

Lead Lag Network and Wiring Schematic:

Network:

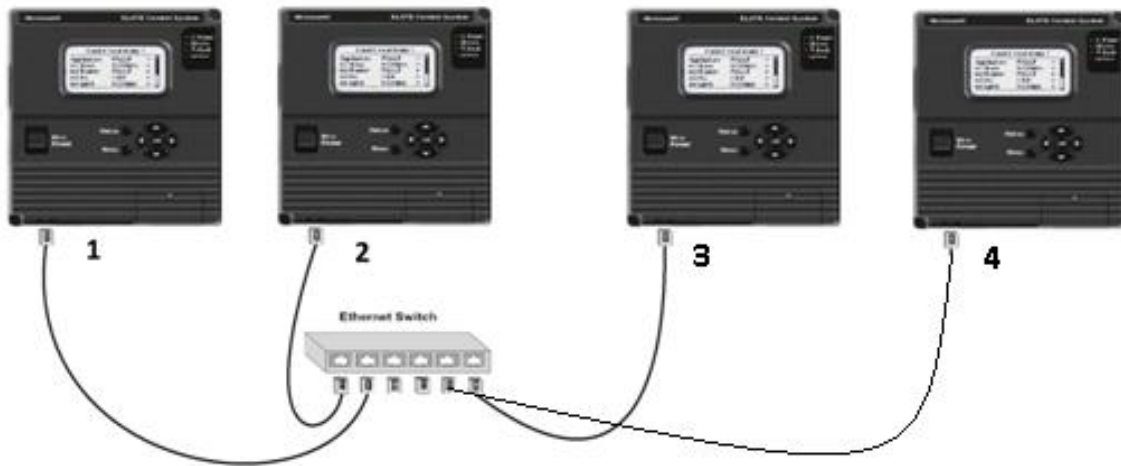
The Lead Lag configuration in this example is done using four SLATE panels. Panel one is considered the Master since it contains the Lead Lag algorithm, but it also contains burner 1. Burners 2-4 are built in their own panels and communicate with the Master via BACnet. BACnet configuration is explained in the “Lead Lag Communication Configuration” document.

The Lead Lag example is built using BACnet/Ethernet or BACnet/TCPIP.

NOTE: Insure each SLATE device is assigned its own IP address on the same subnet.

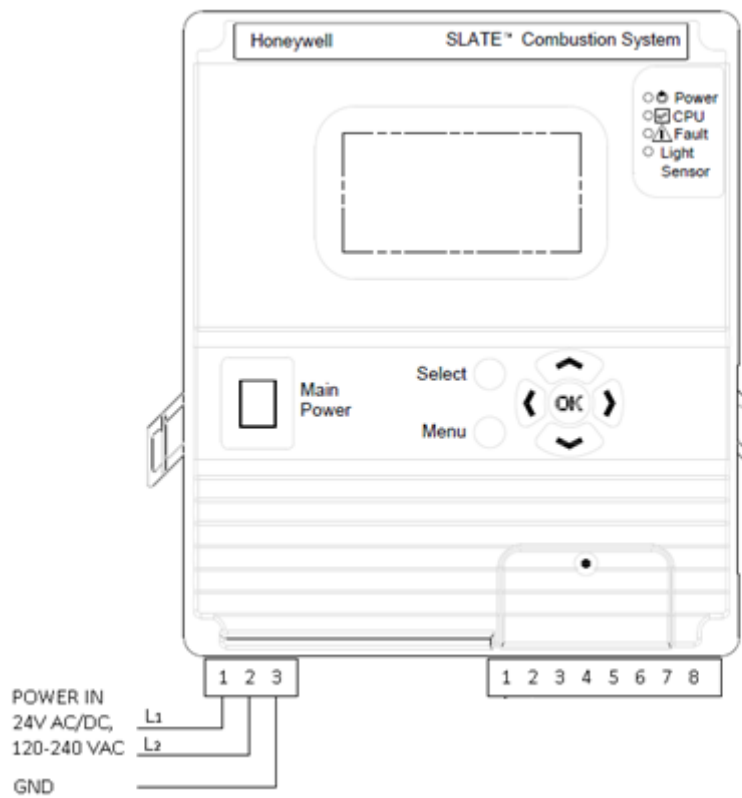
NOTE: If each SLATE device uses an HMI, or multiple HMIs will be used, insure the HMIs are on the same subnet.

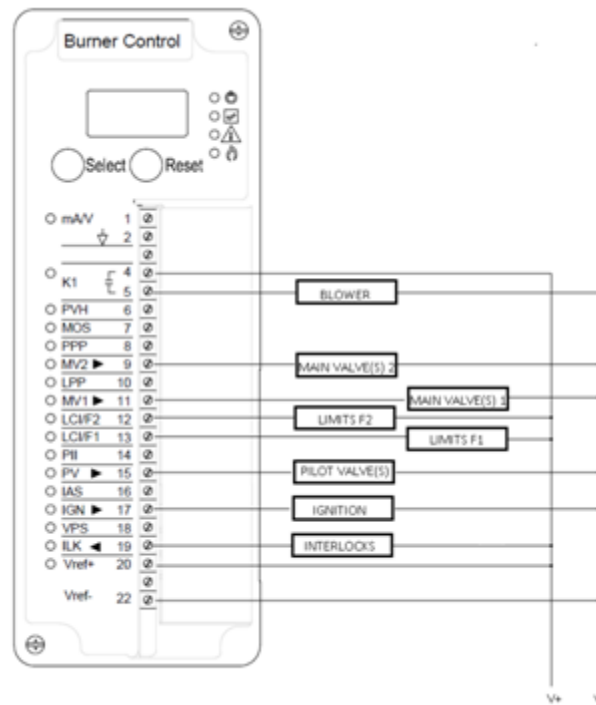
NOTE: Insure all devices on the lead lag network have distinct IP addresses to avoid communication conflicts.



Wiring Diagram:

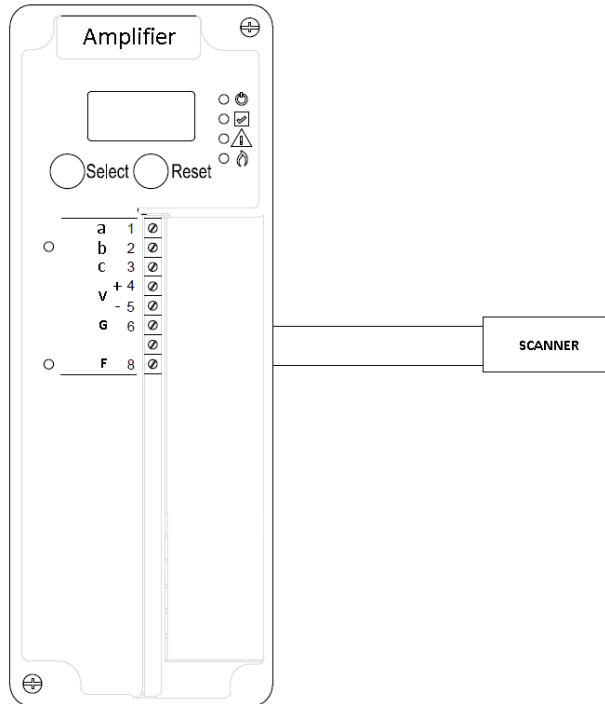
MASTER:



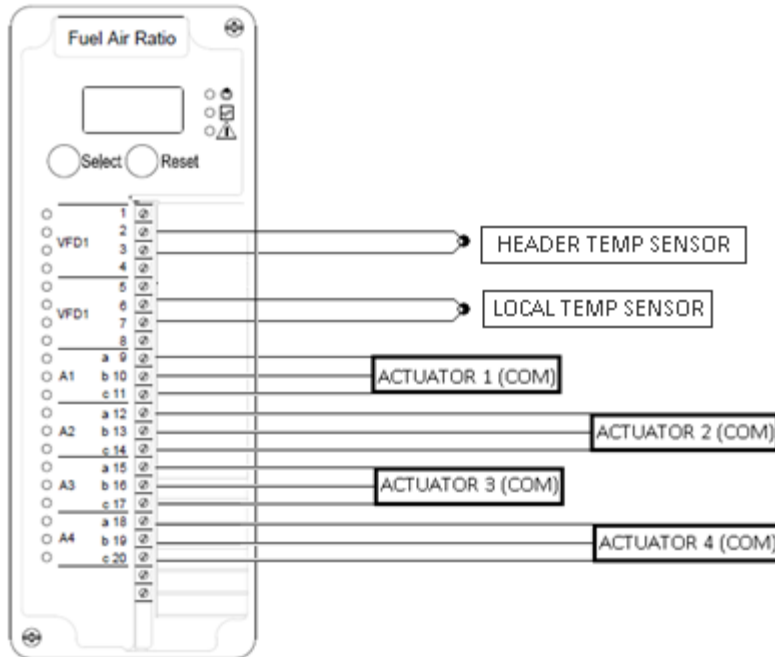


The lead lag example does not use all of the configuration options available. When adapting the Lead Lag algorithm to your project, configurations and wiring may vary. The burner included in the Master algorithm is considered burner 1 (first stage).

NOTE: Check the Burner Module configurations to insure they are appropriate for your project. Make the necessary changes. Use the “Build System” button to save/compile.



Refer to Installation Instructions for exact wiring of the scanner used on your project. The Lead Lag example uses the UV/Visible Ampli-Check Amplifier Module and scanner. Make sure to change the configuration on your project to match the amplifier/scanner you will use on your project.

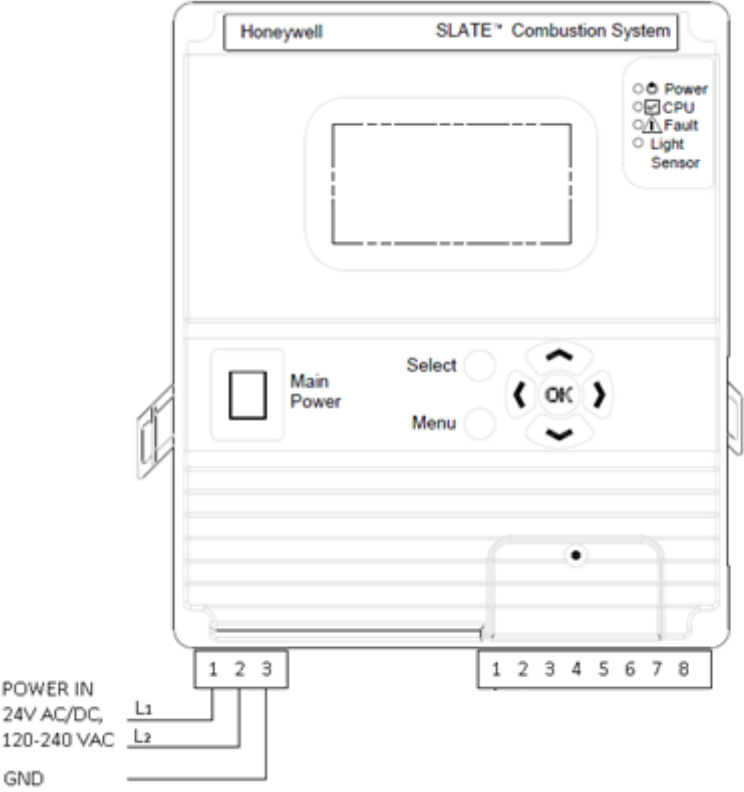


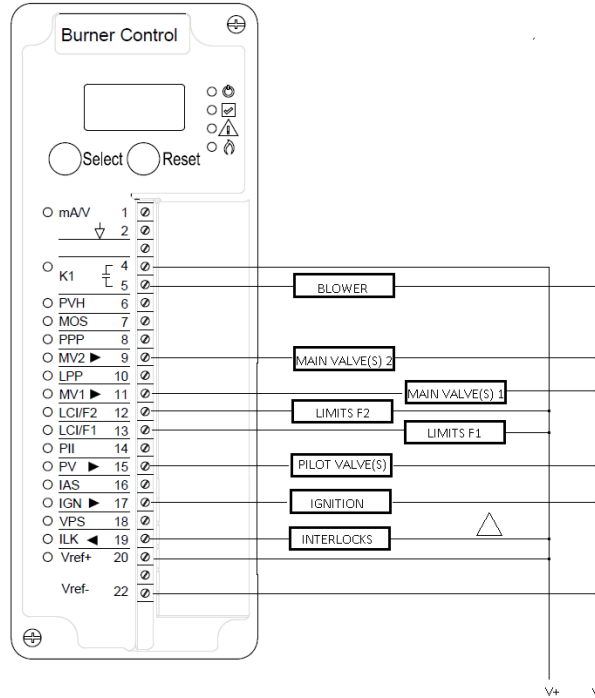
The lead lag example does not use all of the configuration options available. When adapting the Lead Lag algorithm to your project, configurations and wiring may vary.

The Master panel uses two type J thermocouples connected to the Fuel/Air Module VFD analog cells. The VFD1 cell has the Header temperature sensor while the VFD2 cell has the local boiler sensor. If your project uses VFDs and either one or both of the Fuel/Air Module's analog cells are unavailable, move the header temperature sensor(s) to other available Analog I/O cells. Make sure to capture any changes in the configuration/wire sheet.

NOTE: If any of the two Analog I/O cells of the VFD are unavailable (used for VFD or motor), move the temperature sensor(s) to other available Analog I/O cells and insure your changes are captured in the wire sheet. Remember to click the "Build System" button after wire sheet changes are made in order to save and compile.

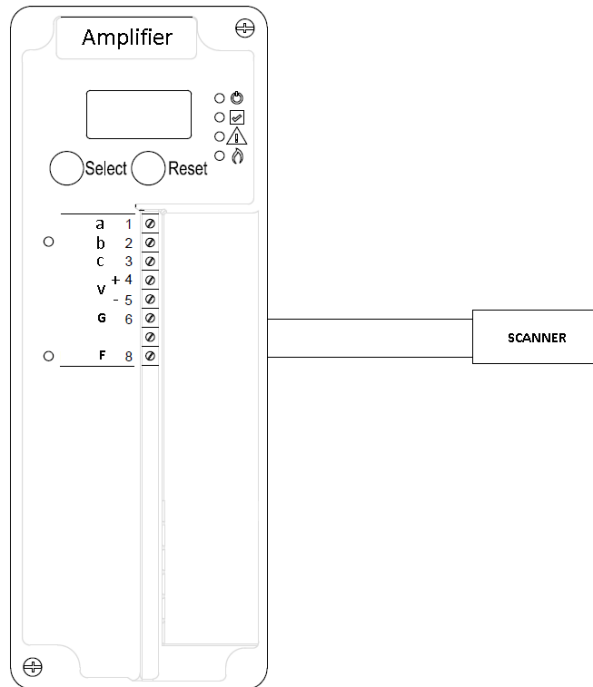
SLAVE:



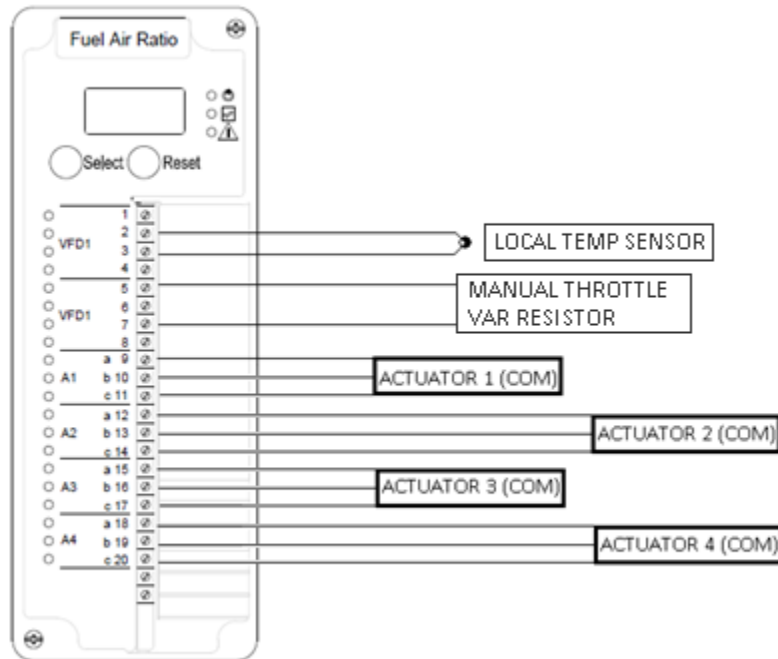


The lead lag example does not use all of the configuration options available. When adapting the Lead Lag algorithm to your project, configurations and wiring may vary. The burners in the Slave panels are assigned their order (stages) when configuring the BACnet communication of each. See the “Lead Lag Communication Configuration” document.

NOTE: Check the Burner Module configurations to insure they are appropriate for your project. Make the necessary changes. Use the “Build System” button to save/compile.



Refer to Installation Instructions for exact wiring of the scanner used on your project. The Lead Lag example uses the UV/Visible Ampli-Check Amplifier Module and scanner. Make sure to change the configuration on your project to match the amplifier/scanner you will use on your project.



The lead lag example does not use all of the configuration options available. Configurations and wiring may vary when adapting the Lead Lag algorithm to your project.

The Slave panels use one, type J thermocouple connected to the Fuel/Air Module VFD1 analog cell for the local boiler sensor. They use a variable resistor on the VFD2 Analog I/O cell for the local manual throttle control. If your project uses VFDs and either one or both of the Fuel/Air Module's analog cells are unavailable, move the local temperature sensor and manual throttle control to other available Analog I/O cells. Make sure to capture any changes in the configuration/wire sheet.

NOTE: If any of the two Analog I/O cells of the VFD are unavailable (used for VFD or motor), move the temperature sensor and the variable resistor (manual throttle control) to other available Analog I/O cells and insure your changes are captured in the wire sheet. Remember to click the "Build System" button after wire sheet changes are made in order to save and compile.