

Introducing the P2 Profiler

A simple programmable piecewise signal generator. Designed to work with or without your PLC to create, modify and run custom pressure profiles with ease.



96 Events

96 Operational events can be programmed with each profile.



1ms Resolution

Event response and resolution is equal to $1 \text{ms} \pm 0.25 \text{ms}$.



3 Triggers

For each programmed event, 3 customizable triggers can be used.



About the P2 Profiler

The P2 Profiler is a standalone server that incorporates a mini PLC controller. This mini PLC controller can either be housed in most Proportion-Air pressure and flow control devices or implemented with a *go between* external device. The server will execute pressure or flow changes based on time and/or input triggers. With the execution of an event the pressure (or flow) will go to the programmed event output for the programmed time. Once time has expired, it will advance to the next event, executing each event in order until all events have been executed.



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the P2 Profiler

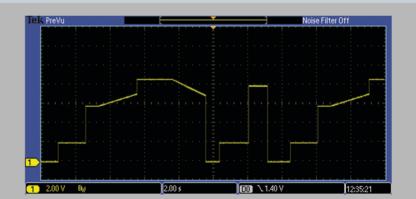
| vent No. | Time | Pressure | Trigger | Ramp | Ouput1 | Ouput2 | Valve | Test |
|----------|------|----------|---------|------|--------|--------|---------|------|
| 1 | 1000 | 0.00 | 0 | No | on | Off | Enabled | No |
| 2 | 550 | 13.33 | 0 | No | on | Off | Enabled | No |
| 3 | 2600 | 25.00 | 0 | No | on | Off | Enabled | No |
| 4 | 1400 | 26.67 | 0 | Yes | on | Off | Enabled | No |
| 5 | 3400 | 15.50 | 0 | No | on | Off | Enabled | No |
| 6 | 1000 | 0.00 | 1 | Yes | on | Off | Enabled | No |
| 7 | 1600 | 19.93 | 0 | Yes | on | Off | Enabled | No |
| 8 | 800 | 58.27 | 0 | Yes | on | Off | Enabled | No |
| 9 | 2200 | 71.07 | 0 | No | on | Off | Enabled | No |
| 10 | 2100 | 86.67 | 0 | Yes | on | Off | Enabled | No |
| 11 | 1900 | 70.20 | 0 | No | on | Off | Enabled | No |
| 12 | 800 | 0.00 | 0 | No | on | Off | Enabled | No |
| 13 | 1700 | 19.93 | 0 | No | on | Off | Enabled | No |
| 14 | 1100 | 79.73 | 1 | No | on | Off | Enabled | No |
| 15 | 1000 | 0.00 | 0 | Yes | on | Off | Enabled | No |

Create profile in Excel



| IP Address | Defaults | Communication | Time and | Events | | | | | | | |
|---|----------|---------------|----------|--------|--|--|--|--|--|--|--|
| <u>↑ + </u> | | | | | | | | | | | |
| Event No. | Time | Pressure | Trigger | Ramp | | | | | | | |
| 1 | 1000 | 0.0 | 0 | no | | | | | | | |
| 2 | 550 | 13.33 | 0 | no | | | | | | | |
| 3 | 2600 | 25.0 | 0 | yes | | | | | | | |
| 4 | 1400 | 26.67 | 0 | no | | | | | | | |
| 5 | 3400 | 15.5 | 0 | yes | | | | | | | |
| 6 | 1000 | 0.0 | 0 | no | | | | | | | |
| 7 | 1600 | 19.93 | 0 | no | | | | | | | |
| 8 | 800 | 58.27 | 0 | no | | | | | | | |
| 9 | 2200 | 71.07 | 0 | yes | | | | | | | |
| 10 | 2100 | 86.67 | 0 | no | | | | | | | |
| 11 | 1900 | 70.2 | 0 | yes | | | | | | | |

Upload profile to P2 Profiler



Run profile

FAQ

Can the output pressure or flow be ramped?

Yes. The P2 Profiler will automatically adjust the ramp steps to provide a smooth transition between the current setpoint and the new setpoint.

Do I need a PLC to control the P2 Profiler?

No. The P2 Profiler is a mini PLC controller that does not require a PLC for operation. However, the P2 Profiler can be programmed and controlled by a PLC if desired.

Is it possible to use the P2 Profiler with older I/Ps and E/Ps?

Yes. The P2 Profiler is available with an external connection box that can be used to connect to any analog commanded pressure regulator.

Do I have to re-upload the excel file everytime I modify the profile?

No. Once the profile is uploaded, the parameters of the profile can be modified directly in the GUI (Graphical User Interface).

I have multiple electronic valves, can I control them all from one screen?

Yes. you can easily switch between all of your valves within the P2 Profiler dashboard. Each device (with the appropriate hardware) is self-discoverable on the network and will show up in the dashboard ready to go!

Can I only control pressure using the P2 Profiler?

No. The P2 Profiler can be used in conjunction with Proportion-Air pressure and flow controllers to control; PRESSURE, FLOW, VACUUM, FORCE, TENSION or POSITION. ---Oh Yeah, you can even control the TEMPERATURE of Saturated Steam!

Specifications

Electrical Power

Supply Voltage: 15-24 VDC Supply Current: 400 mA Electrical Connnector: M12, 8-pin

Digital

Command Resolution: 16 bits Feedback Resolution: 16 bits

Network Interface

Interface: Ethernet, 10Base-T or

100 Base-TX (autosensing) TCP/IP, UDP/IP, DHCP

Protocols: TCP/IP, UDP/IP, DHCP Connector: M12 D-Code Ethernet

Connector

Environmental

Operation Temp: 32-158 °F (0-70 °C)

Operational Details

Number of Events: 1 to 96 Events Event Resolution: 1ms $\pm 0.25ms$ Pressure Resolution: ± 0.02 psig Trigger: ± 3 to ± 24 VDC

3 triggers/event