**1** — Display Diagram and Functions

**2** — User Menu



| 1 | Unit of measurement |
|---|---|
| 2 | State of outputs OUT1 OUT2 OUT3 OUT4 |
| 3 | Controller function states:<br>    * man = manual/automatic<br>      (off=automatic control,on = manual control);<br>    * rem = remote setpoint enabled |
| 4 | Selects **Auto** or **Manual** control from the home screen.<br>pressing the key returns you to the previous menu item or to the higher menu level, as appropriate.<br>hold for 2 seconds to return to the main menu |
| 5 | Navigate through user menu (see options below) |
| 6 | Probe test and burnoff key |
| 7 | Up / down key |
| 8 | Hold for more than 2 seconds to enter Configuration Menus.<br>Navigates among controller menus and parameters.<br>Confirms parameter value, and selects next parameter |
| 9 | Key pressed signals |
| 10 | Displays percentage of power output |
| 11 | Display of percentage of process variable and of setpoint |
| 12 | Parameters, diagnostics and alarm messages. |
| 13 | setpoint display: parameter values.<br>configurable with parameter ds.sp (default = setpoint). |
| 14 | pv display = process variable |

| Button Press | Menu Option |
|---|---|
| Carb.Status | Temp / mV Status |
| CLEA | Clear Carbon Alarms |
| B.FREQ | Burnoff Freq. minutes |
| IN3 | Probe mV |
| IN1 | Probe T/C |
| COF / H2F | Carbon or H2 Factor |
| IMPED | Probe impedance |
| D.RECO | Diagnoses Recovery Time |
| D.FR.TE | Diagnoses Frozen Probe Temp |
| ALRM3 | Alarm 3 SP |
| DIA.D | Last Diagnoses test |
| B.AUT.C | Time to next BO Hrs.Min |
| B.FORB | Burnoff forbidden time Hrs. Min |

## NOTE:
IP Address changes made to the AC50 will not take effect until a power cycle is performed.

| | |
|---|---|
| A/M | Selects Auto or Manual control from the home screen. Pressing the key returns you to the previous menu item or the higher menu level, as appropriate. Hold for 2 seconds to return to the Main menu. |
| FUN | Navigate through user menu |
| TST | TST+A/M = start burnoff<br>TST + FUN = start probe test |
| △ | Press to raise the value of the displayed parameter.<br>Hold to progressively increase the speed of raising the displayed parameter. |
| ▽ | Press to enter a submenu or to reduce the value of the displayed parameter, as appropriate.<br>Hold to progressively increase the speed of reduction of the displayed parameter. |
| MEN | Hold for 2 seconds to enter the configuration menus. Navigates among controller menus and parameters, confirms parameter value and selects next parameter. |

**TO CHANGE PROCESS SETPOINT**
> when device is in auto control, press △ or ▽ until desired setpoint is reached.
> in manual mode, change the power output using the up or down arrow

**TO CHANGE CO FACTOR:**
> Press FUN key to cycle user menu until the COF parameter is displayed
> Adjust the parameter with △ or ▽
> Press FUN key to confirm selection
> Hold A/M key to return to home screen or let device return home after 15 seconds

**TO CHANGE H2 FACTOR:**
> Press FUN key to cycle user menu until the H2F parameter is displayed
> Adjust the parameter with △ or ▽
> Press FUN key to confirm selection
> Hold A/M key to return to home screen or let device return home after 15 seconds

**TO CHANGE BURNOFF TIMER AND FREQUENCY:**
> Hold MEN button until display shows PASSQ
> Enter quickmenu password if set (SSi default password = 5)
> Press MEN button to cycle parameters until B.TIME is reached
> Use arrow keys to adjust time (units are in seconds)
> Press MEN key to confirm selection and advance to B.FREQ parameter
> Use arrow keys to adjust time (units are in seconds)
> Press MEN key to confirm selection
> Hold A/M to return home

**TO PERFORM A PROBE BURNOFF**
> From the home screen, press FUN button once to reach carbon state menu
> Simultaneously press the TST and A/M buttons, burnoff will be initiated if there are no
> inhibiting factors. Probe burnoff can be canceled by holding △ and ▽ simultaneously.

**TO PERFORM A PROBE DIAGNOSTIC**
> from the home screen, press FUN button once to reach carbon state menu
> simultaneously press the TST and FUN buttons, probe test will be inititiated if there are no
> inhibiting factors. Diagnostic can be canceled by holding △ and ▽ simultaneously.

**TO ENTER QUICK SETUP MENU:**
Hold MEN button until display shows PASSQ
Use △ or ▽ to enter password if set (SSi default password = 5)
Press MEN button again to enter menus.
Continue pressing MEN to cycle through menu options.
To exit menu, hold A/M until home screen appears,
or press MEN to cycle through menu options to return to the home screen.

| PARAMETER | DESCRIPTION |
|---|---|
| TYPE_1 | shows and sets thermocouple type for main input |
| F.OUT_1 | shows and sets the function of output 1 |
| F.OUT_2 | shows and sets the function of output 2 |
| F.OUT_3 | shows and sets the function of output 3 |
| F.OUT_4 | shows and sets the function of output 4 |
| TYPE_1 | shows and sets the function of analog output 1 |
| FUNC_1 | shows and sets the function assigned (retransmission of values) to analog output 1 |
| TYPE_2 | shows and sets the function of analog output 2 |
| FUNC_2 | shows and sets the function assigned (retransmission of values) to analog output 2 |
| H.PB_1 | shows and sets the proportional heating band |
| H.IT_1 | shows and sets the integral heating time |
| H.DT_1 | shows and sets the derivative heating time |
| C.PB_1 | shows and sets the proportional cooling band |
| C.IT_1 | shows and sets the integral cooling time |
| C.DT_1 | shows and sets the derivative cooling time |
| B.TIME | shows and sets the duration in seconds of the air blowing phase during a burnoff |
| B.FREQ | shows and sets the automatic burnoff repetition frequency in minutes |
| D.FREQ | shows and sets the frequency of automatic diagnostics repetition, in minutes |
| STAT_3 | shows and sets the state of the digital input |
| CODE | shows and sets the identifying code of the controller in a modbus serial network |
| KBAU | shows and sets the communication speed for the serial port. |
| PAR | shows and sets the parity used in serial communication. |
| IP.AD1 | shows the ip 1 address identifying the controller in an ethernet network. the parameter is the first field in the complete ip address (**xxx**.xxx.xxx.xxx) |
| IP.AD2 | shows the ip 2 address identifying the controller in an ethernet network. the parameter is the second field in the complete ip address (xxx.**xxx**.xxx.xxx). |
| IP.AD3 | shows the ip 3 address identifying the controller in an ethernet network. the parameter is the third field in the complete ip address (xxx.xxx.**xxx**.xxx). |
| IP.AD4 | shows the ip 4 address identifying the controller in an ethernet network. the parameter is the fourth field in the complete ip address (xxx.xxx.xxx.**xxx**). |
| SUB.M1 | shows the subnet mask 1 identifying the controller in an ethernet network. the parameter is the first field in the complete subnet mask (**xxx**.xxx.xxx.xxx). |
| SUB.M2 | shows the subnet mask 2 identifying the controller in an ethernet network. the parameter is the second field in the complete subnet mask (xxx.**xxx**.xxx.xxx). |
| SUB.M3 | shows the subnet mask 3 identifying the controller in an ethernet network. the parameter is the third field in the complete subnet mask (xxx.xxx.**xxx**.xxx). |
| SUB.M4 | shows the subnet mask 4 identifying the controller in an ethernet network. the parameter is the fourth field in the complete subnet mask (xxx.xxx.xxx.**xxx**). |
| IP.E. | Current IP address |

# AC50 Quick Start Guide

Hold MEN button until display shows the desired menu (PASS1 or PASS2)

Use △ or ▽ to enter password if set (SSi default password = 5)

Press MEN button again to enter menus.

**NOTE:**
Reference the AC50 Manual for detailed explanation of these fields and parameters.

Continue pressing MEN to cycle through menu options.

| MENUS UNDER PASS1 |
| :---: |
| INFO |
| INFO ETHERNET |
| INFO CARBON POTENTIAL |
| CP SET |
| BURNOFF SET |
| PROBE DIAGNOSTIC SET |
| ANALOG INPUTS |
| ALARM |
| PID |

After the final PASS1 menu option, you will be prompted to enter the password to access PASS2 options.
Use △ or ▽ as above.
(SSi default password = 5)

Continue pressing MEN to cycle through menu options.

| MENUS UNDER PASS2 |
| :---: |
| DIGITAL INPUTS |
| OUTPUT |
| ANALOG OUTPUT |
| EN.FUN |
| SERIAL |
| ETHERNET |
| U.CAL |
| PASC0 |
| PASQ |
| PASC1 |
| PASC2 |
| FI.CFG |

To exit menu, hold A/M until home screen appears, or press MEN to cycle through menu options to return to the home screen.