

E10 Programmable Sequencer

Industrial Dust Collection and Air Filtration

The E10 is a new generation timer designed with smart maintenance functions. The 10 output timer is controlled with a intuitive three button digital menu and can control up to 60 outputs when connected to optional extension cards. Available as a stand-alone timer, or with an enclosure to suit the surrounding environmental requirements, the E10 is a solid state sequencer designed to provide an adjustable pulse to operate pilot valves in Reverse Jet Pulse Dust Collectors.

Operational benefits

When compared to a basic analogue timer with manual dials the E10 digital programmable sequencer has a number of operational benefits for the user.

The first is the accuracy of the on and off times. On a basic timer the manual analogue dials only approximate values due to the coarseness of the resistive dials. This results in incorrect on and off times and increased air consumption or ineffective cleaning. The E10 screen, three buttons and digital processing software allows the user to exactly specify these parameters improving operational efficiency.

Second is the ability to fully customize the pulsing sequence using the arbitrary mode feature. This allows optimization of bag pulsing, for example, preventing adjacent bags from pulsing dust cake from a dirty bag onto a lean bag.

Third is the ability to interface the E10 with a range of sensor inputs such as dust probes, pressure, differential pressure, temperature, humidity and hopper level. Finally the user can benefit from multiple alarm output connection options such as ModBus RTU or connecting up to 4 output relays that signify

Features

- Digital, solid state timer with LCD interface
- User adjustable on and off time settings
- User adjustable pulsing sequence
- Displays countdown timer and next valve to pulse on HMI screen
- Maintenance mode allowing single valve pulsing for fault diagnosis
- Hours & Pulse counters
- Electronic fault detection on each solenoid valve (short and open circuit detection)
- Mechanical fault detection on each solenoid valve (sensor required)
- Broken bag detection (sensor required)



E10 SPECIFICATIONS

TIMER

- Number of valves..... 1 - 10
- Maximum number of valves Up to 60 with extension cards
- ON time..... 50 - 999 ms
- OFF time 1..... 1 - 999 s
- Pulsing mode..... Sequential or Arbitrary (user defined)
- Clean after shutdown..... 1 - 255 cycles

INPUTS

- Power Supply 110/240 VAC or 24 VDC. Others by request.
- Four (4) sensors Digital (dry contact) or analogue (4-20 mA)

OUTPUTS

- Solenoid valves 110 to 240 VAC or 24 VDC
- System active relay Dry contact (NO/NC)
- Three (3) configurable alarms Dry contact (NO/NC)

EXTENSION BOARDS

- Up to 10 output each
- Up to 5 slaves
- RS 485 2 wire (master and slave communication)

DISPLAY - alphanumeric

- System status—Halted or Pulsing
- Number of the next valve to trigger
- Active alarms
- Broken bag row matrix
- Valve error

ALARMS - standard

- Solenoid failure
- Broken filter row

Configurable*

- Air flow
- Auxiliary
- Header pressure
- Hopper Temperature etc...

COMMUNICATIONS

- Modbus RTU

SIZE

- | | PCB only | ABS / Polycarbonate |
|----------------|-------------|---------------------|
| - Height | 150mm (6") | 180mm (7.2") |
| - Width | 250mm (10") | 290mm (11.6") |
| - Depth | 50mm (2") | 130mm (5.2") |
| - Weight | 0.5Kg (1pd) | 0.5Kg (1pd) |

* A broad range of specialist sensor/alarm configurations can be accommodated, call for details

PTronik master controllers, designed and manufactured in Australia, are supplied as PCB only or in either explosion proof EXtD, ABS, Polycarbonate, mild or stainless steel enclosures, with or without solenoid valves fitted and are manufactured to international quality standards: ISO9001:2008.