GE22-NX
HP32-NX

Setback Thermostat with XBus Communications

Standard (Gas/Electric) up to 2H/2C Heat Pump up to 3H/2C

Secure Direct Connection via any Net/X Network Controller

GENERAL DESCRIPTION:

The GE22-NX and HP32-NX are communicating setback thermostats designed for new and replacement commercial or residential applications. The GE22-NX controls conventional HVAC equipment and the HP32-NX controls both traditional and dual fuel heat pump HVAC equipment. Using any Net/X™ network controller and the Net/X-IP™ Command Center software, Net/X™ makes it simple with near effortless changes to each setting on the thermostat. The pushbuttons on the thermostat can be locked to give restricted override capabilities, and the optional Occupancy Sensor enables automatic energy savings.
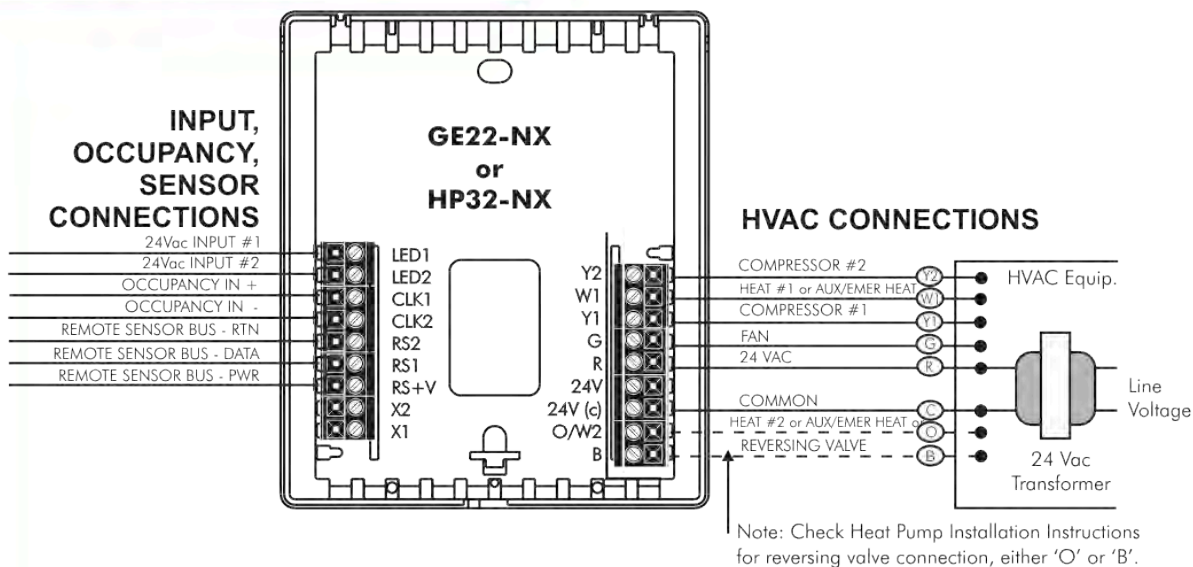
STANDARD FEATURES:

Free PC Software for Controlling Multiple Thermostats from a Single Screen

- Automatic Changeover from Heat-to-Cool and Cool-to-Heat
- 2 Occupied (Day-Cool & Day-Heat) and 2 Unoccupied (Night-Cool & Night-Heat) Setpoints
- Selectable Fahrenheit or Celsius Display
- Commercial Lockout with 1 or 3 Hour Override, with +/-3F Temp Adjustment
- Lockable Access Cover
- Plenum Fan Switch
- HVAC equipment control using dry contact relays
- 3 LED lights (2 for GE22 model); Inefficient Run and Filter Reminder indication with LCD icons; 1 for E-Heat
- Up to 6 Remote Indoor Sensors (NT-TEMP) and 1 Outdoor Sensor (NT-TEMP + NT-OUTDOOR probe)
- Optional Occupancy Sensors Available (Ceiling and Wall Mount)
- Integrated Net/X™ API language, Allowing for Development of 3rd Party Apps

Rated Voltage:	20V to 30VAC, 24VAC nominal
Rated A.C. / D.C. Current:	0.05 to 0.75 AC / 0.0 to 0.75 DC Amp continuous, per output, surges to 3 Amps max.
Control Range:	**Heating:** 38 to 88°F (6 to 30°C) in 1° steps **Cooling:** 60 to 108°F (16 to 40°C) in 1° steps
Thermostat Sensing Range:	28 to 124°F (0 to 48°C) **Control Accuracy:** +/-1°F @ 68°F (0.5°C @ 20°C)
Minimum Deadband:	(between Heat and Cool) 2°F (1°C)
Dimensions:	4.5"H x 4"W x 1"D (114mm x 102mm x 26mm)
Thermostat LEDs:	Red – Emergency Heat, Yellow – Inefficient Equipment Run, Green – Change Filter
Equipment Terminations:	R - 24V switching voltage, W1 - Heat1 or Aux/Emer Heat, G - Fan, Y1-Compressor1, Y2 - Compressor2, O/W2 - Heat2 or Rev. Valve in Cooling, B-Rev. Valve in Heating
Power Terminations:	24V - remote power (not used), 24V(c) - power common (from HVAC equipment)
Input Terminations:	LED1 (Green LED / Filter Icon), LED2 (Yellow LED / Fault Icon)
Occupancy Terminations:	CLK1 (+), CLK2 (-)
Remote Sensor Terminations:	RS+V - Power, RS2 - Return, RS1 - Data

WIRING DIAGRAMS:

INPUT, OCCUPANCY, SENSOR CONNECTIONS

GE22-NX or HP32-NX

HVAC CONNECTIONS

Note: Check Heat Pump Installation Instructions for reversing valve connection, either 'O' or 'B'.

OUTPUT TERMINAL FUNCTIONS

LED1 24Vac Input #1 for Filter or other Alert (Internally tied to Green LED and Filter Icon)

LED2 24Vac Input #2 for Condensate, Fault or other Alert (Internally tied to Yellow LED and Wrench Icon)

CLK1 For use with External Occupancy Sensor (+)

CLK2 For use with External Occupancy Sensor (-)

RS2 Remote Sensor Bus (Power Return)

RS1 Remote Sensor Bus (Data)

RS+V Remote Sensor Bus (Power)

Y2 Energizes compressor for second stage cooling, or for heat pumps, either second stage heating or cooling

W1 Energizes heater for first stage heating, or for heat pumps, aux/emer heat

Y1 Energizes compressor for first stage cooling, or for heat pumps, either first stage heating or cooling

G Energizes fan circuit with a call for heating or cooling

R Independent Switching Voltage from HVAC equip

24V 24Vac

24V(c) 24Vac Common

O/W2 Energizes heater for second stage heating, or for heat pumps, energizes the reversing valve in cooling mode

B Energizes the reversing valve in heating mode

GE22-NX DIP SWITCH SELECTIONS

(FACTORY DEFAULT) OFF		ON
NOT USED (KEEP OFF)	1	NOT USED (KEEP OFF)
1 HOUR OVERRIDE	2	3 HOUR OVERRIDE
4 MINUTES (ON/OFF)	3	2 MINUTES (ON/OFF)
KEYPAD UNLOCKED	4	KEYPAD LOCKED
FAN ON WITH HEAT CALL	5	FAN ON WITH PLENUM SWITCH
1-STAGE CONTROL	6	2-STAGE CONTROL
LED 1 + NO ICON	7	LED 1 + FILTER ICON
LED 2 + NO ICON	8	LED 2 + FAULT ICON

HP32-NX DIP SWITCH SELECTIONS

(FACTORY DEFAULT) OFF		ON
NORMAL HEAT PUMP	1	DUAL FUEL HEAT PUMP (ADD ON)
1 HOUR OVERRIDE	2	3 HOUR OVERRIDE
4 MINUTES (ON/OFF)	3	2 MINUTES (ON/OFF)
KEYPAD UNLOCKED	4	KEYPAD LOCKED
ECONOMY	5	COMFORT
1-STAGE CONTROL	6	2-STAGE CONTROL
LED 1 + NO ICON	7	LED 1 + FILTER ICON
LED 2 + NO ICON	8	LED 2 + FAULT ICON

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