



**Badger Meter**

## Admix Controller

Model AC-154

### DESCRIPTION

The Model AC-154 controller 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 has a *Discharge Hold* function and four safety features. The safety features include overflow protection, no-start on zero indication (to prevent double batching), no-flow/meter fail-safe, and shutoff on batch error.

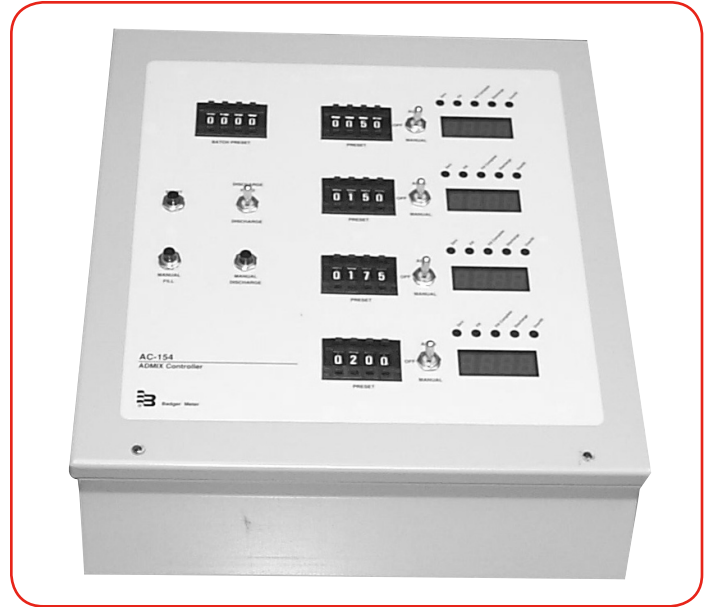
The AC-154 is also designed to accept a count input from Badger Meter® Model PM-5 and CT reed switch transmitters and Model PFT-1E electronic scalable transmitter. Zero and overflow inputs can be accepted from Model DP-10 probe Amplifier or any probe Amplifier that provides a dry contact closure when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

### OPERATION

Solid-state circuitry and microprocessor technology allow you to operate the AC-154 in a *Manual* or *Automatic* mode by selecting a switch on the front panel.

In the *Automatic* mode, you set a batch size by using the pushwheel switches on the front panel. You can set the batch size in total ounces, ounces per 100 wt cement, or ounces per cubic yard. Use the four toggle switches to select the admix dispensers to be operated. To dispense admixture automatically, press and release the *Start* button. The digital display zeroes out and begins counting up to the preset amount, as the admix dispenser bottle fills. When the preset amount is reached, the AC-154 goes into the discharge cycle. Discharge operation depends on the position of the *Discharge Hold* switch. When ON, the discharge cycle stops. 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. When a dispenser is selected (by using one of the four toggle switches), press and hold down the *Manual Fill* button to fill the admix dispenser bottle. As the bottle fills, the LED displays the amount. When the desired amount is reached, release the *Manual Fill* button to stop the fill cycle. To discharge manually, press and hold the *Manual Discharge* button. The material discharges until a zero level is reached. When the discharge stops, release the *Manual Discharge* button.



### FEATURES

- Controls up to 4 admixtures
- Batch preset in 1 of 3 modes
- Measures total ounces, ounces per cwt or 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
- Accepts 110V or 220V primary power
- Optional output voltage capability
- Opto-isolated inputs and outputs
- Filter network on primary power

### OPTIONS

- 1 – remote start
- 2 – remote start and discharge

## SPECIFICATIONS

<b>Enclosure Type</b>	Console type, NEMA 12, 13	
<b>Enclosure Dimensions</b>	14.00" W × 10.75" H × 13.50" D (356 mm W × 273 mm H × 343 mm D)	
<b>Switches</b>	4-digit pushwheel (Batch Preset) 3-position toggle (Admix Unit Select) 2-position toggle (Discharge Hold) Momentary pushbuttons (Start, Manual Fill, Manual Discharge)	
<b>Display</b>	Four 7-segment red LED digits	
<b>Input Power Supply</b>	<i>Standard</i>	120V AC ±10%, 50/60 Hz, 1 Amp
	<i>Optional</i>	220/240V AC ±10%, 50/60 Hz, 0.5 Amp
<b>Count Input</b>	<i>Standard</i>	I/O Module 120V AC pulse 8 mA max. 20 ms Turn On/Off
	<i>Optional</i>	I/O Module 2.5...28V DC pulse 30 mA max. 1 ms Turn On/1.5 ms Turn Off
<b>Probe Input</b>	<ul style="list-style-type: none"> <li>Probe inputs must come from a probe amplifier, which provides a dry contact closure when the probe is covered.</li> <li>The AC-154 Probe Connections cannot be connected directly to the probe.</li> </ul>	
	<i>Standard</i>	I/O Module 120V AC 8 mA max. Input when probe is covered
	<i>Optional</i>	I/O Module 2.5...28V DC 30 mA max. Input when probe is covered
<b>Solenoid Valve Outputs</b>	<i>Standard</i>	I/O Module; Fused output 120V AC 3.5 Amp max.
	<i>Optional</i>	I/O Module; Fused output 220/240V AC or 12...24V DC
<b>Operating Temperature</b>	32...130° F (0...54° C)	
<b>Humidity</b>	100% non-condensing	

**Control. Manage. Optimize.**

Trademarks appearing in this document are the property of their respective entities. Due to continuous research, product improvements and enhancements, Badger Meter reserves the right to change product or system specifications without notice, except to the extent an outstanding contractual obligation exists. © 2014 Badger Meter, Inc. All rights reserved.

**www.badgermeter.com**

The Americas | Badger Meter | 4545 West Brown Deer Rd | PO Box 245036 | Milwaukee, WI 53224-9536 | 800-876-3837 | 414-355-0400  
 México | Badger Meter de las Americas, S.A. de C.V. | Pedro Luis Ogazón N°32 | Esq. Angelina N°24 | Colonia Guadalupe Inn | CP 01050 | México, DF | México | +52-55-5662-0882  
 Europe, Middle East and Africa | Badger Meter Europa GmbH | Nurtinger Str 76 | 72639 Neuffen | Germany | +49-7025-9208-0  
 Europe, Middle East Branch Office | Badger Meter Europe | PO Box 341442 | Dubai Silicon Oasis, Head Quarter Building, Wing C, Office #C209 | Dubai / UAE | +971-4-371 2503  
 Czech Republic | Badger Meter Czech Republic s.r.o. | Maříkova 2082/26 | 621 00 Brno, Czech Republic | +420-5-41420411  
 Slovakia | Badger Meter Slovakia s.r.o. | Racianska 109/B | 831 02 Bratislava, Slovakia | +421-2-44 63 83 01  
 Asia Pacific | Badger Meter | 80 Marine Parade Rd | 21-06 Parkway Parade | Singapore 449269 | +65-63464836  
 China | Badger Meter | 7-1202 | 99 Hangzhong Road | Minhang District | Shanghai | China 201101 | +86-21-5763 5412