



Pocket Quick Reference Guide

On the Installation
of the
TCB-PCUC2E
Application Control Kit

To
VN-M###HE1 Air to Air Heat Exchanger

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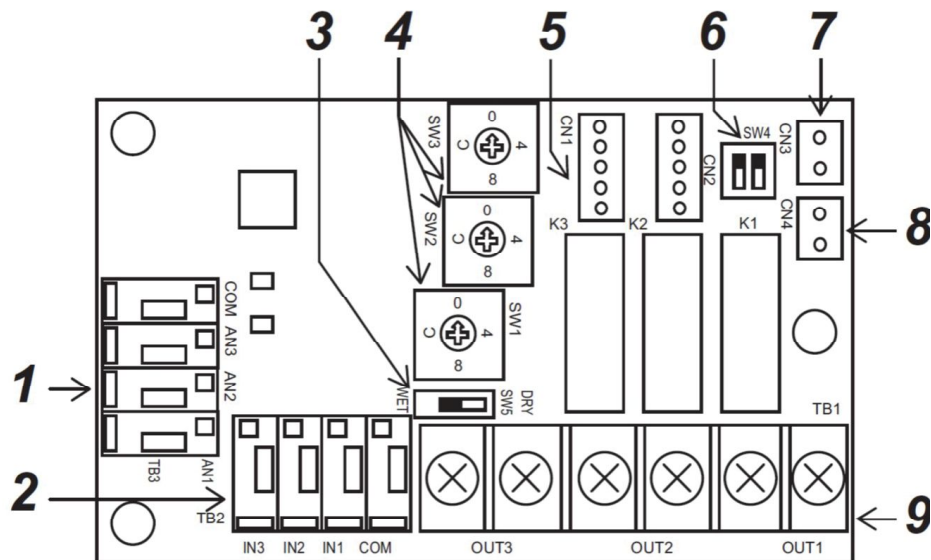
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The “kit” comprises of; 1 x Additional printed circuit board TCB-PCUC2E, two interconnect cable, “Short Plug”, Card edge spacers, installation manual.

With “Field Supplied” remote on/off switch device.



TCB-PCUC2-E

Component layout.

- 1 - NOT USED with VN-M units
- 2 - External Digital Input Terminals (TB2) Terminals COM and IN3.
- 3 - External Digital Input, ON=(Voltage), OFF = (No Voltage)
Default setting OFF LEAVE in the OFF Position.
- 4 - (SW1, SW2, SW3) Switch for Setting Signal Outputs.
- 5 - CN1 Connection to indoor unit, cable (A) supplied with the “Kit”.
- 6 - NOT USED with VN-M units.
- 7 - NOT USED with VN-M units.
- 8 - NOT USED with VN-M units.
- 9 - NOT USED with VN-M units.



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The application control kit, is a universal device with multiple functions, the available functions are indoor model dependant.

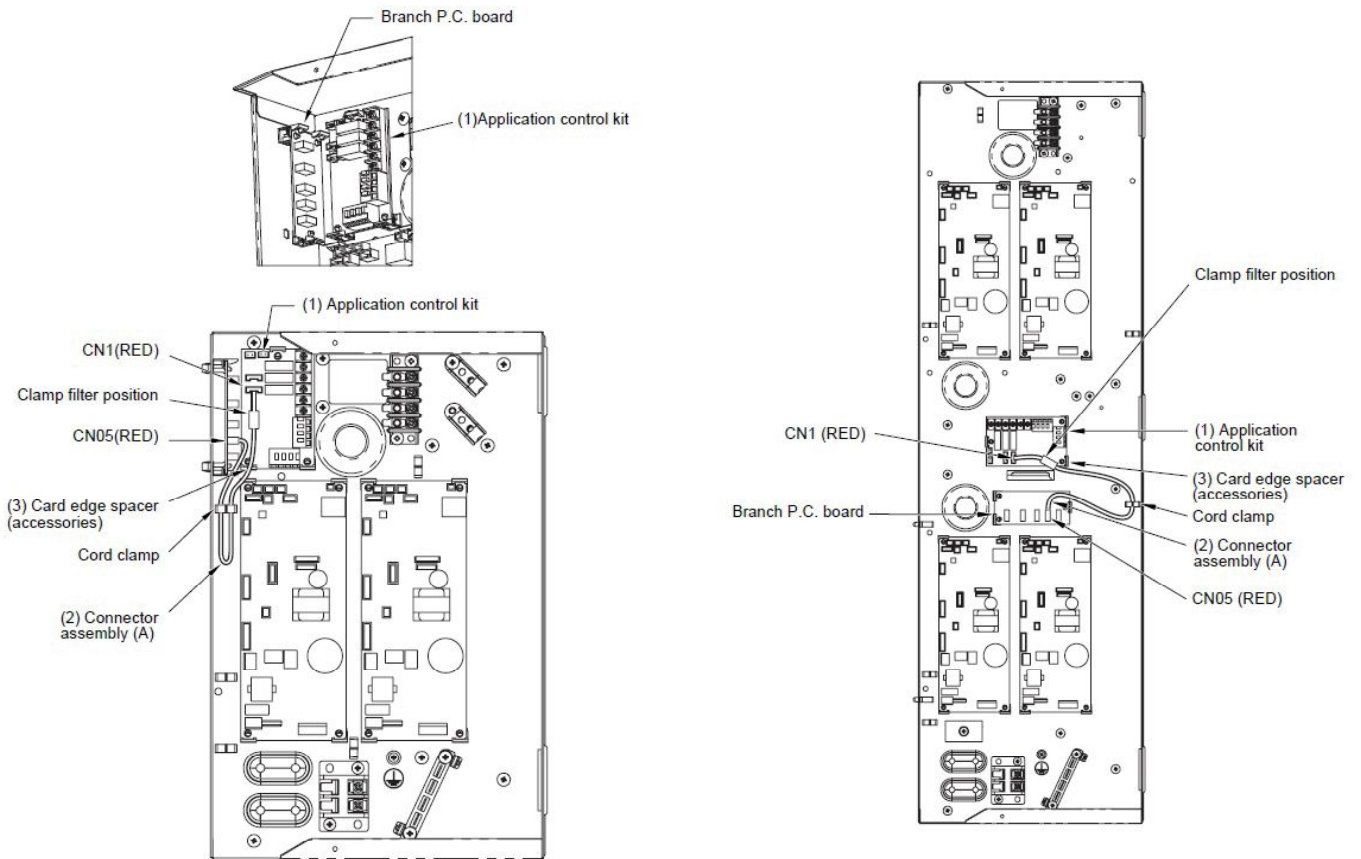
When used with VN-M###HE1 air to air heat exchanger units, TCB=PCUC2E can be used for;

- **Signal Output TB1** (SW1 = Out 1, SW2 = Out 2, SW3 = Out 3) Configured via item 4
External Damper - Item 4 Setting 6 (SW1,SW2,SW3)
Operation - Item 4 Setting 7 (SW1, SW2, SW3)
System Fault - Item 4 Setting 8 (SW1, SW2, SW3)
- **External Digital Input TB2** (Terminals Com, IN1, IN2, IN3)
Com - IN1 - External ON/OFF
Com - IN2 - Ventilation Mode
Open - Heat Exchanger Mode
Closed - Bypass Mode
Com - IN3 - Fan Mode
Open - High Fan Speed
Closed - Low Fan Speed

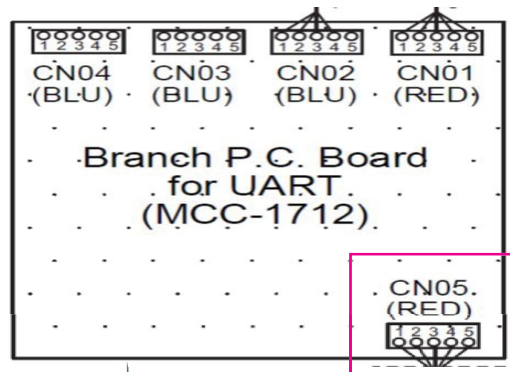




Install the TCB-PCUC2E interface printed circuit board inside the VN-M ###HE1 units Electrical Controls Box (E-Can).



Using the supplied cable (A), plug into CN1 (Red) on the TCB-PCUC2E and CN5 (Red) on the Branch PC (MCC-1712) Board, (The Branch PC Board is already installed within the VN-M###HE1 “E-Can”)



To TCB-PCUC2E



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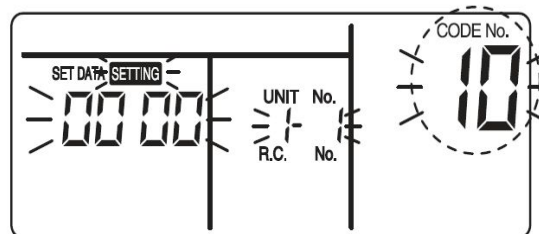
In order to activate the TCB-PCUC2E application board, you will need to change “DN Code” from factory setting “0000” to “0001”

Power up the system with a hard wired remote controller connected to terminals A&B.

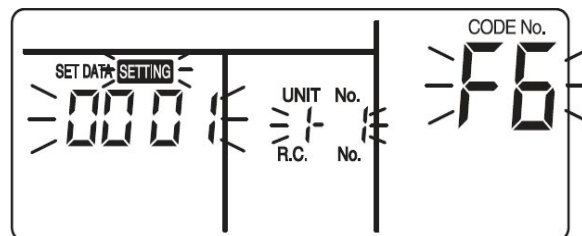
Using a standard hard wired remote controller, NRC-01HE, RBC-AMT32E, RBC-AMS5*E, access the DN Codes.

For NRC-01HE and RBC-AMT32E, press the “TEST”, “SET” and “CL” buttons together and held down for 4 seconds or more.

Display will show



Using the “Temperature UP / DOWN buttons” change the “Code No. - Right hand display” from Default “10” to “F6”



Using the “Timer UP / DOWN buttons” change the “Set Data - Left hand display” from default “0000” to “0001”

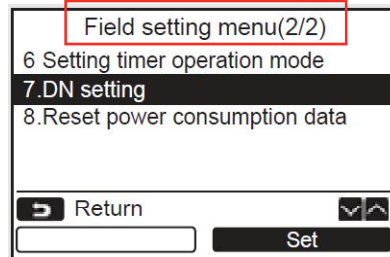
Press “Test” button to lock the settings, the remote will display “Setting” this could take up to 2 -3 minutes, when completed the display will clear, displaying lines only the system will be OFF.



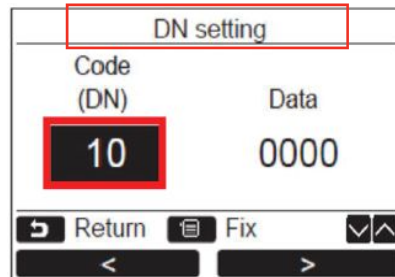


For RBC-AMS5*E series, press the “Menu - Middle button left hand side” and the temperature “Down” buttons together and held down for 4 seconds or more.

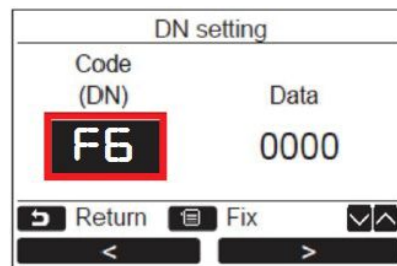
Display will show



Using the “Temperature UP / DOWN buttons” scroll to the “DN Setting” sub menu, press “Set - F2” to enter DN codes.



Using the “Temperature UP / DOWN buttons” change the “Code (DN) - Left hand display” from default “10” to “F6”



Press “F2” button to move over to “Data - Right hand display”, using the temperature UP/DOWN buttons change the “Data” from default “0000” to “0001”, “fix” the settings by pressing the “Menu” button.

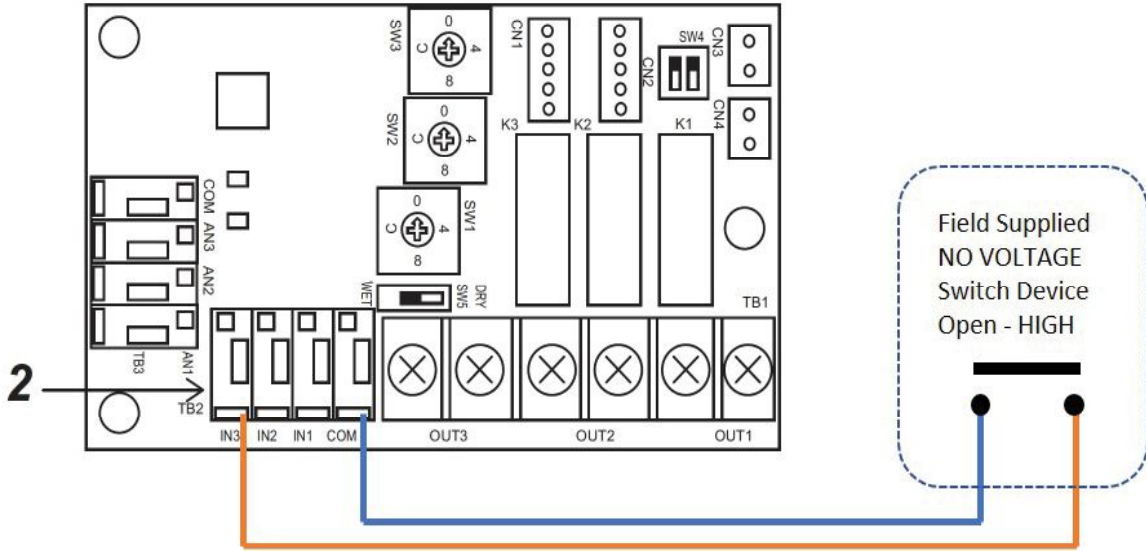
Press the “Cancel” button, (bottom left button), display will clear and the “Egg Timer” will be displayed, once completed the display will clear and the system will be OFF.



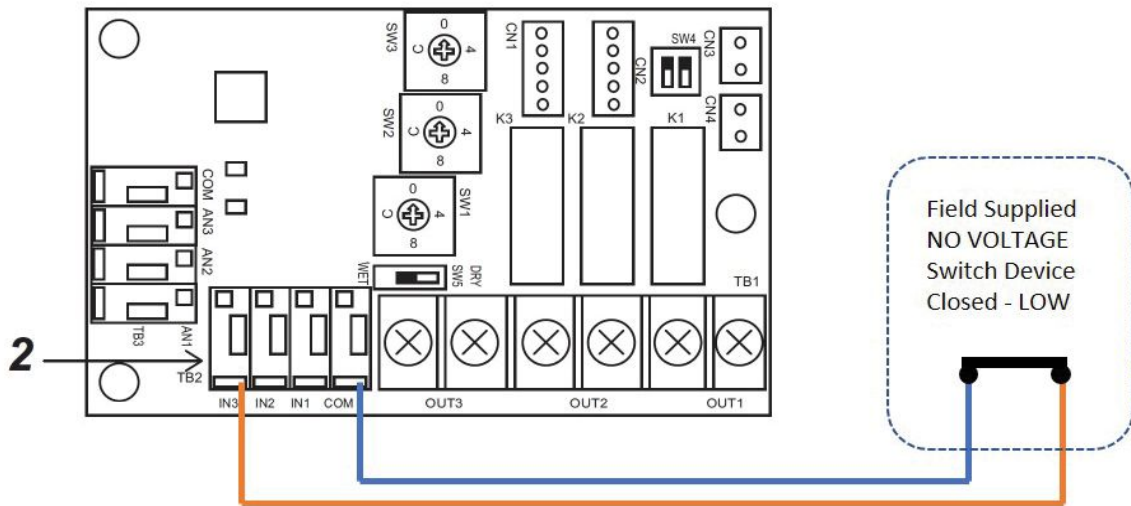


To control the units fan speed via an external switching device, switch, PIR, CO2 sensor etc, the units default fan speed is HIGH.

Connect a **NO VOLTAGE** switching circuit via terminals COM and IN3 (Item 2).



Open circuit - High Fan Speed (Default)



Closed circuit - Low Fan Speed





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