How to configure the Communication Adaptor for use with the OEM Portal Pro

When using an OEM Prtl Pro for a Building Automation System (BAS) the Communication Adaptor is necessary for the front-end to communicate with Sanyo ECO-i equipment. Care must be taken to follow the configuration that was programmed into the OEM Prtl Pro via the Configuration Sheet and the Piping Diagram that was supplied to you. If the information we receive is not correct the program in the OEM Prtl Pro will not properly communicate (read or write) to the equipment.

Please read this entire document before performing any of the procedures.

Fig. 1 (Communication Adaptor Layout)
As an example; Refrigerant Circuit #1 has (15) indoor units with (2) outdoor units and Refrigerant Circuit #2 has (10) indoor units with (1) outdoor unit. The OEM Prtl Pro was programmed to see R.C. #1 on link 1 and R.C. #2 on link 2 of the Communication Adaptor, the appropriate Refrigerant Circuit has to land on the correct link or the OEM Prtl Pro will not communicate with the equipment.

For an example of the wiring for this type of configuration please Fig. 2

A) Setting the Communication Adaptor to scan for indoor units and outdoor units

1. The Communication Adaptor has 4 buttons below the LED display. The buttons are “Home, Up, Down and Set”. These buttons are used to configure the Com. Adaptor. (Fig. 1)
2. Move the Terminal Resistance plug (CN32) on the Communication Adaptor to the “B” position.
3. Turn the Communication Adaptor on.
4. Press and hold <Home> button for 2-3 seconds, the display will show and then change to .
5. Press the <Up> button 5 times and the display will change to .
6. Press the <Set> button and the display will show .
7. Press the <Down> button and the display will now show .
8. Press the <Set> button until the last digit (0) begins to blink .
9. Press the <Down> button and the display changes to .
10. Press the <Set> button until the last digit (3) stops blinking .
11. Now cycle power on the communication adaptor.
12. Upon restarting the communication adaptor will begin scanning links 1 and 2 for indoor and outdoor units. The display will alternately show and .

If everything is correct, using the example above the Communication Adaptor’s 6 digit display will show 00.02.15 and then 01.01.10 when it has completed scanning. These numbers represent:

**Refrigerant Circuit #1**
- 00=Link number 1 on the Communication Adaptor.
- 01=Total number of outdoor units.
- 15=Total indoor units on Refrigerant Circuit 1.

**Refrigerant Circuit #2**
- 01=Link number 2 on the Communication Adaptor.
- 02=Total number of outdoor units.
- 10=Total indoor units on Refrigerant Circuit 2.
B) Using the Communication Adaptor to set Central Control Address

1. We have now confirmed that the Communication Adaptor is seeing all the units to be controlled by the OEM PP.
2. At this point if a Central Control Address has not been assigned, you will have to set the Central Control Address. If the Central Control Address has been set you do not have to perform this portion of the configuration. Please go to “Setting the Communication Adaptor not to scan for indoor units and outdoor units”.
3. You may set the Central Control Address with the System Controller or Intelligent controller instead of using the Communication Adaptor.
4. Press and hold <Home> button for 2-3 seconds, the display will show \[na.00\] and then change to \[Rdpdt\].
5. Press the <Up> button 4 times \[na.04\], the display will now show \[Rdp5Et\]
6. Press the <Set> button and the display will change to \[t\_\_\_\_0\].
7. Press the <Down> button 2 times, the display will now show \[13555Et\].
8. Press the Set button for 2-3 seconds and when the Communication Adaptor has completed setting the Central Control Address the display will show \[End\].

Now that the Central Control address has been set, you will have to change the Communication Adaptor configuration so that it does not scan on a power up.

C) Setting the Communication Adaptor not to scan for indoor units and outdoor units

1. Press and hold <Home> button for 2-3 seconds, the display will show \[na.00\] and then change to \[Rdpdt\].
2. Press the <Up> button 5 times \[na.05\] and the display will change to \[F__5Et\].
3. Press the <Set> button and the display will show \[Lann00\].
4. Press the <Down> button 1 time, the display shows \[85Can3\].
5. Press and hold the <Set> button until the last digit (3) begins to blink \[85Can3\].
6. Press the <Down> button and the display changes to \[85Can2\].
7. Press the <Set> button until the last digit (0) stops flashing \[85Can0\].

At this point the Communication Adaptor has configured to work with the OEM Prtl Pro. Turn the power on to the OEM Prtl Pro and use BacView to confirm that it is correctly reading the temperature from the indoor unit. If the BacView is reporting 50 degree temperatures in the space, the OEM Prtl Pro or the Communication Adaptor is not setup correctly.
D) Configure the Communication Adaptor, OEM Prtl Pro with an Intelligent Controller

This procedure should only be performed if you have an Intelligent Controller with an OEM Portal Pro on the same system. The OEM Prtl Pro must be programmed for this type of configuration, if the OEM Prtl Pro has not been programmed and you perform this procedure, you will lose the ability to read or write to the Sanyo units.

This procedure must be performed before all other procedures in this document.

For an example of the wiring for this type of configuration please Fig. 3

1. Move the Terminal Resistance plug (CN32) on the Communication Adaptor to the “B” position.
2. Turn the Communication Adaptor on.
3. Press and hold <Home> button for 2-3 seconds, the display will show \[ \text{na.00} \] and then change to \[ \text{Ad Pdt} \].
4. Press the <Up> button 5 times \[ \text{na.05} \] and the display will change to \[ \text{Fr 5} \].
5. Press the <Set> button and the display will show \[ \text{lna.00} \].
6. Press the <Up> button 2 times, the display will show \[ \text{3 Cont0} \].
7. Press the <Set> button for 1-3 seconds until the last digit (0) begins to blink \[ \text{3 Cont0} \].
8. Press the <Up> button 3 times, the display will now show the last digit blinking (3) \[ \text{3 Cont3} \].
9. Press and hold the <Set> button until the last digit stop blinking.
10. Press the <Up> button once, the display will show \[ \text{ylan10} \].
11. Press the <Set> button for 1-3 seconds the last digit (0) will begin blinking \[ \text{ylan10} \].
12. Press the <Up> button once to change the last digit from (0) to (1) \[ \text{ylan11} \].
13. Press the <Set> button until the last digit (1) stops blinking.
14. Press the <Up> button once, the display will now show \[ \text{Sc an20} \].
15. Press and hold the <Set> button until the last digit (0) starts blinking \[ \text{Sc an20} \].
16. Press the <Up> button once to change the last digit from (0) to (1).

17. Press the <Set> button until the last digit (1) stops blinking.

18. Cycle power on the Communication Adaptor and perform steps A through C.

Fig.2 (Typical Wiring of the Communication Adaptor and the OEM Prtl Pro)
BACnet/IP or BACnet/Ethernet line 24V AC
RS485 line to Net+ and Net-
RS485 line to 11 and 12
U1-U2 line to 0 and 1 (Link1) or 3 and 4 (Link2)
100~240V AC Power
U1-U2 line up to 64 indoor units on one link