

Start-up: “ACCU Variable Speed Metering Pump”

Equipment: You will need the following items to get started:

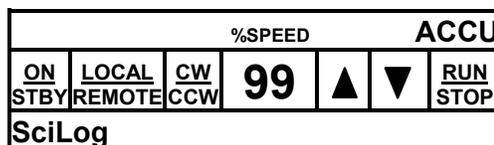
SciLog P/N	Description	Quantity
100-018	ACCU CP-10 w/1081 Peristaltic Head, 160 Rpm	1 pc
400-114	Silicone Tubing, Platinum Cured, #14	25 ft (1 pkg)
080-064	Analog Cable, DB15, for remote proportional control.	1 pc
	Appropriate Media Reservoir	1 pc
	Appropriate Reaction Vessel	1 pc

Hardware Setup:

1. Unpack all the components, visually identify and inspect for damage.
2. At the reaction bench, place the Media Reservoir to the far left, then moving to the right on the bench, place the ACCU, and then finally the Reaction Vessel. Leave some space between these items so you can hook up cables and tubing.
3. Connect the analog cable to the 15-pin connector on the rear of the ACCU and to your controlling signal source. This signal source can be either 4-20ma or 1-5VDC. Place the slide switch on the rear panel in the appropriate position dependent upon the type of control signal you are using.
4. Cut approx. 6 ft. of the #14 tubing and connect it from the Media reservoir. Route the tubing from the reservoir to the ACCU, open the head by rotating the lever 180 degrees counter-clockwise, and place the tubing over the upper set of rollers. Confirm that the tubing is under the centering springs and close the head by rotating the lever back to its original position. Connect the remaining end to the Reaction vessel.

Operation:

The controls on the ACCU are simple. You can only adjust the direction and % of motor speed of the pump. The front panel controls look like this:



ON/STBY indicates with a green led that the unit is plugged into 120V power. Pressing the button will illuminate the rest of the display and allow the pump to run, and changes to be made.

LOCAL/REMOTE indicates whether the unit is being controlled by the front panel, or by a 0-5v or 4-20ma remote source.

CW/CCW indicates the pump direction, clockwise or counter-clockwise. Under normal conditions, use CW.

% SPEED indicates % of motor speed the unit is running, from 0 to 99.

▲▼ Arrows are used to adjust the motor speed.

RUN/STOP indicates the status of the pump and acts as an emergency stop button.

When running in Local mode, Press the ON/STBY button, and the display will light up. Use the Up and Down arrows to choose the % of motor speed, and press the RUN/STOP button to start or stop the pump.

If using a remote signal to control the pump, again, press the ON/STBY button to light up the display, and press the LOCAL/REMOTE button. When the small red led on that button is lit next to the word REMOTE, then the ACCU is in Remote mode, and will respond to the input signal in an very linear manner, and with precise control of the motor speed.

A remote Start/Stop can also be implemented with or without the remote speed control. If using it separately, use SciLog p/n 080-080 Footswitch for ACCU Pump. If using it in conjunction with the remote speed control, you will need p/n 080-081 Analog Cable Kit which includes the connectors and cable. Usually, when using the remote speed control, simply lowering the control signal to zero is enough to provide the remote start/stop function.

The following chart shows tubing dimensions and the available flow rates based on tubing and motor size:

MasterFlex Tubing	13	14	16	25	17	18**	15	24	35**
Tubing ID*: in	0.030	0.060	0.125	0.190	0.250	0.310	0.190	0.250	0.310
Tubing OD*: in	0.157	0.189	0.251	0.314	0.376	0.439	0.376	0.439	0.500
Tubing Wall*: in	0.063	0.063	0.063	0.063	0.063	0.063	0.093	0.093	0.093
Pump Rate Range*:	ml/min	ml/min	ml/min	ml/min	ml/min	ml/min	ml/min	ml/min	ml/min
CP-8 8RPM	0.03 - 0.45	0.10 -1.63	0.43-6.38	0.9 - 12.6	1.14 -18.3	1.7 - 24.3	0.45 – 13	0.65 – 20	0.8 - 32
CP-120 160RPM	0.5 - 10	1.7 - 35.2	6.3 - 129	12.5 - 283	18.5 - 405	24.7 - 554	9 – 260	13 – 435	16 – 650
CP-200 600RPM	2 - 34	8.6- 132	29 - 533	49 -974	70 - 1048	103 - 1515	59-993	85-1348	111 - 2258
* Nominal Values	** Please only use Silicone or C-flex for this size tubing.								
Pump Head Model:	TANDEM 1081						TANDEM 1082		