



# X5N-NX

- Full Color Touchscreen
- Standard (Gas/Electric) up to 2H/2C
- Heat Pump (Standard or Dual Fuel) up to 3H/2C
- Humidity Sensing
- Up to 11 Sensors via Advanced Sensor Bus
- Integrated NetX™ XBus Communications

## GENERAL DESCRIPTION:

## Complete Stand-Alone Solution

The X5N-NX is a communicating setback color touchscreen thermostat designed for new or replacement commercial or residential applications. Our integrated logic for both conventional and heat pump applications may be configured for up to three (3) stages of heating and two (2) stages of cooling with an advanced remote sensor bus. The X5N-NX is a direct replacement for the US32-NX, GE22-NX, HP32-NX GE11-NX, HP21-NX, SST1, MST1, HPT1, and HPT2 models.

The X5N-NX is designed to operate as a stand-alone unit or be controlled using any NetX™ network controller and the NetX™ Command Center software. For maximum security, the X5N-NX may be controlled and operated behind your firewall. For ultimate control over energy usage, the X5N-NX offers a digital lockout that permits limited temperature overrides based on your requirements. The advanced remote sensor bus allows up to 6 indoor remote sensors, humidity sensor, outdoor sensor, and up to 3 auxiliary sensors for needs such as supply air, return air, water temperature, walk-in freezers and refrigerators, and any other temperature monitoring desired.

## STANDARD FEATURES:

## Free NetX Command Center PC App for Controlling Multiple Thermostats from a Single Screen

### Energy Savings

- Efficient Equipment Restart™ randomizes equipment starts to minimize multiple units turning on simultaneously when there are multiple NetX thermostats at the location
- Random Restart on power up staggers restart of HVAC system after a power outage to minimize peak in-rush current

### Monitoring

- 11 Remote Sensors: up to 6 indoor, 1 humidity, 1 outdoor, and up to 3 auxiliary sensors for monitoring items such as supply air, return air, walk-in refrigerators and freezers, etc.
- 2 Digital Inputs for Fault Conditions, including Condensate and Equipment Faults
- Occupancy Sensor Input

### Connectivity

- NetX™ Command Center Software for Local Internal Network and Port Forwarded Access
- Integrated NetX™ API

### Facility Management

- Commercial Lockout with Programmable Temporary Override Time and Temperature Range Adjustment
- 2 Occupied (Day-Cool & Day-Heat) and 2 Unoccupied (Night-Cool & Night-Heat) Setpoints

### General

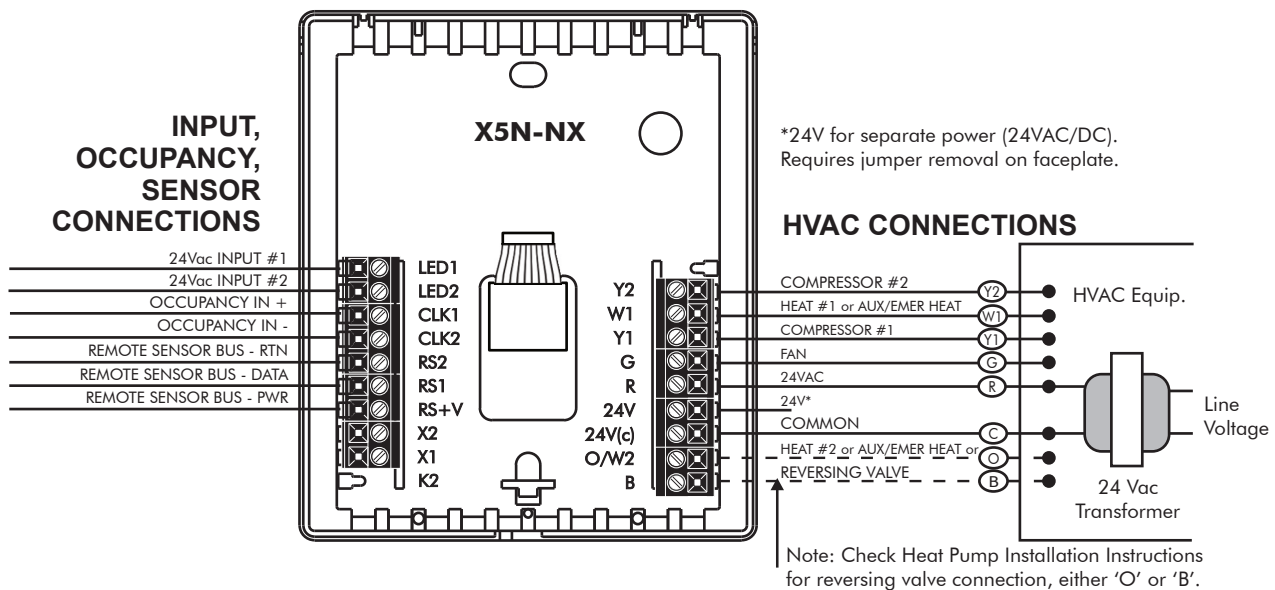
- Color Selectable Touchscreen Display
- Modes: Heat, Cool, Automatic Changeover, and Off
- Integrated Humidity Sensor
- Fan Selector for Automatic or Continuous Fan Operation; Programmable Recirculation Fan



## SPECIFICATIONS:

<b>Rated Voltage:</b>	20V to 30VAC, 24VAC nominal
<b>Rated A.C. / D.C. Current:</b>	0.05 to 0.75 AC / 0.0 to 0.75 DC Amp continuous, per output, surges to 3 Amps maximum
<b>Temperature Control Range:</b>	<b>Heating:</b> 38°F to 88°F (4°C to 31°C) in 1° steps <b>Cooling:</b> 60°F to 108°F (16°C to 42°C) in 1° steps
<b>Thermostat Sensing Range:</b>	32°F to 118°F (0°C to 48°C) <b>Control Accuracy:</b> ±1°F @ 68°F (±0.5°C @ 20°C)
<b>Minimum Deadband:</b>	2°F (1°C)
<b>Humidity Sensing:</b>	<b>Range:</b> 0% - 100% RH <b>Accuracy:</b> ±3% From 10% - 90%
<b>Dimensions:</b>	5.1"H x 4.7"W x 1.15"D (130mm x 119mm x 29mm)
<b>Equipment Terminations:</b>	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
<b>Power Terminations:</b>	24V(c) - Power Return, 24V - Separate Power (24VAC/DC) requires jumper removal
<b>Input Terminations:</b>	LED1 (Filter Icon Selectable), LED2 (Fault Icon Selectable)
<b>Occupancy Terminations:</b>	CLK1 ( + ), CLK2 ( - )
<b>Remote Sensor Terminations:</b>	RS+V - Power, RS2 - Return, RS1 - Data
<b>Communication Terminations:</b>	X1 - XBus ( + ), X2 - XBus ( - )

## WIRING DIAGRAMS:



## OUTPUT TERMINAL FUNCTIONS

<b>LED1</b> 24Vac Input #1 for Filter or other Alert	<b>Y2</b> Energizes compressor for second stage cooling, or for heat pumps, either second stage heating or cooling
<b>LED2</b> 24Vac Input #2 for Condensate, Fault or other Alert	<b>W1</b> Energizes heater for first stage heating, or for heat pumps, auxiliary/emergency heat
<b>CLK1</b> Dry contact closure input for setback	<b>Y1</b> Energizes compressor for first stage cooling, or for heat pumps, either first stage heating or cooling
<b>CLK2</b> Dry contact closure input for setback	<b>G</b> Energizes fan circuit with a call for heating or cooling
<b>RS2</b> Remote Sensor Bus (Power Return)	<b>R</b> Independent Switching Voltage from HVAC equip
<b>RS1</b> Remote Sensor Bus (Data)	<b>24V</b> 24Vac
<b>RS+V</b> Remote Sensor Bus (Power)	<b>24V(c)</b> 24Vac Common
<b>X2</b> Communications bus ( - )	<b>O/W2</b> Energizes heater for second stage heating, or for heat pumps, energizes the reversing valve in cooling mode
<b>X1</b> Communications bus ( + )	<b>B</b> Energizes the reversing valve in heating mode