Instruction Manual

SYL-2615 Quick Guide

Version 1.0 (May, 2018)

- This controller is intended to control equipment under normal operating conditions. If failure or malfunction of the controller may lead to abnormal operating conditions that may result in personal injury or damage to the equipment or other property, devices (limit or safety controls) or systems (alarm or supervisory) intended to warn of or protect against failure or malfunction of the controller must be incorporated into and maintained as part of the control system.
- This controller carries a one (1) year warranty. This warranty is limited to the controller only.

1. Front Panel and Connections



Figure 1. Controller SYL-2615.

1 LCD display.

(2) Set key. Press momentarily to enter the cooking step settings. Press and hold about 2 seconds to enter the parameter settings.

(3) Timer/Back key. Press it in main display will show the cook time. Press it in the parameter setting mode will return back to the upper level menu. When open lid detection stops the blower, press it will resume the blower normal function.

(4) Down key. Decrease value, scroll down the menu, mute the buzzer.

(5) Up key. Increase value, scroll up the menu, or mute the buzzer.

6 Wi-Fi status indicator. Solid ON: the controller is connected to the internet.

Quick flashing: Wi-Fi module ready for configuration. Slow blinking: Wi-Fi

module is initializing its connection to the router. Off: no Wi-Fi connection.

O OUT indicator. In PID-PWM mode, it is synchronized with the output; in PID-FS and Manual mode, the flashing rate is only a representation of the output level.

(8) Probe 1 input for Pit temperature.

(9) Probe 2 input for Food temperature.

- 10 Power output for fan control.
- (1) Power input for controller (12 VDC).

4. LCD Display Modes





4.1 Normal Display Mode



Figure 3. Information displayed on the LCD in the normal operating mode.

- 1 Pit temperature
- 2 Food temperature
- ③ Set value for pit temperature
- ④ Output power (percentage)

4.2 Time-Checking Mode



Figure 4. Using Timer/Back key to check cooking time in single-step mode (left) and in multi-step mode (right).

4.3 Cooking Profile Programming Mode

The controller's cooking profile can be either set to single-step mode (default) or set to multi-step mode. In the single-step mode, the controller will try to maintain the pit temperature at the set value of Step 1 as long as the controller is on. In the multi-step mode, up to 3 steps can be programmed. Each step has its own set temperature for pit probe, and its step-ending criterion. A cooking step can either end by timer or by food temperature. For details, please check section 6.1.

4.4 Parameter Setting Mode



Figure 5. Access the menu of parameters using SET key.

5. Step-by-step Program Example

5.1 Smoking Ribs Example

Requirement: Smoke at 225F for 5.5 Hours.

Cooking Profile Example 1

Step	Pit	X-End (Ending)	X-Time (Timer)	X-Fd (Food Temp)
1	225	Time	5:30	N/A
2	225	Time	0:00	N/A
3	225	Time	0:00	N/A

Set 225F as PIT temperature for step 1. Change ending criterion of step 1 to time. Change the time for step 1 for 5 hours and 30 minutes. Change the ending criterions of step 2 and 3 to time. Change the time for step 2 and 3 to 0.



Figure 6. Flow chat for program example 1.

A flow chart of how to enter the cooking profile described in the Example 1 is shown in Figure 6. To start program the cooking profile, press SET key shortly

to enter the Cooking Profile Programming mode. The top line in the display shows the step number "Step: 1" and the current target of pit temperature "Pit: 225". To enter or edit the profile:

Use ▲ or ▼ key to move the cursor ">" to the parameter you want to edit.
Press SET key, the value to be edited should start blinking.

3) Use \blacktriangle or \blacktriangledown arrow key to edit the value.

4) Then press SET key again to save the change. That parameter value will stop blinking.

5) Use \blacktriangle or \blacktriangledown key to go another parameter, repeat the previous operations till you have finished entering the cooking profile.

The temperature setting will not be saved if SET is not pressed. After programming the necessary steps for cooking, you can finish programming by pressing the Time/Back key to exit the menu. Or, you can use \blacktriangle or \checkmark key to go to "**Back**", and press SET key to exit. The display can also return to the normal display mode if no key is pressed in about 15 seconds.

5.2 Smoking Brisket Example

Requirement: Smoke at 225F for 3 hours, then end the program when meat temperature is over 195F.

Cooking Profile Example 2

Step	Pit	X-End (Ending)	X-Time (Timer)	X-Fd (Food Temp)
1	225	Time	3:00	N/A
2	225	Fd Temp	N/A	195
3	225	Time	0:00	N/A

Set 225F as PIT temperature for step 1. Change ending criterion of step 1 to time. Change the time of step 1 to 3 hours. Set 225F as PIT temperature for step 2. Change ending criterion of step 2 to Fd Temp (food temperature). Change the food temperature for step 2 to 195. Set step 3 end by time and set time of step 3 to 0.

A flow chart of how to enter the cooking profile described in the Example 2 is shown in Figure 7. To start program the cooking profile, press SET key shortly to enter the Cooking Profile Programming mode. The top line in the display shows the step number "Step: 1" and the current target of pit temperature "Pit: 225". To enter or edit the profile:

Use ▲ or ▼ key to move the cursor ">" to the parameter you want to edit.
Press SET key, the value to be edited should start blinking.

3) Use \blacktriangle or \blacktriangledown arrow key to edit the value.

4) Then press SET key again to save the change. That parameter value will stop blinking.

5) Use \blacktriangle or \checkmark key to go another parameter, repeat the previous operations till you have finished entering the cooking profile.

The temperature setting will not be saved if SET is not pressed. After programming the necessary steps for cooking, you can finish programming by pressing the Time/Back key to exit the menu. Or, you can use \blacktriangle or \checkmark key to go to "**Back**", and press SET key to exit. The display can also return to the normal display mode if no key is pressed in about 15 seconds.

AUBER INSTRUMENTS

Pit: 73 Set:225 Food:71 Out:99 SET >Step:1 Pit:225 1-End: Fd Temp >Step:1 Pit;225 Step:1 Pit;2 SET **()** •1-End: FdTemp 1-FdTemp: 170 1-End: Frd Temp >1-End ;Time; SET **()** SET 1-Time: 6:00 Step:2 Pit:225 >2-Time: <u>}6:00</u> >2-Time: ;3:00 SET (▲) Step: 2 2-Fnd: Pit: 225 Time >Step: 2 Pit;2 Step: 2 Pit;2 SET **()** 2-End: 2-Time: Time 6:00 -Endà Fả Temp (SET) **()** 2-FdTemp: 170 Step 3: Pit: 160 2-FdTemp::170 { 2-Fd Temp; 195 (SET) **()** (SET) Step 3: Pit: 160 3-End: Time Step 3: Pit:160 Step 3: Pit 🦻 $\overline{\bullet}$ SET **()** (SET) ۲ 3-End: 3-Time Time 0:00 3-End 3-End Time SET **()** (se) → ><u>3-Time:</u> 3-Time: Back 0:00 (:0:0¢ 3-Time: <u>;0;00</u> SET **()** SET Back Step:1 Pit: 275



6. Mount the Controller

The operating environment temperature for the meter is from 0 - 100°F (or, -20°C ~ 50°C). The meter should be placed away from high heat to protect the plastic housing and electronics. The case is splash-proof. It is not water-proof. It cannot be immersed in the water. It should be fine to operate under light rain for a short time if the controller is mounted in an upright position. The user can cover the controller by a transparent waterproof case.

Two mounting screws holds with metric M4 thread are available on the back of the case (Figure 8). The M4 screws should not be screwed into the hold more than 3/8" or 9 mm, otherwise they will push against the plastic case, create cracks, or damage the case. Mount the controller to a place that is away from the heat from the smoker. Avoid exposing the controller under directly sunshine during hot summer.

Mounting Scrow Holes

Figure 8. Two M4 screw holes on the back of the controller.

7. FAQ

7.1 Probe reading showing "-H-".

This is the input error message. It appears when the sensor is not connected or when the sensor has become defective.

7.2 What if one step is set to end by food temperature while the food probe is not plugged in?

If "X-End" of a certain step is set to "Fd Temp" while the food probe is not plugged in, this step will never end.

(End)

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