



Providing computerized poultry management tools since the mid-1980s.

Remote I/O for Systems I and II is a group of modules that interfaces to most sensors and controls used in a poultry house. One 4-conductor cable daisy-chained between modules is all that is needed for power and communications, significantly reducing the control wiring needed in the house.



Remote I/O

- Available for Systems I
- Systems II support soon
- Four different modules supports all I/O
- Sensor Module
- Counter Module
- Inlet Module (MCU)
- Backup Relay Module (RCU)
- Only needs a 4-conductor between modules
- Supports 16 of each module per house
- Reduces installation costs
- 24/7 Customer Support

Remote I/O

The remote I/O, now available for Systems I and II uses four different modules to support most I/O functions within a poultry house. Each module has a 4-position switch to set a unique address for the module. Only one 4-conductor daisy-chained between all the modules is necessary for power and communications. This reduces the wiring needs and installation cost significantly. *Note: An additional conductor is needed for the counter and inlet modules.*

Equipment

Sensor Module— This module supports two analog inputs that can be factory configured for temperature, humidity or inputs up to 10 volts.
Counter Module—This interfaces to as many as 24 counters per module. The inputs

can also be used for monitoring on/off conditions.

Inlet Module—Used to interface to a baffle motor. Includes fusing, static pressure monitoring and interfaces to backup controls.

Relay Module—Multiple relay modules are used to create the new Deluxe Backup unit. Fans, feeders, lights, etc. are controlled via this module. An Auto/Off/Manual switch is also provided for each output with a verify on each output. Analog outputs are also available for egg drives or VS fans.

Operation

Each module has a unique address for communications to the controller. The controller reads the current values from each module and controls the outputs on the modules. These modules appear like any other I/O to the system.

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Remote I/O

Features

Each of the remote I/O modules has resettable fuses on the power and communications lines with surge protection. These fuses automatically reset once the surge is removed. The relay and inlet modules require 24VDC while the others can be powered by 12 or 24VDC.

The relay module supports two different relay boards. The 1st pictured below has 6 outputs with an additional backup relay for each to implement the deluxe backup function.



The second board has 12 relay outputs with no backup function. Any combination of 4 boards is supported per cabinet.

The inlet module supports all the functions of the existing MCU including static pressure measurement and output isolation that required external relays with the previous design. The backup function requires an additional wire for the watchdog signal.



The sensor modules each support two temperature sensors or can be configured for other inputs with a signal range to 10VDC. This allows up to 32 sensors in each house.



The counter module supports 24 inputs that can be used for egg counters, water meters, fan RPM or used to monitor on/off states. An additional cable is needed for the interrupt function when used for egg counting to indicate when the belts are stopped.



Modules:

Sensor—

- 2 inputs per module
- Temperature
- Humidity
- Signals up to 10V DC

Counter—

- 24 inputs per module
- Mechanical/Optical Egg Counters
- Water meters
- Fan RPM
- On/Off signal monitoring (Alarms)

Inlet—

- Open/Close outputs
- 5V input for static pressure
- Monitors Static Pressure Unit
- Fused
- Backup control

Relay—

- 6 outputs with backup or 12 outputs with NO/NC inputs on 8 channels
- Fan stage control
- Heaters
- Feeders
- Inlets
- Lights
- Alarms
- Any On/Off outputs
- Analog outputs for Egg Drive and VS Fans
- Auto/Off/Manual control
- Monitors output state and alarms when outputs in incorrect state



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Specifications may change without notice