

EnviroLink Manual for KMT/GMT Kilns

INTRODUCTION

The *EnviroLink* was developed by engineers at Skutt to provide kiln owners with the ability to automatically control the Skutt *EnviroVent* and *EnviroVent 2*. The device utilizes a programmable power output (OUTPUT 4) on the Skutt *KMT* and GMT Controllers to turn on/off the *EnviroVent* or *EnviroVent 2*. The kiln may be programmed to control the vent during any segment of a *Ramp/Hold* Program or during preset times of a *ConeFire* or *Glass Fire Mode* program.

The *EnviroLink* may also be used to control competitor's kiln vents and other devices such as remote alarms and automatic dialers. The vent, or other device, plugs into the *EnviroLink* and a control wire is run from the *EnviroLink* to a designated output (Output 4) on the controller. The *EnviroLink* is then plugged into a standard 120V outlet. When the controller signals the device to turn ON, a relay is switched within the *EnviroLink* which provides power to the device. A red indicator light signals that there is power to the *EnviroLink* and a green indicator light signals that the *EnviroVent* is in the ON position.

The *EnviroLink* is rated to cycle components up to 12 amps. Consult the manufacturer prior to installing the *EnviroLink* on devices other than the *EnviroVent* or *EnviroVent* 2.

WHO CAN BENEFIT FROM AN ENVIROLINK?

- <u>Teachers</u> Even though most vents do not draw a lot of energy, most teachers do not feel comfortable letting the fan motor run all weekend or even overnight. The EnviroLink will shut the kiln vent off when the program is complete or when the kiln reaches a specific temperature. Since it works with ConeFire Mode, it is very easy to program.
- <u>Potters</u> Crystal Glazes and Cone 6 Glazes can be very sensitive to cooling rates. Artists can now use the Ramp/Hold programming mode to control whether the kiln vent is on or off for each segment of the firing program.
- <u>Glass Artist</u> Artists who fire glass want to cool quick and hold steady. With the EnviroLink they can program the vent to come on when crash cooling and then turn off during annealing when they are trying to hold the temperature steady.

INSTALLING THE ENVIROLINK

The instructions for installation and programming will vary depending on the type and year of your controller.

UNPLUG THE KILN.

1. Follow the instructions in your manual for removing your control box from the kiln and set it on a padded surface. Remove the heat baffle so you can locate a place to drill the hole without hitting any internal components.



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- 2. Drill a 7/16" (11mm) hole in the side of the kiln control box as close to the power cord as you can without hitting any internal components. This location will make it convenient to zip tie the EnviroLink cord to the power cord so it is out of the way. You will want to remove any burrs to ensure a flush fit.
- 3. Unscrew the attachment nut from the Internal Output 4 Wiring Assembly and remove the nut and washer from the assembly by sliding them down the wires and over the connections. You will need to remove the white protection cap on the KMT connector in order to get the nut and washer to slide over it.
- 4. Pass the wires into the box through the 7/16th" hole from the outside of the box and then reinstall the nut and washer until they are snug against the inside of the box. (Replace the protection cap on the KMT connector).
- 5. KMT Wire Connection The KMT Output 4 Wiring Assembly only utilizes one connector. This connects to the white Output 4 terminal at the top left hand corner of the controller.
- 6. Screw the controller back in place.
- 7. Plug the *EnviroLink* into a 120V outlet and your vent into the *EnviroLink*.
- 8. Plug the External EnviroLink Cord with the straight connector into the receptacle you installed in the control box and the other end (with the 90 degree connector) into the EnviroLink.
- 9. Zip tie the External EnviroLink Cord to the power cord of the kiln to get it out of the way.
- 10. Plug in the kiln. The installation is complete. (Be sure the in-line toggle switch on the vent is in the on position.)

PROGRAMMING THE ENVIROLINK

Once the *EnviroLink* has been installed, the controller must be configured to use it. There are four optional settings that control how the *EnviroLink* cycles the power to the vent.

Programming the Skutt KilnMaster and GlassMaster Touchscreen Controllers for use with the EnviroLink

OP A (Option A)

When option A is selected Output 4 will turn on when a *ConeFire Mode* program is started. When the program has run and the kiln has cooled to 150 °F output 4 will turn off.

When a *Ramp/Hold* program is entered it will ask whether you want the fan (or other accessory) on for each segment you program. After you enter the hold time for each segment the display will show **FAN** along with the number of the segment you are programming. Alternately it will flash the current setting, either **OFF** or **ON**. To change the setting toggle it with the **1** key and press **ENTER** to select that setting.

OP b (Option B)

During a *ConeFire* program Output 4 will turn on when **START** is pressed. It will then turn off at 1450 °F. It will turn back on when the kiln is cooling and the temperature drops below 1000 °F. It will then turn off when the kiln cools to 150 °F.







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When a *Ramp/Hold* program is entered it will ask whether you want the fan (or other accessory) on for each segment you program. After you enter the hold time for each segment the display will show **FAN** along with the number of the segment you are programming. Alternately it will flash the current setting, either **OFF** or **ON**. To change the setting toggle it with the **1** key and press **ENTER** to select that setting.

OP C (Option C)

When Option C is selected Output 4 does not come on during any portion of a *ConeFire Mode* program.

When a *Ramp/Hold* program is entered it will ask whether you want the fan (or other accessory) on for each segment you program. After you enter the hold time for each segment the display will show **FAN** along with the number of the segment you are programming. Alternately it will flash the current setting, either **OFF** or **ON**. To change the setting toggle it with the **1** key and press **ENTER** to select that setting.

ALR4 (Alarm 4)

This is the factory default setting. If Output 4 is not being utilized this is the setting that should be selected. This feature can also control an external alarm or autodialer to initiate if an Error Code is generated or if the internal temperature of the kiln reaches the temperature programmed for the **ALARM** setting of the program. To deactivate the alarm press **ENTER**.

To select an option:

- 1. From IDLE Mode, press Begin Here
- 2. Press Advanced Programming
- 3. Press Auxiliary Output
- 4. Choose the Option you prefer and press SAVE