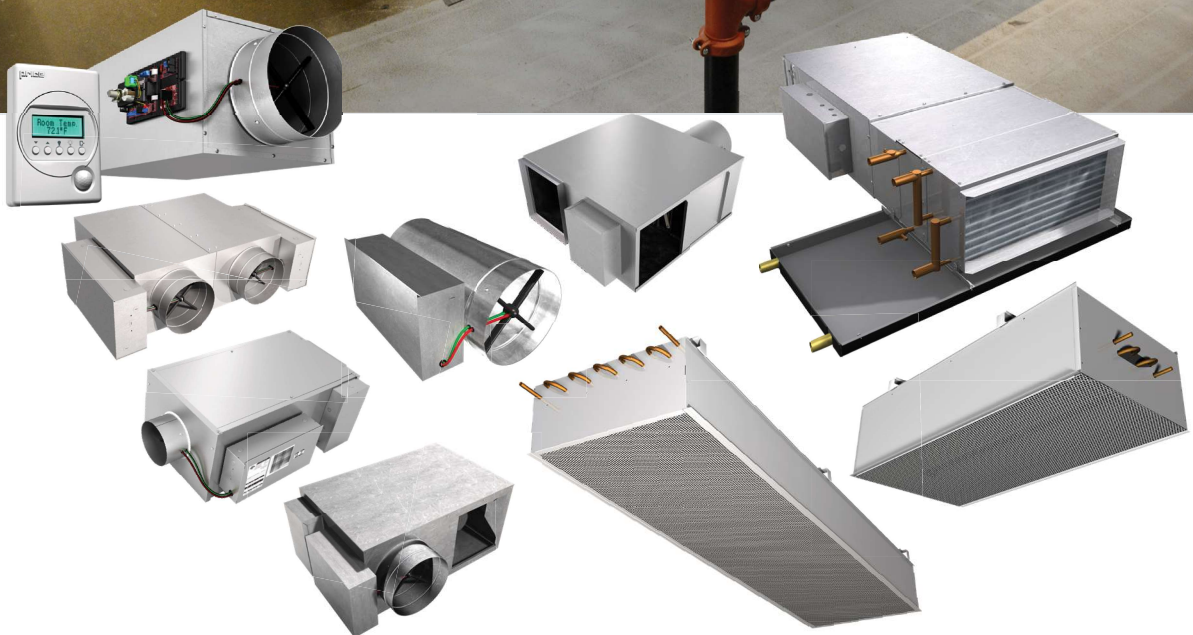# PIC
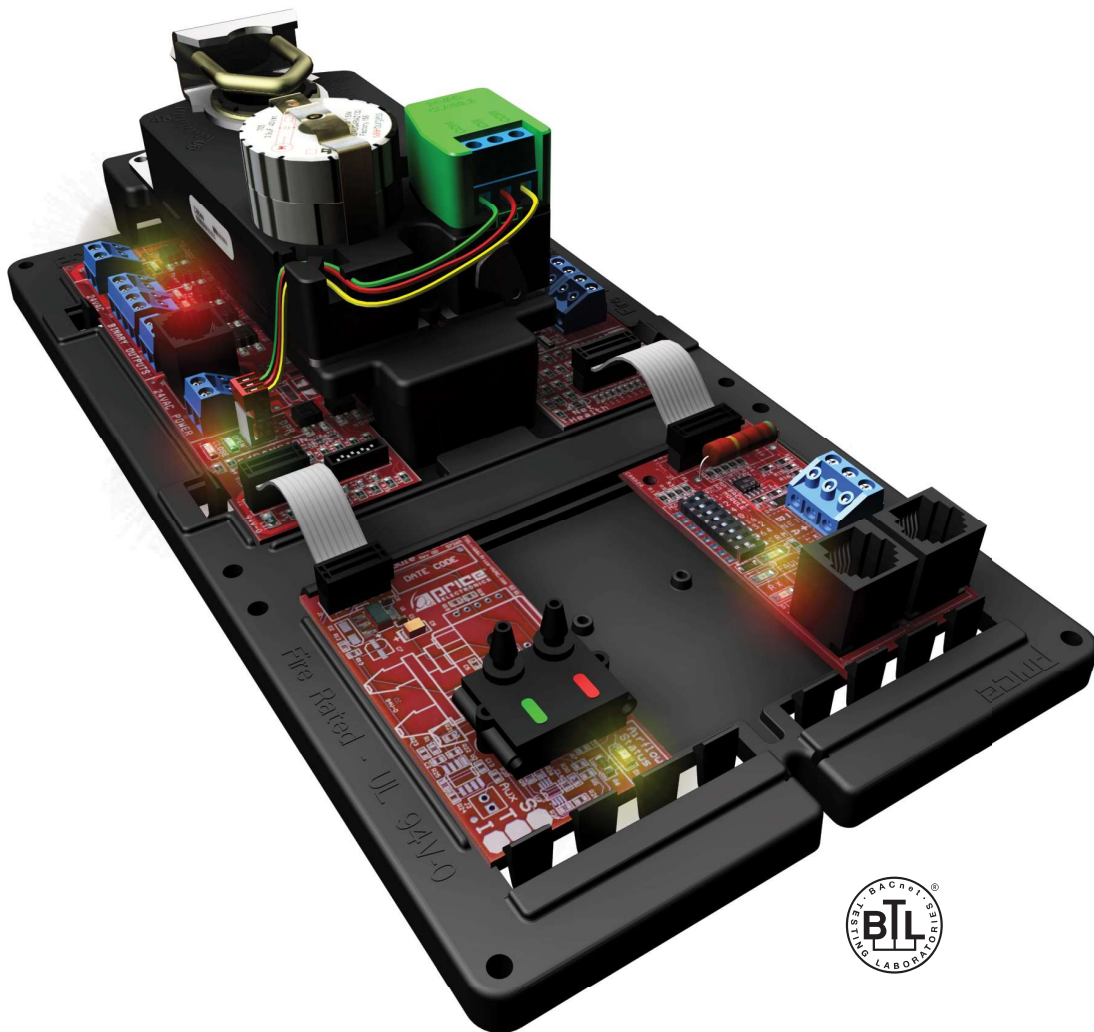## PRICE INTELLIGENT CONTROLLER

PIC
Price Intelligent Controller

PIC FEATURES

+ Fast and error proof RJ-45 thermostat connections

+ Integrated KMC actuator

+ 24 VAC binary outputs field selectable between hot and common switching

+ Analog (0-10 VDC) outputs for heating, cooling, fan and auxiliary

+ Field installable expansion modules for BACnet MS/TP and VAV flow sensing

+ Pluggable terminal blocks for easy field wiring

+ Diagnostic LED's showing status of each output including damper open / close

The Price Intelligent Controller (PIC) was developed as a full blown DDC controller. Its versatility offers control sequences for single ducts, fan powered boxes, dual ducts, chilled beams, fan coils and blower coils.

The PIC controller comes pre-programmed with a specified sequence, resulting in no field programming required. With its plug & play capabilities, the PIC controller is quick and easy for contractors to install, and daisy-chain into a BACnet MS/TP network.

The PIC is available with several thermostat options allowing the designer to match the specific needs of the customer. All Price thermostats, except the wireless model, have an RJ45 jack, allowing plug & play connection with the supplied NETC35 cable.
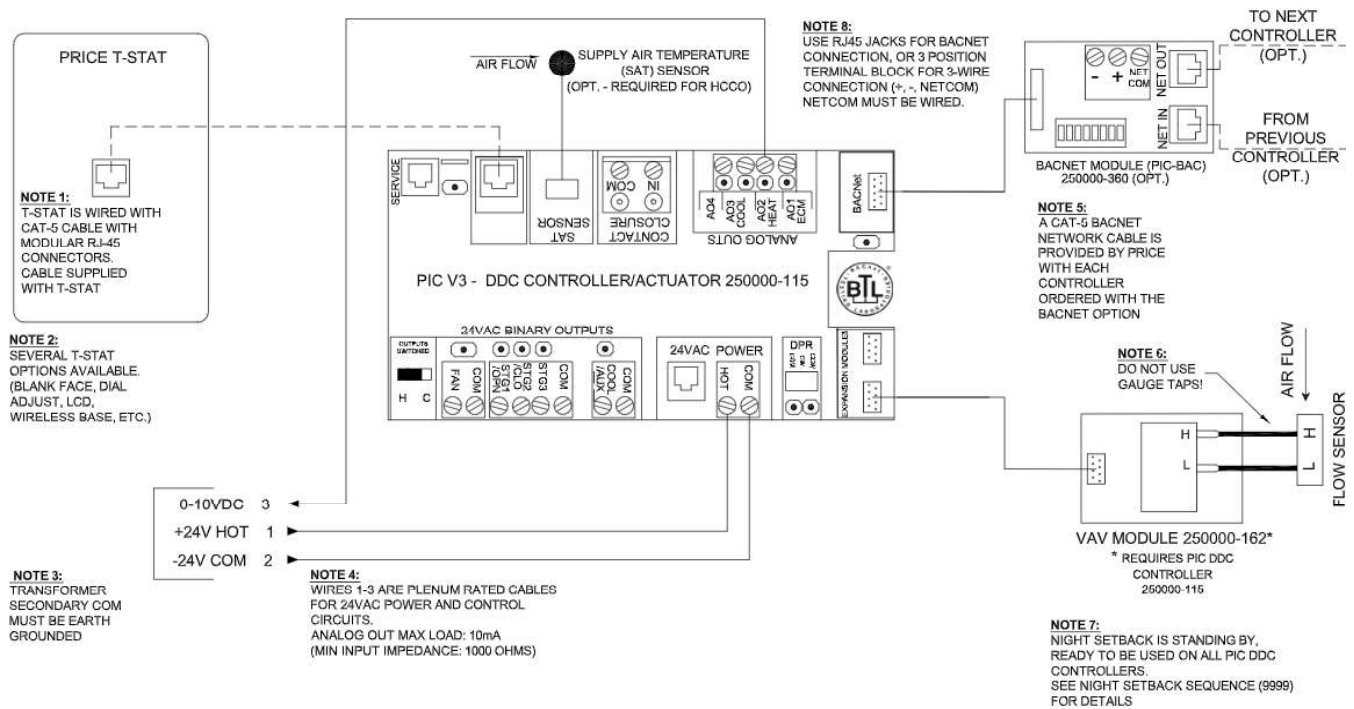
WHY PICK THE PIC?

Wiring – A typical 0-10VDC modulating signal duct sequence is shown for either hot water or SCR heater applications.

The PIC controller is a full blown DDC controller designed to control overhead equipment ranging from single duct to fan powered units, chilled beams, fan coils and even dual duct units. Pressure control can also be achieved with the PIC controller, either with a bypass valve or an end of line linear gate bypass unit.

One of the key highlights of the PIC controller is the plug and play capability for the thermostat and BACnet. Connecting the supplied cables into the RJ45 jacks, eliminates wiring errors and allows the contractors to get in and off job sites quickly. The PIC controller comes pre-programmed with a specified sequence which means no field programming required. Balancing of the unit can be done with a Price LCD thermostat, which acts as a thermostat, balancing stat and setup tool all in one.

Great for new installs and retrofits, the PIC controller can be paired with other box manufacturers as well. With the proper calibration curve data, the PIC controller can be setup to work on non-Price terminal units which make them great for retrofits and tenant improvements.
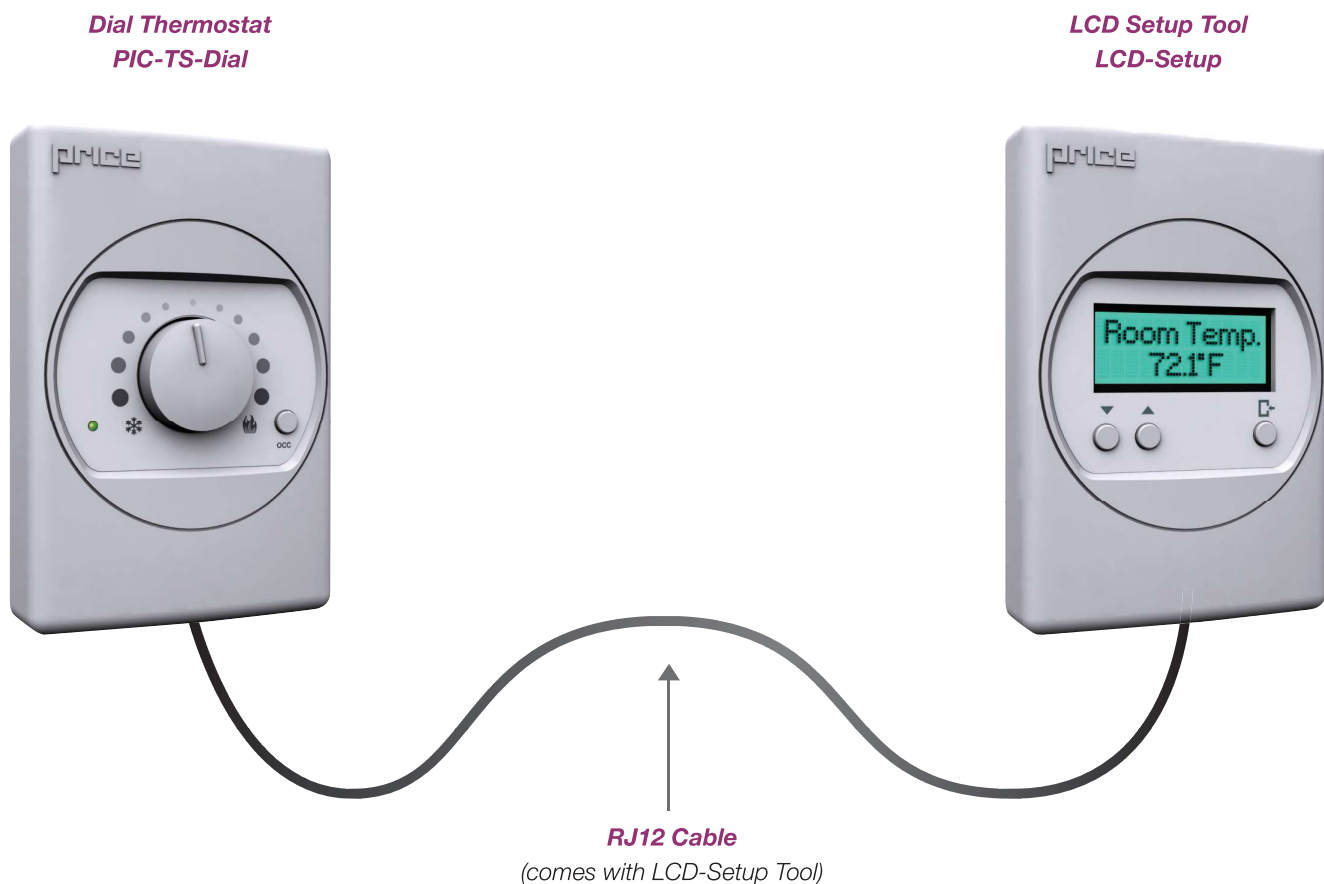
LCD SETUP TOOL

The Price controllers arrive on site fully programmed with a specific sequence of operation. If any parameter changes are required, an LCD-Setup tool can be ordered to make these changes.

The LCD-Setup tool ships with an RJ12 cable for easy connection to the service ports at the bottom of the thermostats.

NOTE: The LCD-Setup tool is to be used with Dial and Blank Face thermostats from Price. (If LCD stats are already on site, this tool is not required).

Dial Thermostat
PIC-TS-Dial

LCD Setup Tool
LCD-Setup

Room Temp.
72.1°F
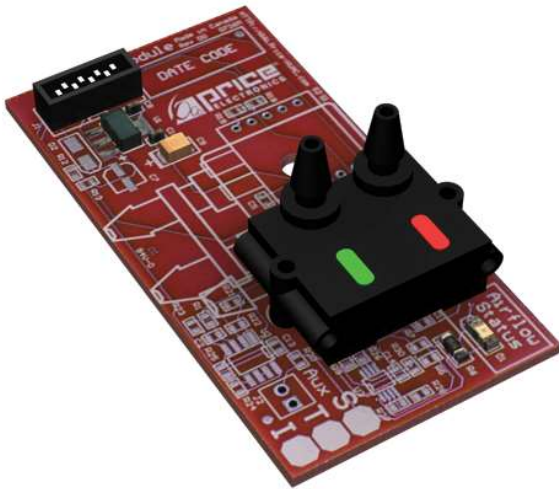
RJ12 Cable
(comes with LCD-Setup Tool)

NOTE: The Linker tool and software can be ordered if programming the controller with a sequence is required, for example, reps that stock controls. Otherwise, the LCD setup tool is all you need!

EXPANSION MODULES

The PIC universal DDC controller is extremely flexible and is available with both BACnet and VAV expansion modules. This allows the PIC to perfectly fit the customers application and control costs. The expansion modules are extremely easy to install. Just use the included ribbon cable connector and plug into the PIC. The cables are keyed to prevent incorrect hookup.

NOTE: BACnet and the VAV transducer come built into the board of the PIC-SD controller.
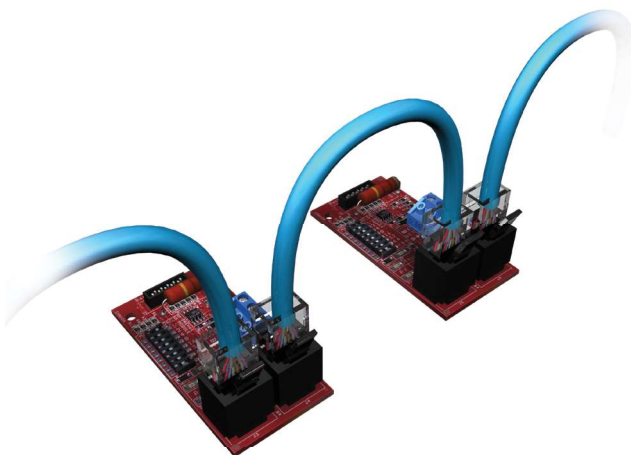

VAV Expansion Module

The Price VAV flow-through transducer module enables the PIC controller to control to specified airflow volumes. A high level of accuracy is maintained even at very low velocity pressure signals. Minimum and maximum airflows can easily be controlled with its expanded range capability and greater turn down ratios can be achieved, which can help earn LEED points and energy savings on a project. The VAV expansion module adds full pressure independent control to the PIC & PIC-SD. Using this highly accurate sensor with the PIC's proportional integral control allows fast and reliable airflow control.

E.g.	Size	Old Range	New Range
	5"	63-350	63-428
	8"	125-800	125-1000
	14"	439-3000	439-3600

Benefits

Lower minimum	Higher maximum
Energy savings	More flexibility in terminal unit selection
Better comfort control	Costs savings (reduced size of terminal unit)
Lower risk of overcooling/overheating	More adaptable to changes after installation
Typically used in buildings with occupancy control or demand control ventilation (DCV) for low flow rates during low unoccupancy periods	Less unique products on jobsite. Reduces potential installation errors

BACnet Expansion Module

The BACnet MS/TP expansion module adds BACnet capabilities to a PIC controller or VAV diffuser. RJ45 jacks are provided for easy plug & play daisy-chain connections to each controller. A 3-position terminal block is also provided when hard-wired MS/TP connection is required.

NOTE: RJ45 jacks and terminal block can be used in any combination for MS/TP connections.

PRICE | CONTROLS