# Common Errors of Auber Controller

Auber Instruments (May, 2023)

Please use Ctrl+F to search your controller model number.

#### For SYL-1512A/1612B/2362/2362B:

#### Error code:

**EEEE**: This is an input error message. The possible reasons are, the sensor is not connected properly; the input setting is a wrong type; or the sensor is defective. If it happens when using a thermocouple sensor, you can short thermocouple terminals (*Please disconnect all the output wires to the controller before the test.*). If the display shows the ambient temperature, the thermocouple is defective. If it still displays EEEE, check the input setting, Inty, to make sure it is set to the right thermocouple type. If Inty setting is correct, the controller is defective. For RTD sensor, check the input setting first; because most controllers are shipped with input set for K type thermocouple. Then check the wiring or sensor resistance.

#### For SYL-2342/2352/2372/2342P/2352P/2372P/4342/4352/4342P/4352P:

#### Error code:

**OrAL**: This is an input error message. The possible reasons are: the sensor is not connected or not connected properly; the sensor input setting is wrong; or the sensor is defective. In this case, the instrument terminates its control function automatically, and the output value is fixed according to the parameter OUTL. If this happens when using thermocouple sensor, you can short thermocouple terminals with a copper wire (*Please disconnect all the output wires to the controller before the test.*). If the display shows ambient temperature, the thermocouple is defective. If it still displays "oral", check the input setting, Sn, to make sure it is set to the right thermocouple type. If the Sn setting is correct, the controller is defective. For RTD sensors, check the input setting first because most controllers are shipped with the input set for thermocouples. Then check the wiring.

**04CJ**: At the moment of powering up, the controller will show "04CJ" in the PV window and "808" in the SV window. Next, it will show "8.8.8.8." in both windows briefly. Then the controller will show probe temperature in PV window and set temperature in SV window. If the controller frequently flashes "04CJ" and doesn't show a stable temperature reading, it is being reset due to unstable power line or inductive loads in the circuit. If user connects a contactor to SYL-2342's terminal 7 and 8, please consider adding a RC snubber across these two terminals.

#### For SYL-2441/2451/2442C/2452C/5342P/5352P/5342PA/5352PA:

**HH** / **LL**: This is an input error message. When the input signal is over its high limit, HH error will be displayed. When the input signal below its low limit, LL error will be displayed. The possible reasons are: the sensor is not connected or not connected correctly; the sensor input

setting is wrong; or the sensor is defective. In this case, the instrument terminates its control function automatically. If this happens when using thermocouple sensor, you can short terminal 4 and 5 with a copper wire or paper clip (*Please disconnect all the output wires to the controller before the test.*). If the display shows ambient temperature, the thermocouple is defective. If it still displays "HH", check the input setting, Sn, to make sure it is set to the right thermocouple type. If the Sn setting is correct, the controller is defective. For RTD sensors, check the input setting first because most controllers are shipped with the input set for thermocouples. Then check the wiring. The two red wires should be connected to terminals 4 and 5. The white wire should be connected to terminal 3.

#### For EZboil DSPR120/220/300/400/310/320:

**OrAL**: Top display will flash "oral" and "932" alternately (for Fahrenheit display); or "orAL" and "500" alternately (for Celsius display). This is an input error message. The possible reasons are: RTD temp sensor is not connected; not connected properly or the sensor is defective. First, please power off your system and use a screw driver to confirm all the connection are secured from your temp sensor to the controller's screw terminal. If no help, please disconnect your sensor cable from the controller's screw terminal, and use a multimeter to check the resistance on the cable ends/connectors. Sensor cable is a 3-lead wires. Two wire should have some color, and one wire has different color. At ambient temp, if you get about 100 Ohms between two different color wires (2-pair), and about 0 Ohms between two same color wires, your sensor & cable are good. Otherwise please check the continuity on your cable (including panel mount mating cable), to see if the cable is bad or the probe head is bad.

**EZboil ignored my set output percentage, and kept 100% output:** The boiling/distilling mode of EZboil controller has a special mode call acceleration period. By design, when the reading temp is low and below acceleration set temp parameter **bast** (or **dast** for distilling controllers), the actual output percentage is set by the parameter **bout**, or **dout** for distilling controllers, which is 100% by default. When your temp is over **bast/dast**, the actual output is set the user (the bottom display). For example, by the default setting of DSPR120, when the reading temp is 150F in boiling mode, the output is always 100%; when the reading temp is 205F, the output is set by the bottom display on the controller.

User can adjust parameter **bast/dast** and output parameter **bout/dout** accordingly to avoid control confusion. To disable this acceleration period feature, please set **bast/dast** to a very low temp like 0F.

#### For SYL-1615:

**EEEE**: This is an input error message. The possible reasons are: The sensor input type parameter is set incorrectly; the sensor is not connected correctly; the connector from the sensor is loose; the socket from the controller is loose; or the controller/sensor is defective. Please enter access code 0089, and confirm parameter "inty" is set to "K" (looks like backwards "4"). Then you can short temperature terminals. If the display shows the ambient temperature, the thermocouple is bad, or the connector from the sensor is loose. If the display shows EEEE, the controller is bad, or the socket from the controller is loose.

How to fasten thermocouple connector.

How to fasten thermocouple socket on controller.

#### For SYL-1813/1812RA/1813-24/2813:

**EEEE**: This is a temperature sensor input error message. If you use non-temperature sensor (like pressure sender), this error means you haven't configured inty yet (sensor input type parameter). If you use temperature sensor (like EGT probe, oil/water temperature probe), the possible reasons are, the sensor is not connected correctly; the input setting is wrong type; or the sensor is defective. If this happens when using thermocouple sensor, you can short thermocouple terminals. If the display shows the ambient temperature, the thermocouple is defective. If it still displays EEEE, check the input setting, Inty, to make sure it is set to the right thermocouple type. If Inty setting is correct, the controller is defective. For other types of sensor, please unplug your current sensor first, short thermocouple terminals by copper wire or paper clip, then change inty to K (backwards "4"). Then do the same test above. If it still displays EEEE, the controller is defective.

If you notice this issue only in winter/cold weather, please be advised the minimum ambient temperature is 32F/0C for SYL-1813 and -20C/-4F for SYL-2813. If your ambient temperature is below this point, your gauge may have hard time to boot up or display correct temperature.

# For SYL-2342H/2342Y:

**orAL**: This is an input error message. The possible reasons are: the sensor is not connected or not connected correctly; sensor cable/connector is loose; or the sensor is defective. Please try to disconnect all the sensor cables, fasten the sensor connectors and connect them back firmly.

#### For AT100/AT200:

**EEEE**: This is an input error message. The possible reasons are: The sensor input type parameter is set incorrectly; the sensor is not connected correctly; the connector from the sensor is loose; the socket from the controller is loose; or the controller/sensor is defective. Please enter access code 0089, and confirm parameter "inty" is set to "K" (looks like backwards "4"). Then you can short temperature terminals. If the display shows the ambient temperature, the thermocouple is bad, or the connector from the sensor is loose. If the display shows EEEE, the controller is bad, or the socket from the controller is loose.

How to fasten thermocouple connector.

How to fasten thermocouple socket on controller.

#### For AT210:

#### Slave unit (AT210-A):

**EEEE**: This is an input error message. The possible reasons are: The sensor input type parameter is set incorrectly; the sensor is not connected correctly; the connector from the sensor is loose; the socket from the controller is loose; or the controller/sensor is defective. Please enter access code 0089, and confirm parameter "inty" is set to "K" (looks like backwards "4"). Then you can short temperature terminals. If the display shows the ambient temperature, the thermocouple is bad, or the connector from the sensor is loose. If the display shows EEEE, the controller is bad, or the socket from the controller is loose.

How to fasten thermocouple connector.

How to fasten thermocouple socket on controller.

Special pairing notes.

#### Master unit (AT210-B):

**EEEE**: This is an input error message. The possible reasons are, wireless connection settings are incorrect or master unit is offline. Please check its associated slave unit is working properly or not. Then, please check the wireless connection parameters of the master unit match the parameters in slave unit (section 8 in instruction manual). If you see this master unit displays EEEE occasionally, please increase tdly (hand shake time) to  $10 \sim 20$  s.

# For TD series controller including TD130, TD120, TD100, TD200, TD300, TD400P;

# TH series controller including TH330A, TH230A, TH220, TH210;

# HD series controller including HD330, HD220, HD200, HD100:

**Err**: This is an input error message. The possible reasons are: the sensor is not connected or not connected correctly; sensor cable/connector is loose; or the sensor is defective. Please try to disconnect the sensor cable from both ends (if your sensor head has detachable design), fasten the sensor connectors and connect them back firmly. If no help, it is recommended to replace both the sensor block and sensor cable at the same time.

#### For THS-192:

**Hi or Lo**: If the meter shows "Hi", you may need to check the sensor connection first to make sure the sensor is connected correctly to the meter. The meter will show "Hi" or "Lo" if the temperature out of the display range.

**Battery plus icon**: If the meter displays battery plus icon, it means the battery needs to be replaced.

# For SMD-200, SYL-3615/SYL-2615, WS/WSD/WST/AW series plug-n-play controllers including WS-1211H, WSD-1200GPH, WST-1510H, AW-1520H, WS-1510ELPM/1510DPM

-H-: This is an input error message. The possible reasons are: The sensor is not connected correctly/firmly; the input setting is wrong type; or the sensor is bad. Please check your sensor connection first. Simplest way to test is unplug/remove sensor, then plug in/install it back. If your controller works properly before or you just reset your controller recently, please check sensor input type parameter (if applicable). In addition, it is unlikely that both two probes go bad at same time; to check whether your probe is bad or controller is bad, you can simply swap two probes in different socket. If this problem comes with probe, this probe is bad; if this problem comes with the socket, the controller is bad.

# For WS/WSD/WST/AW series plug-n-play controllers including WS-1211H, WSD-1200GPH, WST-1510H, AW-1520H, WS-1510ELPM/1510DPM, WS-2000F

**My controller is continuously heating up:** The built-in relay chip inside of your controller could be bad/shorted. Please process the following test. Please remove your smoker from your controller. Plug in a small load like table lamp into the heater output socket on the back of the controller. Plug in all temperature sensors into the controller then power your controller up. Change your set temperature to a very low number to make sure the front OUT light is OFF. Then check if your lamp is ON or OFF. **If ON**, your controller is bad and you need to contact Auber support for service. **If OFF**, your controller's hardware could be still good. Then this issue might be due to the bad P, I and D settings in your controller. Please refer to its manual to process auto-tune at your preferred cooking temperature.

**My controller doesn't heat up my smoker/heater:** Please process the following test. Please remove your smoker from your controller. Plug in a small load like table lamp into the heater output socket on the back of the controller. Plug in all temperature sensors into the controller then power your controller up. Change your set temperature to a very high number (like 300F) to let the front OUT light is solid ON. If your OUT remains OFF all the time, please check if any errors showing on the controller, like -H- (sensor input error, see previous page for details). If the controller shows a temperature properly without an error, and your OUT is still OFF, some other parameters may be wrong. If your controller has an one-key factory reset feature, please try factory reset and see how it works.

If the OUT is solid ON and your lamp is powered, your controller is good. If the OUT is solid ON but your lamp is OFF, your controller is bad and you need to contact Auber support for service.

#### For RDK-200, RDK-300, RDK-300A, RDK-300B

-H-: This is an input error message. The possible reasons are: The coil is not connected correctly/firmly; the coil has wrong pin assignment; coil is bad; or the controller is bad. Please check your coil connection first. Simplest way to test is unplug/remove the coil, then plug in/install it back. If you have an old coil which has been used this controller properly, you can use that coil to confirm whether the controller is good or bad. You need a multimeter to test this coil. For 100W coil, the resistance between pin 1 & 2 is about 140 Ohms. The resistance between pin 3 & 4 is about 10 Ohms. Otherwise, your coil is bad/incompatible pin assignment. Please note, coil with incompatible pin assignment may damage the coil or controller itself.

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