

TOOLS FOR TOMORROW

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Leading the Poultry Industry into the World of Technology

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Be sure to visit us in Atlanta at the
International Poultry Expo

January 25-27, Booth 2126

You'll be able to check out these new NOAH and CIII features:

- New CIII manure logic
- New cross-conveyor monitoring for egg flow
- Enhanced history storage
- Improved CIII user interface
- Custom fan and mister controls
- Custom feed cart controls
- New baffle control logic
- Environmental "split" house controls
- The latest software, which combines flock information from all NOAHs into one editor
- Ability to create PDF versions of production graphs

Command III Intelligent Controller and Interface Tools Provide Mister Control

by Dan Henslee, Sales Manager

The most effective approach to supplying your site with automation is the customized way, rather than relying on the manufacturer's generic system. To help you improve your control and monitoring, the Command III (CIII) system can bring multiple aspects of your automation together that go beyond the manufacturer's system. Examples of recent specialized controls using the CIII include custom baffle control, cool cell/curtains controls, egg-flow split house control, specialized feed cart control, egg counter debouncing, and the main focus of this article, mister control.

While at Rainbow Farms in California, our senior software engineer Eric Hansen programmed the CIII to help improve the efficiency of the farm's mister pump. Below are some of the questions Eric addressed with the CIII system to improve the effectiveness of Rainbow's house environment.

Q: Can the mister pump provide a better environment, based on more balanced temperature and humidity information?

A: Yes, it can control the mister using the average of your temperature sensors; for example, eight temperature sensors distributed along the length of a building using humidity overrides to stop the pumps. This strategy provides the house with better automated decision-making as opposed to using a single temperature and humidity sensor.

Q: Is there a good way to minimize oversaturation of water dripping into the house?

A: Yes, the mister control feature ties to the baffle control when the first stage mister is activated by opening the baffles all the way to minimize water droplets not absorbed by the warm air.

Another feature sets a specified amount of fan-staging before the foggers can be activated. In Rainbow's example, at least 16 fan stages must be running to help prevent moisture saturation.

Q: Is there a way to increase the pumps' operational life?

A: Yes, the CIII can rotate the pump schedule through the mister pump schedule.

Tommy Manotok of Rainbow Farms describes the CIII benefit: "This will rotate all the pumps throughout the season. In most cases, if we do not rotate the pumps, then during the summer season the stage 1 pump might have run four times longer than the stage 3 pump and two times longer than the stage 2 pump."

This feature gives the pumps and motor longer operational life. In addition, the CIII also makes it easier to determine time of service.

Q: We need an efficient way to invoke a fourth standby pump.

A: A standby pump can function in place of a failed pump simply by making two setting changes: one to enable the spare in the proper position, and, optionally, one to disable the problematic pump.

At Rainbow Farms, "in the event of failure of a given pump, the spare pump can immediately be assigned as another stage out of the three stages while the other pump is being serviced," says Tommy.

Q: What is the benefit of using the CIII to track the run-time of each pump to the nearest minute?

A: This helps to determine how much time is left in the equipment's lifespan.

In conclusion, a manufacturer's generic system cannot guarantee the most efficient performance from your equipment. The CIII's Intelligent Controller expands the role of your equipment and increases the productivity of your environmental strategy.



Tech Tips

Backing up your Crackless Egg with the New Handheld Memory Expansion Slot

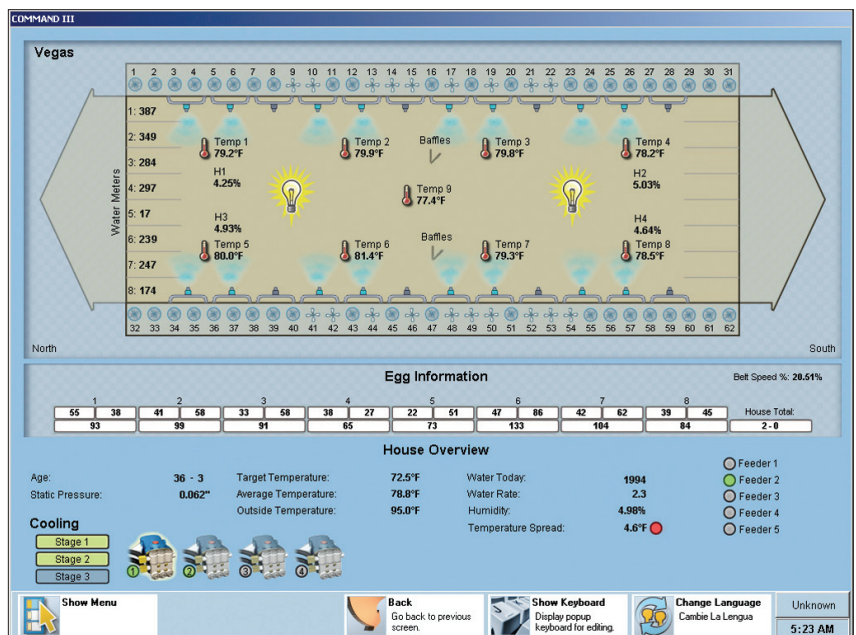
If your handheld unit's battery drains and it has been in an uncharged state for an extended period, you can lose all stored data, including the Egg software. Before this happens, be sure that you previously have installed the Palm Desktop software, which came with your Crackless Egg kit, so you can quickly reinstall the software.

Reinstalling software

If you previously performed a HotSync operation on your Sensor Wireless Palm, the information should be stored on your PC. Use the HotSync function to automatically reload the Sensor Wireless software.

To install back-up files from the previously installed memory card, follow these steps:

1. Ensure the memory card is in the expansion slot.
2. In the main menu screen, click on the Preference icon.
3. Tap Copy on the applications drop-down menu. Ensure you are set to copy from CARD to HANDHELD. You can change this by tapping the down arrow next to the selection.
4. Tap the SWI file, then tap Copy (the file transfer will take a few seconds). Repeat these steps with the PalmDB and PalmAPI files. Then tap Done. This will bring you back to the main menu, where you should be able to view the SWI icon.



Custom mister pump feature shown bottom left: stage 1, stage 2 and stage 3

GETTING TO KNOW YOUR COMMAND III SYSTEM

What is the Command III system?

It's an industrial computer system designed specifically for poultry house management. Most anything functional you can think of in a poultry house or processing plant can be controlled, monitored and reported by the Command III system:

- Bird environment: feed, water, fans, lights, air inlets, egg belts, etc.
- Processing: wash water temperatures, chlorine, soap, cooler temperatures, GMPs, etc.

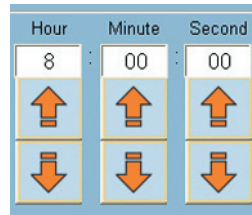
How is house information quality improved by the CIII?

Of course, you are always limited to the integrity of your sensors. However, reliable sensors are available that work well with the CIII system. And the CIII brings a higher level of consistency when monitor-

ing your house conditions and making adjustments to the environment.

How easy is it to enter data?

The CIII is oriented around a menu-driven interface. This means you can use the touch screen on the CIII display to move around within the CIII system. And if you need to enter a numerical schedule, for example, you can tap your finger on the up and down arrows located in the time schedule's menu, as shown at right.



How does the partnership between the CIII and NOAH work?

NOAH is the computer used to centrally store and monitor all history, reports and

alerts. In fact, it is very easy to access any information recorded by a CIII with the NOAH system. But the CIII can also be set up as a stand-alone system.

How is the CIII display different from the CII display?

The new intelligent interface requires less training and offers much easier interaction between computer and user.

What happened to the Command II system?

It is the CIII's predecessor. The CII is the most installed environmental controller in the industry. We continue to fully support this system and provide our customers with on-site and phone support, as well as spare parts.

Command III Software Menu

View	Edit	Other
House Overview House details	Environment Settings Edit settings for ventilation, feed, water, etc.	Change Zone Go to a different zone
Graphs See data in graphical detail	Schedules Feed and Light Scheduling	Diagnostics Perform Diagnostics
History View historical data.	Enter Mortality Edit daily flock mortality.	Acknowledge Alerts Acknowledge current alerts by device, type, or house.
Line Definitions Tabular view of line definitions		Close Menu Close this menu and return to previous screen

VIEW

House Overview

- Shows conditions in the entire house, at a glance, reporting the latest information and alerts from each house
- Customizable to each site, data for each house is displayed and continually updated
- Depending on the system, may include device information such as temperatures, egg counters and fan controls as well as flock information such as age, feed and water data
- Fully customized per system

Graphs

- Provides visual representation of stored historical information
- Provides a better understanding of flocks by allowing users to view data for one or more devices under varying conditions

History

- Continually tracks data for each device that stores history
- Stores history in ten-minute intervals and typically keeps it available for the past 30 days
- Tracks and stores data for longer or shorter periods, depending on needs
- Easy data evaluation allows users to detect difficulties such as feeder troubles, water leaks or temperature problems

Line Definitions

- Provides a snapshot of current information about every item in the CIII system
- Displays each item's current value, and history storage and diagnostic information
- Sortable columns and pop-up boxes provide additional information regarding related items

EDIT

Environmental Settings

- Allows you to make changes to control settings
- Tabbed groups of settings provide quick, convenient access to editing of control settings and values
- Customizable multi-lingual help text describes the role of each control setting

Schedules

- Set the start time, stop time and duration of devices that have schedules; for example, output devices such as feeders, light controls and manure belts

Enter Mortality

- Mortality numbers recorded
- When used in combination with a NOAH system, this figure is subtracted from the current population to arrive at the next morning's population

OTHER

Change Zone

- View and manage other buildings remotely; for example, check House 2's egg counts while working in House 5

Diagnostics

- Display useful statistics such as when the CIII was started and how many days it has been running
- In the advanced section, view date, time and user access

Acknowledge Alerts

- Acknowledge that CIII has detected a reading that is out of tolerance with the current settings by house, type or device