamlessly with the WCM-1, Wireless Coordinator Module. The integrated RF transceiver offers unmatched performance in a 2.4GHz IEEE 802.15.4 module. With a tested outdoor line-of-site range of 1,000 feet from thermostat to thermostat, the WBM-1 series supplies the power and reliability needed for practically any building. In addition, each thermostat's RF transceiver acts as a repeater, allowing networks of virtually any size and range.

Works for both new construction and hard to reach retrofit applications.



Standard Features

- Interchangeable with passive Net/X thermostat backplates
- Standard HVAC thermostat connections match all Net/X thermostats
- Standard Net/X remote sensor connections
- Single Push Button for Link Coordination with WCM-1
- Link LED with link quality indicator
- Powered from HVAC equipment with standard HVAC cabling
- Integrated F antenna
- IEEE 802.15.4 mesh network compliant
- 2.4GHz spread spectrum technology
- FCC Certified on all 16 channels
- FCC Part 15.247 Class B agency approval
- Industry Canada (IC) approval

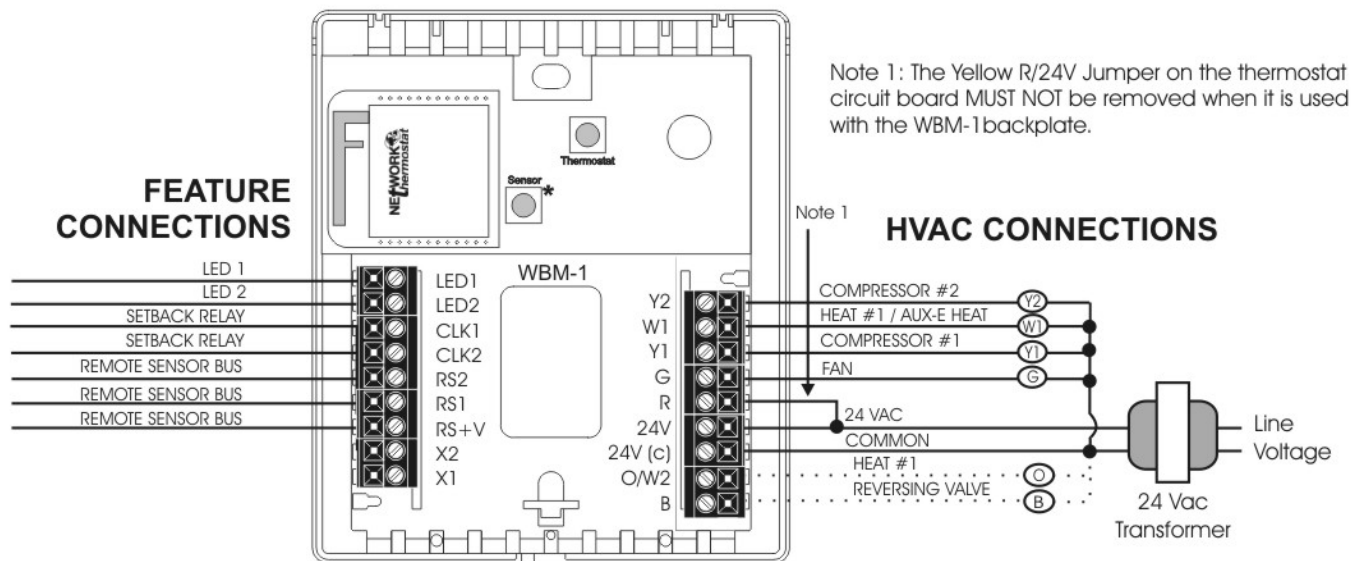
Note: Specifications subject to change without notice.

SPECIFICATIONS

Rated Voltage : 20 to 30Vac, DC 24 nominal
 Rated Power : 18dBm
 L.O.S Range: 1,000 feet
 Indoor Range: up to 200 feet
 Frequency Range: 2.4GHz, spread spectrum
 Antenna Type: Integrated F
 Certifications: FCC and IC

Dimensions : 4.5" H x 4" W x 1" D (including thermostat)
 Equipment Terminations : R-switching volt., W1- Heat 1/Aux Heat/E Heat, Y1-compressor stage 1,G-fan, O/B-reversing valve cool/heat, LED1-light, LED2-light, Y2-compressor stage 2
 Power Terminations : 24V - power, 24V(c) - power common
 Communication Terminations : X1, X2
 Sensor Terminations : RS+V - sensor power, RS1 - comm(+), RS2 - comm(-)
 Setback Terminations : CLK1, CLK2 dry contact closure

WIRELESS BACKPLATE CONNECTIONS



OUTPUT TERMINAL FUNCTIONS

LED1 Free light for status or function indication
LED2 Free light for status or function indication
CLK1 Dry contact closure input for setback
CLK2 Dry contact closure input for setback
RS2 Remote indoor, outdoor and/or wet
RS1 location sensor
RS+V Power for remote sensors
X2 No Connection
X1 XBUS Communications (internal connection to wireless module)

* Future Wireless Remote Sensor Feature

Y2 GE - Cooling #2
 HP - Compressor 2nd stage operation
W1 GE - Heating #1
 HP - Auxiliary Heat as 2nd stage heat or Emergency Heat
Y1 GE - Cooling #1
 HP - Compressor 1st stage operationHeat
G Fan
R Independent Switching Voltage from HVAC equip
24V 24Vac
24V(c) 24Vac Common
O/W2 GE - Heat #2
 HP - Cooling Mode Reversing Valve
B HP - Heating Mode Reversing Valve