

Understanding Interface boxes

Interface boxes are used to control accessories that are beyond the capacity or capability of an environmental controller. They receive a signal from the controller and respond by activating various accessories consistent with the design of the particular interface box being used.

- Some interface boxes are designed to control accessories that operate from 120 V AC or 240 V AC. This is because the environmental controllers are not designed or intended to handle AC power. The controller is configured to send a 24 V DC signal to the interface box, containing relays or contactors which, when energized by the 24V signal, apply AC power to the accessory designated when setting up the controller configuration. The line of "CIBAC" units are designed for various combinations of AC powered accessories, and the simple 42-CB2 and 42-CB4 are inexpensive options for applications with the need to control only one or a few AC accessories.
- Interface boxes designed to control low voltage ventilation motors contain a built-in DC power supply. Some of these units have controls on the front panel to allow manual control of motors when desired or can be set in the "AUTO" position which reverts control to the environmental controller.

Advancing Alternatives provides a range of interface boxes to allow a controller to operate virtually any greenhouse accessory.

For more in-depth information on the function of interface boxes, see Advancing Alternatives paper "Understanding and application of contactors and relays."