

AboveAir Technologies: BACnet MSTP Card Addressing

These instructions apply to controllers with BIOS version 5.0 and later.

Setting Your Controller for BACnet

To set your controller to communicate via the BACnet protocol, navigate to the BMS Setup screen in the Technician Menu (refer to controller IOM if you require assistance).

The system's protocol should be set to BACnet. Set the Identity to match the Station Address. Set the Baud Rate to match the front end's baud rate.

Serial Card Factory Parameters

Your card ships from the factory with the following default values:

Parameter	Min	Max	Factory
Device Instance/ BACnet ID	0	4194303	77000
Station Address/ BACnet MAC	0	127	0
Max Master	0	127	127
Max Info Frames	0	255	20
Baud Rate	9600 - 19200 - 38400 - 76800		38400

Adjusting Serial Card Parameters

In order to configure the serial card to communicate with your front end, hold the alarm and enter buttons at the display interface simultaneously. The display will change to the System Information menu.

To navigate to the parameter selections:

- Scroll down to Other Information and press Enter.
- Scroll to PCOWEB/NET CONFIG and press Enter.
- Scroll to pConet settings and press Enter.

Once the card information populates, the serial card parameters can be viewed. The first screen displays the BACnet ID and Baud Rate. Pressing the down arrow will display a second screen showing the BACnet MAC Address, Max Master, and Max Info Frames parameters.

Use the enter button and arrow keys to select and adjust the parameters, to match your system requirements.

Once all of the parameters have been set, scroll past the two parameters screens to the PCONET CONFIG ENABLE screen. Select YES to confirm parameter selections. Cycle power on the unit to reboot the controller and the serial card.

Factory Reset

Resetting the card to the factory default parameters is accomplished using the card's pushbutton.

To reboot the card, verify that the status LED is flashing regularly. Press and hold the pushbutton for approximately 7 seconds and release. After 10 seconds, the LED will stop flashing. After another 15 seconds, the status LED will flash quickly red-green-red-green indicating the serial card is restarting.

To revert to the factory parameters, press and hold the pushbutton after the reboot for approximately 20 seconds. Release the button with the LED begins to flash slowly red. The status LED will come on solid green, flash red quickly 3 times, then come on green again to signal that the reset was successful. The card will automatically reboot and be available for connection in approximately a minute.

Troubleshooting Notes

If you are having difficulty communicating with the serial card, check the following:

- Verify that the Status LED on the left is blinking green regularly: this confirms that the serial card and the controller are communicating. If this LED is not flashing, verify that the settings in BMS Setup menu are set appropriately.
- Verify that the RS485 LEDs are flashing - green with occasional red flashes indicates proper communication.
- If both RS485 LEDs are on continuously, verify the Serial Card Parameters. Verify that there are no conflicts with other devices on the system. Verify RS485 wiring.
- Download the BACset tool from ksa.carel.com to isolate the device from the system and verify communication with the card, if necessary.