Simplicity Smart Equipment Controls (SSE) Quick Start Guide

BEFORE YOU BEGIN CONFIGURING YOUR UNIT CONTROLLER

Ensure you understand the application and identify the equipment configuration:

- Constant Volume
- Variable Air Volume (VAV)
- Economizer
- Hot Gas Reheat
- Dual Stage
- Four Stage
- Heat Pump
- Thermostat Controls
- Network Sensor Control
- Space Sensor Control
- Discharge Air Control

UNDERSTANDING THE LOCAL LCD

After you apply power to your Rooftop Unit (RTU), a start-up countdown begins on the Unit Control Board (UCB) LCD. When the controller is ready, the screen will be blank if no faults are present. Use the joystick and the two push buttons below the LCD, to navigate through the menus (Figure 1).

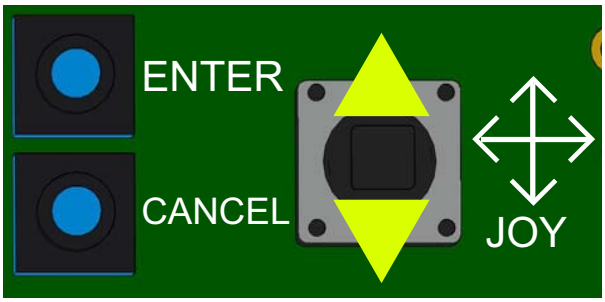


FIGURE 1 - Joystick and Push Buttons on UCB

Up and down movements of the joystick move the > cursor and scroll through the selections in the active section of the menu (Figure 2).

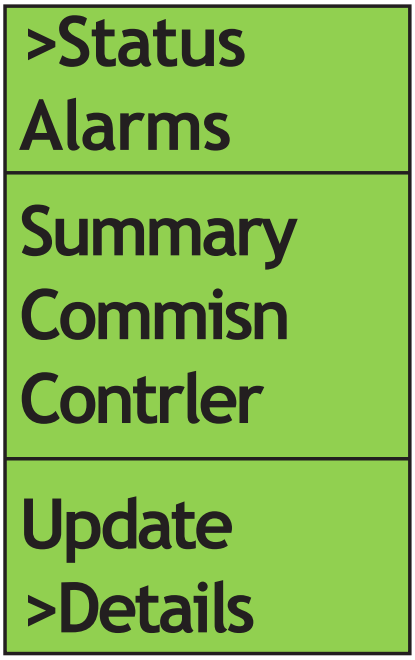


FIGURE 2 - UCB Top Level Menu

Each menu selection represents either a submenu or a property. Press "ENTER" to display the items in the submenu or the values of the selected property. Press "ENTER" to display the current value of the selected property. Move up or down with the joystick to display the values of other properties.

NOTE: Please see the menu navigation example on page 5.

POWERING THE UNIT

When you apply power to the unit (the C and 24V terminals), the UCB begins a start-up sequence.

The LCD scrolls the text Johnson Controls on the top line and JCI on the bottom line (Figure 3).

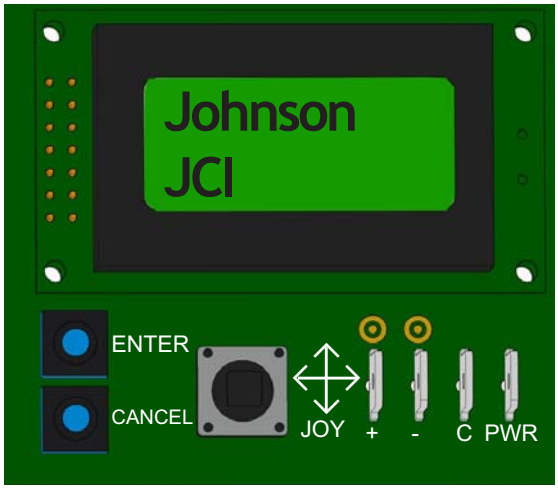


FIGURE 3 - Powering the Unit

The display backlight and green Power LED remain lit as long as power is applied to the C and 24V terminals.

The red Fault LED lights, goes off briefly, and then flashes throughout the start-up sequence.

The green SA Bus LED lights briefly.

During the start-up sequence, the joystick, the "ENTER" button, and the Cancel button are not functional.

The LCD shows a countdown on the top line.

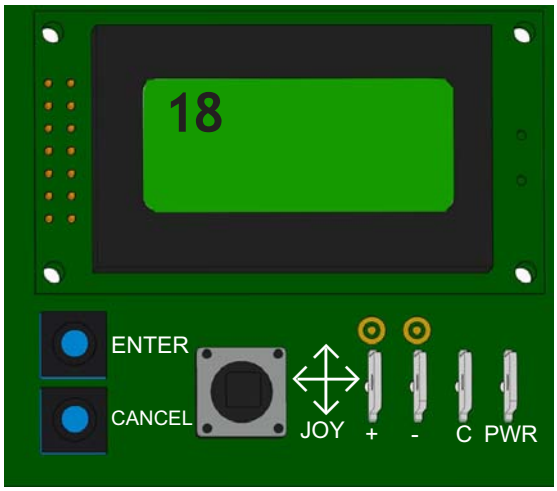


FIGURE 4 - Start-up Countdown

After approximately 15 seconds, the green SA Bus LED does one of the following:

- Lights to indicate the UCB has not established communication and is awaiting communication from SA Bus devices
- Flashes to indicate the UCB established communication with SA Bus devices

After the start-up sequence finishes (90 - 120 seconds), the display shows the current operating status. I.E. Idle, startup delay, cooling... on both lines if no alarm is active. The red Fault LED stops flashing and turns off. The joystick, "ENTER", and Cancel buttons are operational.

COMMISSIONING WITH THE LOCAL LCD

Figure 5 shows the Commissioning view second level menus. The Commissioning view consists of 9 nine main menus and several sub-menus.

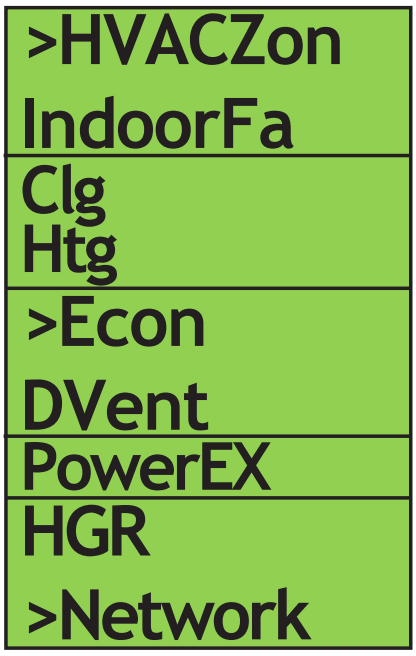


FIGURE 5 - Commissioning View: Second Level Menus

COMMISSIONING VIEW SUBMENUS

Your equipment configuration determines which menus appear in the Commissioning view. Use the joystick to move between the menu options. Press "ENTER" to select an option.

NOTE: Please see the Commissioning Menu Starting on Page 8.

NOTE: Please see the Pages 7 - 16 for a detailed table of all menus, sub-menus and properties.

VALIDATING YOUR CONFIGURATION

Use the Details > Service > Inputs menu to ensure your configuration parameters are correct. This view shows the input values for each input. You can view the Sensors and Coil Sensors values.

If no input value appears, the input states **No Input**. This is a convenient way to ensure all your configuration parameters are set and reading properly.

IMPORTANT - Remember to save your configuration parameters using the Update > Backup feature with the USB port on the UCB. See *Connecting your Flash Drive* and *Performing a System Configuration Backup* for more information.

CONNECTING YOUR FLASH DRIVE

When you connect your flash drive to the USB port on the UCB, USB: Wait appears (Figure 6).

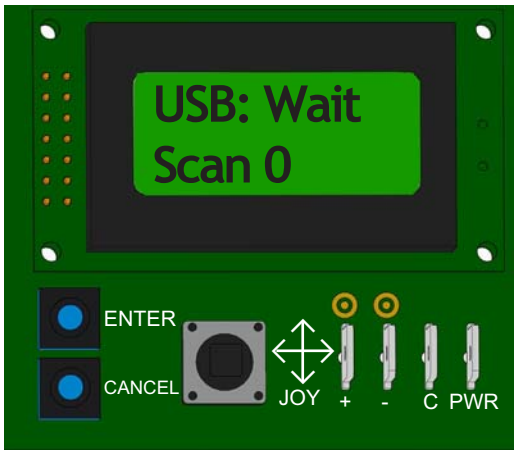


FIGURE 6 - USB Port Connection

NOTE: If you do not see USB: Wait after you connect your flash drive to the UCB, ensure it is properly connected. If it is properly connected, and you do not see the USB: Wait text, your flash drive may not be compatible with the UCB or is defective.

After a few seconds, the top line of the UCB displays USB: OK (Figure 7). The Scan number indicates the files and folders in the top level of the flash drive.compatible with the UCB.

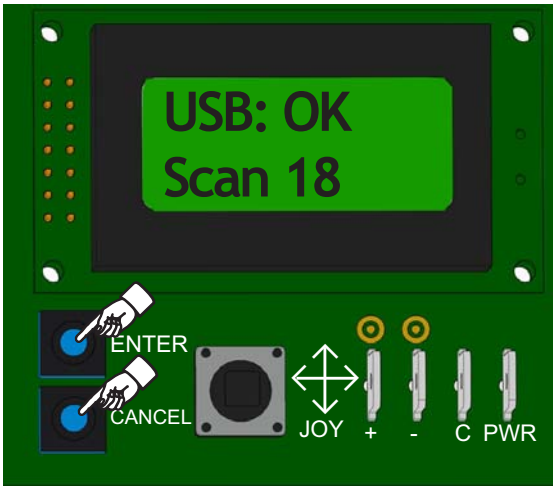


FIGURE 7 - USB Scan

You can keep the flash drive connected to the UCB after the scan completes.

Press the "ENTER" button, press the cancel button, or move the joystick up or down to navigate through the display menu.

PERFORMING A SYSTEM CONFIGURATION BACKUP

Insert your flash drive into the USB port. Navigate to the Update > Backup menu and press "ENTER" (Figure 8).

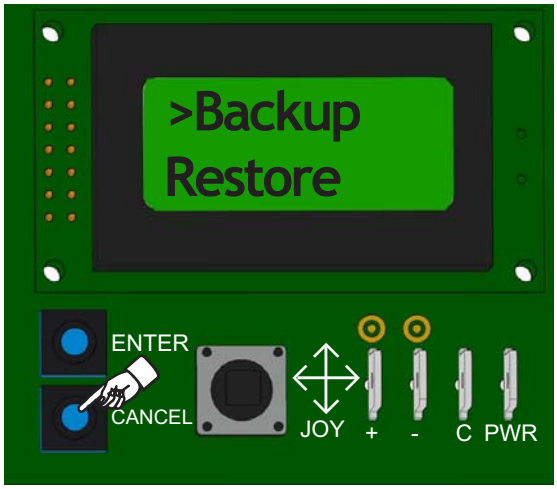


FIGURE 8 - Backup Menu Option

BKP: Wait appears while the backup is in progress. During the backup procedure, the colon (:) flashes on the top line and the percentage increases on the bottom line of the display.

The backup completes in approximately 30 seconds and BKP: OK appears on the screen. The percentage shows 100.

FIGURE 9 - Backup Complete

You may remove the flash drive from the USB port.

After the backup completes, a comma separated value (.csv) restoration file is created in the top level of the flash drive. The file name is drawn from the date and time settings in the UCB at the time you create the file. The restoration file size is generally less than 30 KB. Figure shows an example of the .csv file name structure.

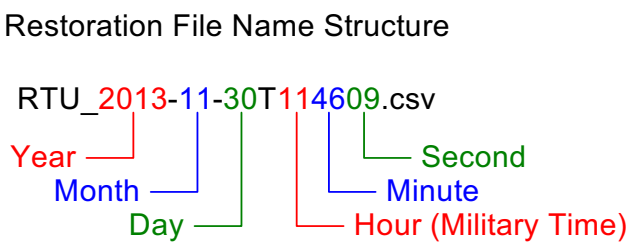


FIGURE 10 - Restoration File Name Structure

You can restore the backup file to the unit and retrieve the configuration after performing an upgrade or making setpoint changes by using the Upgrade > Restore feature.

Use the Partial Cloning feature to take the configuration parameters from one unit, via the backup file, and update the data on another unit. Use the Upgrade > Part Clone feature on the unit you wish to update using the backup file from the previously configured unit.

NOTE: Only use the Full Cloning feature when you are replacing the UCB board.

UPDATING SSE SOFTWARE

A USB Flash Drive must be plugged into the UCB. It must contain the appropriate software file (ending in ".pkg"). This is at the top level of the flash drive.

On the UCB, at the display, push the joystick "down" until the display has a line showing: >Update.

FIGURE 11 - Display Update

Push the "ENTER" button. The first line should now display: >View Ver.

- If you want to verify the version in the UCB, push the "ENTER" button now. The current version will be displayed. Push the Cancel button to return to displaying ">Update"

Push the joystick down until the display is showing: >Backup

Push the "ENTER" button. Wait until the top line says "BKP: OK" and the second line says 100%

Push the Cancel button. The display should now show: >Update

Push the "ENTER" button. The display should now show: >View Ver

Push the joystick down. The first line should now display: >LoadFirm

Push the "ENTER" button. The top line should display: >1.0.0.1101.secusb.pkg or the current firmware version.

If not, push the joystick down (or up) so the carrot (>) points to the appropriate file

Push the "ENTER" button. Push again to Confirm.

The UCB and economizer will now be reprogrammed with the selected software, if they are different. Wait until the everything is complete, and the control has done a Restart (as if power was just applied).

On the UCB, at the display, push the joystick "down" until the display has a line showing: >Update

Push the "ENTER" button. The first line should now display: >View Ver

Push the joystick down until the display is showing: >Restore

Push the "ENTER" button.

Push the joystick down until the display line starts with: >RTUxxxx and ends with .csv

The UCB will now read back the stored setup. When it is done, the control will Restart. When that is complete, the new software version will be running.Push the "ENTER" button. Push again to Confirm.

READ THE VERSION ON THE ECONOMIZER

With Econ and UCB attached together (see Step 1 above).

Push the joystick "down" (or up, if you go past) until the display shows: >Contrler

FIGURE 12 - Display Update

Push the "ENTER" button. The first line should now display: >Firm

Push the joystick down until the display shows: >SysCntlrs

Push the "ENTER" button. The first line should now display: >Misc

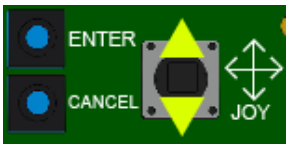
Push the joystick down until the display shows: >Econ

Push the "ENTER" button. The first line should now display: >EconMainVer

Push the "ENTER" button again. The second line should now display the version of software installed in the Economizer.

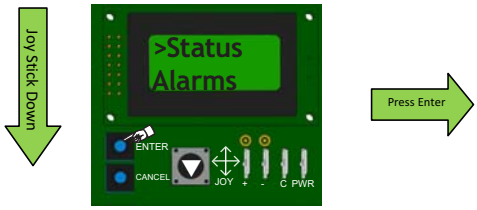
SIMPLICITY™ SE (SMART EQUIPMENT) FIRMWARE VERSION 1. BASIC UNIT CONTROL BOARD NAVIGATION EXAMPLES:

The following document details the navigation and viewing of the LCD display screen equipped as a standard item on the Simplicity SE control installed within various commercial UPG packaged and split system equipment. The following information provides a step-by-step demonstration on how to navigate the basic status menu and how to change basic configuration settings. The basic navigation steps outlined in this short demonstration applies to most menus within the Simplicity SE control.



Understanding the Local LCD
After you apply power to your Rooftop Unit (RTU), a start-up countdown begins on the Unit Control Board (UCB) LCD. When the controller is ready, the screen is blank because no faults are present. Use the joystick and the two push buttons below the LCD, to navigate through the menus.

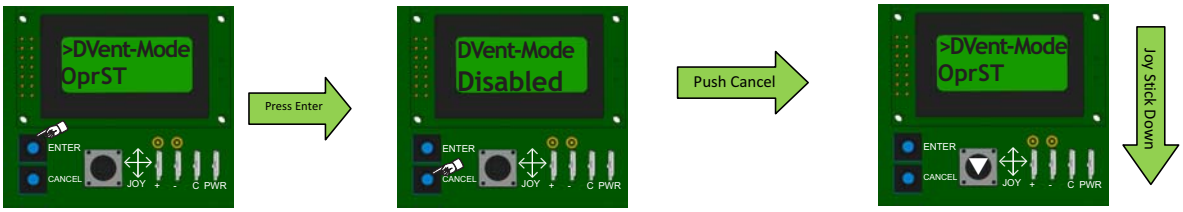
Step 1 - After the start-up countdown is complete the first screen displayed is the "Status & Alarms" screen. When the cursor is on the top "Status" line hit the ""ENTER"" button. This action steps the LCD display into the status mode. Hit ""ENTER"" to view the status menu.



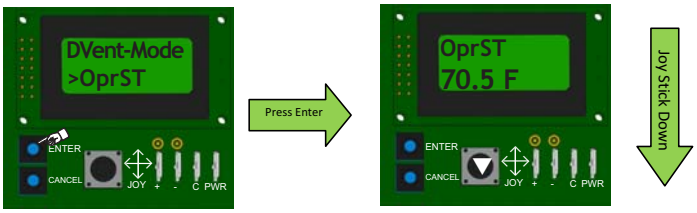
Step 2 - The first item under the status menu is "DVent-Mode". This is the demand ventilation mode.

Step 3 - When the cursor is on the "DVent-Mode" hit "ENTER" to view the status of this mode. In this case a CO2 sensor is not installed, thus Demand Ventilation or DVent is disabled.

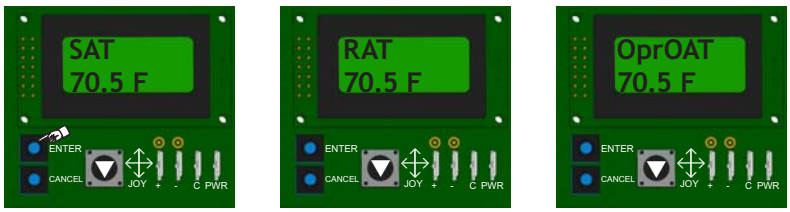
Step 4 - To exit out of the "DVent-Mode status screen push "Cancel". The screen returns to that shown below.



Step 5- By pushing the joystick down, the cursor toggles to OprST (Operating Space Temp).



Step 6- By pushing "ENTER" the actual OprST (Operating Space Temp) appears. Pushing the joystick down scrolls through SAT, RAT, OAT and other available sensor readings.

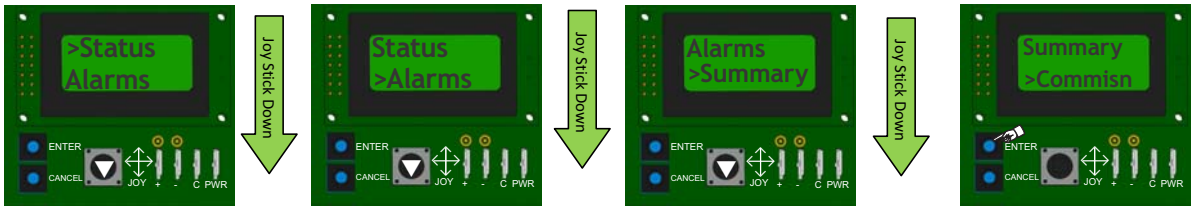


Press the "Cancel" button to exit each menu level. Repeatedly pressing "Cancel" returns the menu to the first "Status, Alarms" screen.

When the "Cancel" button is pressed multiple times to exit each menu level and the screen returns to the first "Status, Alarms" display the next demonstration can begin. In this demonstration the information below steps through the "Commissioning" menu.

Step 1- Beginning at the status/alarm screen toggle the joystick down three times. This accesses the “Commissioning “ screen. In this menu section various settings can be changed. Please see the menu table that follows this demonstration for a list of parameters that can be modified.

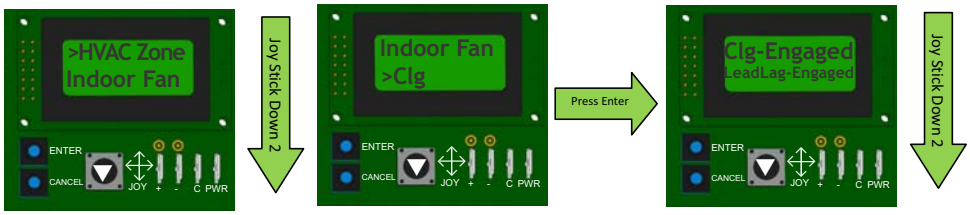
Step 2- Once commission appears next to the cursor, press “ENTER” to begin viewing parameters.



Step 3- After “ENTER” is pressed the various parameter sections appear, such as: HVAC zone, Indoor Fan, Clg, Htg, Econ and others.

Step 4- After toggling the joystick down two times “Clg” appears. This allows items, such as lead-lag and OCC/UNOCC cooling set points, to be changed.

Step 5- At the “Clg” screen once “ENTER” is pushed the status indicates if cooling is engaged/disengaged and lead-lag is engaged/ disengaged.

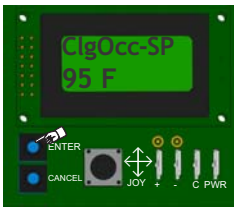


Step 6- By toggling down twice the screen reaches the “ClgOcc-SP” screen or “Cooling Occupied Set Point”.

Step 7- After pressing “ENTER” at the “ClgOCC-SP” screen the space temperature set point appears. NOTE: Only applies to units controlled by a space sensor.

Step 8- In order to change set points push the toggle switch left or right. Note: The screen flashes. Left decreases the value, right increases. In this demonstration the ClgOCC setpoint is changed from 72F to 95F.

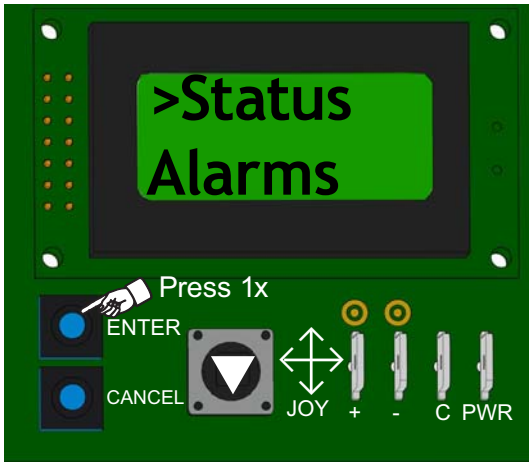
Step 9- The joystick was toggled right to increase the set point temperature. The screen flashes when in the change mode. Once the desired set point/value is reached press the ““ENTER”” button to save the value.

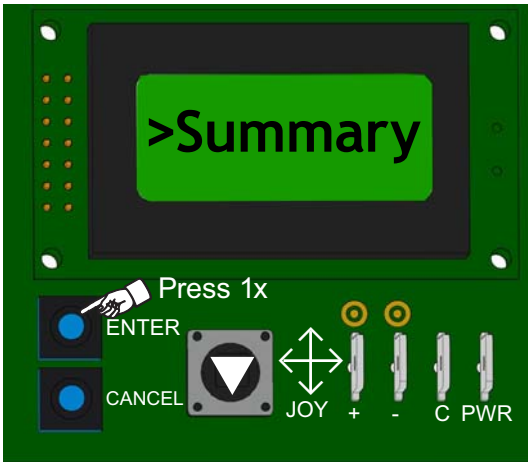


These few pages provide a simple demonstration how to navigate the menu’s of the Simplicity SE control containing Version 1 firmware. Please utilize this document along with the additional information in the Users Guide and detailed navigation menu to adjust the control to customer preferences or job specifications.

NOTE: IF OPERATING THE EQUIPMENT WITH A THERMOSTAT, THE UCB SETPOINTS AND PARAMETERS SHOULD NOT REQUIRE ALTERATION; HOWEVER, THERE MAY BE THE CASE WHERE MINIMUM OUTSIDE AIR, LEAD-LAG OR OTHER CUSTOM SETTINGS ARE REQUIRED. PLEASE READ THIS DOCUMENT IN DETAIL TO UNDERSTAND THE IMPLICATIONS OF MAKING CHANGES BEFORE PROCEEDING. IT IS STRONGLY RECOMMENDED THAT A BACKUP OF PARAMETER SETTINGS BE SAVED ON A USB DRIVE BEFORE MAKING ANY MAJOR CHANGES TO THE CONTROL!

SSE UCB DISPLAY MENU GUIDE I





Menu	Status☞	
DVent-Mode	Disabled	(Demand Vent Mode)
OprST	(73.0 F)	(Space Temperature Input)
SAT	(60.7 F)	(Supply Air Thermistor Input)
RAT	(73.0 F)	(Return Air Thermistor Input)
OprSH	(49.6 %H)	(Space Humidity Input)
RAH	(49.6 %H)	(Return Air Humidity Input)
OprOAT	(73.0F)	(Outdoor Air Temperature Input)
OprOAH	(71 %H)	(Outdoor Air Humidity Input)
OprOAQ	(989ppm)	(Outdoor Air Quality Input)
OprIAQ	(477ppm)	(Indoor Air Quality Input)

Menu	▼Alarms☞
No Events	(No active alarm)
Alarm Description	(most recent Alarm)
Alarm Description	(2nd most recent Alarm)
Alarm Description	(3rd most recent Alarm)
Alarm Description	(4th most recent Alarm)
Alarm Description	(5th most recent Alarm)

Legend	
Default settings in Red	
Yellow = Function not Enabled - Do Not Use	Blue = UCB Conditional Parameter
Tan = Economizer Board Presence	DkGreen = Economizer Board Presence + another Condition

▼▲◀▶ Joystick navigation

☞Press Enter 1 time

☞▼Press Enter Scroll Down

Press Cancel to return to Previous Menu

Menu	▼Summary	
Sub Menu	☞HVACZone☞	
OccSrc	Local Input	(Occ/UnOcc Status Source)
OprCVClg-Sp	72 F	(CV - Operating Cool Set-point)
CVOprHtg-Sp	68 F	(CV - Operating Heat Set-point)
OprVAVClg-Sp	60 F	(VAV Operating Cool Set-point)
VAVOprHtg-Sp	68F	(VAV Operating Heat Set-point)
Opr ST	73.0 F	(Space Temperature Input)
Opr SH	49.6 %H	(Space Humidity Input)
OprIAQ	477ppm	(Indoor Air Quality Input)

Menu	▼Summary	
Sub Menu	☞▼Fan☞	
Fan		(UCB FAN 24 VAC output status)
FanCtl-Type	Single Speed	(ID Blwr/Unit Op Mode)
FanOn Occ	Yes	(CV Constant Fan in Occupied Mode)
FanVFD	0%	(UCB VFD 2-10 VDC output status)
DctPrs-Sp	1.50"/w	(VAV Supply Duct Press Setpt)
DctPrs	1.50"/w	(VAV UCB Dct Prs 0-5 VDC input)

Menu	▼Summary	
Sub Menu	☞▼Clg☞	
C1	Off	(UCB C1 24 VAC output status)
C2	Off	(Demand Vent Set Point)

Menu	▼Summary	
Sub Menu	☞▼Htg☞	
Empty		
HI	Off	(UCB HI 24 VAC output status)
H2	Off	(UCB H2 24 VAC output status)

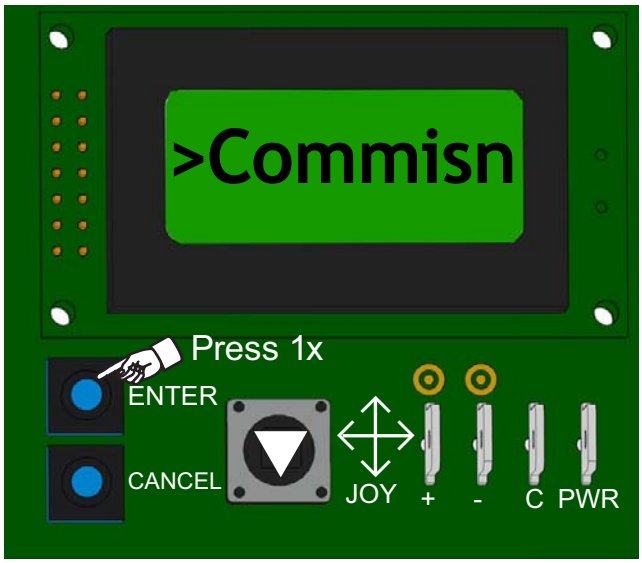
Menu	▼Summary	
Sub Menu	☞▼Econ☞	
Econ-Free	No	(Free Cooling availability)
FreeClg-Mode	Dry Bulb Tempe	(Changover Method)
Econ	0%	(ECON 2-10 VDC output status)
LowAmb-MinPos	0%	(Econ "Occ" Lo Amb Min Pos)
EconOAT-SpEn	55 F	(DryBulb Free Cool Setpoint)
EconOAEnth-Sp	27 B/#	(S Enthlp Free Cool Setpoint)
OA-Enth	20B/#	(OS Air Enthalpy Calculated)
OprOAH	19%H	(OS Air Humidity in use)
Opr OAT	70.7 F	(OS Air Temperature in use)
RA-Enth	20B/#	(RA Air Enthalpy Calculated)
RAH	19.4 %H	(UCB RAH 0-10 VDC input)
RAT	70.4 F	(UCB RAT Thermistor input)

Menu	▼Summary	
Sub Menu	☞▼DVent☞	
DVent-Mode	Disabled	(Dmand Vent mode select)
DVentIAQ-Sp	1000ppm	(Demand Vent Set Point)
DVentDiff-Sp	600ppm	(IAQ - OAQ diff Set Point)
OprIAQ	477ppm	(IAQ currently in use)
OprOAQ	989ppm	(OAQ currently in use)

Menu	▼Summary	
Sub Menu	☞▼PowerEx☞	
ExFType	None	(Power Exh Fan mode selection)
ExFan	Off	ExFan Off (EX-Fan 24 VAC output status)
Bldg-Sp	100"/w	(Bldg Pressure Set Pt for Exh)
BldgPres	.164"/w	(Bldg Pressure 0-5 VDC input)
Econ	0%	(ECON 2-10 VDC output status)
EconDmpPosFanOn	60%	(Position Ex-Fan 24vac On)
EconDmpPosFanOff	20%	(Position Ex-Fan 24vac Off)
EAD-O	0%	(ModDmpr EX-VFD 2-10vdc outpt status)
ExFanVFD	0%	(VFD EX-VFD 2-10vdc output status)

Menu	▼Summary	
Sub Menu	☞▼Sensor☞	
SAT	(60.7 F)	(S A Temp Thermister input)
RAT	(73.0 F)	(R A Temp Thermister input)
RAH	(49.6%H)	(R A Humidity 0-10 VDC input)
Opr OAT	(73.0 F)	(OS Air Temperature input)
OprOAH	(19%H)	(OS Air Humidity input)
OprOAQ	(989ppm)	(OS Air Quality input)

Menu	▼Summary	
Sub Menu	☞▼Network☞	
Comm-S	Waiting For Pol	(FCBusCommStatus)



Menu	▼Commisn	
Sub Menu	☞HVAC Zone☞	
OccMode	External	

Menu	▼Commisn	
Sub Menu	☞▼IndoorFan☞	
FanOn Occ	Yes	(CV ConstantFanOccupied Mode)
DctPrs-Sp	1.50"/w	(VAV Supply Duct Press Set-point)
Fan Only-% Cmd	50%	(CV IntelliSpeed Fan Only)
1ClgStg-% Cmd	70%	(CV IntelliSpeed 1 Stg Cool)
2ClgStg-% Cmd	80%	(CV IntelliSpeed 2 Stg Cool)
3ClgStg-% Cmd	90%	(CV IntelliSpeed 3 Stg Cool)
4ClgStg-% Cmd	100%	(CV IntelliSpeed 4 Stg Cool)
1HtgStg-% Cmd	100%	(CV IntelliSpeed 1 Stg Heat)
2HtgStg-% Cmd	100%	(CV IntelliSpeed 2 Stg Heat)
3HtgStg-% Cmd	100%	(CV IntelliSpeed 3 Stg Heat)

Menu	▼Commisn	
Sub Menu	☞▼Clg☞	
Clg-En	Yes	(Cooling Enabled/Disabled)
LeadLag-En	No	(Equalized Comp Runtime)
ClgOcc-Sp	72 F	(CV - Occ Cooling Setpoint)
ClgUnocc-Sp	80 F	(CV - UnOcc Cooling Setpoint)
SATUp-Sp	60 F	(VAV - Upper S A Temp Setpoint)
SATLo-Sp	55 F	(VAV - Lower S A Temp Setpoint)
SATRst-Sp	72 F	(VAV - S A Temp Reset Setpoint)

Menu	▼Commisn	
Sub Menu	☞▼Htg☞	
Htg-En	Yes	(Heating Enabled/Disabled)
CVHtgOcc-SP	68 F	(CV - Occ Heating Setpoint)
CVHtgUnocc-Sp	60 F	(CV - UnOcc Heating Setpoint)
HtgOcc-En	Yes	(VAV Occ Heating Enable)
VAVHtgOcc-SP	68 F	(VAV - Occ Heating Setpoint)
HtgUnocc-En	No	(VAV UnOcc Heating Enable)
VAVHtgUnocc-Sp	60 F	(VAV UnOcc Heating Setpt)

Menu	▼Commisn	
Sub Menu	☞▼Econ☞	
Econ-En	Yes	(Permit Free Cooling operation)
FreeClg-Sel	Auto	(FreeCoolChangeoverMethod)
EconOAT-SpEn	55 F	(DryBlbFreeCoolCngOvrSetPt)
EconOAEnth-Sp	27 B/#	(S EnthLp FreColCngOvrSetPt)
LowAmb-Sp	0 F	(Econ"Occ" MinPosLoAmbSetPt)
LowAmb-MinPos	0%	(Econ"Occ"LoAmbMinPos)
IAQEcon-MaxPos	50%	(DmandVentMaxEconPos)

Menu	▼Commisn	
Sub Menu	☞▼DVent☞	
DVent-Mode	Disabled	(DmandVentModeSelect)
DVentMaxEconPos	50%	(Max Econ Position)
DVentIAQ-Sp	1000ppm	(Demand Vent IAQ SetPt)
DVentDiff-Sp	600ppm	(IAQ-OAQ DifferenceSetPt)
IAQRange	2000ppm	(ID SetPt w/Co2 Sensor Inst)
OAQRange	2000ppm	(OD SetPt w/Co2 Sensor Inst)

▼▲◀▶ Joystick navigation

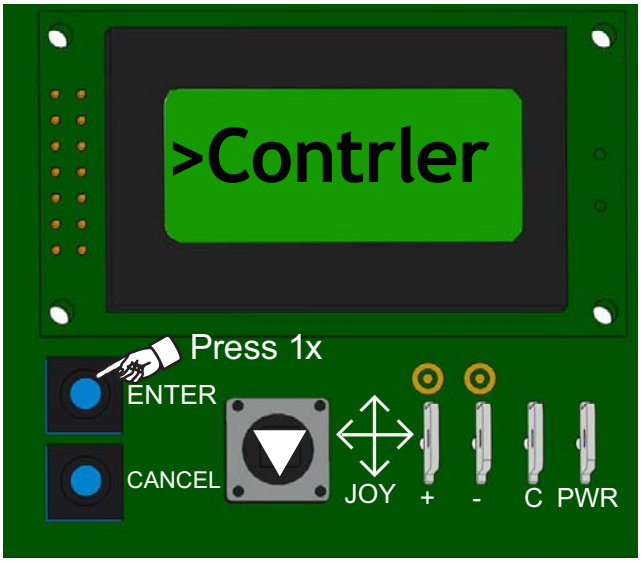
☞Press Enter 1 time

☞▼Press Enter Scroll Down

Press Cancel to return to Previous Menu

Menu	▼Commisn	
Sub Menu	☞▼PowerEx☞	
EconDmpPosFanOn	60%	(PositionExFan 24vac On)
EconDmpPos-FanOff	20%	(PositionExFan 24vac Off)
Bldg-Sp	100"/w	(BldgPressureSetPt for Exh)
ExDmpPosFanOn	80%	(PositionExFan 24vac On)
ExDmpPosFanOff	20%	(PositionExFan 24vac Off)
ERV-En	No	(Econ&PwrEx intergration w/ ERV)

Menu	▼Commisn	
Sub Menu	☞▼Network☞	
DevName	UCBApp	(FCBusBACnetNtwrkName)
BASCom	BACnet	(CommSubboard operation)
Address	4	(FCBusBACnetNetworkAddress)



Menu	▼Contrler	
Sub Menu	☞Firm☞	
FirmVer	1.0.0.1101	(Firmware Revision)
Firm-S	Firmware Version	(Firmware Status)

Menu	▼Contrler	
Sub Menu	☞▼Time☞	
TimeZone	Central	

Legend	
Default settings in Red	
Yellow = Function not Enabled - Do Not Use	Blue = UCB Conditional Parameter
Tan = Economizer Board Presence	DkGreen = Economizer Board Presence + another Condition

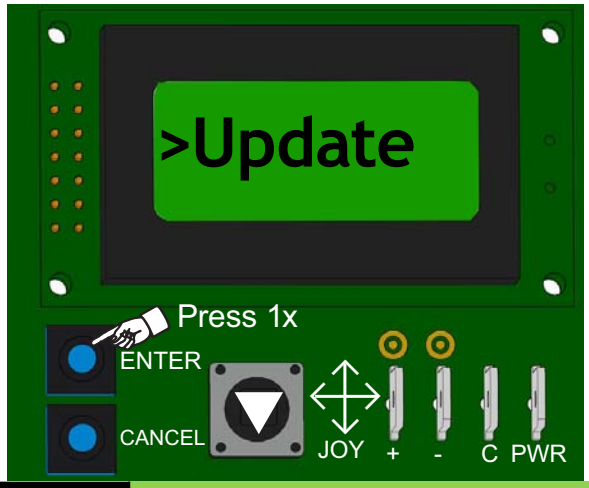
Menu	▼Contrler	
Sub Menu	☞▼Network☞	
DevName	UCBApp	(FC Bus BACnet network name)
BASCom	BACnet	(Comm Sub-board operation)
Comm-S	Waiting For Pol	(FC Bus comm status)
Address	4	(FC BUS BACnet network address)
OprBaudRate	Auto	(FC BUS baud rate to be used)
BaudRate	Auto	(FC BUS baud rate in use)
DeviceId	1	(FC BUS BACnet network Dev ID #)

Menu	▼Contrler	
Sub Menu	☞▼Misc☞	
Language	English	
Units	IP	(units of measure to be used)

Menu	▼Contrler	
Sub Menu	☞▼SysCntlrs	
Sub Menu	☞Misc☞	
Relearn	False	(clear SA BUS devices in Memory)
#NetSensors	0	(# of NetSensors n SA BUS com)
EconCntlr	Not Present	(Econ Brd Comm status)
4StgCntlr	Not Present	(FC BUS BACnet network address)
FDDMCntlr	Not Present	(Refr Circ 1-2 status)
FDDSCntlr	Not Present	(Refr Circ 3-4 status)

Menu	▼Contrler	
Sub Menu	☞▼SysCntlrs	
Sub Menu	☞▼UCB☞	
UCBMainVer	1.0.0.1101	(Firmware Revision)
UCBAppVer	11.0.0.1017_20	(Software App Rev)
UCBHardVer	Not Present	(Hardware Revision)

Menu	▼Contrler	
Sub Menu	☞▼SysCntlrs	
Sub Menu	☞▼Econ☞	
EconMainVer	1.0.0.1101	(Firmware Revision)
EconAppVer	11.0.0.1017_20	(Software App Rev)
EconHardVer	Not Present	(Hardware Revision)



Menu	▼Update	
Sub Menu	☞View Ver☞	
1.0.0.1101	Firmware OK.	

Menu	▼Update	
Sub Menu	☞▼LoadFirm☞	
No Package Present	Error	USB w/firmware must be present

Menu	▼Update	
Sub Menu	☞▼Backup☞	
BKP:Wait	bCfg 0%	

Menu	▼Update
Sub Menu	☞▼Restore☞

>serialflash/BackupConfig

Menu	▼Update
Sub Menu	☞▼Full Clone☞

>serialflash/BackupConfig

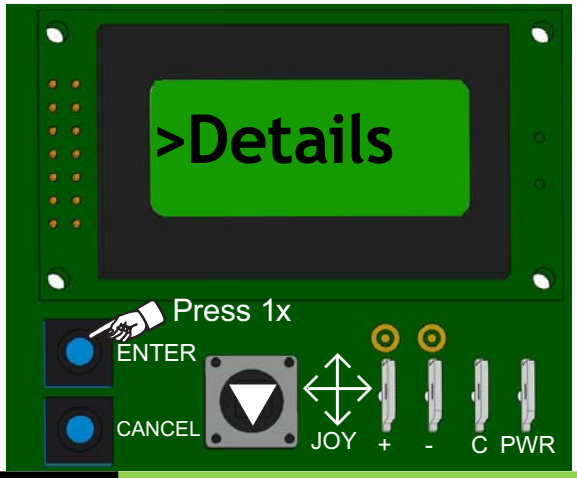
Menu	▼Update
Sub Menu	☞▼Part Clone☞

>serialflash/BackupConfig

Menu	▼Update
Sub Menu	☞▼FactryDft☞

Confirm

Menu	▼Update	
Sub Menu	☞▼Date Time☞	
>Hour	1	(0 through 23)
Minute	1	(0 through 59)
Day	11	(1 through 31)
Month	1	(1 through 12)
Year	2000	(1900 through 2155)



Menu	▼Details	
Sub Menu	☞Unit☞	
Name	RTUxxxx	(14 character max)
Model#	RTUxxxxx	(14 character max)
Serial#	DEFAULT_SERIAL	(14 character max)
ResetLO	Off	(Reset active hard lock-out alarms)

Menu	▼Details	
Sub Menu	☞▼Setpoints☞	
Opr ST	73.0 F	(Space Temperature in use)
OprOcc	UnOc-cupied	(Occupancy Status)
RAT	73.0 F	(UCB RAT thermistor input)
OprCVClg-Sp	72 F	(CV cooling set pt in use)
CVOprHtg-Sp	68 F	(CV heating set pt in use)
ClgOcc-Sp	72 F	(CV Occ Cooling set point)
ClgUnocc-Sp	80 F	(CV UnOcc Cooling set point)
CVHtgOcc-SP	68 F	(CV Occ Heating set point)
CVHtgUnocc-Sp	60 F	(CV UnOcc Cooling set point)
SAT	60.7 F	(UCB SAT thermistor input)
DctPrs	1.50"/w	(VAV UCB DuctPress 0-5Vdc input)
OprVAVClg-Sp	60 F	(VAV Cooling SAT SetPt in use)
VAVOprHtg-Sp	68 F	(VAV Heating SetPt in use)
DctPrs-Sp	1.50"/w	(VAV SupplyDuctPress setpoint)
SATUp-Sp	60 Fc	(VAV Occ UpprCooling SAT Setpt)
SATLo-Sp	55 F	(VAV Occ Lowr Cooling SAT Setpt)
SATRst-Sp	72 F	(VAV Occ Cool SAT Reset Setpt)
HtgOcc-En	Yes	(VAV Occ Heating Enabled)
VAVHtgOcc-SP	68 F	(VAV Occ Heating SetPoint)
HtgUnocc-En	No	(VAV UnOcc Heating Enabled)
VAVHtgUnocc-Sp	60 F	(VAV UnOcc Htg SetPoint)

Menu	▼Details	
Sub Menu	☞▼Zone	
Sub Menu	☞Indoor☞	
Opr ST	73.0 F	(Space Temperature in use)
OprOcc	UnOccupied	(Occupancy Status)
OprIAQ	477ppm	(IAQ in use)
Opr SH	49.6 %H	(Space Humidity in use)
OprFanReq	On	(ID Blower operation request)
OprSSO	.0 F	(Space SetPt Offset in use)
SSO	.0 F	(UCB SSO 0-20,000 Ω input)
SSORange	3.0 F	(Max Space SetptOoffset Adj)
STSrc	Return Air Tem	(SpaceTempUsedSource)
STAlarmOffset	5 F	(SpaceTempAlarmOffset)
STAlarmDelay	60min	(SpaceTempAlarmDelay)
OccSrc	Local Input	(OccUnOcc status Source)
TempOccTimeout	120min	(Max Temp Occ)
OccMode	External	(Occ InitiationMethod)
IAQSrc	Local Input	(IAQ Input Source)
SH Source	Local Input	(SpaceHumidInptSource)
FanReqSrc	Local Input	(ID BlowerInputSource)
SSO Src	Local Input	(SSO Input Source)

Menu	▼Details	
Sub Menu	☞▼Zone	
Sub Menu	☞▼Outdoor☞	
Opr OAT	73.0 F	(OutdoorAirTemp in use)
OprOAH	19%H	(OutdoorAirHumidity in use)
OA-Enth	20 B/#	(Calculated Enthalpy)
OprOAQ	990ppm	(OutdoorAirQuality in use)
OATSrc	Local Input	(OutdoorAirTemp source)
OAHSrc	Local Input	(OA Humidity source)
OAQSrc	Local Input	(OutdoorAirQuality source)

Legend	
Default settings in Red	
Yellow = Function not En-abled - Do Not Use	Blue = UCB Conditional Parameter
Tan = Economizer Board Presence	DkGreen = Economizer Board Presence + another Condition

Menu	▼Details	
Sub Menu	☞▼Control	
Sub Menu	☞Indoor Fan	
Sub Menu	☞Status☞	
Fan	Off	(Fan 24vac output status)
Fan VFD	0%	(VFD 2-10vdc output status)
FanCtl-Type	Single Speed	(UnitOpMode)
APS	Off	(APS input status)
DctPrs	1.50"/w	(DuctPres 0-5vdc input)
SAT	60.7 F	(UCB SAT thermistor input)
FanOverload	Normal	(FanOvrInptStatus)
FanVFDFlt	Normal	(Flt24vacInptStatus)
Fan-RT	.0 hr	(Accumulated Fan runtime)
DFS	Normal	(DFS 24vac input status)

Menu	▼Details	
Sub Menu	☞▼Control	
Sub Menu	☞Indoor Fan	
Sub Menu	☞▼Setup☞	
LowAmbFanPre-runCool	60sec	
FanOnDlyCool	0sec	(CoolFanOnDelay)
FanOffDlyCool	30sec	(CoolFanOffDelay)
FanOnDlyHeat	30sec	(HeatFanOnDelay)
FanOffDlyHeat	60sec	(HeatFanOffDelay)
FanOn Occ	Yes	(OccupiedConstantFan)
FanOffStartHeat	Yes	(FanOff atHeatStart)
Fan Only-% Cmd	50%	(CV IS Fan Only)
1ClgStg-% Cmd	70%	(CV IS 1 Stg Cool)
2ClgStg-% Cmd	80%	(CV IS 2 Stg Cool)
3ClgStg-% Cmd	90%	(CV IS 3 Stg Cool)
4ClgStg-% Cmd	100%	(CV IS 4 Stg Cool)
1HtgStg-% Cmd	100%	(CV IS 1 Stg Heat)
2HtgStg-% Cmd	100%	(CV IS 2 Stg Heat)
3HtgStg-% Cmd	100%	(CV IS 3 Stg Heat)
DctPrs-Sp	1.50"/w	(DuctPres setpoint)
DctShutdownSp	4.50"/w	(DuctPressLimit)

Legend	
Default settings in Red	
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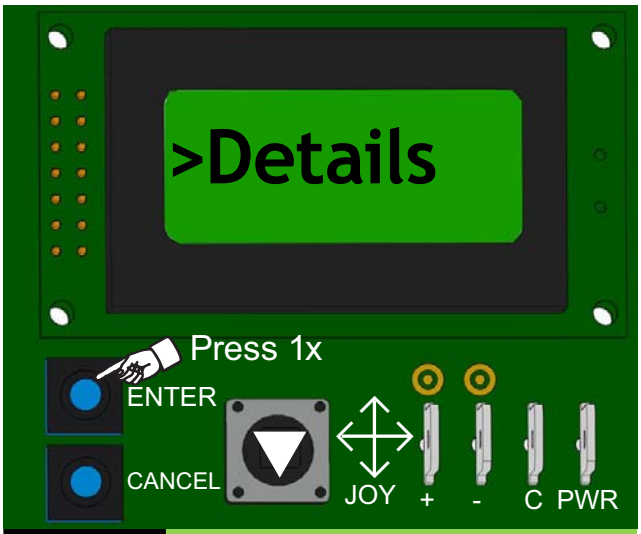

Menu	▼Details	
Sub Menu	☞▼Control	
Sub Menu	☞▼Clg	
Sub Menu	☞Status☞	
#ClgStgs	2	(# of cooling stages)
SAT	60.7 F	(SAT thermistor input)

Menu	▼Details	
Sub Menu	☞▼Control	
Sub Menu	☞▼Clg	
Sub Menu	☞▼Stage1☞	
CI	Off	(CI 24vacOutputStatus)
CI-En	Yes	(CI 24vacOutputEnabled)
CIOnTmr	0 min	(CIMinRuntimeRemain)
CIASCDTmr	0 min	(CI ASC TimeRemain)
CIRunTim	. 0 hr	(CI outptAccumRuntime)
ECI	42 F	(ECI thermistor input)
CCI	96 F	(CCI thermistor input)

Menu	▼Details	
Sub Menu	☞▼Control	
Sub Menu	☞▼Clg	
Sub Menu	☞▼Stage 2☞	
C2	Off	(C2 24vac output status)
C2-En	Yes	(C2 24vac output enabled)
C2OnTmr	0 min	(C2 minRuntimeRemain)
C2ASCDTmr	0 min	(C2ASC timeRemain)
C2RunTim	.0 hr	(C2OutptAccumRuntime)
EC2	42 F	(EC2 thermistor input)
CC2	96 F	(CC2 thermistor input)

Menu	▼Details	
Sub Menu	☞▼Control	
Sub Menu	☞▼Clg	
Sub Menu	☞▼Setup☞	
Clg-En	Yes	(Cooling Enabled/Disabled)
MinRtCoolStg	3min	(MinCompRunTime)
LeadLag-En	No	(EqualCompRuntime)
LowAmbFanPrerunCool	60 sec	
ClgOATCutout-En	Yes	(LowAmbComp LO)
ClgOATCutout	45 F	(LoAmbCompLO StPt)
SATCoolLimit-En	Yes	(Enable SAT Limit)
SATCoolLimit-Sp	50 F	(SAT Limit SetPt)
EconLoad-En	No	(EconLoadingEnabled)
AllClgOff-Econ	No	(SuplmntEconoEnable)
LowAmbI00n50ffSp	45 F	(LoAmbOpSetPt)
TempHumCtrl-En	No	(CntrlOperEnable)
TempHum-Sp	50%H	(*effectsOprClg-SP)
MaxTempHumSpOff	3.0 F	
TempHumValPerDegOff	5%H	

Menu	▼Details	
Sub Menu	☞▼Control	
Sub Menu	☞▼Htg	
Sub Menu	☞Status☞	
Htg-Type	Staged	(HeatingControlMethod)
#HtgStgs	1	(# of Heating Stages)

Menu	▼Details	
Sub Menu	☞▼Control	
Sub Menu	☞▼Htg	
Sub Menu	☞▼Stage1☞	
HI	Off	(1st Stg Heat output status)
HIOnTmr	0 min	(RemainMinRunTime)
HIASCDTmr	0 min	(Remain ASCD Time)
HIRunTim	. 0 hr	(accum HI RunTime)

Legend	
Default settings in Red	
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Tan = Economizer Board Presence	DkGreen = Economizer Board Presence + another Condition

Menu	▼Details	
Sub Menu	☞▼Control	
Sub Menu	☞▼Htg	
Sub Menu	☞▼Stage 2☞	
H2	Off	(2nd Stg HeatingOutputSatus)
H2OnTmr	0 min	(Remain Min RunTime)
H2ASCDTmr	0 min	(remain ASCDTime)
H2RunTim	.0 hr	(Accum H2 RunTime)

Menu	▼Details	
Sub Menu	☞▼Control	
Sub Menu	☞▼Htg	
Sub Menu	☞▼Setup☞	
Htg-En	Yes	(Heating Oper Enabled)
SATHtgLimit-En	Yes	(SA HtgLimitEnabled)
SATHtgLimit-Sp	135 F	(SA HtgLimitSetPt)
HtgOATCutout-Sp	75 F	(HtgOAT CO SetPt)
HydHISA-Sp	120 F	(Hyd HI SAT SetPt)
HydH2SA-Sp	150 F	(Hyd H2 SAT SetPt)
SATTempHydHt-En	No	No(HydHtgSA Temper)
HydReverse	No	(ModHt 2-10vdcAction)
MornW-En	No	(VavMornWrmupEnable)
MornWRAT-Sp	71 F	(MornWrmupRA SetPt)

Menu	▼Details	
Sub Menu	☞▼Control	
Sub Menu	☞▼Econ	
Sub Menu	☞Status☞	
Econ	0%	(ECON 2-10vdc output status)
Econ-Free	No	(FreeCooling available)
FreeClg-Mode	Dry Bulb	(ChngoverMode)
MAT	71 F	(MAT thermistor input)
OA-Enth	20 B/#	(CalcOA enthalpyInput)
OprOAH	19%H	(OA Humidity in use)
Opr OAT	73.0 F	(OA Temp in use)
RA-Enth	20B/#	(RA enthalpy input)
RAH	19.4 %H	(RA Humidity0-10vdcInput)
RAT	70.4 F	(UCB RAT thermistorInput)
SAH	71 %H	(SA Humidity 0-10vdcInput)

Menu	▼Details	
Sub Menu	☞▼Control	
Sub Menu	☞▼Econ	
Sub Menu	☞▼Setup☞	
Econ	Yes	(EconoFreeCoolingEnable)
FreeClg-Sel	Auto	(FreClgChngOvrMethod)
Econ-MinPos	20%	(OccEconoMinPos)
EconOAT-SpEn	55 F	(DryBlbChgOvrSetPt)
EconOAEnth-Sp	27 B/#	(EnthCngOvrSetPt)
LowAmb-Sp	0 F	(LoAmbMinPossSetPt)
LowAmb-MinPos	0%v	(OccLoAmbMinPos)
IAQEcon-MaxPos	50%	(DVentMaxEconPos)
LowSpeedFan-MinPos	25%	(OccLoFanPos)

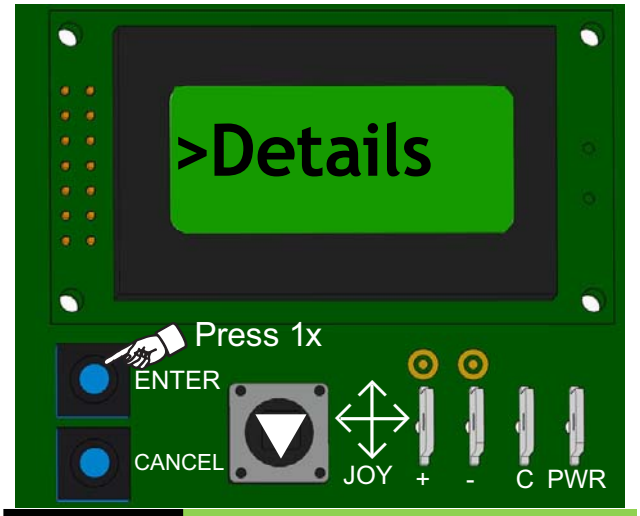
Menu	▼Details	
Sub Menu	☞▼Control	
Sub Menu	☞▼PowerEx	
Sub Menu	☞Status☞	
ExFan	Off	(EX-FAN 24vacOutputStatus)
ExFanVFD	0%	(EX VFD2-10vdc Output)
ExFanVFDFlt	Normal	(VFD FLT24vacInput)
ExFan-RT	.0 hr	(24vacOutputAccRunTime)
EAD-O	0%	(EXVFD2-10vdcOutptStatus)
BldgPres	.164"/w	(BldgPress0-5vdcInput)
Bldg-Sp	100"/w	(ExDmprBldgPresSetPt)

Menu	▼Details	
Sub Menu	☞▼Control	
Sub Menu	☞▼PowerEx	
Sub Menu	☞▼Setup☞	
ExFType	None	(PwrExFanModeSelection)
EconDmpPosFanOn	60%	(FanOnPosition)
EconDmpPosFanOff	20%	(FanOffPosition)
ExDmpPosFanOn	80%	(FanOnPosition)
ExDmpPosFanOff	20%	(FanOffPosition)
ERV-En	No	(Econ&PwrExIntrgrationW/ERV)

▼▲◀▶ Joystick navigation

☞Press Enter 1 time

☞▼Press Enter Scroll Down
Press Cancel to return
to Previous Menu



Menu	▼Details	
Sub Menu	☞▼Control	
Sub Menu	☞Dvent☞	
DVent-Mode	Disabled	(DemandVentiMode)
OprIAQ	477ppm	(IAQ 0-10vdcInput in use)
DVentMaxEcon-Pos	50%	(IAQ Econ-MaxPos)
DVentIAQ-Sp	1000ppm	(OccIAQEconOperSetPt)
DVentDiff-Sp	600ppm	(Occ Diff IAQ/OAQ SetPt)
IAQRange	2000ppm	(ppm@10vdcIAQ Output)
OAQRange	2000ppm	(ppm@10vdcOAQ Output)

Menu	▼Details	
Sub Menu	☞▼Control	
Sub Menu	☞▼Cvent☞	
Empty	(Future Comfort Vent function)	

Menu	▼Details	
Sub Menu	☞▼Control	
Sub Menu	☞▼AirMon Station☞	
MOAFlow-Sp	10CFM	(OcMinOAFlowSetPt)
Fr Air	7129CFM	(FR AIR 0-10vdc Input)
MOA-Range	10000CFM	(Cfm/10vdcOutpt)

Menu	▼Details	
Sub Menu	☞▼Control	
Sub Menu	☞▼Smoke Ctrl☞	
OprPurgeCmd	False	(ActivePurgeCmd)
PurgeCmdSrc	RATemp	(PurgeCmdSource)
Purge	False	(Purge Input status)
NetPurge	?Unrel	(PurgeCommandStatus)

Menu	▼Details	
Sub Menu	☞▼Service	
Sub Menu	☞Inputs	
Sub Menu	☞Sensors☞	
ST	60.5 F	(UCB ST ThermisterInput)
SSO	.0 F	(UCB SSO 0-20,000 Ω input)
IAQ	477ppm	(IAQ 0-10 VDC Input)
RAH	49.6 %H	(UCB RAH 0-10vdcInput)
OAT	73.0 F	(UCB OAT ThermistorInput)
OAH	49.6 %H	(OAH 0-10vdc Input)
OAQ	477ppm	(OAQ 0-10vdc Input)
SAT	60.7 F	(UCB SAT ThermistorInput)
RAT	73.0 F	(UCB RAT ThermistorInput)
SAH	49%H	(SAH 0-10 vdcInput)
DctPrs	1.50"/w	(DCT PRS 0-5vdcInput)
BldgPres	.164"/w	(BldgPres 0-5vdc Input)
MAT	71 F	(MAT thermistor input)
Fr Air	7129CFM	(FR AIR 0-10vdc Input)
UCB24VForOutputs	24	
EconDampPos		(AI-IN 0-10vdc Input)

Menu	▼Details	
Sub Menu	☞▼Service	
Sub Menu	☞Inputs	
Sub Menu	☞▼Coil Sensors☞	
EC1	42 F	(EC1 Thermistor Input)
CC1	96 F	(CC1 Thermistor Input)
EC2	41 F	(EC2 Thermistor Input)
CC2	117 F	(CC2 Thermistor Input)

Menu	▼Details	
Sub Menu	☞▼Service	
Sub Menu	☞Inputs	
Sub Menu	☞▼Thermostat	
Y1-Tstat	Off	(24vac input to Y1 term)
Y2-Tstat	Off	(24vac input to Y2 term)
W1-Tstat	Off	(24vac input to W1 term)
W2-Tstat	Off	(24vac input to W2 term)
G-Tstat	Off	(24vac input to G term)
TSTstatTAT-Only	Yes	(T-Stat Input Only)

Menu	▼Details	
Sub Menu	☞▼Service	
Sub Menu	☞Inputs	
Sub Menu	☞▼Binary Inputs☞	
Limit	Normal	(Limit 24vac input status)
MV	No	(MV pin 24vac input status)
HPSI	Normal	(HPSI 24vac input status)
LPSI	Normal	(LPSI 24vac input status)
FSI	Normal	(Freeze Protect1 status)
HPS2	Normal	(HPS2 24vac input status)
LPS2	Normal	(LPS2 24vac input status)
FS2	Normal	(Freeze Protect2 status)
FanOvrload	Normal	(24VAC input status)
APS	Off	(AirProving Switch input status)
DFS	Normal	(DrtyFltr Switch input status)
SD	Normal	Normal (Smoke Detect input status)
Purge	False	(Purge 24vac input status)
ExFanVFDFlt	Normal	(24vac input status)
FanVFDFlt	Normal	(24vac input status)
OCC	Unoccupied	(24VAC input status)

Menu	▼Details	
Sub Menu	☞▼Service	
Sub Menu	☞Inputs	
Sub Menu	☞▼Safeties☞	
HPSI-LO	Normal	(HiPressI switch status)
LPSI-LO	Normal	(LoPressI switch status)
FSI-LO	Normal	(Freeze Protect1 status)
HPS2-LO	Normal	(HiPress2 switch status)
LPS2-LO	Normal	(LoPress2 switch status)
FS2-LO	Normal	(Freeze Protect2 status)
LimitLO	Normal	(Heat Limit status)

Legend	
Default settings in Red	
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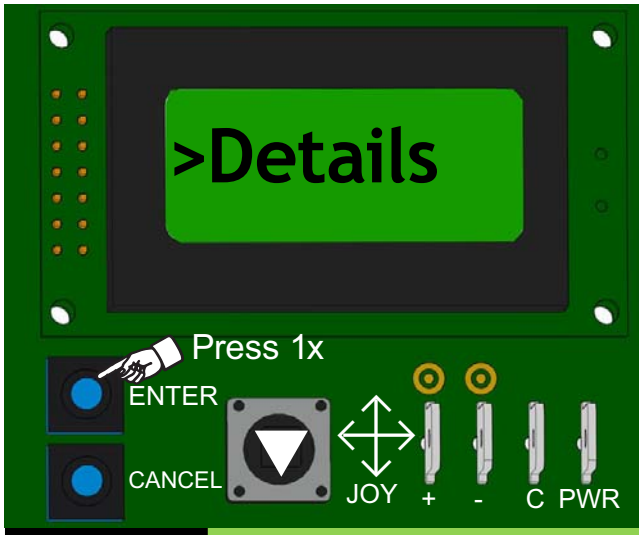


Menu	▼Details	
Sub Menu	☞▼Service	
Sub Menu	☞Inputs	
Sub Menu	☞▼NetworkInputs☞	
NetST	?Unrel	(FC Bus Space Temp)
NetSSO	?Unrel	(FC BusSpaceSetPtOffset)
NetSH	?Unrel	(FC BusSpaceHumidity)
NetOcc	Not Set	(FC BusOccupncyStatus)
NetTempOcc	False	(TempOccCommand)
NetIAQ	?Unrel	(FC Bus IAQ value)
NetFanReq	?Unrel	(FC BusFanOn reqst)
NetOAT	?Unrel	(FC Bus OA Temp)
NetOAH	?Unrel	(FC Bus OA Humidity)
NetOAQ	?Unrel	(FC Bus OA Quality)
NetPurge	?Unrel	(FC BusPurge Comand)

Menu	▼Details	
Sub Menu	☞▼Service	
Sub Menu	☞▼Outputs	
Sub Menu	☞Relay☞	
C1	Off	(1st Cool 24 VAC output)
C2	Off	(2nd+ Cool 24 VAC output)
H1	Off	(1st Heat 24 VAC output)
H2	Off	(2nd+ Heat 24 VAC output)
ExFan	Off	(Ex-Fan 24 VAC output)
CN-Fan	Off	(CN-Fan 24 VAC output)
Fan	Off	(Fan 24 VAC output)
X-Out	Off	(X term 24 VAC output)

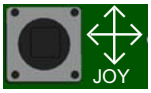
Menu	▼Details	
Sub Menu	☞▼Service	
Sub Menu	☞▼Outputs	
Sub Menu	☞▼Analog☞	
Empty		
FanVFD	0%	(VFD 2-10 VDC output)
Econ	0%	(Econ 2-10 VDC output)
ExFanVFD	0%	(ExFan 2-10 VDC output)

Menu	▼Details	
Sub Menu	☞▼Service	
Sub Menu	☞▼Factory☞	
#ClgStgs	2	(# of Cooling Stages)
#HtgStgs	0	(# of Heating Stages)
Htg-Type	Staged	(Heating Control Method)
FanCtl-Type	Single Speed	(ID Blower Type)
ExFType	None	(Exhaust Fan Mode/Type)
APSSetup	None	(Air Proving Switch Operation)
HGP-Inst	No	(Hot Gas Bypass Installed)
BASCom	BACnet	(Comm sub-board present)
Freeze-Sp	26.0 F	(Evap freeze protect setpt)

END OF MENU

Legend	
Default settings in Red	
Yellow = Function not enabled - Do Not Use	Blue = UCB Conditional Parameter
Tan = Economizer Board Presence	DkGreen = Economizer Board Presence + another Condition

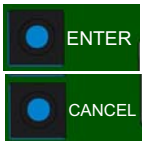
▼▲◀▶ Joystick navigation



☞Press Enter 1 time

☞▼Press Enter Scroll Down

Press Cancel to return to Previous Menu



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Supersedes: Nothing

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