

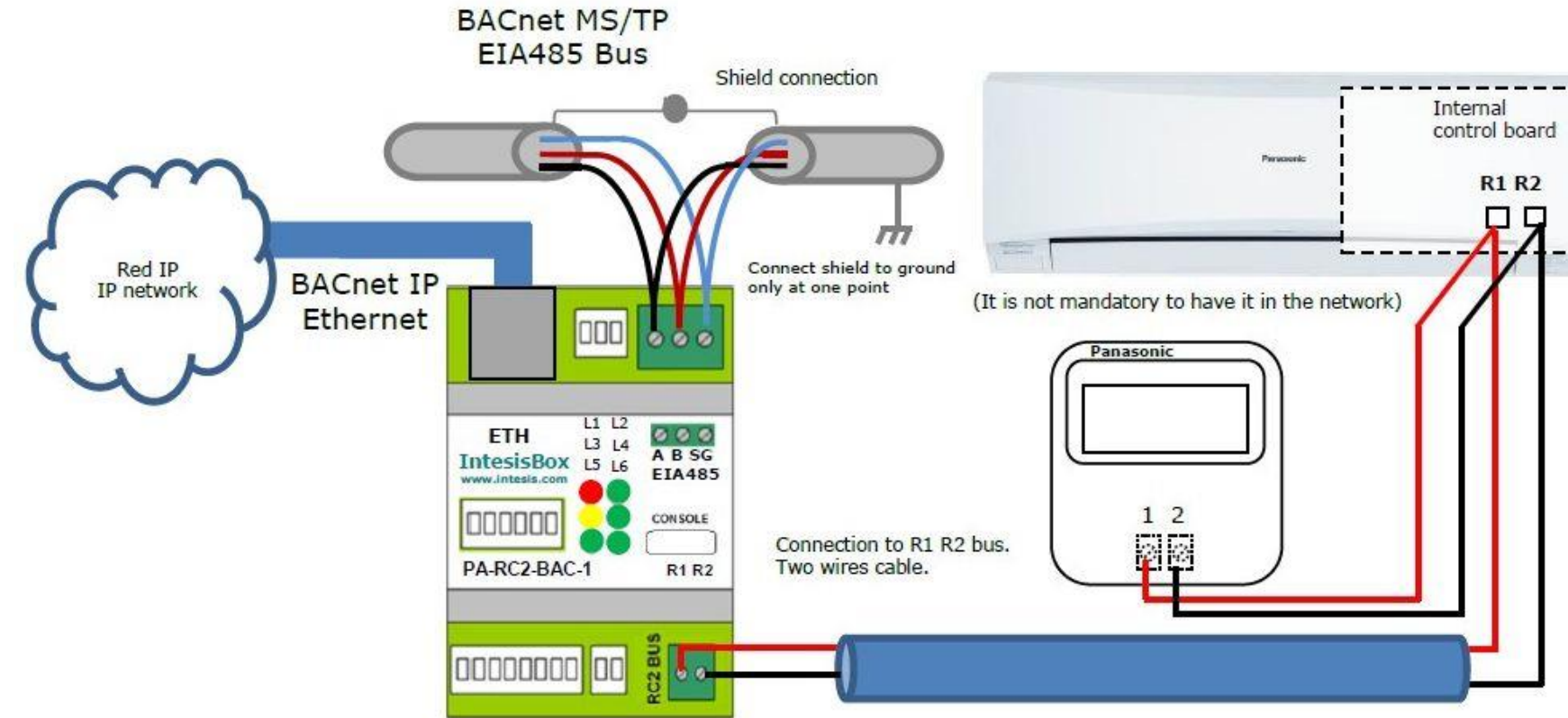
*Professional Air Conditioning Controls*

**Panasonic**

Heating and Air Conditioning Solutions



- The USPA-RC2-BAC-1 is a BACnet IP or MSTP gateway that's capable of monitoring and controlling ECOi, ECOiEX and PACi units.
- Simply configured via external switches. The Graphical user interface is easily accessed through the Ethernet port.
- The USPA-AC-BAC-1 features Occupied/Unoccupied heat and cool set points for reduced programming time and greater efficiency.
- Robust and reliable hardware with standard DIN-Rail mounting.

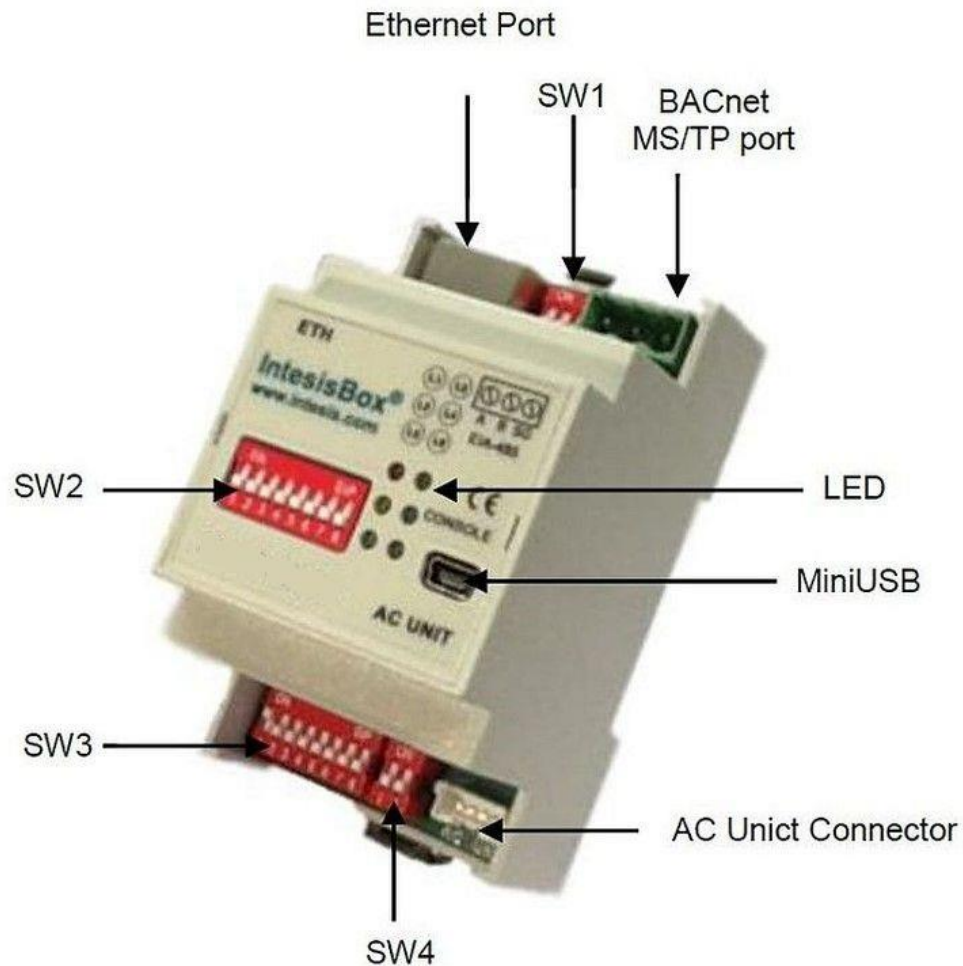


1. Access the terminal block on the indoor unit.
2. Locate the R1 & R2 terminals on the indoor unit.
3. Use 18-2 shielded stranded wire and connect the R1 & R2 terminals in the indoor unit to the BACnet gateway terminals labeled "RC 1 and 2".

The 18-2 stranded shielded connection between the indoor unit and the BACnet gateway cannot exceed 1,650 ft.

# PACi Controls

# USPA-RC2-BAC-1



- SW1 - Configures the EIA485 bus.
- SW2 - Configures the MS/TP MAC address.
- SW3 - Selects IP or MSTP and configures the baud rate for MS/TP communication.
- LED Status - Depending on the type of connection and processes carried out the LED status may change.

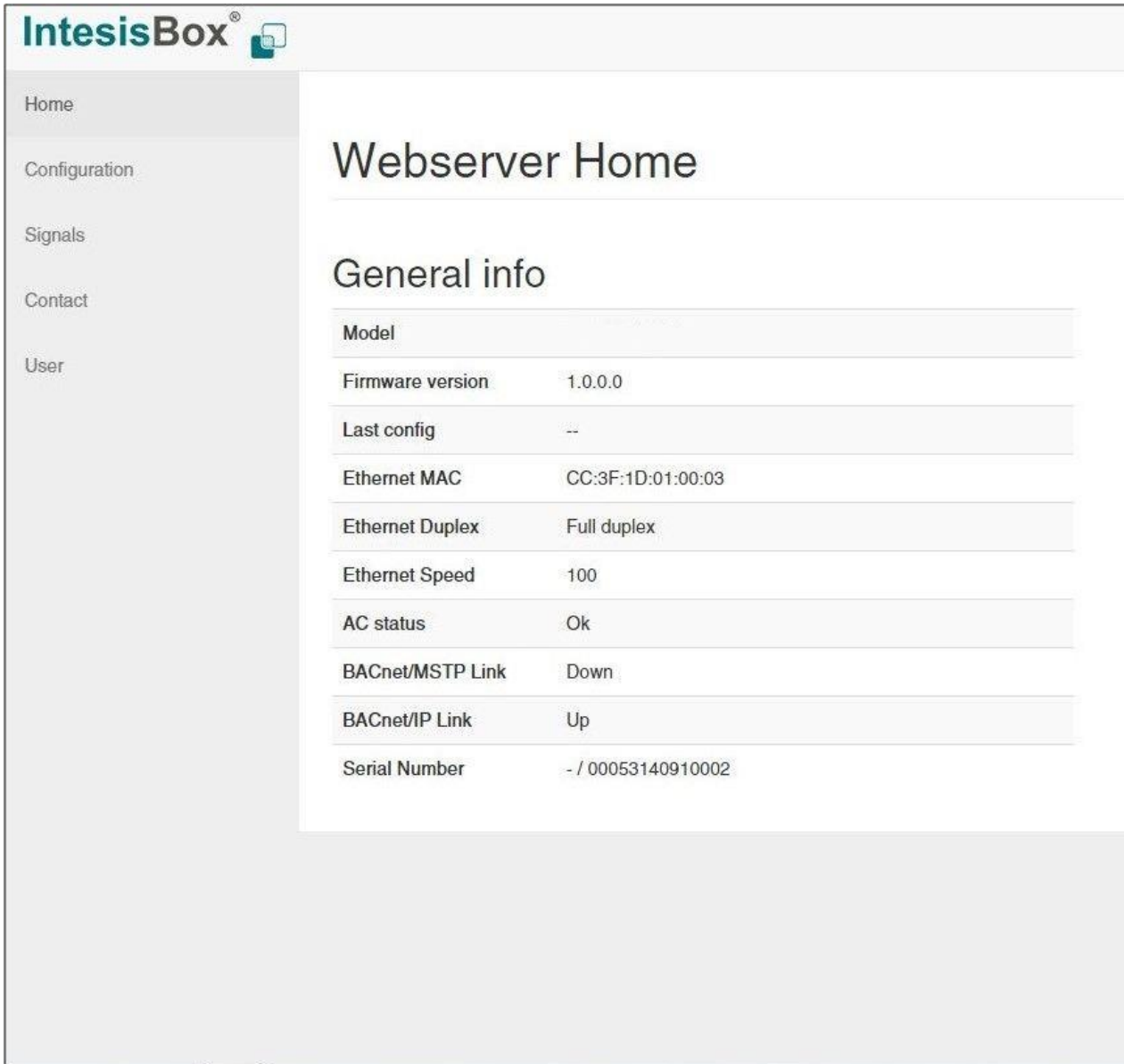
The USPA-RC2-BAC-1 can automatically detect the MS/TP baud rate.

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# PACi Controls

# Configuration Interface



The screenshot shows the IntesisBox webserver home page. The left sidebar contains navigation links: Home, Configuration, Signals, Contact, and User. The main content area is titled "Webserver Home" and features a "General info" section with a table of device details.

Model	
Firmware version	1.0.0.0
Last config	--
Ethernet MAC	CC:3F:1D:01:00:03
Ethernet Duplex	Full duplex
Ethernet Speed	100
AC status	Ok
BACnet/MSTP Link	Down
BACnet/IP Link	Up
Serial Number	- / 00053140910002

In order to check the status of the device, signal values and general configuration, the PA-AC-BAC-1 includes a configuration tool.

This tool is only accessible through the Ethernet port, a crossover Ethernet cable and any HTML internet browser.

There are two access levels: ***admin*** and ***operator***.

By default the device comes with a static IP, so please check that you are in the same network domain in order to connect. The default IP is: **192.168.100.246**.

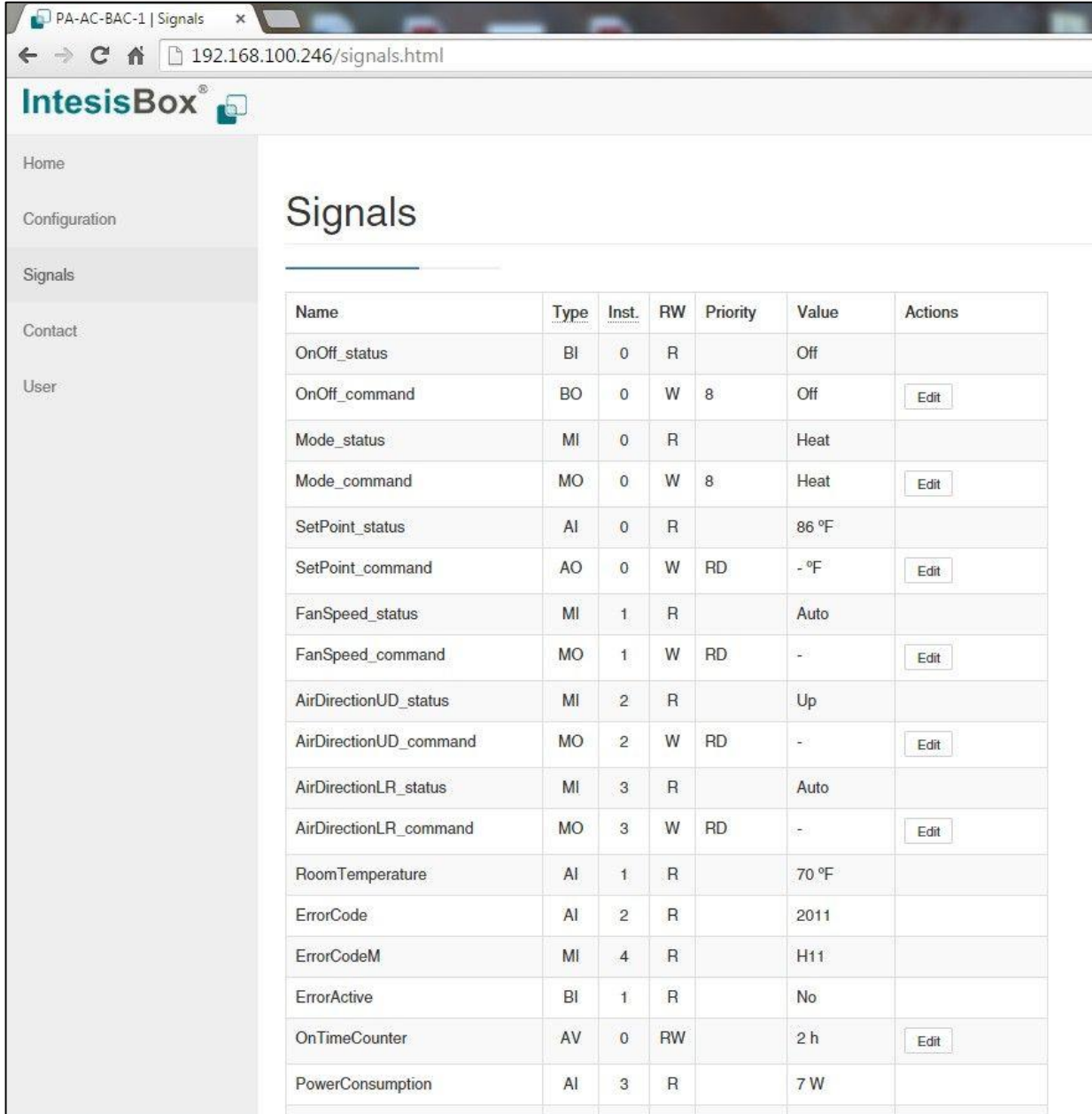
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# PACi Controls

# Object Viewer



The screenshot shows the IntesisBox web interface for a PACi Controls system. The browser address bar displays '192.168.100.246/signals.html'. The left sidebar contains navigation links: Home, Configuration, Signals (selected), Contact, and User. The main content area is titled 'Signals' and contains a table with the following data:

Name	Type	Inst.	RW	Priority	Value	Actions
OnOff_status	BI	0	R		Off	
OnOff_command	BO	0	W	8	Off	<input type="button" value="Edit"/>
Mode_status	MI	0	R		Heat	
Mode_command	MO	0	W	8	Heat	<input type="button" value="Edit"/>
SetPoint_status	AI	0	R		86 °F	
SetPoint_command	AO	0	W	RD	- °F	<input type="button" value="Edit"/>
FanSpeed_status	MI	1	R		Auto	
FanSpeed_command	MO	1	W	RD	-	<input type="button" value="Edit"/>
AirDirectionUD_status	MI	2	R		Up	
AirDirectionUD_command	MO	2	W	RD	-	<input type="button" value="Edit"/>
AirDirectionLR_status	MI	3	R		Auto	
AirDirectionLR_command	MO	3	W	RD	-	<input type="button" value="Edit"/>
RoomTemperature	AI	1	R		70 °F	
ErrorCode	AI	2	R		2011	
ErrorCodeM	MI	4	R		H11	
ErrorActive	BI	1	R		No	
OnTimeCounter	AV	0	RW		2 h	<input type="button" value="Edit"/>
PowerConsumption	AI	3	R		7 W	

In the signals section, a complete list of the available BACnet objects, their **type**, **Object Instance**, **Priority** and current **value** is shown.

Clicking the “**Edit**” button allows users to command the system and receive feedback from both BACnet and AC system.

Some BACnet objects may not be available on all indoor units.

This is useful when testing unit and network communication.

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## Setting Objects

- On/Off
- Mode
- Setpoint
- Fan Speed
- Air Direction (If available)
- Filter Reset
- Prohibit Thermostat Functions
- Occupied/Unoccupied Cool Setpoints
- Occupied/Unoccupied Heat Setpoints



## Monitor/Status Objects

- On/Off
- Mode
- Set Point
- Fan Speed
- Air Direction (if available)
- Space Temperature
- Thermostat Lockout
- Filter Status
- Active Alarm and System Error Codes
- Occupied/Unoccupied Mode
- Run Time Counter