AVS-500TS Ventilation System

Congratulations on your purchase of an AVS-500TS Touch Screen series ventilation control. Your Touch Screen control is one of the most user friendly in the industry and incorporates some of the newest ventilation technologies.

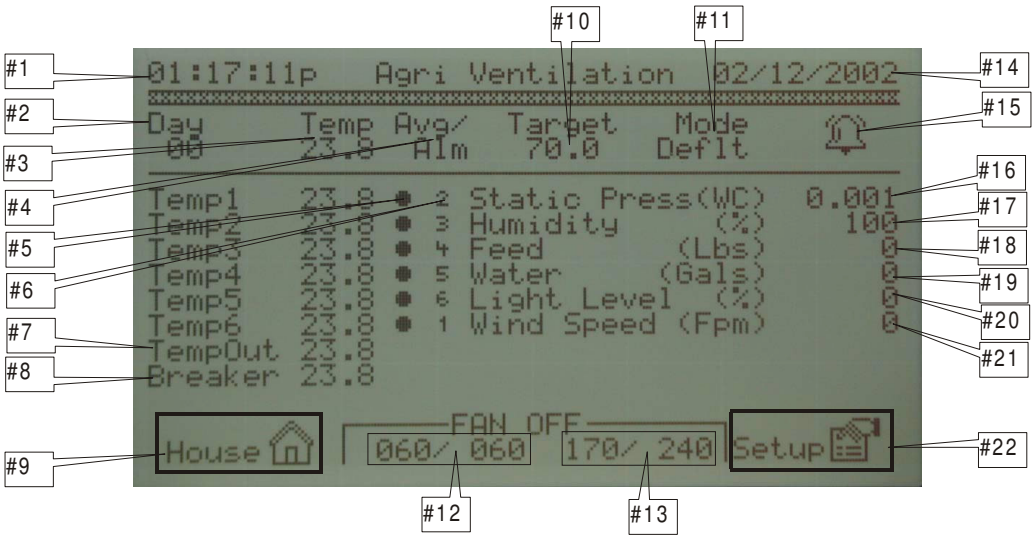
Because this control is capable of a wide variety of configurations many items in this manual will not match exactly what you see on your own controller. There may be sections in this manual that discuss items that are not activated on your control.

Main Screen

Below is a picture of the Main Screen. This is the default screen which comes up when the control is first started. The control will also return to this screen from most other functions after a period of inactivity.

While going over the functions of this screen you will be directed many times to the Setup Screen 1 & 2. On these screens the *Touch Points*[1] are denoted by numbers. These numbers are in the manual to reference the Touch Points only and do not show up on the screen. Example – Press #22 Setup to go to Setup Screen 1. From there press #12 More Options to go to Setup Screen 1.

From the Main Screen we will show you where to change the different settings. We will discuss how to change them later in the manual as most of these settings have their own section.



#1 Time This is the current time. Note the AM or PM as this is important in all of your time settings. The time can be set or changed by going to Setup Screen 2 and pressing #23 *Time*.

#2 Day This refers to the Growth Day and is also a quick reference to what day a flock is in. This is changed by going to Setup Screen 1 and pressing #1 *Target Sp Main*.

#3 Temp This is the Average Temperature of the sensors you have selected for average. You can view what is selected by looking in the column below fig. 1 #4. The dots like fig. 1 #5 show a sensor is included in the average. If there is no dot in this column the control does not consider it for the Average Temperature. This can be changed by going to Setup Screen 1 and pressing #1 *Targtet SP Main* or #21 *Probe Config*.

[1] An area of the screen that can be pressed as a button.

#4 Avg/Alm is a column heading standing for Average and Alarm. See #5 and #6.
#5 Average The information in this column shows what sensors are included in the Average Temperature and which sensors are being used for backup. A dot indicates that a sensor is included in the average. If there is no dot it is not included. This can be changed by going to Setup Screen 2 and pressing #24 Probe Config.

#6 Alarm The number in this column shows the backup sensor being used for the current sensor. In figure 1 Temp1 is being backup up by Temp2, Temp2 is being backup up by Temp3, and Temp3 is being backed up by Temp4… This can be changed by going to Setup Screen 2 and pressing #24 Probe Config.

#7 TempOut This displays the outside temperature if a sensor is hooked up. It is used for reference only.

#8 Breaker This shows the surface temperature of the main breaker and is used for alarming it.

#9 House This Touch Point will take you to a house diagram showing the current status of the items hooked to the computer.

#10 Target This is the Target Temperature (Main Set Point) that is controlling all the ventilation in the house.

#11 Mode This will show you what ventilation mode is currently being used to ventilate.

#12 FAN ON This is a rolling counter to show the position of the minimum vent fan timer On Cycle. When the heading shows FAN ON the first number will start counting at 000 and continue for the full amount of the run time. The second number shows the amount of run time called for. The timer status FAN OFF or FAN ON is a Touch Point. Pressing it will take you to the Min Vent Timer & Ramping Screen where you can adjust or view the settings.

#13 FAN OFF This is a rolling counter to show the position of the minimum vent fan timer Off Cycle. When the heading shows FAN OFF the first number will start counting at 000 and continue for the full amount of the off time. The second number shows the amount of off time called for. The timer status FAN OFF or FAN ON is a Touch Point. Pressing it will take you to the Min Vent Timer & Ramping Screen where you can adjust or view the settings.

#14 DATE This is the current date. The Date can be set or changed by going to Setup Screen 2 and pressing #23 *Time*.

#15 Alarm This is an animated Touch Point shows the status of the alarm. If the button blinks back and forth between 🔔 and 🔔 there is a current alarm condition in the house. If you press the Touch Point you will go to the Alarm List. Here you can silence the alarm,

or view the alarm conditions. If the bell shows up 🔔 it mean you have silenced the alarm but there is still an alarm condition. If the bell shows up 🔔 there are no alarm conditions.

#16 Static Press(WC) Shows the actual static pressure in the house.

#17 Humidity %. Shows the current humidity in the house.

#18 Feed (Lbs) Pounds of feed fed since midnight.

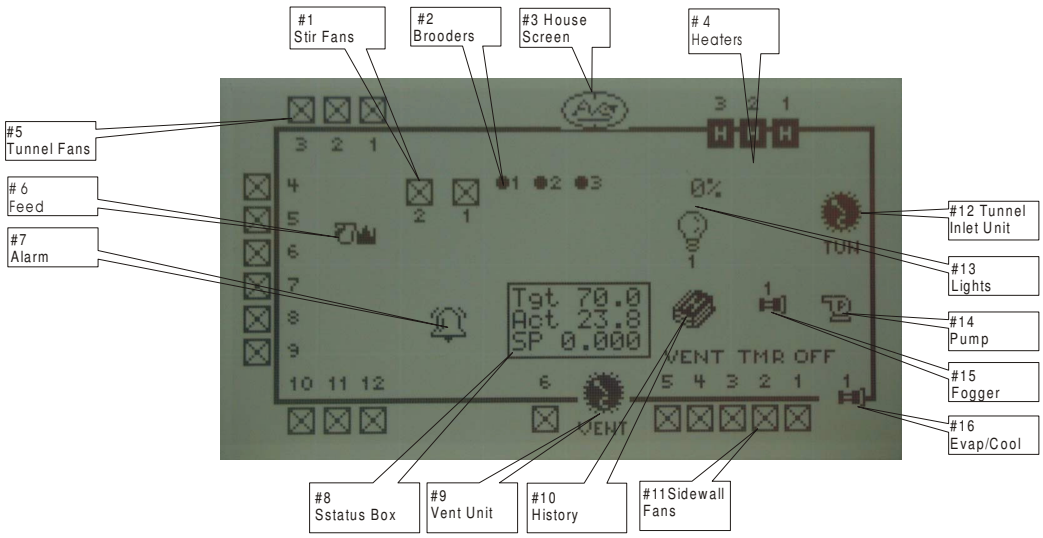
#19 Water (Gals) Gallons of water used since midnight.

#20 Light Level (%) If the lights are on this will show the current intensity. If they are supposed to be off it will show 0.

#21 Wind Speed (Fpm) Shows the F/pm air is moving in the house.

#22 Setup Pressing this Touch Point takes you to Setup Screen 1.

House Screen



Note: Your screen will not show up exactly like this. This screen shows most options available for demonstration purposes and does not display a realistic setup. Your screen should show only the items installed in your house.

You can return to this screen from many of the other screens throughout this control by pressing the HOUSE Touch Point.

#1 Stir Fans Fan show up when off and when it is running.

#2 Brooders Brooders show up when off and when on.

#3 House Button Pressing this Touchpoint will take you to the *Main Screen*.

#4 Heaters Heaters show up when off and when on.

#5 Tunnel Fans show up when off and when on.

#6 Feed shows up when off and when running.

#7 Alarm shows up when there are no problems and during an alarm condition.

#8 Status Box In the box *Tgt* is the *Target Temperature*, *Act* is the *Actual Temperature* and *SP* is the current *Static Pressure.*

#9 Vent Unit shows up when closing, when opening and when pressure is satisfied according to the *Static Pressure* settings.

#10 History Pressing this *Touchpoint* takes you to the history area where you can view and work with the history maintained in the control.

#11 Sidewall Fans show up  when off and  when on.

#12 Tunnel Inlet Unit shows up  when closing,  when opening and  when the control is not calling for it to run.

#13 Lights shows up  when off and  when on. The number above the bulb shows what percentage the light intensity is at present.

#14 Pump shows up  when off and  when on.

#15 Fogger shows up  when off and  when running.

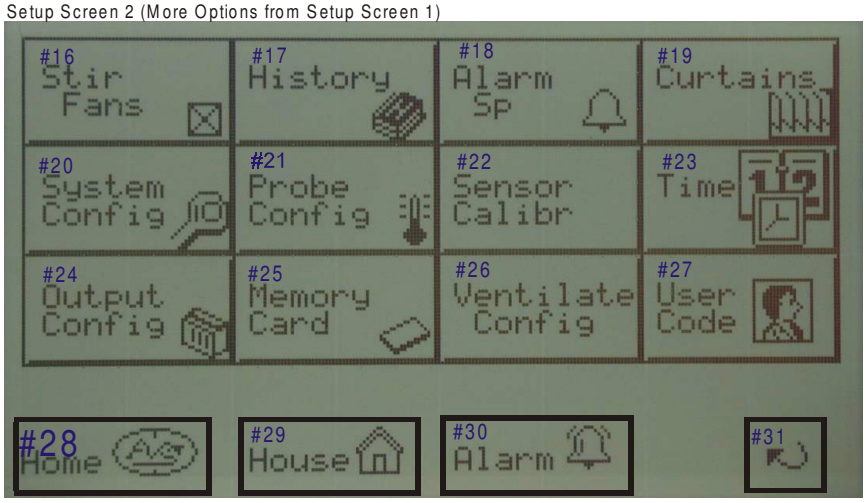
#16 Evap/Cool shows up  when off and  when running.

Setup Screens

The purpose of this page is for reverence. It contains pictures of Setup Screens 1 & 2 with numbers on each Touch Point. These numbers will be referred to throughout this manual to guide you to other sections of the control.

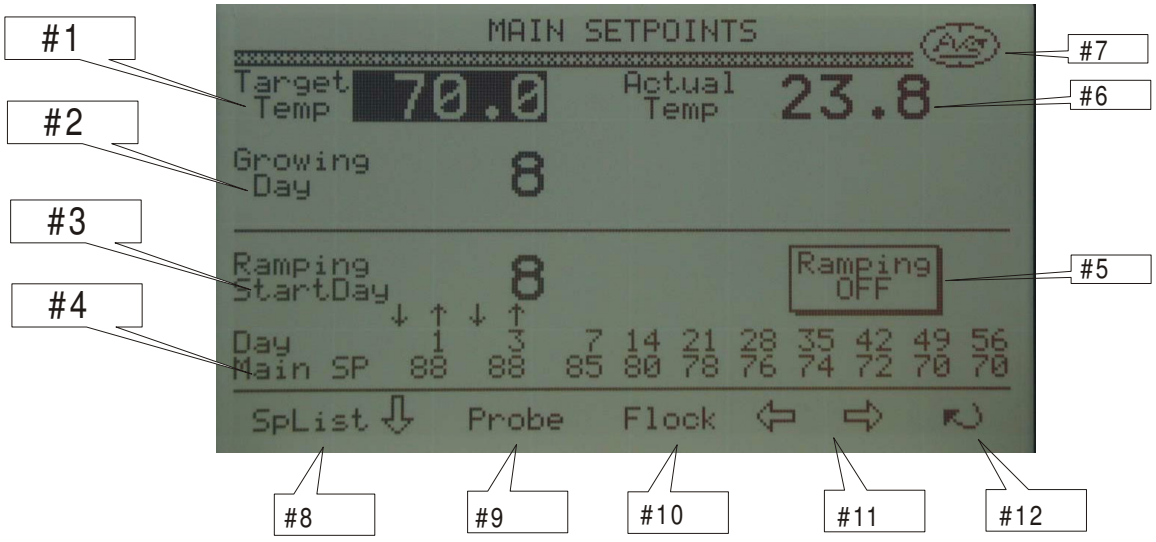
Setup Screen 1

Setup Screen 2 (More Options from Setup Screen 1)



Main Setpoints

This screen is accessed by pressing #1 Target Sp Main on Setup Screen or by pressing the Status Box on the house screen.



To navigate this screen you will need to use the touch points illustrated above as well as the keypad below. If a button is lit that button is available on this screen. For example; when viewing this screen the ⊕, ⊖ and Help keys are lit meaning they can be used on this screen

.

Using the four arrow keys ▲▼◀▶, navigate to the item you would like to change. The item will be highlighted with a dark background illustrated by #1 Target Temperature above.

#1 Target Temp This is the temperature which everything in the control works from. To change this use the ⊕ or ⊖ buttons below to increase or decrease the temperature.

#2 Growing Day This is the current day the flock is in. You can adjust this setting with the ⊕ or ⊖ keys. It will automatically advance one day at midnight.

#3 Ramping Day In order to have the computer ramp the setpoint, this day must be set to 0 the day the birds arrive. This value will then automatically advance one day at midnight. The day can be manually adjusted using the ⊕ and ⊖ keys.

#4 Day Main This is where you set your ramping schedule. Use the arrow keys and the ⊕ and ⊖ keys to set up your program. The computer will then adjust the target temperature according to this schedule if #5 is changed to Ramping On. See the chart and information below for an explanation of how ramping works.

Day	1	3	7	14	21	28	30	42	49	54
Temp	90	88	85	80	78	76	74	74	74	74

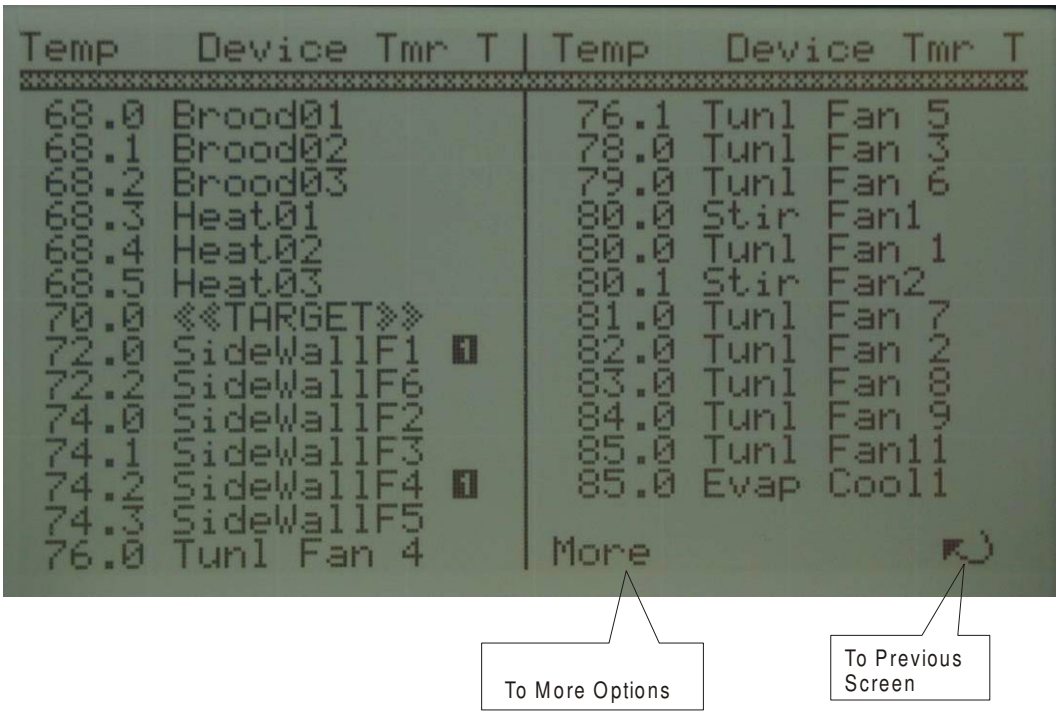
control will then automatically drop the temperature so that when day three is reached the Set Point will be 88 degrees. This is a gradual change and is averaged out over the amount of days in the period.

#5 Ramping Off By pressing this Touch Point you can activate the ramping. The button will then change to Ramping On. While ramping is ON the target temperature cannot be manually changed. It will follow the as described in item #4. To deactivate ramping simply press Touch Point #5 when it displays Ramping On and it will Change to Ramping Off.

#6 Actual Temp This is the actual temperature as the sensors are reading it

#7 Return Pressing this Touch Point will return you to the previous screen

#8 SpList Pressing this touch point will bring up the list of all setting as they appear in relationship to the setpoint. This list is an overview of all the items and at what point they will come on. See the screen below.



Pressing the more options touch point on this screen will take you to the remainer of the list. To return to the Main Setpoint screen press the To Previous Screen Touchpoint.

#9 Probe will take you to the Probe Setup Screen discussed later in this manual.

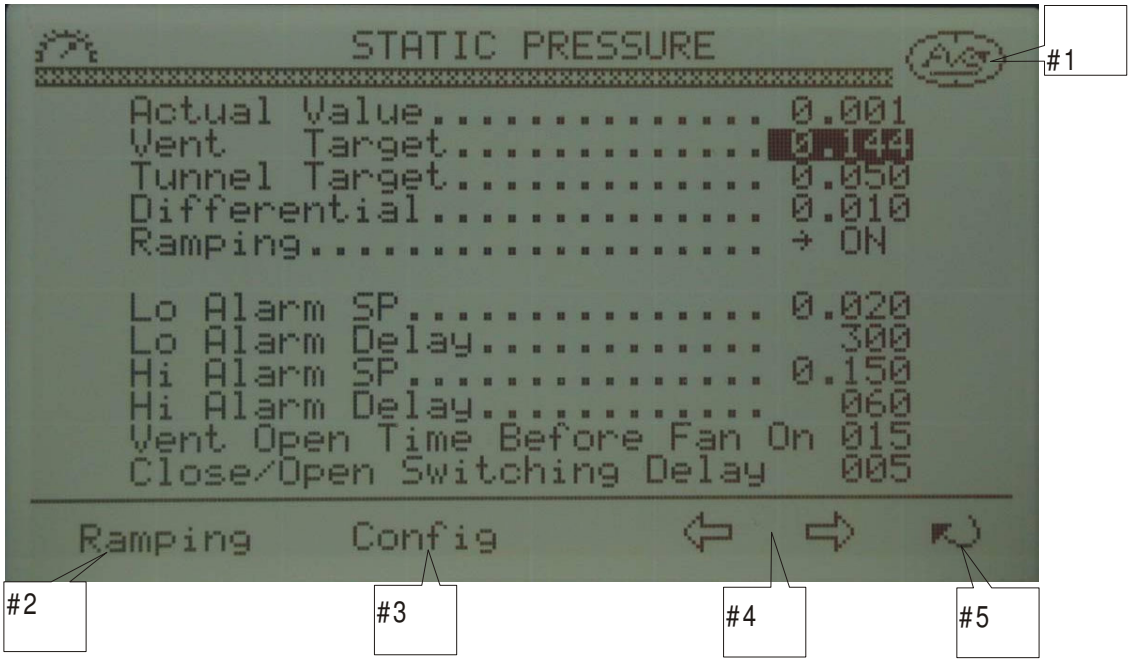
#10 Flock will take you to the New Flock Setup screen also discussed later in this manual

#11 To SP Lists These arrows will roll you through the following screens; Static Pressure, Heaters & Brooders, Sidewall Fans, Tunnel Fans, Curtains, Stir Fans,Evap Cool/Fog, Light Schedule, Feed Schedule, and back to the Main Setpoints. These individual screens can also be accessed from the Main Setup screen and will be discussed in their own section..

#12 Return Takes you back to the previous screen.

Static Pressure

This screen can be accessed by pressing #2 Static Pressure on Setup Screen 1 or by pressing either the Vent or Tunnel Unit symbols on the House Screen. Use the and keys to navigate through this screen. Use the and buttons to increase or decrease the settings.



Actual Value is the current static pressure as read by the static pressure sensor. This is a reading only and cannot be changed.

Vent Target This setting is your vent Target Static Pressure. It is used in conjunction with the differential to determine when the vents will open and close. Set this to the static pressure you would like to maintain during minimum ventilation. **Note:** if the ramping is ON you will not be able to change this number.

Tunnel Target This setting is your Tunnel Static Pressure. It is used in conjunction with the differential to determine when the tunnel unit will open and close. Set this to the static pressure you would like to maintain during tunnel ventilation.

Differential is used with the Vent Target and Tunnel Target. This is a dead band that will work on both sides of the target and is used to keep the units from bouncing. As long as the Actual Static Pressure is within the dead band the unit will not attempt to run. As soon as the pressure rises or falls outside the dead band the vent or tunnel unit will adjust accordingly See the examples below

Vent Target ----- 0.090	Tunnel Target --------- 0.060
Differential ----- 0.020	Differential ---------- 0.020
Dead Range----- 0.070-0.110	Dead Range ---------- 0.040-0.080
Opens ---------- 0.111 or above	Open ---------- 0.081 or above
Closes ---------- 0.069 or below	Closes ---------- 0.039 or below

Ramping This feature can only be used if an outside temperature sensor is hooked up. Use the (Yes/No) button to turn it on or off. See #4 Ramping below to see how to set this up.

Lo Alarm SP is the low static pressure alarm setting. If the static pressure remains below the value set here for longer than the Lo Alarm Delay it will set off the alarm. If this setting is reduced to 0.000 it will be deactivated.

Lo Alarm Delay is the amount of time in seconds that the pressure can be below Lo Alarm SP before it will activate the alarm. Note: You must set this to a value greater than the off time in your minimum ventilation timer to avoid false alarms.

High Alarm SP is the high static pressure alarm setting. If the static pressure remains above the value set here for longer than the Hi Alarm Delay it will set off the alarm.

Hi Alarm Delay is the amount of time in seconds that the pressure can be above Hi Alarm SP before it will activate the alarm. Make sure this setting is high enough to allow the vent or tunnel units to adjust when another fan comes on.

Vent Open Time Before Fan On is the time in seconds the vents will open before a Fan On Time cycle starts during minimum ventilation only. This allows the vents to be open and ready when the fans start. When the fans begin to come on by temperature this feature will stop.

Close/Open Switching Delay is the amount of time in seconds the vent or tunnel unit will remain if the off position after running before reversing and running the opposite direction.

#1 House Screen Pressing this Touch Point will take you to the House Screen where you can view the output status of the control.

#2 Ramping Pressing this Touch Point takes you to the Static Pressure Ramping screen. We will discuss setting this up below.

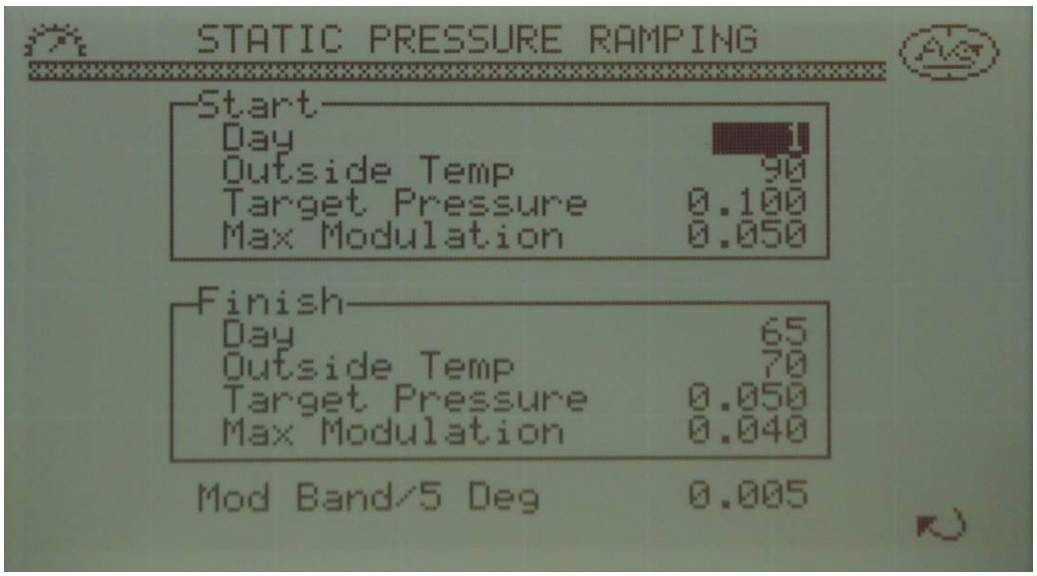
#3 Config Used only by the installer.

#4 These arrows will lead you to the previous or next screens. Previous goes to the Main Setpoints Screen and Next goes to the Heaters & Brooders Screen.

#4 Return Takes you to the previous screen.

Static Pressure Ramping

This screen is accesses by pressing the #4 Ramping Touch Point. Use the and keys to navigate through this screen. Use the and buttons to increase or decrease the settings.



Note the two sections above. The start section contains the settings the control will start ramping from when the growth day reaches the value set in Day on start. The Finish section contains the settings the control will have ramped to when the growth day reaches the value set in Day in the Finish Section.

Start

Day is the growth day you want to start ramping the static pressure.

Outside Tem This is the outside temperature that it must be above or below before it will ramp the static pressure up or down.

Target Pressure This is the target pressure that the control will set when the growth day reaches the value set in Day on the Start Section. You can view the current Target pressure on the Static Pressure screen.

Max Modulation is the maximum amount that can be added or subtracted to Target Pressure during ramping regardless of the outside temperature.

Finish

Day is the growth day where you have reached the maximum amount of ramping. When the growth day reaches this point it will not ramp any further but will continue to operate by these settings.

Outside Temp This is the outside temperature that it must be above or below to ramp the static pressure up or down.

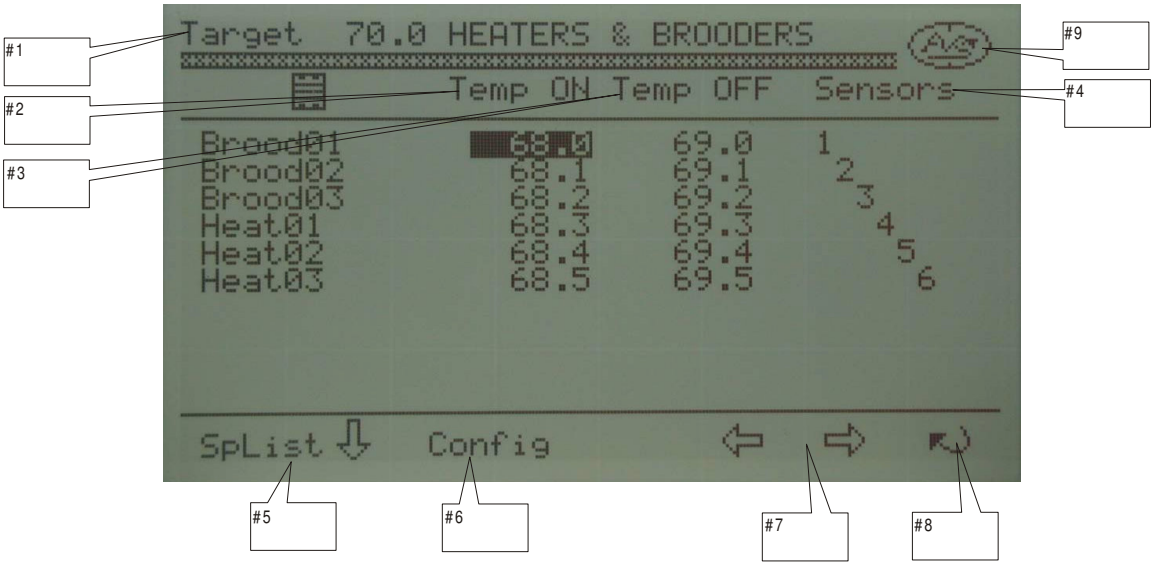
Target Pressure This is the target pressure that the control will set when the growth day reaches the value set in Day in this section. It will automatically ramp to this setting from the value set in the start section above from the Start Day to the Finish Day. You can view the current Target Pressure setting on the Static Pressure screen Vent Target line.

Max Modulation is the maximum amount that can be added or subtracted to Target Pressure during ramping regardless of the outside temperature.

Mod Band/5 Deg This is the amount the control will add or subtract to the Target Pressure for each 5 degrees above or below the outside temperature. This will continue to add until it reaches the limit set by the Max Modulation.

Heaters and Brooders

This screen can be accessed by pressing #3 Heat & Brood on Setup Screen 1 or by pressing a heater or brooder symbol on the house screen. Use the ,,, and keys to navigate through this screen. Use the and keys to increase or decrease the temperature values. Use the numeric Keypad to select sensors



This screen is where the on and off temperatures for the heaters and brooders are set up. This sample screen may differ from your control. The list should only reflect the items you have installed in your house.

#1 Target This is the target temperature the control is currently using. This is only a reading and cannot be changed here.

#2 Temp ON This is the actual temperature the item will turn on. Increasing or decreasing this will automatically increase or decrease the Temp OFF by the same amount. You can change the Temp OFF later if you want more or less spread.

#3 Temp OFF This is the actual temperature the item will turn off.

#4 Sensors These are the sensors selected for each line item. In the example above only one sensor is selected per item but you may select as many available sensors as you like. If more than one sensor is selected the average will be used to calculate the temperature. To turn a sensor off or on press the corresponding number on the keypad below the screen. If a sensor is on and you want to remove it pressing the number again will turn it off.

#5 SpList Pressing this Touch Point will bring up the list of all settings as they appear in relationship to the setpoint. This list is an overview of all the items and what temperature they are set to come on.

#6 Config used only by the installer.

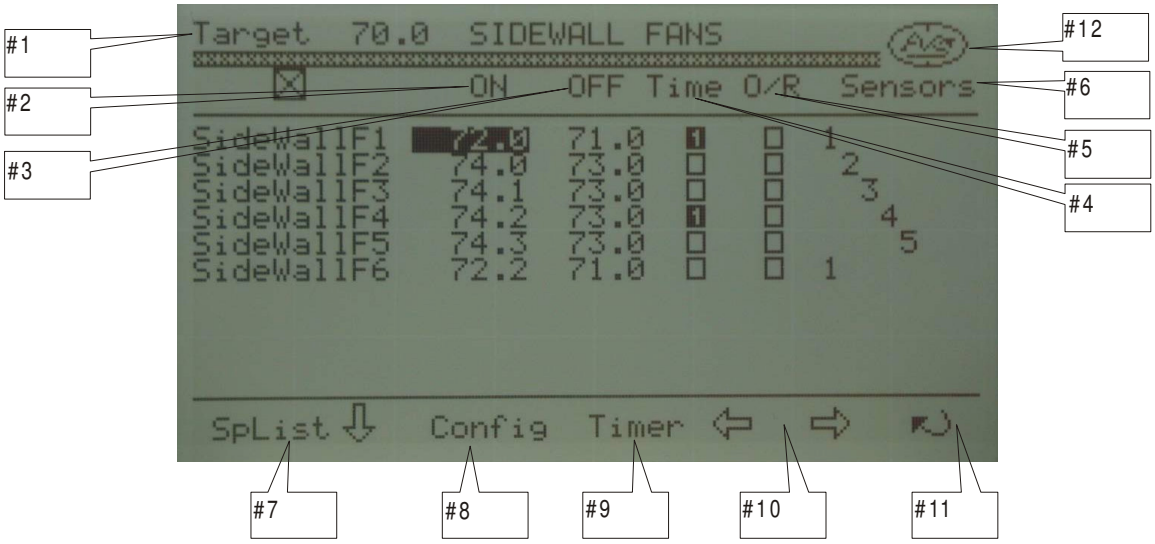
#7 These arrows will lead you to the previous or next Set Point screen. Previous goes to the Static Pressure Screen. Next goes to the Sidewall Fans screen.

#8 Return takes you to the previous screen.

#9 Main Screen This will take you to the main screen.

Sidewall Fans

This screen is accessed by pressing #4 Sidewall Fans on Setup Screen 1 or by pressing the image of a sidewall fan on the house screen. Use the ,,, and keys to move the cursor through this screen. Use the and keys to increase or decrease the temperature values. Use the numeric Keypad to select sensors. Use the (Yes/No), and (Trans.) keys as directed.



This screen is where the on and off temperatures for the sidewall fans are set. Fan will also be selected to run on timer here as well as whether they will be run under High Temperature Over Ride. Sensors to the individual sidewall fans are also set up on this screen.

#1 Target This is the target temperature the control is currently using. This is only for reference and cannot be changed here.

#2 ON This is the temperature you would like the sidewall fan to come on by temperature. Increasing or decreasing this will increase or decrease the OFF temperature by the same amount. You can change the OFF later if you desire more or less spread.

#3 OFF This is the actual temperature the fan will turn off.

Note: If ramping is activated these temperatures will automatically lower daily according to the ramping schedule.

#4 Time This column shows whether or not a fan is a timer fan. If the box is filled in it will have a number showing which timer it is running from. This is changed by putting the cursor on the line for the fan you want to change then pressing the

(Yes/No) key. It can be pressed multiple times to change between the following options: Timer 1, Timer 2, and back to Off.

#5 O/R This is the high temperature override column. If a fan is selected for high temperature override it will come on whenever the temperature rises above the value set in High Temp Override on the Fan Stop Override screen. A fan is set for Override if the box in this column is filled in. It can be turned off using the  (Trans) key. The cursor must be on the line of the fan you want to change.

#6 Sensors These are the sensors selected for each fan. In the example above only one sensor is selected per fan but you may select as many available sensors as you like. If more than one sensor is selected the average will be used to calculate the temperature. To turn a sensor off or on press the corresponding number on the keypad below the screen. If a sensor is on and you want to remove it pressing the number again will turn it off

#7 SpList Pressing this Touch Point will bring up the list of all settings as they appear in relationship to the Setpoint. This list is an overview of all the items and what temperature they are set to activate.

#8 Config used only by the installer.

#9 Timer Pressing this Touch Point will take you to the Min Vent Timer and & Ramping Screen. The setup for this will be discussed below.

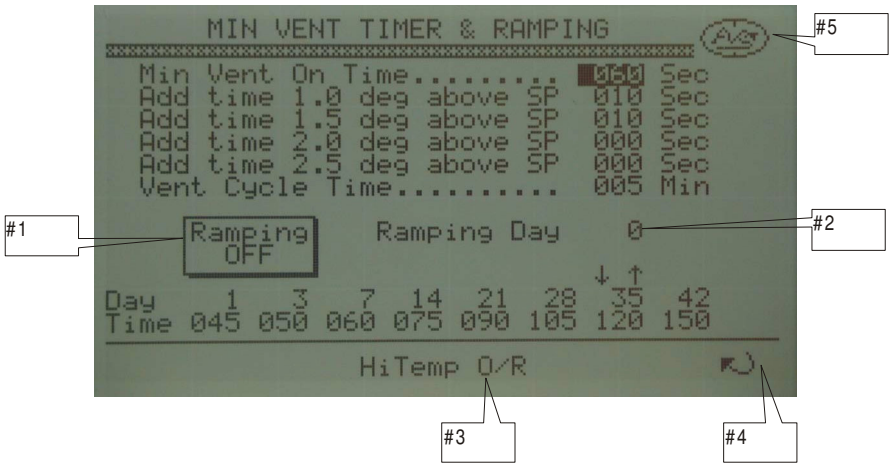
#10 These arrows will lead you to the previous or next Set Point screen. Previous goes to the Heaters & Brooders screen. Next goes to the Tunnel Fans screen.

#11 Return takes you to the previous screen.

#12 Main Screen takes you to the Main Screen.

Min Vent Timer Setup

The following screen is the Min Vent Timer & Ramping setup screen. This is where you set up the time and the ramping time. You select which fans to operate on timers on their respective screens. This screen is only used to set up the time itself. Use the ,, , and keys to move the cursor through this screen. Use the and keys to increase or decrease the temperature values.



Min Vent On Time The amount of time in seconds that the fans selected for Time will run.

Add time 1.0 deg above SP If the temperature rises 1.0 degree above the Set Point the control will add this amount of time to the fan run time.

Add time 1.5 deg above SP If the temperature rises 1.5 degree above the Set Point the control will add this amount of time to the fan run time.

Add time 2.0 deg above SP If the temperature rises 2.0 degree above the Set Point the control will add this amount of time to the fan run time.

Add time 2.5 deg above SP If the temperature rises 2.5 degree above the Set Point the control will add this amount of time to the fan run time.

Vent Cycle Time Time in minutes for the total cycle including both the on and off time. In the screen above if the temperature was at or below Set Point the control fans would run for 60 seconds and be off for 4 minutes for a total of 5 minutes.

Day/Time Day is the ramping day. Time is the Min Vent On Time that will be used if the ramping is activated. Time is the amount of time that will be used when the Ramping Day reaches the day set in this period. In the screen above day 1 the control would run 45 seconds, day 3 would run 50 seconds, and day 7 would run

60 seconds etc. The control will gradually raise the on time each day so it reaches the set amount by the set day.

#1 Ramping OFF/ON Pushing this button will allow turn the Timer Ramping on or off. Pressing this Touch Point alternates between off and on.

#2 Ramping Day displays the current ramping day. It must be changed from the Main Set Point screen.

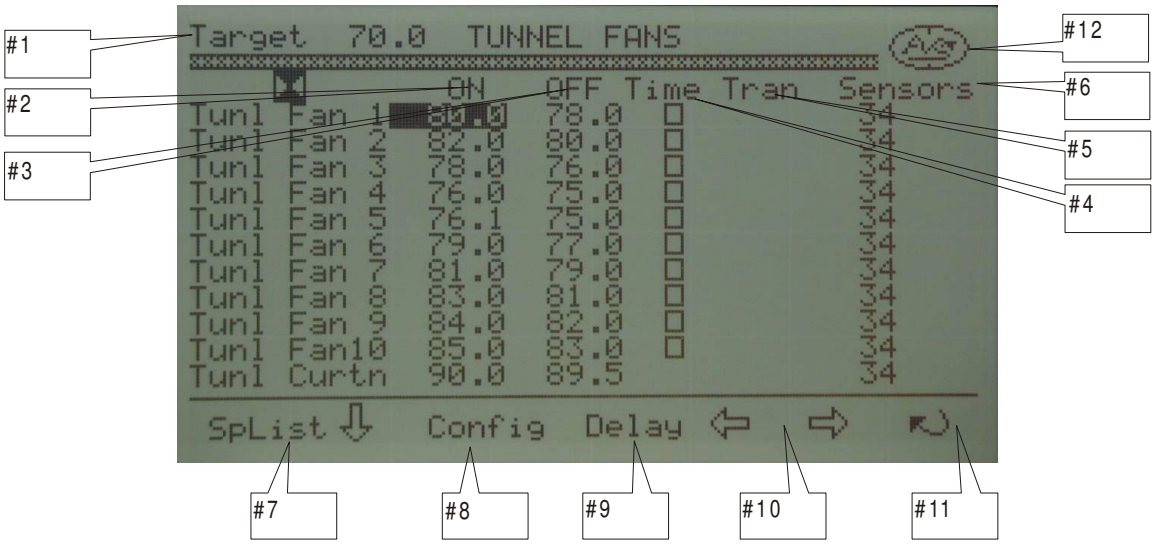
#3 High Temp O/R takes you to the Fan Stop Override screen. Here you can set a temperature that when the Average Temperature reaches this point it will turn the sidewall fans selected in the Sidewall Fans screen back on.

#4 Return to previous screen

#5 House to the House Screen.

Tunnel Fans

This screen is accessed by pressing #5 Tunnel Fans on Main Setup screen 1 or by pressing the image of a tunnel fan on the House Screen. Use the ,,, and keys to move the cursor through this screen. Use the and keys to increase or decrease the temperature values. Use the numeric Keypad to select sensors. Use the (Yes/No), and (Trans.) keys as directed.



This screen is where the on and off temperatures for the sidewall fans are set. Fans will also be selected to run on timer here as well as which fans start transition and tunnel ventilation. This screen is a sample only and will not necessarily be exactly like the one in your control.

Tunl Fan 1 – Tunl Fan 10 These are the individual tunnel fans. The different settins will be discussed below.

Tunl Curtn Is for the Tunnel Inlet. This setting is used if you want to start tunnel ventilation at a certain temperature instead of a certain fan. This is set by putting the cursor on this line and using (Trans.) button to change the value in the Tran column. The option is either TUN or blank. Note: You cannot set the curtain to TUN if a fan has the same selection. You must first go to the fan and blank it out then change it on the Tunl Curtn line.

If you are using a fan to put the system in tunnel the ON and OFF temperatures will follow the settings of that fan.

#1 Target This is the target temperature the control is currently using. This is only for reference and cannot be changed here.

#2 ON This is the temperature you would like to tunnel fan to come on. Increasing or decreasing this will increase the OFF temperature by the same amount. You can change the OFF later if you desire more or less spread.

#3 OFF This is the temperature the fan will turn off. This setting will automatically change in proportion to changes made to the ON temperature but it can be independently changed in this column to increase or decrease the temperature range in which the fan will run.

#4 TIME This column shows whether or not a fan is a timer fan. If the box is filled in it will have a number showing which timer it is running from. This is changed by putting the cursor on the line for the fan you want to change then pressing the (Yes/No) key.

You have two options for the timer. If a 1 is displayed in all fans used as timers they will run every timer cycle. If a 2 is displayed on some of the fans the fans with a 1 will run the first cycle. The next cycle the fans with a 2 will cycle.

These timer settings are tied to the timer settings for the Sidewall Fans in as much if you have a 2 set on 1 or more sidewall or tunnel fans it will cause the min vent timer to oscillate between the fans instead of running all fans selected for timer each time.

#5 Tran This column determines several different functions that take place when that fan turns on. Values of this column are changed by pressing the (Trans.) key when the cursor is one the line of the fan you want to change. Besides being blank this field has three possible settings. They are HELP, STOP, and TUN. See the definitions below. You can only have one fan selected at a time for any of these functions so before you can select a different fan you will need to remove that value from that fan that currently has it.

HELP – When the Tran column displays HELP beside a fan this indicates that when this fan comes on the vents will lock in place in whatever position they happen to be and static pressure will be regulated by the tunnel inlet. The vents will resume normal operation when this fan turn off unless the system is in tunnel.

STOP – When the Tran column displays STOP beside a fan this indicates that when this fan comes on the sidewall fans will stop. Sidewall fans will resume operation when this fan turns off unless the system is in tunnel.

TUN – When the Tran column displays TUN beside a fan or the Tunl Curtn this indicates that when this fan comes on or the ON temperature for the tunnel curtain is reaches the system will go into tunnel and remain there until this fan turn off or the OFF temperature on the tunnel curtain is reached.

You can view the current mode of ventilation on the House The word Tun, Stop, or Help will be displayed beside the tunnel fans if that function is active.

#6 Sensors These are the sensors selected for each fan. In the example above sensors 3 & 4 are selected for each fan meaning an average of these sensors will be used. You can use any or all of the available sensors. To turn a sensor off or on press the corresponding number on the keypad below the screen. If a sensor is on and you want to remove it pressing the number again will turn it off.

#7 SpList Pressing this Touch Point will bring up the list of all settings as they appear in relationship to the Set Point. This list is an overview of all the items and what temperature they are set to activate.

#8 Config used only by the installer.

#9 Delay Pressing this Touch Point takes you to the Tunnel Mode Transition Delays screen where you choose the delay before and after tunnel where no fans run to allow the vents and tunnel curtain to adjust without drag. This time is adjusted in seconds.

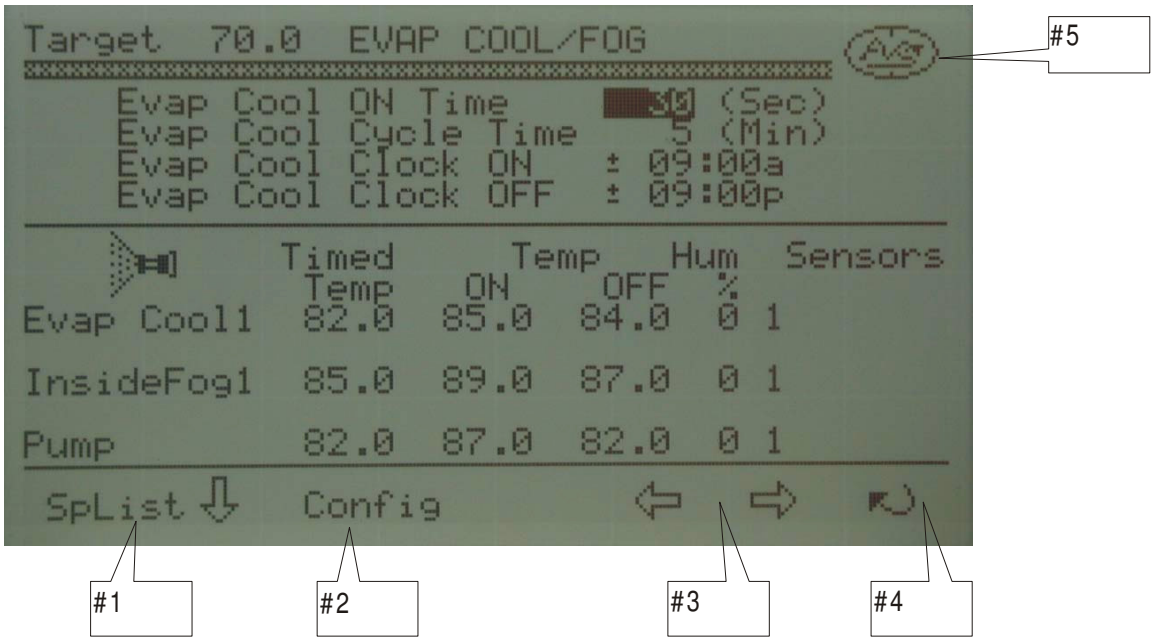
#10 These arrows will lead you to the previous or next Set Point screen. Previous goes to the Sidewall Fans screen. Next goes to the Stir Fans screen.

#11 Return takes you to the previous screen.

#12 Main Screen takes you to the main screen.

Evaporative Cooling

This screen is accessed by pressing #6 Evap/Cool on Main Setup Screen 1 or by pressing the image of a fogger nozzle on the house screen. Use the ▲,▼,►, and ◄ keys to move the cursor through this screen. Use the ⊕ and ⊖ keys to increase or decrease the temperature values. Use the numeric keypad to select sensors.



This screen is where the on and off temperatures for the various evap/cool elements are set. From this screen you can also set whether they run on timer and if so what the time cycle is.

Evap Cool ON Time amount of time in seconds that the pads, foggers, or pump will operate if they are running on a timer cycle.

Evap Cool Cycle Time total amount of time in the evap/cool timer cycle. This is in minutes and includes the on time.

Evap Cool Clock ON Time in the day when the evap/cool can start to operate. Take note of the AM/PM indicator.

Evap Cool Clock OFF Time in the evening when the evap/cool stops operating. Take note of the AM/PM indicator.

Note: the evap/cool items such as pads, foggers, and pump will **not** operate if the clock is outside the timer prescribed by Evap Cool Clock ON and Evap Cool Clock OFF.

Timed Temp When the temperature of the sensors selected reaches this setting the item such as the Evap Cool 1 or Inside Fog 1 will begin to operate on Timer. This setting cannot be set to a higher value that the Temp ON for the same item.

Temp ON When the temperature of the selected sensors rises to this level the item will stop the timer cycle and start running continuously. It will continue to run full time until the temperature drops below the value of Temp ON.

Temp OFF When the temperature falls below this value the item will stop running.

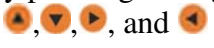
Sensors These are the sensors selected for each item. In the example above sensor 1 is selected for each line. You can use any or all of the available sensors. To turn a sensor off or on press the corresponding number on the keypad below the screen. If a sensor is on and you want to remove it pressing the number again will turn it off.

#1 SpList Pressing this Touch Point will bring up the list of all settings as they appear in relationship to the Set Point. This list is an overview of all the items and what temperature they are set to activate.

#2 Config Used only by the installer

#3 These arrows lead you to the previous or next Set Point Screen. Previous goes to the Tunnel Fans screen. Next goes to the Light Schedule screen.

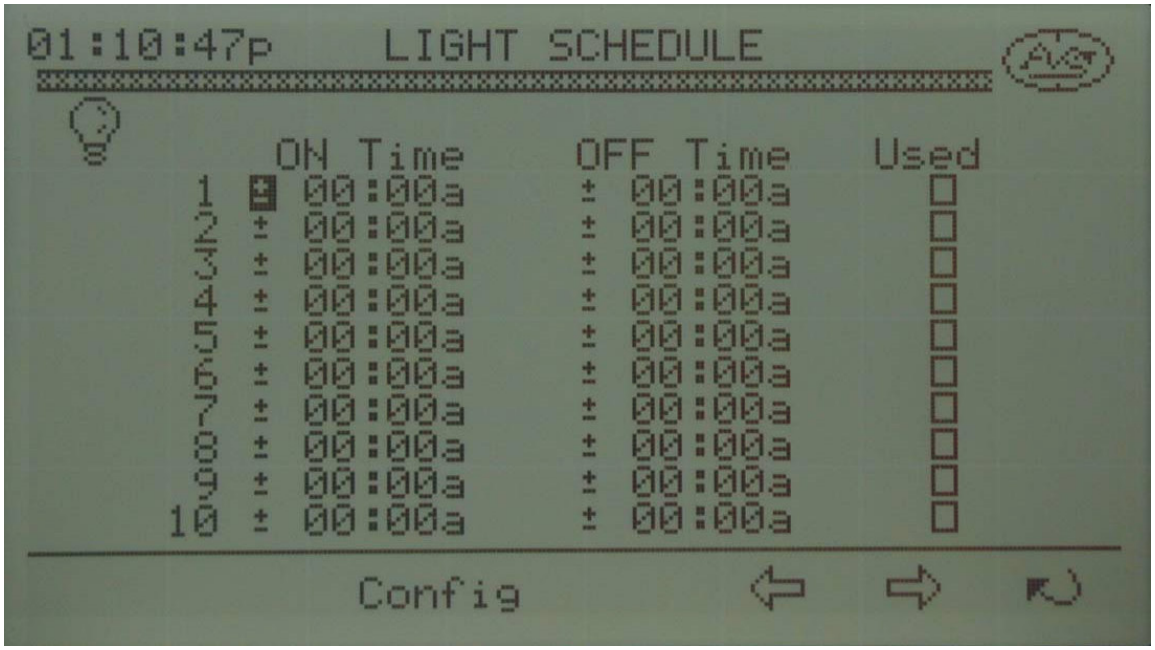
#4 Return takes you to the previous screen

#5 Main Screen takes you to the main screen.
This screen can be accessed by pressing #7 Lights on Setup Screen 1 or the light symbol on the house screen. Use the  , and keys to move the cursor through this screen. Use the  and  keys to increase or decrease the temperature values. Use the (Yes/No) key to toggle each period between used and not used.

Lights

Lighting Overview Your options with your light setup will depend on the optional equipment you have installed. You will not be able to use the Soft Start and Spiking features if you don't have dimmer installed.

Spiking refers to running the lights at a higher or even full intensity several times during the day to stimulate the birds. Your service person will be able to help you determine how to set up this feature.



On Time Is the time the lights will turn on. This is changed using the ⊕ and ⊖ keys.

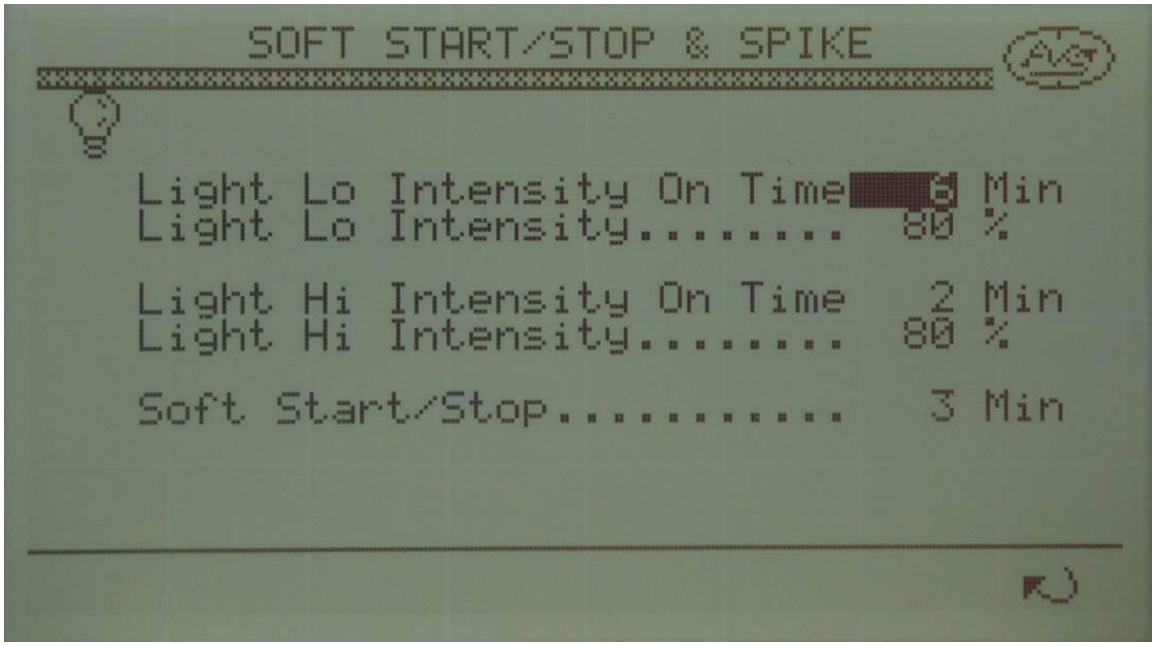
Off Time Is the time the lights will turn off. This is changed using the ⊕ and ⊖ keys.

Used determines whether a line is used. It can be turned on or off by putting the cursor on the line you want to use and pressing the (Yes/No) key. This feature is useful if you change your lighting schedule several times during a flock. You can set all your lighting periods and only use the ones you currently need without having to reset all the light times for each cycle.

Note: Be careful when setting up the lighting schedule. If you are using two lines that have times overlapping the control will operate the lights by whichever line has the greater amount of time.

Config This Touch Point is used only by the installer.

This screen is accessed from the #7 Lights on Setup Screen 1. On that screen touch Soft Start in the bottom left corner.



Light Lo Intensity On Time Amount of time lights will operate at Low Intensity during the light cycle.

Light Lo Intensity Light Intensity lights will be on during Light Low Intensity On Time during the light cycle.

Light Hi Intensity On Time Amount of time lights will operate at Hi Intensity during the light cycle.

Light Hi Intensity Light Intensity lights will be on during Light Hi Intensity On Time during the light cycle.

Soft Start/Stop Amount of time from when Light Cycle starts until the Light Intensity reaches the setting of Light Low Intensity.

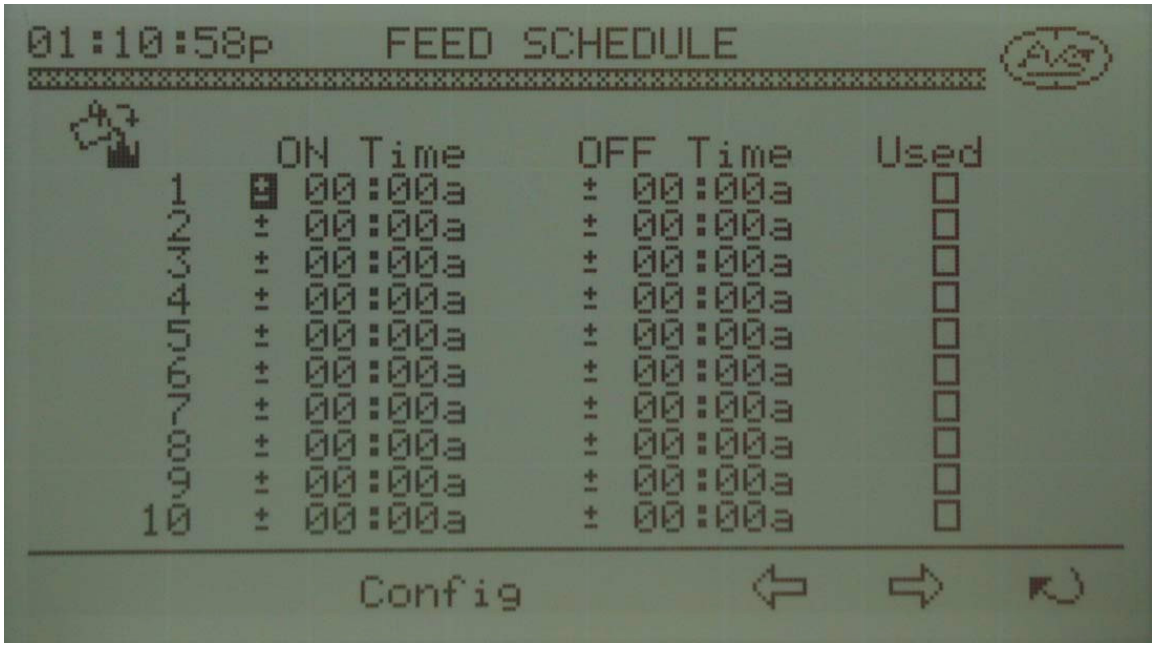
Light Cycle Overview. Following is an explanation of how the lights will operate if the *Soft Start/Stop* and *Spiking* features are activated. The light cycle starts when the Main Clock reaches the On Time for a lighting period. If there is time set in the Soft Start/Stop the control will gradually raise the light intensity from 0% to the setting in Light Lo Intensity over that amount of time.

The lights will then remain at that percentage for the amount of time set in Light Lo Intensity On Time. When the amount of time set in Light Low Intensity On Time passes the control raise the light intensity to the percentage set in Light Hi Intensity.

The lights will then remain at that level for the amount of time set in Light High Intensity On Time. When this time passes the control will cycle back to Light Lo Intensity. This cycle will continue until the Main Clock reaches the Off Time set for the lighting period.

Feed

This screen can be accessed by pressing the feed indicator on the house screen or by pressing #8 Feed on the Setup Screen 1. This will take you to the following screen where you can setup your feed schedule.



On Time Is the time the feed will turn on. This is changed using the ⊕ and ⊖ keys.

Off Time Is the time the feed will turn off. This is changed using the ⊕ and ⊖ keys.

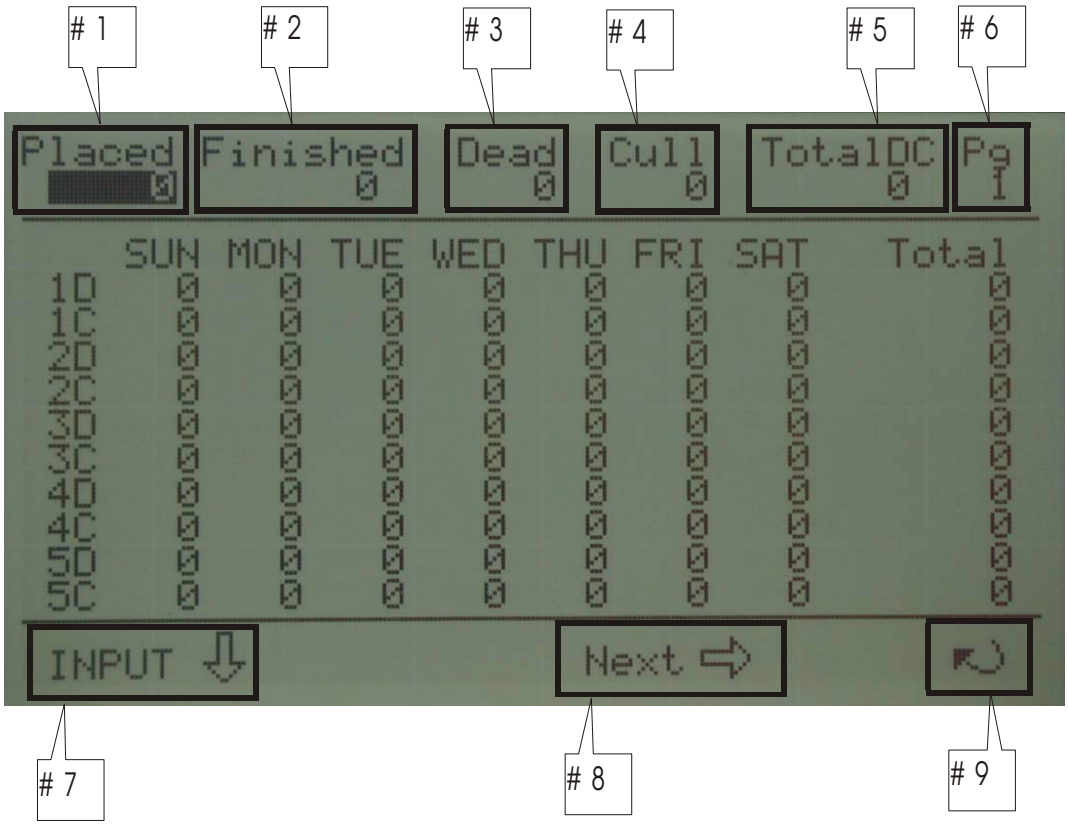
Used determines whether a line is used. It can be turned on or off by putting the cursor on the line you want to use and pressing the (Yes/No) key. This feature is useful if you change your lighting schedule several times during a flock. You can set all your lighting periods and only use the ones you currently need without having to reset all the light times for each cycle.

Note: Be careful when setting up the lighting schedule. If you are using two lines that have times overlapping the control will operate the feed by whichever line has the greater amount of time.

Config This Touch Point is used only by the installer.

Bird Count

The bird count screen can be reached by pressing #9 Bird Count on Main Setup Screen 1. Here you can record you dead and culled birds for the duration of your flock. When you go to the Bird Count area you get the following screen. Entering daily information will be discussed at the end of this section.



#1 Placed Use the , and to move the cursor to the Placed line. Using the numeric keypad enter the starting number of birds. As you enter daily data the Finished, Dead, Cull, and TotalDC compute automatically.

#2 Finished This is the total number of living birds in the house. This is figured by subtracting both the dead and culled birds for each day from the number placed.

#3 Dead This number shows the number of dead birds for the duration of the flock.

#4 Culled This number shows the number of culled birds for the duration of the flock.

#5 Total DC This is the total number of birds dead and culled for the duration of the flock.

#6 Page Shows which page you are on, on the viewing screen above. Using the #8 Next button you can move through other pages. Each screen shows 5 weeks. The page number in this are will show how many pages you are from the first Bird Count screen.

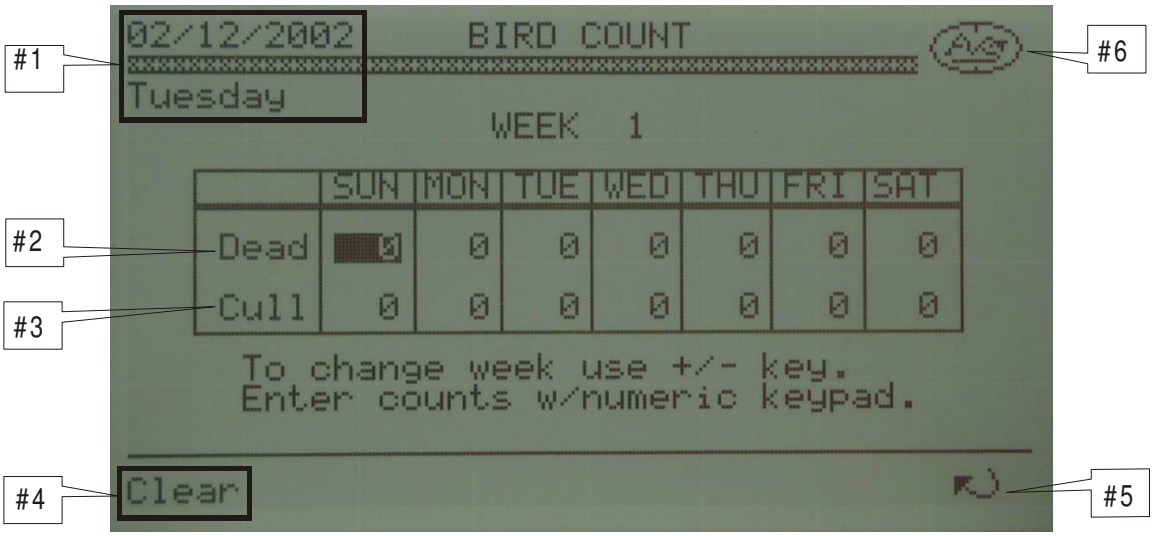
#7 Input Pressing this Touch Point will take you to the are where you enter the daily information. This will be discussed in depth at the end of this section.

#8 Next This Touch Point is related to #6 Page. Pressing Next will take you to the next page. When you are on a page other than #1 a Touch Point called Previous will appear to the left of Next. Use these buttons to navigate back and forth through the Bird Count Screens.

#9 Return Pressing this touch point will return you to the previous screen.

Bird Count Input Screen

Pressing #7 Input on the Bird Count screen will take you to this screen. Here you can enter the daily amounts of dead and culled birds for each day during the duration of the flock. Use the Use the ,,, and to move the cursor through this screen. Use the and keys to change the week. Use the numeric keypad to enter the information for each day.



#1 Date is the current date and day of the week.

#2 Dead Using the numeric keypad enter the number of birds found dead for the day.

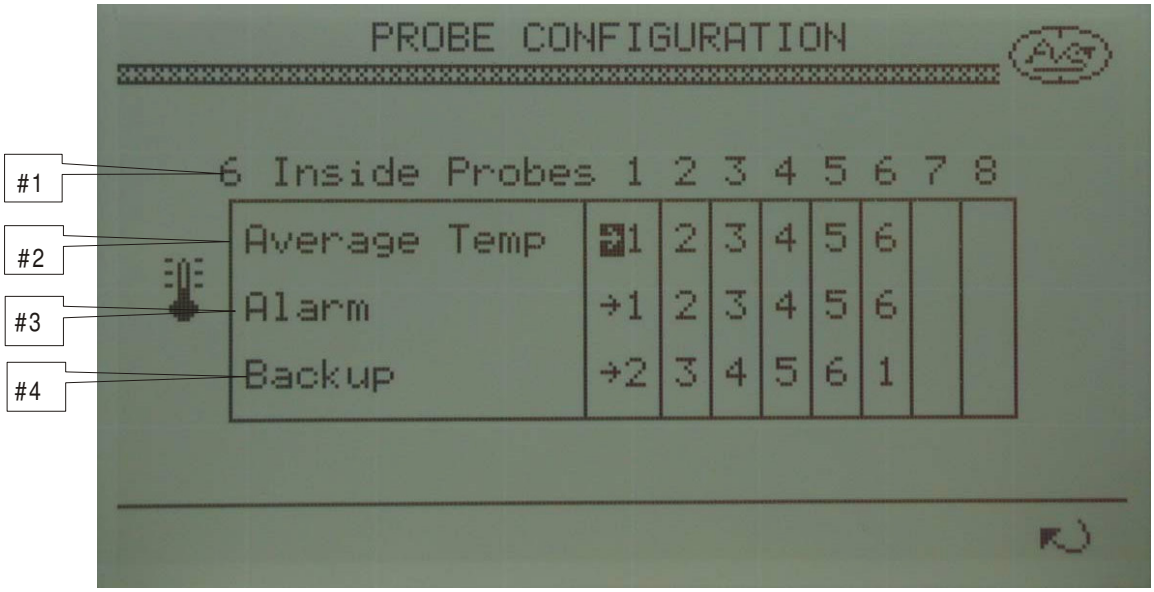
#3 Cull Using the numeric keypad enter the number of birds culled for the day.

#4 Clear **Caution** Pressing this Touch Point will clear the bird count information from the memory of the control. It will not clear the temperature history.

#5 Return will take you to the previous screen.

#6 Main Screen Pressing this Touch Point will take you to the Main Screen.This screen is accessed by pressing #21 Probe Config on Setup Screen 2 and by pressing Probe at the bottom of the Main Setpoints Screen.

Probe Configuration



#1 The number of probes listed here should match the number of inside temperature sensors installed in the house. If you have only five sensors you should se only numbers 1-5 on this line.

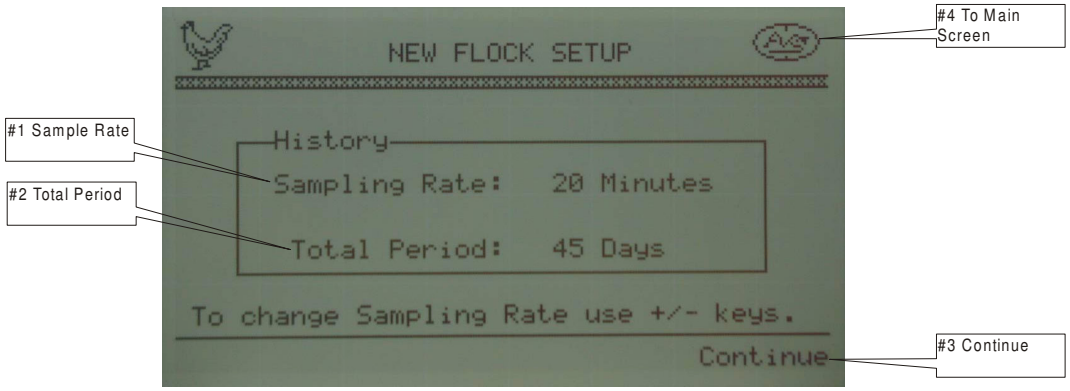
#2 Average Temp Using the keyboard you must select the probes you want to use for your average temperature. Use the and keys to select the item you would like to change. Then simply push the number on the keypad corresponding to the sensor you would like to use. If this sensor is activated that number will show up in the column below. Example: Highlight the little arrow to the right of Average Temp. Then by pressing 1, 2, 3, 4, 5, 6 you will activate all six sensors for your average. Pressing these numbers again will remove them.

#3 Alarm Use your or arrows to highlight the little Alarm arrow. Choose what sensors you would like to alarm. *Hint: You would not want to include sensors in your alarm that are in off chambers of the house as this will cause nuisance alarms.

#4 Backup These set up different than the Average Temp and Alarm settings. As you select a sensor to alarm a number will appear beneath that sensor on the backup line. This is the number of the sensor the control will default to if anything should happen to that sensor. If an alarmed sensor reaches 20° below your target Target Temp it will be considered defective. To set your backup sensor scroll down to the backup line with the key. Scroll Across to the line you want to change with the or keys and use the and to select the sensor you would like to use to backup the sensor above.

New Flock Setup

This screen is accessed by pressing *Flock* at the bottom of the *Main Setpoint* screen. You should only go through this process when you receive a new flock of birds. **Caution, This will erase all history logs already in the memory and reset the Growth Day to 0!**



#1 Sampling Rate sets how often the temperature will record data. This value is changed by pressing the ⊕ and ⊖. Changing the value will cause #2 Total Period to change automatically. Set the *Sample Rate* with regard to *Total Period* and how long you will have the flock.

#2 Total Period This shows how many days the control can log history before the memory get full. This is automatically set when the *Sample Rate* is set. A sample rate of 1 minute would only have enough memory for 2 days, a rate of 15 minutes would run 33 days and a rate of 30 minutes would run 67 days.

#3 Continue When you have the sample rate set to the desired time press the *Continue Touch Point*. This will take you to a warning screen making sure you know all existing historical data will be erased. You must verify this by pressing the *Yes Touch Point*. **This will change the *Growth Day* back to 0.**

#4 To Main Screen Pressing this *Touch Point* will take you back to the *Main Screen*.