



C-TRAC3

SETUP, MONITORING, AND COMMISSIONING (SMC) SOFTWARE MANUAL

FOR

Desk Top, Pocket PC and Palm®

UNIT MODEL NO. _____
UNIT SERIAL NO. _____
SERVICED BY: _____
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Retain instructions with unit and maintain in a legible condition.
Please give model number and serial number when contacting
factory for information and/or parts.



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A. INTRODUCTION

This version of the SMC software can be used for monitoring, trouble shooting, and communication set up. With this tool, you have real-time access to C-TRAC3 control variables and status information.

Three types of service platforms can be used to access the C-TRAC3; a laptop computer, a Palm[®] handheld PDA and a pocket PC PDA. To support these platforms, there are three versions of the SMC software.

All three versions of the SMC software provide the same style interface. Navigating buttons are provided for easy intuitive access to all pages.

SMC performs the following tasks:

- Real-time monitoring of C-TRAC3 sensors, alarms and operating status.
- Data trending for key variables.
- Program set up and equipment commissioning.
- Service and troubleshooting functions.
- Communications set up.

The software and manuals are available at <http://www.engineered air.com>.

B. THE SMC SOFTWARE INSTALLATION

There are three versions of the SMC software. They are for MS windows, Palm[®] OS system and Pocket PCs (Windows CE) respectively. All three versions have the same features. This section explains how to install the SMC program to these machines.

1. Installing the SMC software to a Windows Laptop.

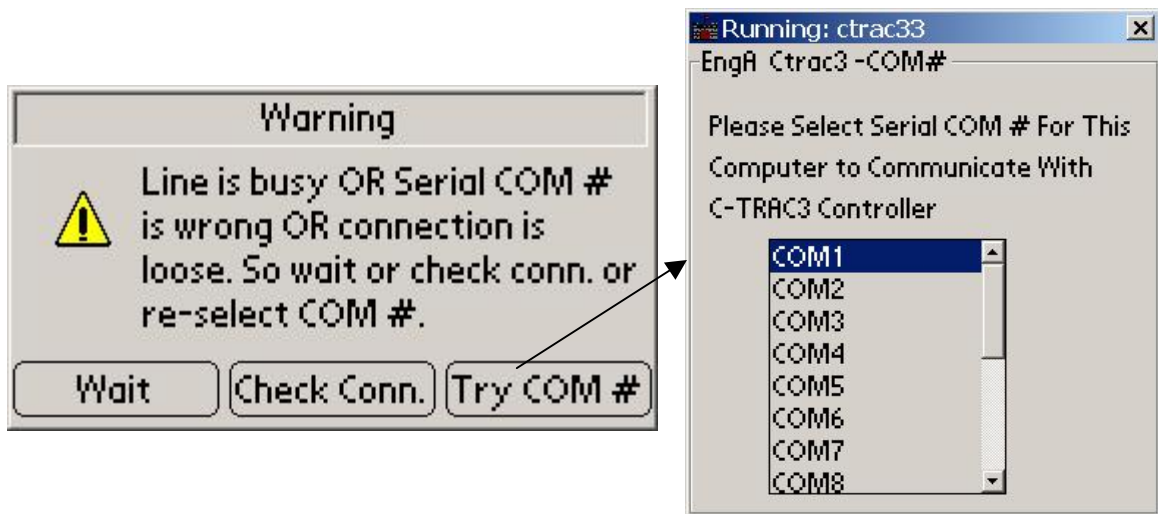
Requirements:

- 1) Hardware requirements: a personal computer, a 9-pin NULL MODEM cable with 2 FEMALE serial port connectors.
- 2) Software requirements: Windows 95, 98, ME, NT, 00 and XP.

Installation:

- 1) Download or copy the applicable installation program *Ctrac3.3.1 Setup.exe* to your PC from either the EngA web site or the CD provided. The SMC V3.3.1 is compatible with version 3.3, 3.2 and 3.1.
- 2) Double click *Ctrac3.3.1 Setup.exe* file to start the CTRAC3 Set up Wizard . Click the **Next** button to continue installation.
- 3) Select a folder to place the program, then click the **Next** button.

- 4) Check the box if a desktop icon is to be created by the wizard. Click the Next button to finish the installation. After installation, you can run the SMC software for either EngA CTRAC3.3 from Start menu or from the desktop icon.
- 5) Connect the cable to your PC and the C-TRAC3 controller.
- 6) Power up the C-TRAC3 controller. Start the SMC from the start menu or from the shortcut on your desktop. If the starting page has a message of "is reading ..." instead of buttons, check the connections until you see buttons displaying on the screen.
- 7) Click on one of the buttons, if the window freezes with the message "Sending" shown, click on a button will bring up message box as shown below:



If all connections are OK then try a different communication port. The default COM port # is 1. A valid port can be the built-in serial port #1 and #2 or virtue port #3 and #4 etc. that is the USB to serial converter. Click on the COM# you want to use, then click on a button on the starting page the window should change if the selected port number is valid. Once a valid port number has been found the program will save it as the default port number automatically.

Note: If the installation process halts and the SMC can not be installed successfully, check if your windows operating system has *Msvrt.dll* and *mfc42.dll* files. If these files are missing, you can down load them from <http://www.caslsoft.com/download.html>. Down load the *mfc42.dll.exe* file to your PC. Run this program to install the above two files to your computer. Then start from step 1.

2. Installing the SMC software to a Palm® Handheld

The system requirements for Palm® OS Devices:

Palm® or Palm® compatible PDA with a 3.x, 4.x or 5.x operating system. The handheld must also have a serial or universal connector port. In order to communicate with the C-TRAC3.x you must have either BlueTooth wireless communication function

or a serial cable. Palm[®] P10804U universal connector cable for the 15 pin universal port devices.

Some compatible Palms include; Palm[®] V, Palm[®] VII, m130, m515, Zire 71, Tungsten W, Tungsten T, and Tungsten C.

Installation:

- 1) Download or copy the SMC for (Palm[®]) folder from the EngA web site or from the CD provided to a desktop PC.
- 2) If you have not already done so, install the Palm[®] Desktop program that comes with the Palm you purchased. If the Palm[®] Desktop program has already been installed, go to the next step.
- 3) Connect the Palm to you PC using the Hotsync cradle.
- 4) Open the SMC for Palm folder and double click the *Setup.exe* file to start the installation wizard.
- 5) Click the **Start Install** button when you have selected a user name. The Synchronization setup window opens.
- 6) Check the "Restart synchronization manager now" box and click the **Finish** button to finish the installation.
- 7) Push the synchronize button on the cradle to load the program from your PC. Installation Done.
- 8) Using the serial cable, connect the Palm[®] to the C-TRAC3 controller. See 4. Setting up the Bluetooth for Bluetooth settings.
- 9) Power up the C-TRAC3 controller. Click the C-TRAC3 icon on Palm[®] main page to start the SMC program. The handheld should now communicate with the EngA C-TRAC3 controller. If the starting page has a message of "is reading ..." instead of buttons, check the Ctrac power and cable connections.

3. Installing the SMC software to a Pocket PC (Version 3.3 and earlier)

The system requirements for the Pocket PC Device

Pocket PC 2002/Windows CE 3.x, and Pocket PC 2003/Windows Mobile, with ARM, SH3, MIPS microprocessors. The handheld must have either blueTooth wireless communication function or a serial or universal port along with a serial or universal cable. Make sure the correct version (BlueTooth version or Serial cable version) of SMC is obtained from Engineered Air.

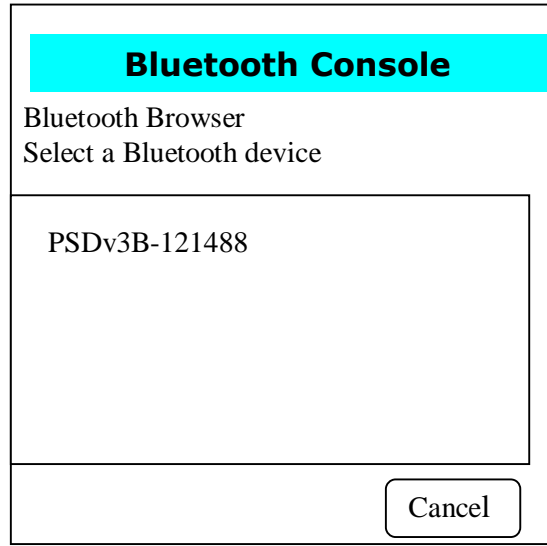
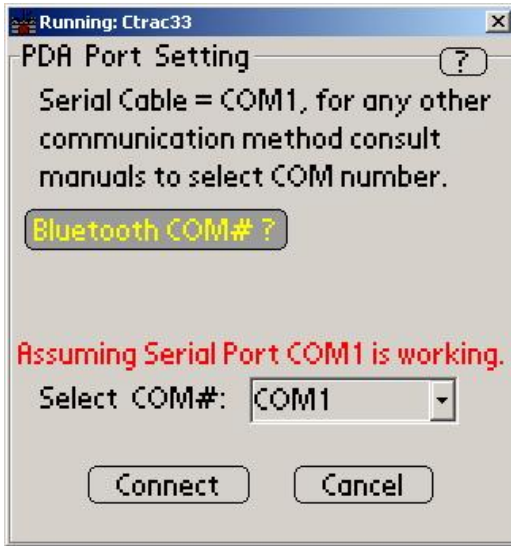
Installation:

- 1) Download or copy the SMC software for pocket PC folder from the EngA web site or from the CD provided to a desk a PC.
- 2) Install the Microsoft ActiveSync program that comes with the pocket PC you purchased. When the Microsoft ActiveSync program has been installed, close it and go to the next step.
- 3) Connect the Pocket PC to your desktop PC using the USB cradle cable.
- 4) Open the SMC for pocket PC folder, then double click the *Setup.exe* file to start the installation wizard.
- 5) Click the **Start Install** button. The wizard will let you to confirm the file location. Select **Yes** to continue. When the installation is complete, a message appears on the screen asking you to check the pocket PC for any reminding messages. Click **OK** if no additional steps are required.
- 6) Using the serial cable, connect the Pocket PC to the C-TRAC3 controller. See 4. Setting up the Bluetooth for Bluetooth settings.
- 8) Power up C-TRAC3 controller. Click the Ctrac3 icon on the program screen to load the starting page of the SMC program. The Pocket PC should be able to communicate with the EngA C-TRAC3 controller. If the starting page has a message of "is reading ..." instead of buttons, check the cable connections.

4. Setting up the Bluetooth

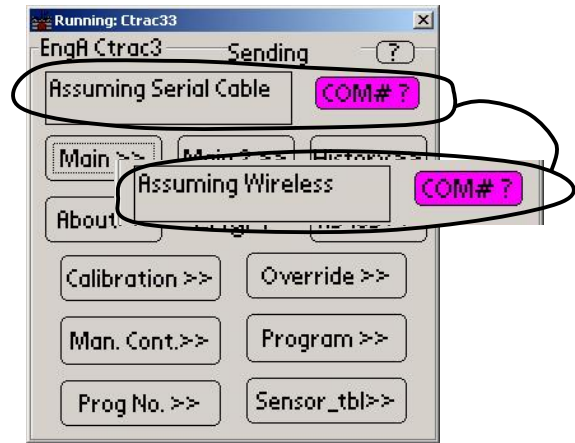
Pocket PC Bluetooth:

- 1) Bluetooth adapter "PSDv3B-121488" connection procedures: Power up C-TRAC3, turn off the Bluetooth adapter, plug the adapter to the RS232 port on C-TRAC3, turn the adapter ON.
- 2) Serial port COM#: Go to the Serial Port page and select the Bluetooth Manager, write down the COM# under label "Outbound COM Port". This information can also be found from the Pocket PC Manual.
- 3) Network setting: From the Bluetooth Manager, go to the Dial-up Networkig page, set the Baud rate to 9600 and the Flow control to "Hardware (Rts/Cts).
- 4) Setting the port COM#: Run the SMC program or restart the Pocket PC, the PDA Port Setting page shows up. For a serial connection, select COM1, for Bluetooth wireless connection select the COM number found in step 1. For example, if a HP Pocket PC is used, the COM8 is the Bluetooth outbound COM port.)



- 5) Selecting device: Click the "Connect" button to open Bluetooth Console window. Click on the adapter used to finish.

Whenever the Pocket PC is turned on, pay attention to the connection type shown on the starting page of the SMC program. The note can be either "Assuming wireless" or "Assuming Serial Cable". Make sure the note matches the physical connection type (cable or wireless). If they do not match, click the "COM#?" button to go to the PDA Port Setting page to set the correct COM port.



To switch between the Serial port and the Bluetooth port, restart the Pocket PC then go to the PDA Port Setting to set the correct port.

When starting or running the SMC program if the following warning message pops up, go to the PDA Port Setting to set the correct port.



Palm® Bluetooth:

- 1) Bluetooth adapter "PSDv3B-121488" connection procedures: Power up C-TRAC3, turn off the Bluetooth adapter, plug the adapter to the RS232 port on C-TRAC3, turn the adapter ON.
- 2) Turning the Bluetooth on: On the home page of Palm®, click the Bluetooth icon to go to the Bluetooth page. If the Bluetooth is OFF, check the ON box.

- 3) Making connection: From the Bluetooth page, click the Connect button to select the device to connect. Select the Bluetooth adapter then click OK.

Discovery Results

Show: Nearby devices
Select a device:

PSDv3B-121488

OK Cancel Find

C. THE SMC PROGRAM

1. The Starting Page

After the SMC software is successfully installed and the communication between the C-TRAC3 controller and a PDA/PC/Pocket PC has been established, you should be able to read from and write data to the C-TRAC3 Ctrac3 controller. When you launch the SMC program, the SMC starting page (interface) opens as shown below. There are two levels of access to the C-TRAC3 control data and air conditioning system information. Level one is mainly monitoring and is designed to be a customer access level. Level two is designed for the serviceman and allows calibration, overrides and communication set up. Level 2 requires a password. At each access level, several interface pages can be opened for displaying and or writing data from and to the C-TRAC3 controller. To open a page simply click on the page button.



Level 1



Level 2

Level 1 pages: Main and Main2: Display sensor, operating status and set point information.

About: Software version information.

History: Viewing C-TRAC3 key sensor history.

Level 2 page: Calibration: Calibrating input signals.

Override: Set point override and EMS enabling.

RS485: RS485 communication configuration.

Standard buttons

The following 4 standard buttons are on most pages.



By clicking <<Back button, the previous page is displayed

Click or Tap the cursor on the data or offset you wish to change. Now click or tap the INC or DEC button.

After clicking the Send button, all the data shown on the current page will be send to the Ctrac3 controller. If you forget to send the data, all the changes you made will be lost when you leave the page.

2. The Main Page

Clicking the Main button will open this page. This is a read-only page. This page displays information such as unit operating modes, blower status, sensor readings, discharge set points, etc. Table 1 gives explanations for all possible messages.

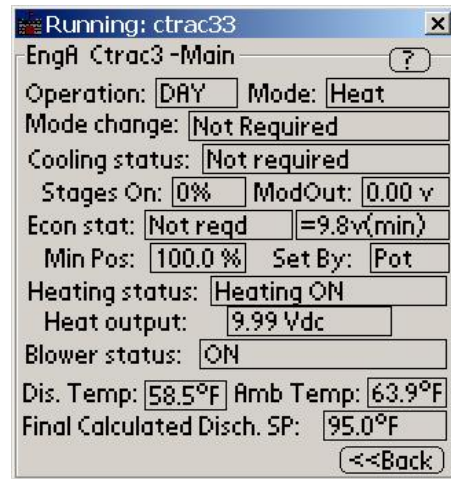


Table 1. Detailed explanation table for Main page

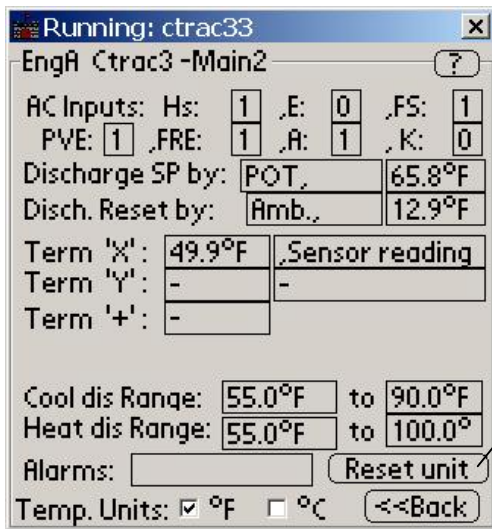
Label	Status	Descriptions
Operation:	Alarm	One of the general alarms happened (Low limit, open sensor, and heat failure)
	NIGHT	Unit is running in night mode / unoccupied mode
	DAY	Unit is running in day mode / occupied mode
	OFF	Unit is OFF
Mode:	None	There's no temperature control
	Mzone	Multizone unit
	RH_Dual	Reheat unit / Dehumidification, Both heating and cooling are on
	Returning	Reheat unit, dehumidification call is satisfied, unit is transitioning from dual mode to single control mode.
	Heat	Current control mode is heating
	Econ	Current control mode is economizer
	C+E	Current control modes are mechanical cooling + economizer together
Mode change:	Cool	Current control mode is mechanical cooling
	Timing	Current control mode cannot satisfy the temperature. After a delay, the C-TRAC3 will select a new control mode.

	Not required	No control mode change is required. The change mode timer is reset.
	Blocked	No valid mode is available, so mode change is blocked
	Hold until change enab.	Mode change timer is timed out, but the required control mode is not available. The C-TRAC3 will stay in the current mode until the required mode becomes available then go to that mode immediately.
Cooling Status:	Disabled Prog.	Cooling lock out due to general alarm
	Cycling ON	A compressor is cycling ON. (2.5 to 13 minutes load and application dependent)
	Cycling OFF	A compressor is cycling OFF. (2.5 to 13 minutes load and application dependent)
	Cooling ON	At least one compressor is running or water cooling coil is modulating
	Cooling Enabled	Cooling is ready to run
	Not required	Mechanical cooling is not required.
	None	No cooling device in this unit
	Disabled, term.A	Cooling is locked out, because Terminal A is not powered.
	On blocked by Amb.	Compressor starting is prevented by low ambient temperature. See control / program manual for complete description.
	% on Limited by VFD	Ctrac3 won't bring on another compressor because the VFD air flow volume is too low. See control / program manual for complete description.
		OFF
Stages ON:	%	Percent of cooling stages running.
ModOut:	V	Modulating cooling output, vdc,
Econ stat:	Disabled Prog.	Economizer lock out due to general alarm
	Not reqd	Economizer is not required to be on
	Disab by E	Economizer is locked out, because Terminal E is powered.
	Disab, Amb	Economizer is disabled because the outside ambient is too high.
	None	There is No economizer installed in this unit
	Econ ON	Dampers are modulating
	LL OR	The economizer minimum position setting is being overridden because the discharge temperature is approaching the low limit trip point.
	Damp. open	Outside damper is opened
	OFF	Outside damper is closed
		= x.xv (min)
Min Pos:	%	Minimum outside air percent
Set By:	Pda /Ems /Pot	Minimum outside air percent is currently set by Pda or Ems (serial communication from Energy management system) or Pot.
Heating status:	HEAT FAILURE	Heat failure (Flame fail, purge fail, wiring or flame relay)
	Disabled Prog.	Heating lock out due to general alarm.

	Heating ON	Heating is on.
	Heating ON(Mheat)	For two heating section reheat unit, main heat is on
	Heating ON(Rheat)	For two heating section reheat unit, reheat coil is on
	None	No heating device is installed in this unit
	Not Required	Heating is not required
	Disabled by HS	Heating is locked out, because terminal HS is not powered.
	Disabled, Amb	Heating is locked out due to high ambient temperature.
	Heat Enabled	Heating is ready to run but not yet on.
	OFF	When unit is OFF, heating is OFF
Heat output:	Vdc	Output volts to terminal HD
Blower status:	Delay OFF	Blower is delaying off for cool down and/or pump down
	ON	Blower is running
	Delay ON	Blower is delaying on for opening damper and/or warming up
	Low Air Flow	VFD units only.
	OFF	Blower is OFF
Dis. Temp:	°F or °C	Discharge temperature. Displays sensor 1 (Terminal Q) or sensor 1+2 (Terminals Q+X) average if program and unit is set up to do averaging.
Amb Temp:	°F or °C	Ambient temperature reading.
Final Calculated Disch. SP:	°F or °C	Final leaving discharge air set point after all resets have been added in. For multizones it is the final hot deck set point.

3. The Main2 Page

The Main2 page is a read-only page. Table 2 gives explanation for information displayed in this page.



Push this button and the C-TRAC3 controller will reboot and the alarms will be reset.

Table 2. Detailed explanation table for Main2 page

Label	Status	Descriptions
AC Inputs:	0 or 1	0 = digital input terminal is not powered (24vac). 1 = digital input terminal is powered (24vac).
Discharge SP by:	PDA, xx°F	The current base set point of sensor 1 is xx degrees and is set by the PDA. You can enable or disable this option in the PDA Override page.
	EMS, xx°F	The current base set point of sensor 1 is xx degrees and is serially set by communication from the EMS computer. You can enable or disable this option from the PDA Override page.
	BMS, xx°F	The current base set point of sensor 1 is xx degrees and is calculated based on BMS input value and the upper and lower discharge temperature range shown on this page. (0 vdc = lower limit)
	POT, xx°F	Current base set point of sensor 1 is xx degrees and is set by pot #1 on Ctrac3 face or from a remote set point pot connected to terminal S.
Disch. Reset by:	Room, xx°F	Room reset from a TE6100 thermostat. The room is calling for xx degrees of reset. You can adjust the room proportion band and integral time from the PDA Calibration page.
	Amb., xx°F	Ambient reset. The ambient is calling for xx degrees of reset.
	BMS, xx°F	BMS reset. The 0-10 volt BMS signal is calling for xx degrees of reset.
Term "X":	xx°F, Room Temp.	Terminal X is used as a room sensor. It is reading xx degrees.
	xx°F, Average Sens	Terminal X is used as a second discharge sensor that is to be averaged with the main discharge sensor. It is reading xx degrees.
	xx°F, Cold deck Sens	Terminal X is used as the cold deck discharge sensor. It is reading xx degrees.
	xx°F, DH cool Sensor	Terminal X is used as the cooling discharge sensor in dehumidification mode. It is reading xx degrees.
	- , OPEN	Sensor mounted on terminal X is open
	xx°F, Sensor reading	X terminal is used for temperature read out.
	Opened, Digital input	X terminal is used as a digital input and the status is open
	Closed, Digital input	X terminal is used as a digital input and the status is closed

	-	Terminal X is not used
Term “Y”:	xx°F, SP2 by PDA	Cooling set point is set by PDA.
	xx°F, SP2 by EMS	Cooling set point is set by EMS.
	xx°F, Day Room SP	Terminal Y is the room thermostat set point setting.
	xx°F, SP2 by POT	Terminal Y is the base set point setting for sensor 2. It is set from pot #2 on Ctrac3 face or remote pot connected to Terminal Y. (Cooling set point for Multizone & dehumidification function.
	xx v, BMS SP2	Terminal Y is the BMS input signal. (0-10v)
	-	Terminal Y is a spare terminal and has no function
Term “+”:	0-10vdc	BMS input signal, 0-10v
Cold deck D/A calculated SP:	xx °F	The final set point after resets for the Multizone cold deck or the final cooling set point for the dehumidification circuit
Cool dis Range:	xx °F to xx °F	The lower and upper set point limits for the cooling and economizer control modes. In no case, can the final discharge set point, be set out of this range. These values can only be changed from the EngA access level.
Heat dis Range:	xx °F to xx °F	The lower and upper set point limits for the heating control mode. In no case, can the final discharge set point, be set out of this range. These values can only be changed from the EngA access level.
Alarms:	None	No alarms
	Sensor_Q fail	sensor 1 connected to terminal Q is open
	Sensor_X fail	sensor 2 connected to terminal X is open
	Amb_sens fail	ambient sensor is open
	Lowlimit	Low limit tripped
	BurnerWiring	For DJ/DG heating devices, burner wiring problem
	Flame Relay	For DJ/DG heating devices, Flame Relay failure
	Pre-Purge	For DJ/DG heating devices, Pre-Purge problem
	Flame Fail	For DJ/DG heating devices, flame failure
	Heat Fail	For Mtrac, LMK, general heat failure occurred

	VFD fault FB	Faulty VFD feedback signal
	Clog Filters	Clogged filter alarm
	Cooling alarm	Cooling problem
	Low Air Flow	Low air flow problem
	Special alarm	Custom defined alarm
	Wheel turning	The heat wheel is operating
	Spe. Stat = ON	Custom defined status is "ON"
Reset unit button	Reset unit	Click this button to reset the C-TRAC3 controller.
Temp. Units:	Check boxes: °F, °C	Toggles display between °F and °C. Note: The temperature readings on the program setup and manual control pages are always in °F.

4. The About Page

This page gives information such software versions, the program number, unit address and a brief program description for the selected program #.

Table 3 explains the information displayed on this page.



Table 3. Detailed explanation table for the About page

Label	Status	Descriptions
Unit Address:	Number	Default is 1, can be set through PDA, valid value is from 1 to 255
Software Version:	Ver 3.3.1	Coded in Program
Program Number:	Number	When unit is in the field, this number can't be changed. A change of the program# can only be made by an EngA service personnel. Valid value is from 1 to 64.
Options(A: to C):	Number	Display the Option package setup. Reading only.
Program Description Button	Program Description	Click this button to display an description of the selected program.

5. The Hist CFG. and Hist View Pages

The History button on the starting page will open the History Configuration page. This page is used to configure the History View page for displaying the required information.



MPU CODE:

These codes are for Engineered Air usage only.

Flame fail reset:

This cell keeps track of the number of flame failure auto resets. Auto flame failure reset is an option available for DJ and DG heat exchangers under 2500 MBTUH.

Alarm:

This is the alarm occurred in the past. Possible codes are listed in the following table.

Code	Alarm
BW	Burner wiring
FR	Flame relay
PP	Pre-purge
FF	Flame fail
HF	Heat fail
LL	Low limit
SQ	Sensor wired to Q
SX	Sensor wired to X
SAmb	Sensor wired to Amb
Cool	Cooling alarm
Air	Low air flow

History function

Due to memory limitations, the C-TRAC3 has a limited history function. Instead of providing traditional trending data, the C-TRAC3 sets up time windows and records the minimum and maximum values measured in that time window. Note if any changes are made to the history configuration page, the configuration data is only stored when the reset/send button is pressed. If the reset/send button is not pressed, any changes made will be lost.

Variable selection

To select a variable to trend, simply check the check box beside that variable name. Up to 4 variables can be selected from a pre-defined list of 8 variables.

Window Size

The window size can be altered in 30 second “step” increments. If you enter 8 then the window time interval = $8 * \frac{1}{2} \text{ min.} = 4 \text{ minutes.}$

There are two history data recording styles. One is to continue recording (rewrite) and stop at alarms (default setting). With this style, the newest window records overwrite the oldest window records. The other is to start recording history from the moment you clear the buffer or the moment you power the C-TRAC3. The recording will stop when the history record buffer is full or at the alarms.

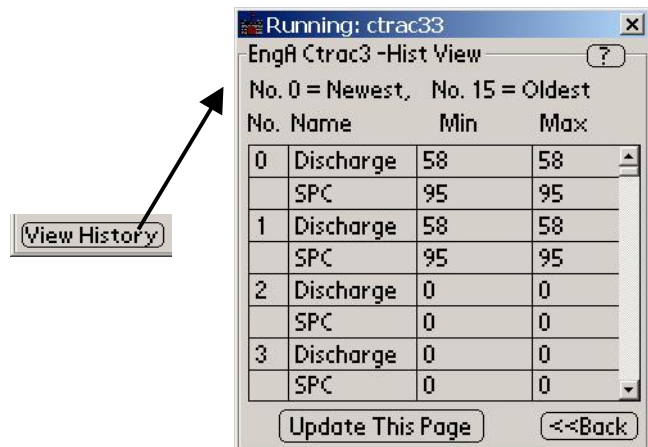
Reset / send button

Push this button, to clear the history record and to save any history configuration changes.

The Hist View page

The minimum and maximum values are recorded for each of the variables selected on the history set up page. The time frame between windows is as set on the history set up page. Window # 0 is the always most recent data. Window #1 is a little older and so on.

While viewing the data the C-TRAC3 is not updating the display. If you want to update the display you need to click the update this page button. If the unit is off or there is an alarm, the C-TRAC3 will stop recording.



6. The Calibration Page

You need a second level password to access this page. This page is used for calibrating sensors, set point signals, and 0-10 vdc control signals. This page also sets room temperature control parameters such as integration time, proportional band, night set back and night set up values.

The screenshot shows the 'EngA Ctrac3 - Calibration' window. It contains a table of sensor readings and calibration offsets, followed by room control parameters. Callout boxes provide detailed explanations for these parameters:

Discharge	61°F	Cal offset	0°F
Ambient	32°F	Cal offset	0°F
Sensor2	50°F	Cal offset	0°F
Dis SP	66°F	Cal offset	0°F
Term. Y	66°F	Cal offset	0.0°
BMS	3.4v	Cal offset	0.0
MinP/vfd	47%	Cal offset	0

Room Int. Minutes/Deg(5 - 40): 8

Room Prop Band (3 - 13 F): 6.0°F

Room Nite: SB: 5.0° SetUP: 5.0°

Buttons: INC, DEC, Send, <<Back

Callout Box 1: This column is read only. These values are calculated using the actual reading + calibration off set. After calibration, the send button must be pushed.

Callout Box 2: Room reset integral rate (minutes / degree): "5", means the Discharge air set point will ramp up/down 1° degree every 5 minutes. The range is from 8 to 40 min. / degree.

Callout Box 3: Room proportional band, The setting range is 3 to 13 °F

Callout Box 4: Night set back (SB), deduct this number from the room thermostat set point. Night set up (Set UP), add this number to the room thermostat set point.

Calibration offset

The program has an internal fixed Max/Min calibration offset limit. If you input a number higher than the offset limit, the number will be reduced back to the Maximum or Minimum offset value. For the BMS, Y Terminal the offset value will accept a number with one decimal place.

7. The Override Page

Some C-TRAC3 data and operating parameters can be overridden using the override page. When determining who has control of the set points etc, the C-TRAC3 follows this priority list ranked from highest to lowest.

1. PDA
2. Serial communication from a central EMS computer.
3. 0-10 vdc reset signal from a central building computer.
4. Remote pots
5. Built in pots.

The screenshot shows the 'EngA Ctrac3 - Override' window with the following options:

- Disable Resets
- Override baseSP1,
- Override MinPos(0-100%),
- Enable Remote Panel
- Enable EMS Set Points + MinPos
- Enable EMS Unit On/Off
- Enable EMS K+ DO + all disables
- Speed up all timers for ONE hour

Buttons: INC, DEC, Send, <<Back

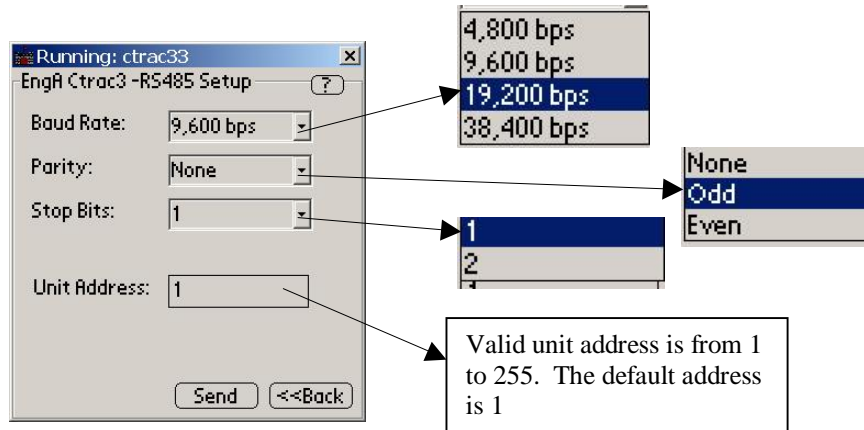
The PDA also has the authority to enable or disable serial communication to a central energy management computer system.

Table 5. Descriptions of the Override page

Item	Descriptions
Disable Resets	Disable discharge air resets. (room, 0-10vdc and ambient) and BMS set points, then use discharge air control only, set point can be POT, EMS or PDA.
Override Base SP1 Range (ll to hh) Input xx	This setting will override all other means of set point adjustment (The PDA has the highest priority). Once the box is checked a set point request line appears. You may enter any value as long as the value lies between ll and hh. Note! unless you disable the resets, they are still active.
Override Base SP2 This check box is only visible when a program has a second discharge set point. Range (ll to hh) Input xx	This setting will override all other means of set point adjustment (The PDA has the highest priority). Once the box is checked a set point request line appears. You may enter any value as long as the value lies between ll and hh. Note! unless you disable the resets, they are still active.
Override Minimum Position	This setting will override all other means of Minimum position adjustment (The PDA has the highest priority).
Enable Remote Panel	If this option is checked, the unit discharge air temperature set points and minimum position setting can be set by the RS485 remote panel.
Enable EMS set points + MinPos.	If this block is checked, the discharge set point(s) and the economizer Minimum Position setting can be set by serial communication from a central energy management computer. EMS control has the second highest priority next only to PDA. Resets are disabled.
Enable EMS Unit On/Off	The central energy management computer will have unit on/off control.
Enable EMS K and all disable	If this block is checked, the EMS computer will control dehumidification call (dehumidification programs only) and separately command each operating mode (heat, economizer and mechanical cooling) to disable or automatic operation.
Speed up timers for one hour	Service tool. If checked, the timers (mode change , compressor cycle, alarms, etc.) are reduced to 1/2 of normal time. If you forget to disable it, all the timers will go back to normal timing in an hour.

8. The RS485 Set up Page

The RS485 Set up page is used for setting up the RS485 serial communication parameters.



D. THE ONLINE HELP

Online helps have been built in with each page. The help text can be accessed from any page.

The Help Topics page displays the topics of the help messages. Select a topic then a sub-topic, the help message page with a description of the selected topic opens. Simply click the Back buttons to go back to previous pages.

