PCM2001N Software Users Guide
Version 1
Draft 3 Mar. 2004

1 Software functions.

The following section is describing the software function profiles implemented in the Lonbox® Command Module model PCM2001N.

The PCM2001N is designed to fulfil the requirement for command modules in modern Intelligent Building Installations, using the LonWorks® network standard ANSI/EIA/CEN 709.1.

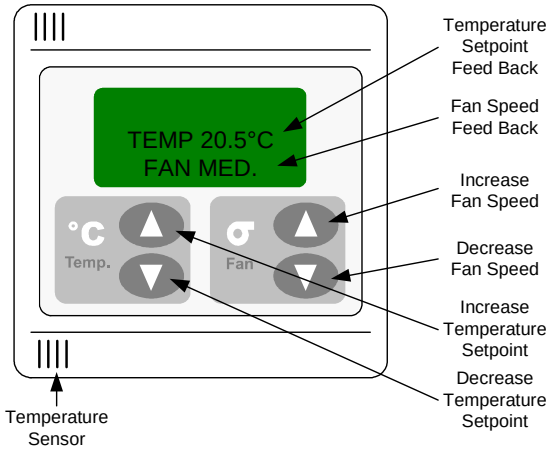

Figure 1 The main application for PCM2001N

1.1 Software function overview

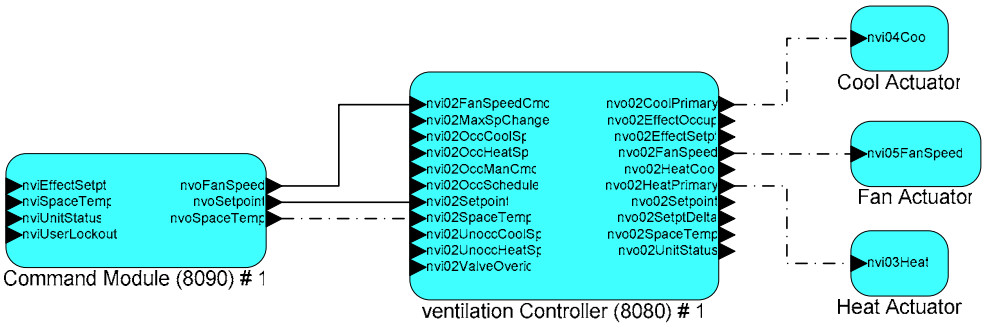

Figure 2 Typically use of the Lonbox® Command Module PCM2001N

1.2 Space comfort function profiles:

The following is describing the space comfort software functions implemented in the Lonbox® Command Module model PCM2001N.

1.2.1 Command module (8090), 1 object TODO

TODO The following describes the function for the occupancy sensor object. This object is used with a hardware sensor whose output is either in an occupied or unoccupied state. The occupancy sensor object is used to detect occupancy in a room or an area and keep the occupied state until no occupancy can be detected. The output from the occupancy sensor object is typically connected to a controller. A occupancy controller can take care of the proper action and calculates application delay or hold times as appropriate.

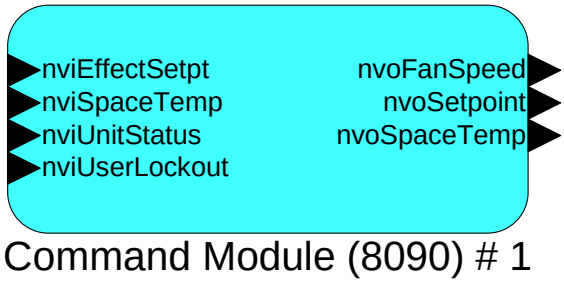

Figure 3 The command module object

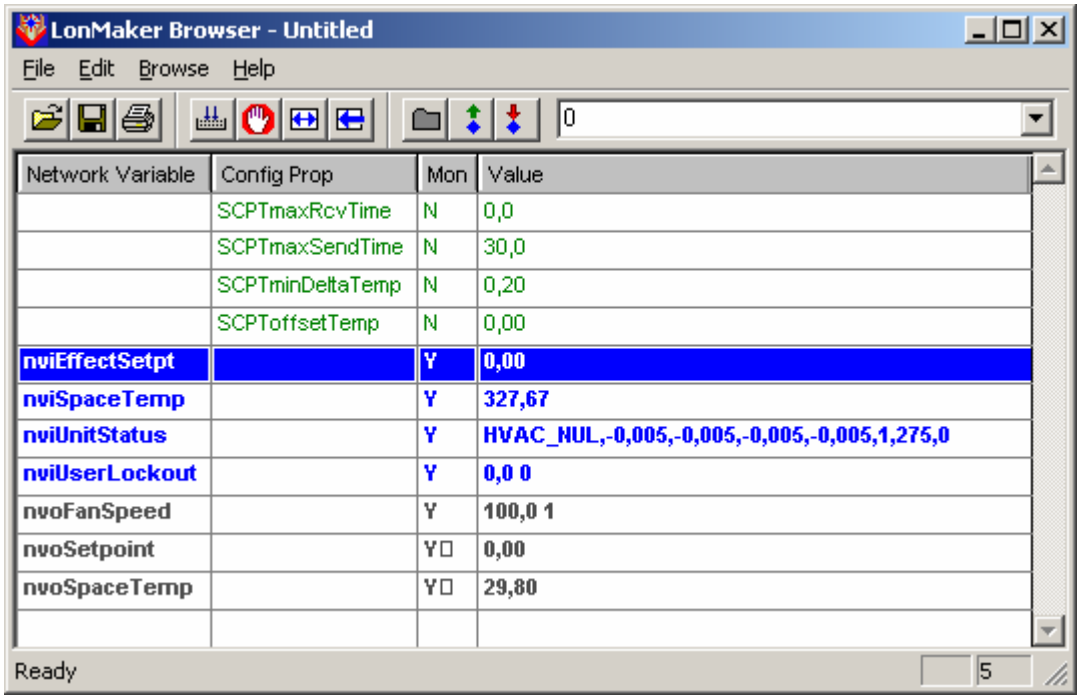

Figure 4 Browsing the command module object

1.2.1.1 Network Variable Interface

Variable name	Default Value	Type	Description
nviEffectSetpt	327,67		
nviSpaceTemp	327,67		
nviUnitStatus	HVAC_NUL,-0,005,-0,005,-0,005,-0,005,1,275,0		
nviUserLockout	0,0 0		
nvoFanSpeed	0,0 0		
nvoSetpoint	0,0 0		
nvoSpaceTemp			

1.2.1.1.1 nviEffectSetpt

todo

1.2.1.1.2nviSpaceTemp

todo

1.2.1.1.3nviUnitStatus

todo

1.2.1.1.4nviUserLockout

todo

1.2.1.1.5nvoFanSpeed

todo

1.2.1.1.6nvoSetpoint

todo

1.2.1.1.7nvoSpaceTemp

todo

This output network variable provides the qualified state of the hardware sensor output connected to the Comfort and Ligth Controller. The sensor input can be inverted with the configuration property SCPTinvrtOut.

The variable is transmitted when the occupancy state changes from unoccupied to occupied or when the occupancy state has changed from occupied to unoccupied at the frequency of the heartbeat. The maximum update rate is fixed by the heartbeat frequency and the minimum update rate is fixed by the debouncing time. The default service type is acknowledged.

1.2.1.2 Configuration Properties

TODO

Configuration	Default Value	Description
SCPTmaxRcxTime	0,0	
SCPTmaxSendTime (49)	30,0	Heartbeat time
SCPTminDeltaTemp	0,20	
SCPToffsetTemp	0,00	

1.2.1.2.1 SCPTmaxRcxTime

todo

1.2.1.2.2 SCPTmaxSendTime (49)

todo

1.2.1.2.3 SCPTminDeltaTemp

todo

1.2.1.2.4 SCPToffsetTemp

todo

1.2.1.2.5 SCPTmaxSendTime

SCPTmaxSendTime is a configuration property. This configuration defines the repeat period between to value update sent on the bus also called a heartbeat. The aims of the heartbeat is to be sure that the sensor is alive and to permit a controller to have multiple sensors on the same input

2 Software History

2.1 Lonbox PCM2001N Version 1.00

Initial release with basis functions.

3 Applications and bindings

3.1 TODO

4 Figure list