

*INSTRUCTIONS
FOR
THE
APPLICATION OF DDC PROGRAMS
FOR*

Johnson Controls / Envirotec (Palm Pilot)
Johnson Controls / Envirotec (Laptop)

T A C Stats

Trane

Siemens (Laptop)

STAEFA

Carrier Comfort ID

JOHNSON CONTROLS / ENVIROTEC



Turn On, Scroll to VBT 1400, Single duct.

Write down address, scroll down 2 pages.

Highlight Min and enter value.

Highlight Max and enter value.

Highlight Max Flow and enter the same value as Max.

Hit send changes to enter.

Scroll down 1 page.

Enter area & send changes.

Scroll to next page to check if fan is on.

Highlight balance on top.

Highlight balancing Acting Menu.

Highlight Drive supply to Max OCC. Flow.

Hit OK when Done.

CHECK DIFFERENTIAL PRESSURE AT BOX

Use Chart to Find CFM Value

Highlight user flow and enter CFM.

Hit + sign on Max sign.

Hit Action menu, then hit save Max Flow Pick-Up game

-----Wait a minute and hit refresh to see if values changed-----

Write down the DATA (Pick-up gain, damper %, actual CFM.)

Back to action menu, hit drive supply to Min. OCC. flow.

-----Once box begins to ramp down hit cancel-----

Back to Action Menu.

Hit release all overrides.

Hit home and go to next STAT.

Johnson Controls
- (HVAC PRO) Laptop-

Double click Icon.

Go to commission, scroll to commission control (click OK)
-(Computer will now load data)-

Click on Inputs, and then click on Outputs.

Then click on Params.

Scroll through Params and check Min, Max, Area and so on.

To open supply box-on parameters side highlight dampers command, enter 100 and then click override.

To open exhaust – go to outputs side, the first line.

Exhaust Com...double click, enter 100 and click override.

When you get reading for supply, scroll to supply multi and enter new multiplier.
(CFM read ÷ CFM design x Multiplier)

Do the same procedure for the exhaust (Use exhaust multiplier)

When complete go to top commission.

Scroll to exit commissioning mode.

Hit exit save changes (**you must save changes**).

X out and go to next STAT.

T A C S T A T S

CONSTANT VOLUME BOX:

- 1) Service, 183, ↵
- 2) AP, ↵
- 3) PPF, ↵

The box will set to constant volume CFM. Allow a few minutes to level off. Read outlets and enter CFM to STAT.

- 4) After entering value hit ↵
- 5) Escape and go to up, ↵ (from AP).
- 6) Select PF to view pickup factor.

TRANE

Double click on EWARE Icon.

Initiate search will come up, highlight yes and hit enter.
(Wait for the information to download)

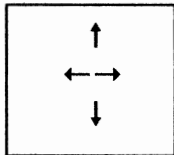
Hit F4 to Log On, then enter the password: 1111, then press enter.

Hit F5 to search.
(Address will start with 64)

Type in the box you want to work on. (Example: 64, ENTER, than S).

Page Up & Down to find information.

Tab down to Flow Override



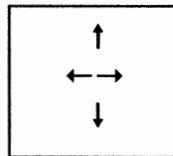
to Max flow, then F5 to download.

Once Max Flow has established read outlets.

(For Fan powered establish CFM by Delta P, for Non-Fan boxes read outlets)

Tab down to measured cooling flow and enter CFM.

Tab down to flow override, and with



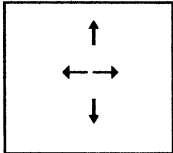
change to Auto, F5.

Hit escape and start next box.

SIEMANS (LAPTOP)

Hook-up: Phone jack to stat or box

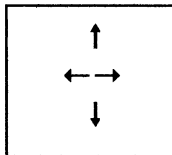
Program: Double click Siemans icon



To change report, press enter.



To balancing, press enter.
Check minimums & maximums.



(to change to set, press enter, put in change, press enter, then enter password: Powers, press enter.)

Set: set point to 100.0 (will override)

(Flow will equal flow set point)

Read outlets.

Take total and divide by air volume then multiply by flow flow Coff. This will give you new Coff.

Enter new Coff.

Set to low flow and verify.

Scroll to flow set point and release.

Then quit and shut window.

STA-EFA

Turn on.

Hit Enter Key 3 times (this will get you to readings).

Scroll to 03 (CFM).

Hit FNC to set service mode, then press enter, scroll to commissioning mode, press enter.

(You will now have a C L under O3)

To go to full open and calibrate:

Hit 55, then enter, hit change and scroll to open, then enter, go back to O3 and wait for 2 minutes to cycle.

Hit CAL then change and scroll to calibrate span, press enter, enter values by scrolling up & down, then press enter.

Hit 40, then press enter, change and enter old minimum set point, then press enter.

Hit 41, press enter, change and enter maximum set point, press enter.

Hit 42, press enter, change and enter minimum set point, press enter.

Hit 55, press enter hit change and scroll to maximum, go back to O3 and balance.

Now to check VAV operation, hit 55, press enter, change to minimum, press enter, hit O3, then press enter and check to see if CFM's are reducing and damper is closing.

To close out – go to 55, press enter, change and scroll to automatic, press enter. Move on to next VAV.

Carrier Comfort ID

1. Open Comfort ID program.
2. Enter Bus# (obtain from control contractor).
3. Enter Element # (address).
4. After device is displayed, select the “screen” option to choose from the four options: Point Status, Air Balance, Temperature Setpoints or Air Flow Setpoints.
5. Select Air Flow Setpoints first and verify values are correct. If not double click on the value and enter the correct value.
(select change after entering the value).
6. Switch to Air Balance from the screen option.
7. Double click on “Disabled” value for commissioning mode, change to “Enable” and select “Force”.
8. Double click on “Disabled” value for maximum cooling, change to “Enable” and select “Force”.
9. Measure flow at outlets, ports, etc...
10. If measured flow does not match actual airflow displayed, double click on actual airflow, enter measured flow, and select “Force”.
11. Calibration gain should go to a value less than “1” to obtain more air and a value greater than “1” to reduce air.
12. When maximum cooling is completed, double click on “Enabled” value and select “Auto” to release maximum command.
13. Follow the same procedure for Minimum to verify flow. However, the calibration gain cannot average different values for Maximum and Minimum. So, unless the Minimum cooling is significantly off, do not change the calibration gain.
14. If the unit is fan powered (parallel), double click on the “Disabled” value for fan override and select “Force” to energize the fan. Ensure the box is at Minimum primary airflow to simulate heating mode. Adjust fan speed at speed control or motor taps.
15. When balancing is completed, double click on “Enabled” value for commissioning mode and select “Auto”. All overrides will be released.
16. Arrow up or down in Element section to move to another box.

****After approximately 30 minutes the commissioning mode will “time out” and return to terminal mode.****

****If total cfm for the AHU associated with a string of VAV’s cannot be traversed, send all VAV’s to commissioning mode and Maximum cooling to record the actual airflows from the display. The sum of the displayed actual airflows will represent the AHU total flow.****