

## GENERAL

The Model AC-154 Control Unit has been specifically designed to operate up to four concrete admixture dispenser systems. Solid state circuitry and microprocessor technology give the AC-154 superior operating characteristics.

The AC-154 allows manual or automatic modes of operation with the ability to batch concrete admixtures in total ounces, ounces per 100 wt of cement, or ounces per cubic yard.

During the batching process, the AC-154 provides visual LED indication of the zero point, fill, fill complete, discharge, and overflow. In addition to providing timers to empty discharge lines and sequence discharging of admixtures, the AC-154 provides a discharge hold function and four safety features. The safety features include measuring unit overflow protection, no-start on zero indication to prevent double batching, no-flow/meter fail-safe, and shut-off on batch error.

The AC-154 is also designed to accept a count input from Badger Model PM-5 and CT reed switch transmitters, as well as Badger Model PFT-1E electronic scalable transmitter. Zero and overflow inputs can be accepted from Badger Model DP-10 probe Amplifier or any probe Amplifier that provides a dry contact closure when the probe is covered.

## OPERATION

The AC-154 allows for operation in a manual or automatic mode. This is achieved through operator use of the front panel switches coupled with solid state circuitry and microprocessor technology.

When in the automatic mode, the operator sets a desired batch size by using push-wheel switches located on the front panel. The batch size can be set in total ounces, ounces per 100 wt cement, or ounces per cubic yard. The operator then uses four toggle switches to select the admix dispensers to be operated. To dispense admixture automatically, the start button is depressed and released. The digital display will zero out and begin counting up to the preset amount, as the admix dispenser bottle is filling. When the preset amount is reached, the AC-154 goes into the discharge cycle. Discharge operation depends upon the position of the discharge hold switch. When on, the discharge cycle is stopped; when off, the discharge cycle continues until the material reaches a zero level.

In the manual mode; only one admix dispenser can be operated at a time. Once the desired dispenser is selected by using one of the four toggle switches, the manual fill button must be depressed and held down to fill the admix dispenser bottle. As the bottle is filling, the amount is indicated on the LED display. When the desired amount is reached, the manual fill button is released, stopping the fill cycle. To discharge manually, depress and hold the manual discharge button. The material discharges until a zero level is reached. At this time, the discharge stops and the manual discharge switch can be released.



## FEATURES

- Controls Up to 4 Admixtures
- Batch Preset in 1 of 3 Modes:  
Total Ounces/Ounces per cwt/Ounces per cubic yard
- \* Remote-Start Fill and Remote Start-Discharge
- Automatic or Manual Operation
- Sequence Discharging
- Line Empty Capability
- Can Be Operated in U.S. or Metric Standards
- Will Accept 110v or 220v Primary Power
- Optional Output Voltage Capability
- Opto-isolated Inputs & Outputs
- Filter Network on Primary Power
- \* **Options:** 1-Remote Start  
2-Remote Start and Discharge



## SPECIFICATIONS

### Enclosure

Consolet type, Nema 12,13  
14.00" W x 10.75" H x 13.50" D

### Switches

4 Digit Pushwheel (Batch Preset)  
3 Position Toggle (Admix Unit Select)  
2 Position Toggle (Discharge Hold)  
Momentary Pushbutton (Start, Man.Fill, Man.Disch)

### Display

Four 7-Segment Red LED Digits

### Input Power Supply

120 VAC +/- 10% 50/60 HZ 1 Amp (Standard)  
220/240 VAC +/- 10% 50/60 HZ .5 Amp (Optional)

### Count Input

I/O Module;  
120 VAC pulse 8mA Max.  
20m Sec Turn On/Off (Standard)  
2.5-28 Vdc pulse 30mA Max.  
1m Sec Turn On/1.5m Sec Turn Off (Optional)

### Probe Input

I/O Module;  
120 VAC 8mA Max.;  
Input when probe is covered (Standard)  
2.5-28 Vdc 30 mA Max;  
Input when probe is covered (Optional)

- Probe inputs must come from a probe Amplifier which provides a dry contact closure when the probe is covered.
- The AC-154 Probe Connections can not be connected direct to probe.

### Solenoid Valve Outputs

I/O Module;  
120 VAC 3.5 Amp Max; Fused output (Standard) 220/240 VAC or 12-24 Vdc (Optional)

### Operating Temperature

32° F to 130° F  
100% Non-Condensing Humidity



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