



Touchscreen Controller

- *Economical Control Solution*
- *Constant Volume, Variable Air Volume, Single Zone VAV, and Makeup Air Applications*
- *Simple Touchscreen Interface*
- *Air-Cooled, Air-Source Heat Pump, Water-Source Heat Pump, and Chilled Water Systems*

AAON Products available with the Touchscreen Controller



Introducing the AAON Touchscreen Controller

AAON products are available today with the Touchscreen Controller. The Touchscreen Controller is a networkable controller with built-in space temperature and humidity sensors that mounts directly in the space similar to a conventional thermostat. The powerful, yet simple, controller allows set-and-forget control over an indoor environment without the expense of a large building automation system.

The AAON Touchscreen Controller is designed as an economical control system alternative that is compatible with a wide range of AAON equipment and applications. It is designed specifically for use with high efficiency AAON equipment and can control systems with up to two total compressors (two variable capacity, two on/off, or one of each).

Energy saving options include variable speed fan control, modulating sensible or enthalpy economizer control, modulating compressor control, heat pump operation, energy recovery, occupancy scheduling, and CO₂ options for demand control ventilation.

The controller can function as stand-alone control or as part of a BACnet MS/TP or Modbus RTU networked system. If installed for stand-alone application, the network can be added later if desired. Networking enables monitoring and control from remote locations.

Applications

Touchscreen Controller applications include:

- Constant Air Volume
- Single Zone Variable Air Volume (Single Zone VAV)
- Makeup Air
- Variable Air Volume

System applications include:

- Air-Cooled
- Air-Source Heat Pump
- Water-Source Heat Pump
- Chilled Water Air Handling Unit

Applicable AAON products include:

Rooftop Units (Up to 2 compressors)

- RQ and RN Series

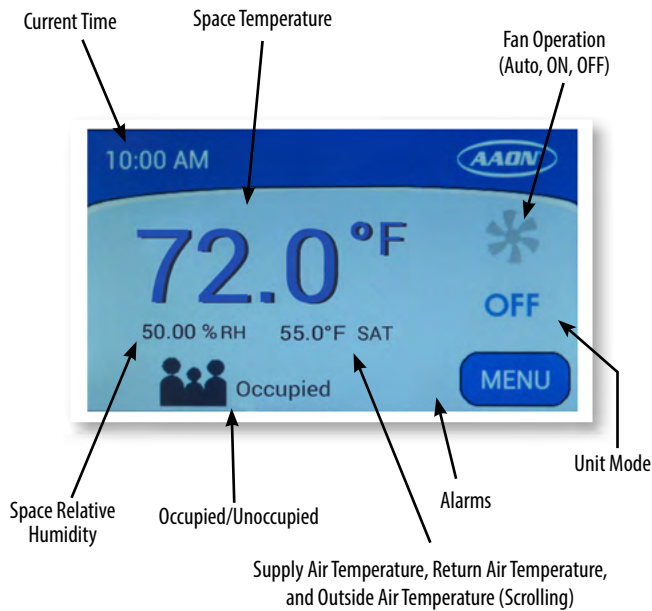
Self-Contained Units (Up to 2 compressors)

- SB Series
- SA Series
- M2 Series

Chilled Water Air Handling Units

- RN, RQ, H3, V3, and M2 Series

Operation



Cooling Mode



Heating Mode



Economizer Mode



Dehumidification Mode



Occupied



Unoccupied



Fan On



Unit Off



General Alarm



Shutdown Alarm



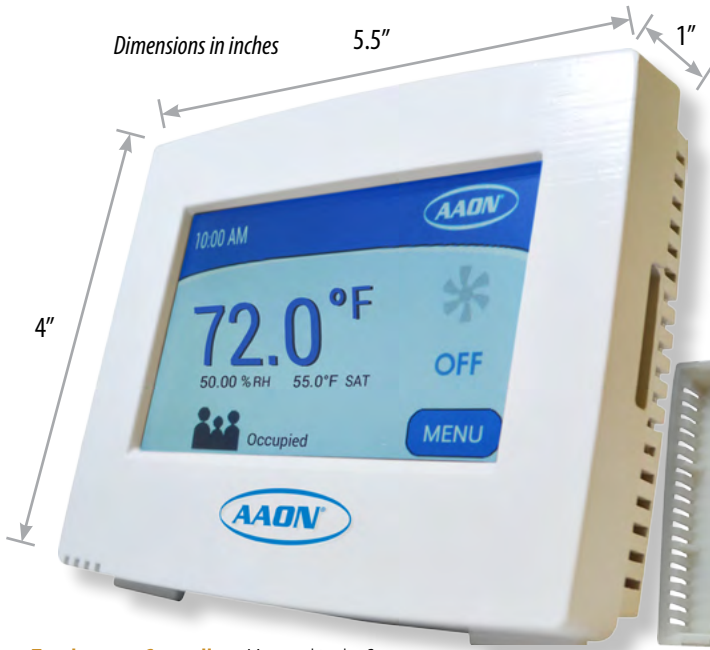
Fan Off

Features

Easy to configure and easy to use, the AAON Touchscreen Controller has many features, including the following:

- Designed to be space mounted, the Touchscreen Controller includes built-in temperature and humidity sensing, as well as easy access to occupancy scheduling.
- User-friendly, high-contrast, 4.3 inch touchscreen interface.
- In addition to the built-in sensors, multiple inputs are available for external sensors, which include options for modulating hot gas reheat, sensible and enthalpy economizer, CO₂ indoor air quality control, clogged filter switch, condenser head pressure control, energy recovery, and outside airflow monitoring.
- Display of space temperature, space relative humidity, supply air temperature, return air temperature, and outside air temperature depending on options selected.
- Can be used with remote space temperature sensor and remote humidity sensor allowing Touchscreen Controller to be located in an office or mechanical room.
- Separate Admin, Operator, and User password protected profiles. Three levels of access prevent disruption of operation and configuration.
- During installation, easily select from the built-in, factory tested library of application control sequences.
- Built-in occupancy scheduling with Weekly, Weekday/Weekend, and Daily options for easy configuration.
- Multiple built-in alarms enhance system monitoring.
- Can be configured to control variable capacity compressor lead stage or variable capacity compressor all stages, with control of up to two total compressors.
- Can be configured for up to four stages of heating, modulating gas heat, or SCR electric heat.
- Chilled water and hot water fully modulating valve control for air handling unit applications.

Touchscreen Controller System Hardware

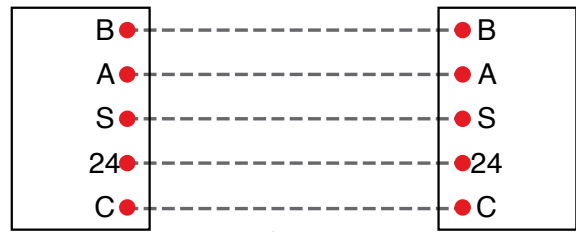


Touchscreen Controller - Mounted in the Space

Field Installed Wiring - From the Controller in the Space to the AAON Equipment

**Touchscreen
Controller**

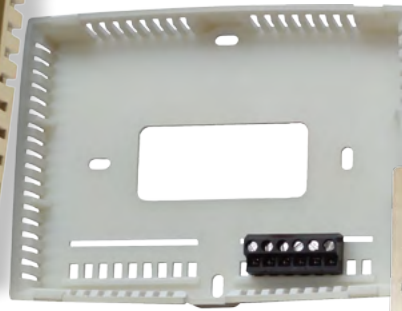
UNIT



- B** = Communication
- A** = Communication
- S** = Shield for Communication
- 24** = 24 VDC
- C** = Common

18 GA/5 Stranded Wire, Max 2500 ft

Backplate with Terminal Block



Unit Control Board - Mounted in the AAON Equipment



Contact your local AAON representative to see how an AAON Touchscreen Controller can benefit you.

www.AAON.com/repsearch



Defining Quality. Building Comfort.

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