



UNIVERSAL CONTROL CABLE - Purchased Separately

Length	2 metre (6 ft.)	Part Number	1001300
Length	5 metre (15 ft.)	Part Number	1001301
Length	10 metre (30 ft.)	Part Number	1001302

FUNCTIONS - External control of the pump, via the universal control cable

4 (four) different pump functions are available via the 5 (five) wires of the control cable

PAUSE - Brown-Black

- Open contact pump between these wires, pump will be in "PAUSE" mode.
- "PAUSE" shown on pump display, pump stopped.
- Closed contact between these wires, pump enabled, pump will run based on operating mode.
- When the cable is connected to the pump and the pause function is not used, it is necessary to close Brown - Black wires together, otherwise pump will always be in "PAUSE" mode.

CONTACT - White-Black

- Pulses between these wires will pace the pump when the pump is in contact mode.

ANALOG - Blue-Black

- For 4-20 mA input Blue + input, Black - input, Pump Impedance 120 ohms.

AUXILIARY - Grey-Black

- Open contact between these wires, pump operates as normal.
- Closed contact between these wires, pump defaults to the preset auxiliary stroking frequency.

STATUS LEDs

GREEN LED ON

- Normal operation LED blinks off with each pump stroke.

YELLOW LED ON

- In calibration mode stroke volume adjusted +/- > 10% of calibrated setting.
- "CALIB" flashing at side of display.

YELLOW LED ON

- Display flashing, low chemical tank level warning.

RED LED ON

- "MINIM" Flashing, low chemical tank level.

RED LED ON

- "ANALG" Flashing, No mA input or mA input less than 3.7 mA. (4-20 mA operation)

RED LED ON

- "FLOW" Flashing, low flow for more than preset numbers of strokes.

ProMinent Fluid Controls, Inc. (USA)

136 Industry Drive,
Pittsburgh, PA 15275-1014
Tel: (412) 787-2484
Fax: (412) 787-0704
eMail: sales@prominent.us
Internet: www.prominent.us

ProMinent Fluid Controls Ltd. (Canada)

490 Southgate Drive,
Guelph, ON N1G 4P5
Toll-Free: 1-888-709-9933
Tel: (519) 836-5692
Fax: (519) 836-5226
eMail: sales@prominent.ca
Internet: www.prominent.ca

QUICK START PROGRAMMING GUIDE for Sigma and gamma/L pumps

ProMinent®

Experts in Chem-Feed and Water Treatment



Push Button Functions



P = Hold for 2 (two) seconds to enter into programming
or
P = Press once to confirm a setting or value



i = Steps through operating information each time when pressed



ARROW UP = Increases numeric value / Up



ARROW DOWN = Decreases numeric value / Down



START/STOP = Start/Stop pump operation

Additional Quick Start Instructions Inside

ProMinent recommends operators familiarize themselves with the pump's operating manual, as the Quick Start Guide is a supplement to this important documentation about your control version pump.



MANUAL MODE

Pump is shipped in Manual mode, set at maximum stroke frequency.

- Use **⏮** or **⏭** to change pump's stroke frequency.
- Use **⏮** to step through pump operating information each time when pressed (i.e. stroke frequency, stroke length % / totalized strokes / etc.).
- Use **⏻** to start and stop pump.

ANALOG MODE (Optional for pump)

For 4-20 mA control

- Press and hold **⏻** until display flashes. Release.
- Use **⏮** or **⏭** until you see "MODE". Press **⏻**.
- Use **⏮** or **⏭** until you see "ANALOG". Press **⏻**.
- The pump is now in analog mode.
- If the red L.E.D. comes on and "ANALG" flashes on the display, the pump is either not getting an analog signal or the signal is below 3.7 mA. (4-20 mA operation)

To set for 4-20 mA operation

- Press and hold **⏻** until display flashes. Release.
- Use **⏮** or **⏭** until you see "SET". Press **⏻**.
- Use **⏮** or **⏭** until you see "ANALG". Press **⏻**.
- Use **⏮** or **⏭** until you see "4-20 mA". Press **⏻**.
- Pump will respond proportionally, 4 mA = 0 SPM 20 mA = Maximum frequency

CONTACT MODE

External pulse inputs via the universal control cable from (i.e. water meter, Dulcometer controller).

BASIC CONTACT MODE

- Press and hold **⏻** until the display flashes. Release.
- Use **⏮** or **⏭** until you see "MODE". Press **⏻**.
- Use **⏮** or **⏭** until you see "CONTACT". Press **⏻**.
- The pump is now in contact mode.

TO SET MULTIPLIER/DIVIDER VALUE (when pump has this option)

- Factor can be set in the range of 00.01 to 99.99
- Put pump into "CONTACT" mode, as per above.
- Press and hold **⏻** until display flashes. Release.
- Use **⏮** or **⏭** until you see "SET". Press **⏻**.
- Use **⏮** or **⏭** until you see "CNTCT". Press **⏻**.
- Use **⏮** or **⏭** until you see "OFF". Press **⏻**.
- First of 4 (four) digits is flashing XX.XX
- Use **⏮** or **⏭** to set numeric value of the flashing digit. Press **⏻** to move to next digit.
- Repeat until factor is set (i.e. For multiply by 2.5 = 02.50 For divide by 2 = 00.50)
- Press **⏻** to return to pump operation.

FOR QUICK PRIMING

For quick priming while on external control

- Press **⏮** until "FREQ" is shown at the right hand side of display.
- Then by pressing **⏮** and **⏭** simultaneously, pump will run at "MAX" frequency.

CALIBRATION

To calibrate the pump, have pump ready to draw from a calibration column or graduated cylinder.

- Stop pump **⏻**.
- Press and hold **⏻** until display flashes. Release.
- Use **⏮** or **⏭** until you see "SET". Press **⏻**.
- Use **⏮** or **⏭** until you see "CALIB". Press **⏻**.
- Use **⏮** or **⏭** until you see "ON". Press **⏻** "Start" should be flashing on display.
- Note the level in the calibration column/graduated cylinder.
- Press **⏻** to start the calibration.
- Run calibration as long as the calibration column allows. Press **⏻** to stop calibration.
- Determine the volume pumped (i.e. 38 ml=0.0380 litres)*.
- Use **⏮** or **⏭** to change the numeric value of the flashing digit.
- Press **⏻** to move to the next digit.
- When volume setting is complete. Press **⏻**.
- Use **⏮** or **⏭** to set unit to litres*.
- Press **⏻**. Calibration is complete.
- By using **⏮**, you can step through operating information, view pump rate in litres/hr and totalized capacity.

* If calibration was done in gallons, use the pumped gallon volume and set unit for gallons.

FLOW MONITORING

A flow monitor must be connected to the pump for this function. Monitor purchased separately.

- Press and hold **⏻** until display flashes. Release.
- Use **⏮** or **⏭** until you see "SET". Press **⏻**.
- Use **⏮** or **⏭** until you see "FLOW". Press **⏻**.
- Use **⏮** or **⏭** until you see "ON". Press **⏻**.
- You can now set the number of pump strokes with low volume before a fault occurs.
- Use **⏮** or **⏭** to set numeric value of the flashing digit, press **⏻** to move to next digit.
- Repeat until the desired number is set. (up to 125)

AUXILIARY FREQUENCY

A universal control cable must be connected to the pump. When the gray wire is connected to the black, the pump strokes at the pre-set auxiliary frequency.

To set Auxiliary Frequency

- Press and hold **⏻** until display flashes. Release.
- Use **⏮** or **⏭** until you see "SET". Press **⏻**.
- Use **⏮** or **⏭** until you see "AUX". Press **⏻**.
- A value can be set from 0 to maximum stroking frequency.
- Use **⏮** or **⏭** to set numeric value of the flashing digit, press **⏻** to move to next digit.
- Repeat until the desired number is set.
- Press **⏻** to return to pump operation.

Note:

- For Analog and Contact Mode Operation, an universal control cable must be connected to the pump.
- For flow monitoring, a ProMinent flow monitor must be connected.
- For low level indication, a ProMinent 2-stage level switch must be connected.
- Large knob on the pump face is for stroke volume adjustment.
 - Can be adjusted from 0% to 100%
 - Recommended 30% to 100% for standard liquid ends.
 - Recommended 50% to 100% with auto-degassing liquid ends for gamma/L