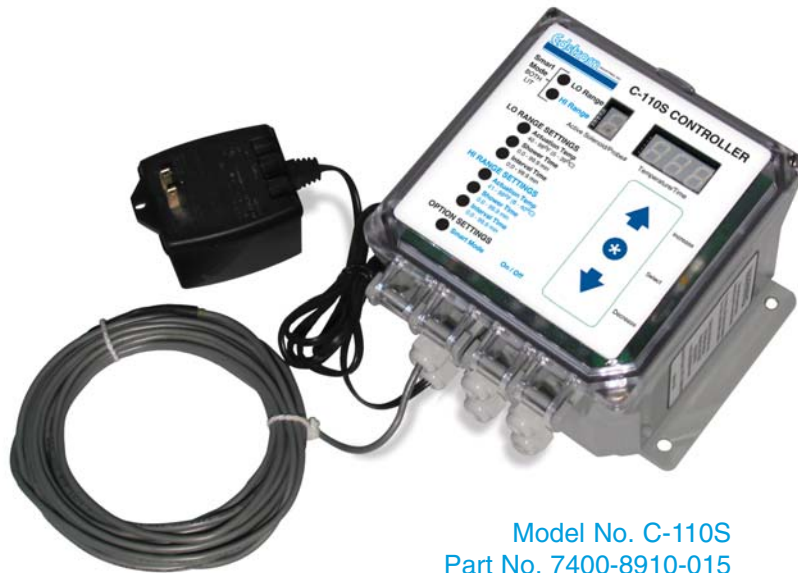


# C-110S Controller



Model No. C-110S  
Part No. 7400-8910-015

The C-110S Controller is used to regulate the shower cycle and interval cycles in a livestock cooling system. This easy-to-program controller can be set to operate either in Two Stage Mode or Smart Mode. In Smart Mode, the interval time is automatically adjusted as the temperature changes. The interval time is the period of time when no showering occurs and the water is allowed to evaporate from the animals. As temperature increases, the interval time will decrease, thus giving animals more frequent shower cycles, to reduce heat stress.

Dealing with the effects of heat stress is a major economic factor in livestock production. A spray-cool or drip-cool system can drastically reduce the effects of hot weather and allow your livestock to remain healthy and profitable. This reliable, economical controller makes the most efficient use of your water resources to keep your livestock productive.

## Features & Benefits

- Operates one electric solenoid valve and monitors one temperature probe – ideal for dairy holding pens or swine gestation facilities where all spray nozzles or drip nozzles can be supplied by a single solenoid valve
- Two Stage Mode provides traditional two-level cooling – a lower intensity cooling cycle (LO Range) operates when the temperature is above the low temperature setting, and a higher intensity cooling cycle (HI Range) operates when the temperature is above the high temperature setting
- Smart Mode provides innovative, infinite stage cooling – it varies the interval time in direct proportion to the temperature difference as the temperature moves between LO Range and HI Range actuation temperature settings, providing exactly the right amount of cooling at any temperature while minimizing water usage
- With Smart Mode, you program the system once – no need to make adjustments as the temperatures change during the season
- 24 VAC power output for safety and ease of installation
- Super bright LED displays for viewing indoors or outdoors
- User programmable – quick and easy to program
- Easy and economical to install and operate – quick return on investment
- Fully compatible with previous model controllers to allow upgrades of existing systems
- 2-Year Factory Warranty

# Application/Operation

The C-110S Controller is designed for use with the Edstrom Drip-Cool and Spray-Cool systems. The controller monitors the temperature and regulates the shower or drip cooling cycles in livestock production facilities. The controller is the heart of the system and makes the best use of your resources to keep livestock comfortable, healthy, and productive.

The C-110S Controller is generally mounted in an area that is easy to access and monitor. It is also recommended that the controller be installed in a location that is protected from rain and direct sunlight. It may be centrally located or the controller could be located in a remote office area and connected by low voltage wires to the electric valve in the livestock area. The C-110S Controller can remain plugged in during winter to serve as a temperature gauge.

The controller plugs into a standard 120 VAC outlet through a transformer (included) that reduces the line voltage down to 24 VAC. An optional 230 VAC/24 VAC model, Part No. 7400-8910-215, can be special ordered. Accessories to complete the cooling system (shower nozzles, additional temperature probes, and electric solenoid valves) are also available from Edstrom Industries.

The C-110S Controller is easy to program by using the three push buttons on the front panel. The star button toggles through the various settings, and the up or down arrow buttons increase or decrease the settings as needed (Figure 1). You can also toggle between Two Stage Mode and Smart Mode.

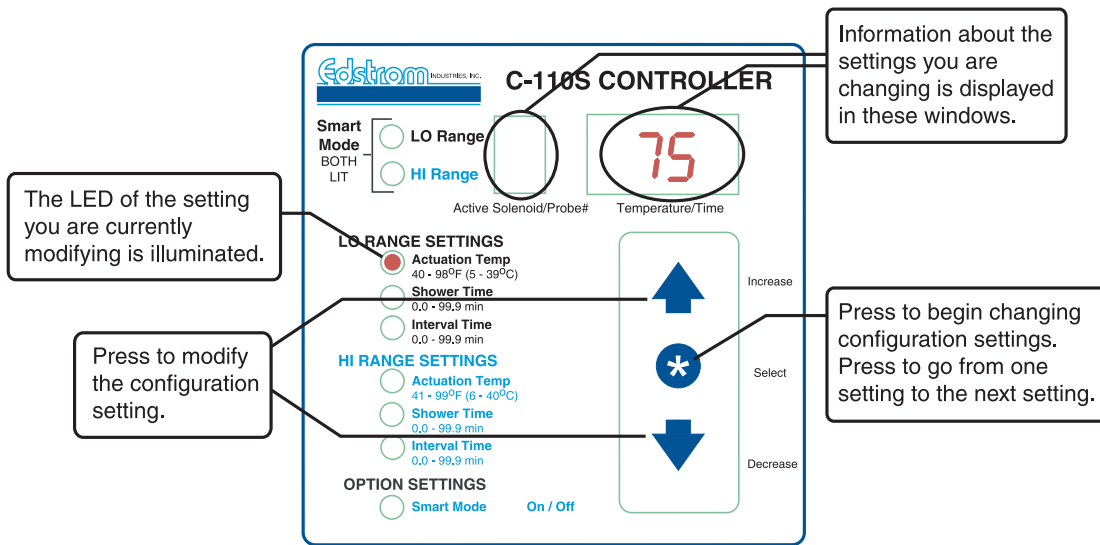


Figure 1 - Modifying configuration settings on the C-110S Controller

## Specifications

### Hardware

Dimensions: 7.75 in. W x 7.5 in. H x 5.5 in. D  
[197 mm W x 190 mm H x 140 mm D]

### Control Panel

Enclosure: Solid, high-impact engineered thermoplastics  
NEMA 4X rating  
7 segment high intensity LED characters  
Non-volatile, user programmable memory

### Utility Requirements

Input Power: 120 VAC ± 10% 60 Hz 0.25 Amp  
Relay Output Power: 24 VAC ± 10% 0.8 Amp inrush  
(19VA) 0.57 Amp steady state (14VA)

### Operating Parameters

Operating Temperature Range: 0°F to 122°F  
[-18°C to 50°C]

#### Programmable Ranges:

Temperature: 40°F to 98°F [5°C to 39°C] (LO Range)  
41°F to 99°F [6°C to 40°C] (HI Range)

Shower Time and Interval Time: 0 to 99 minutes  
Programmable in 0.1-minute (6 second) intervals

*All specifications are subject to change without notice.*