



PQ167 QUICK START rev G

**USING THE PQ100
IMMEDIATELY**

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I. SETTING UP THE INSTRUMENT TO BEGIN A SAMPLING RUN

INSTALLATION PROCEDURE

1) Included components:

- a) PQ101 charger**
- b) SSI2.5 Inlet**
- c) Rigid Stand with Hose**
- d) Stabilizer Assembly**
- e) PQ-102 Adaptor**
- f) F-20 Filter Holder**
- g) A1904 Filter Holder Adaptor**
- h) A1751 Long Down Tube**
- i) F21/2 Filter Cassettes in Clear Case**
- j) PQ200 PC software CD**
- k) CQ-2 Download Cable**
- l) Set of legs**

SEE PAGE 7 FOR COMPONENT IDENTIFICATION

2. Instrument set-up on site

- a) Unpack instrument and legs checking packing list against received items.
- b) Begin setup by attaching the legs to the rigid stand using attached knurled snap lock fittings. **FIGURE 1**
- c) Fit the filter holder adaptor (A1904) into the hole in the rigid stand. **FIGURE 2**
- d) Install the appropriate filter media cassette into the filter holder (F20). **FIGURE 3**
- e) Screw the filter holder (F20) into the filter holder adaptor (A1904). **FIGURE 4**
- f) Install the down tube (A1751) onto the filter holder. **FIGURE 5**
- g) Install Stabilizer Assembly and tighten using 1/4" allen wrench. **FIGURE 6**
- h) Attach SSI2.5 PM10 Inlet into download tube and adjust the stabilizer to hold inlet.
FIGURE 7
- i) Gently set PQ100 pump into the stand and screw in the Hose Adaptor (A1902) and attach hose. **FIGURE 8**
- j) Position battery charger box on left side of rigid stand and secure with thumbscrews provided. **FIGURE 9 and 10**
- k) Install battery charger up inside the charger box and hook along edge of box.
FIGURE 11 and 11b (CUTAWAY OF BATTERY BOX)

**REFER TO PHOTOS ON NEXT 2 PAGES TO IDENTIFY
COMPONENTS AND ASSEMBLY STEPS**

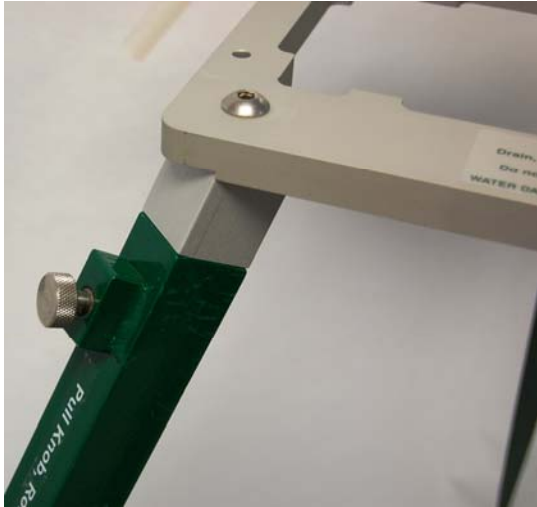


Figure 1



Figure 4

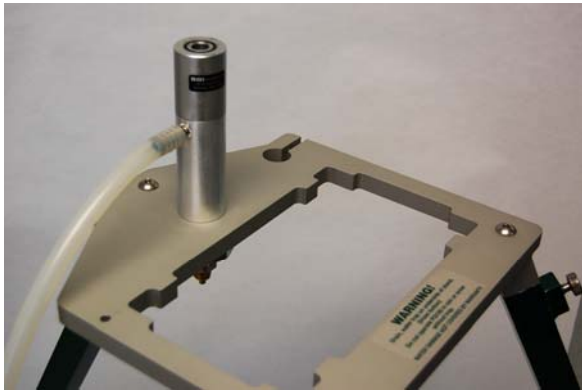


Figure 2



Figure 3



Figure 5



Figure 6



Figure 7



Figure 8

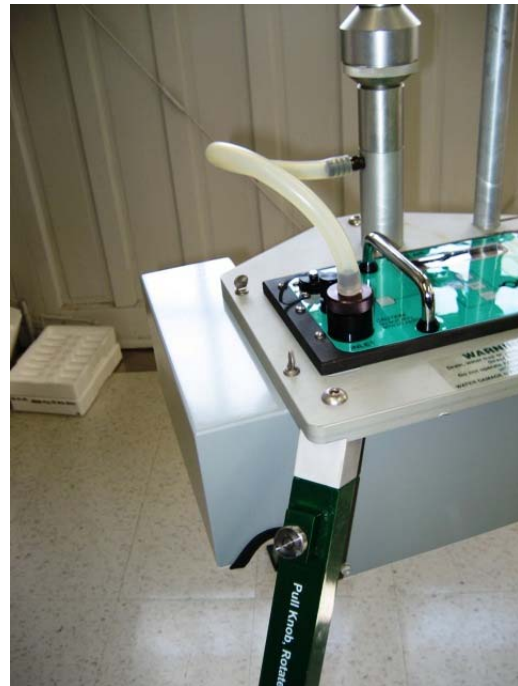


Figure 9



Figure 10



Figure 11a

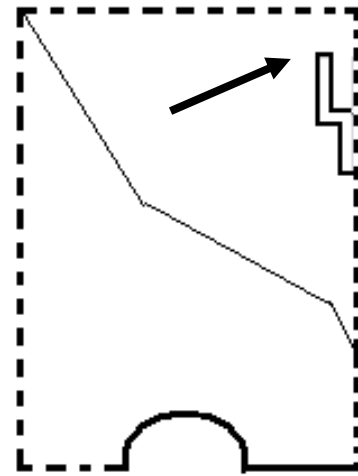


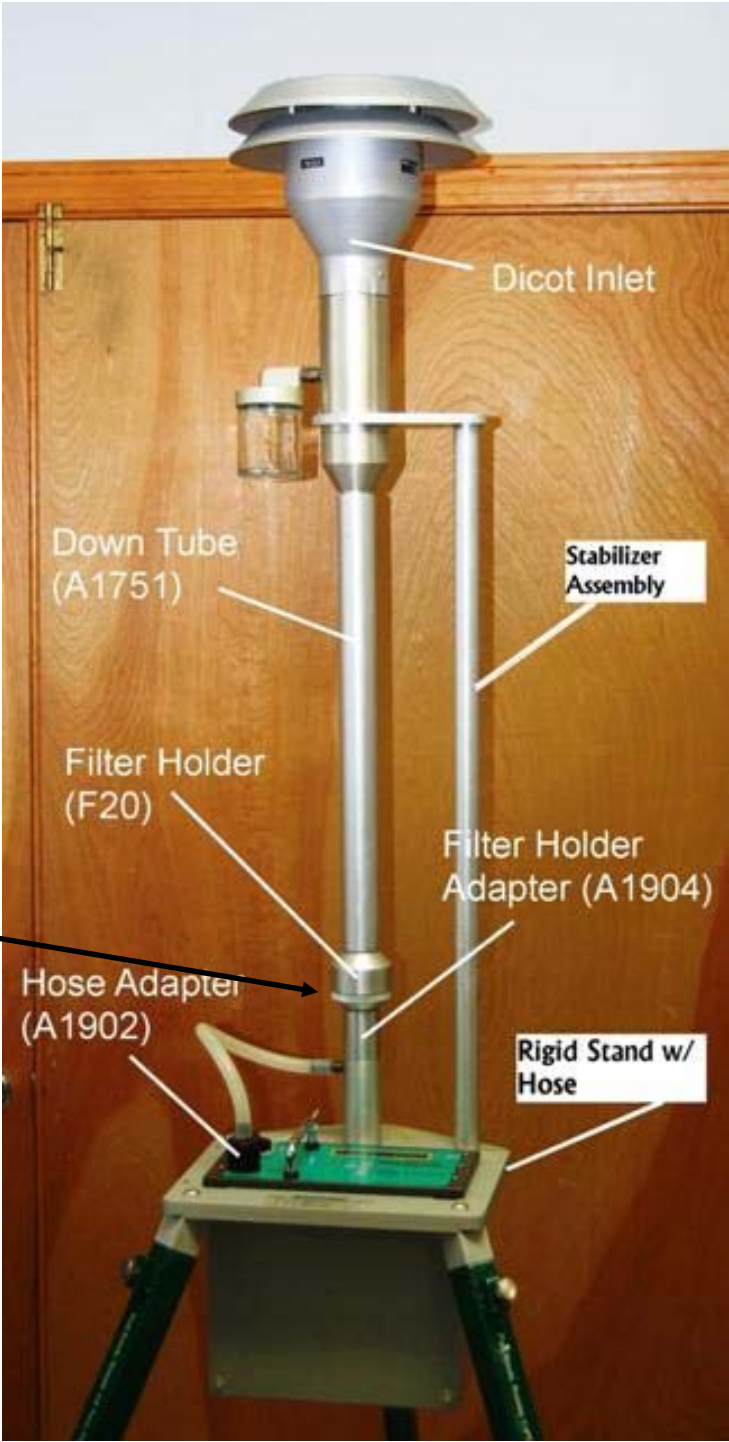
Figure 11b

Install battery by hooking the edge on the bracket. (SEE ARROWS)

Figure A

**PICTURE OF
TYPICAL
INSTALLATION**

**NOTE POSTION OF
FILTER HOLDER
DO NOT INSTALL
DIRECTLY ON
INSTRUMENT**

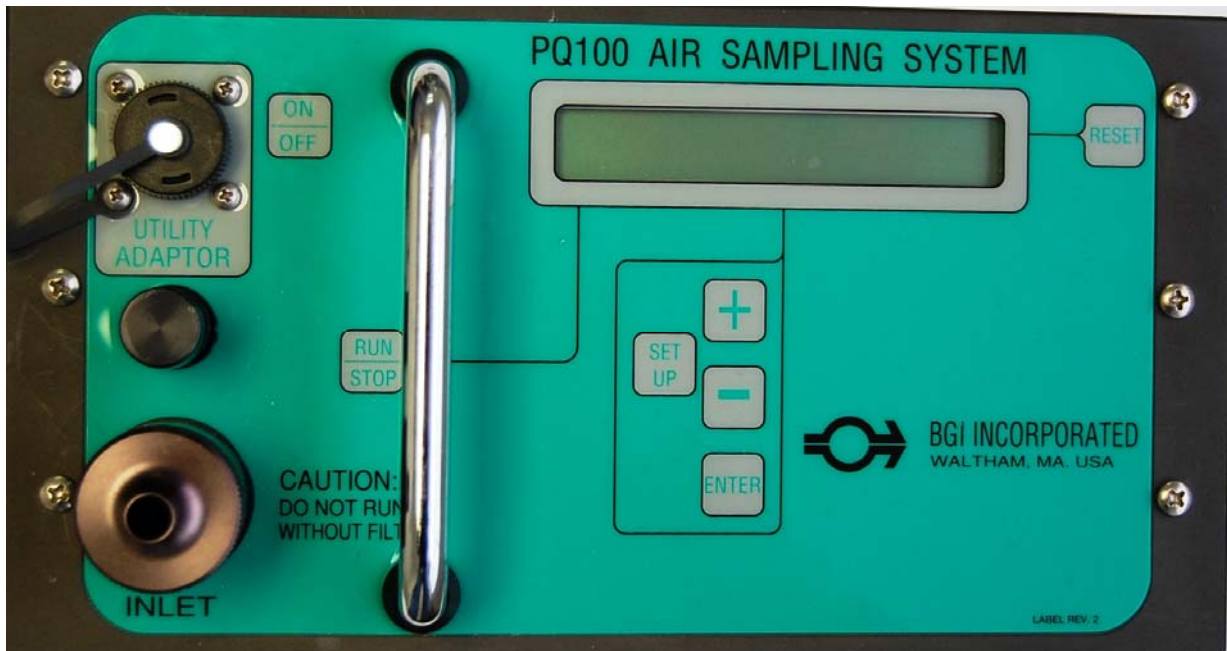


II. OPERATING THE PQ100

1) What the Buttons do:

- a) **"ON/OFF"** - Turns the PQ100 On or Off.
- b) **"RESET"** - Press after a sampling job to clear all the counters in preparation for the next sampling job.
- c) **"RUN/STOP"** - Use when the PQ100 has been reset and programmed for another run and you now wish to start the pump.
- d) **"+" Increase "-" Decrease**
- e) **"SETUP"** - Moving from screen to screen to check or change values set on the screen.
- f) **"ENTER"** – Press the enter key to move the flashing value across the screen.

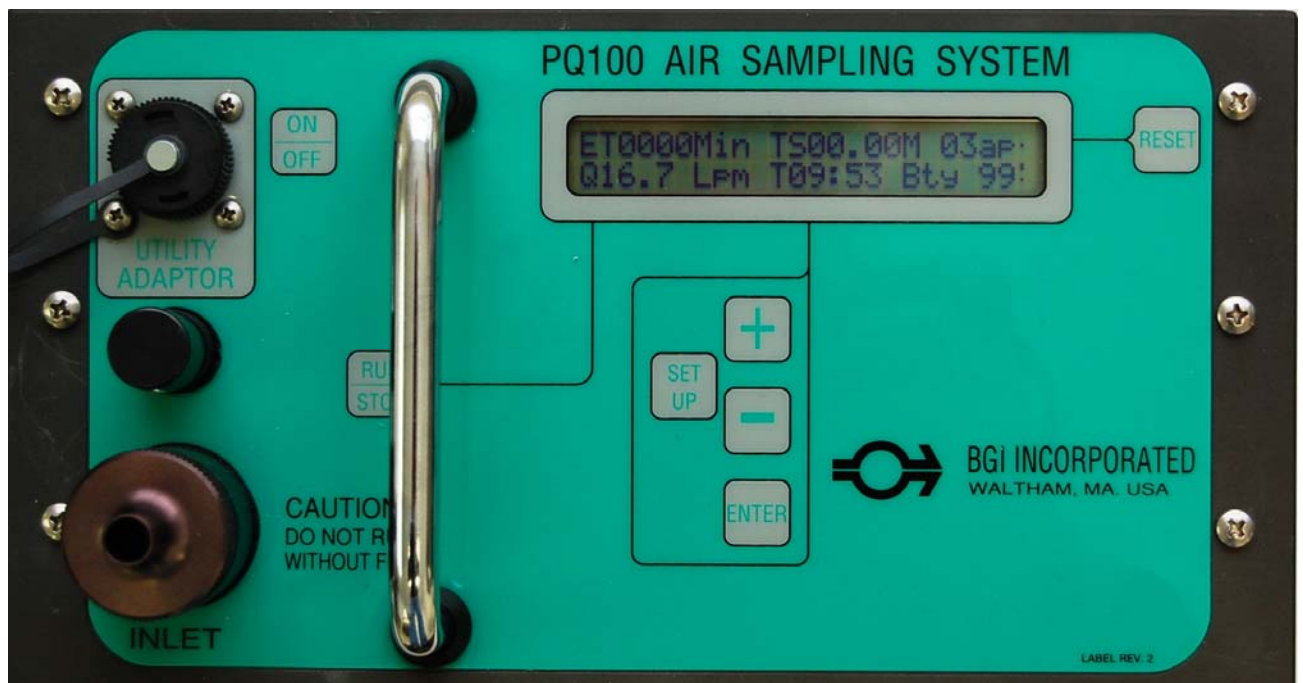
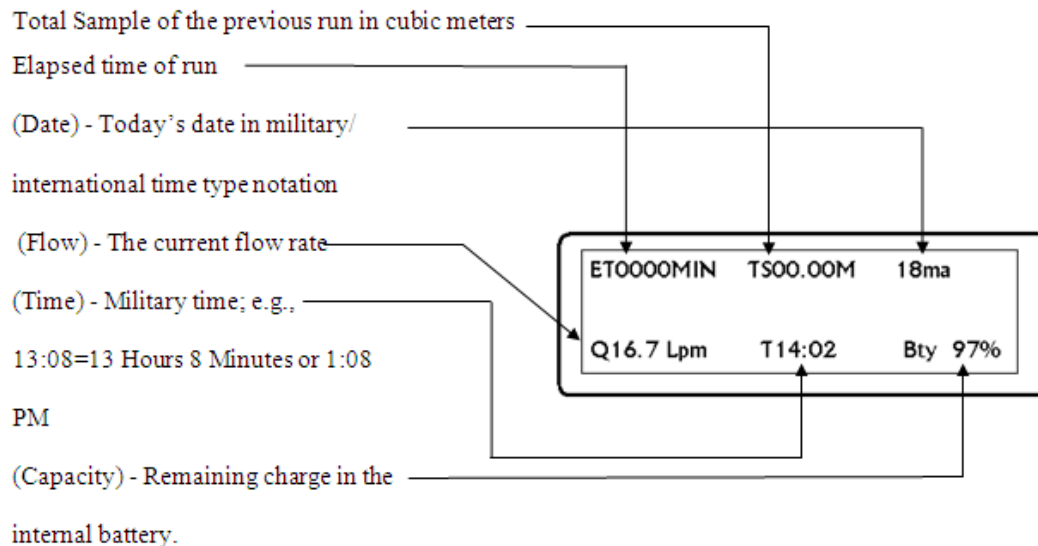
The non-blinking value can be changed with the "+" and "-" buttons. Press enter again to accept new setting within the screen.



2) Running the PQ100 at 16.7 Liters per Minute

- a) Turn the PQ-100 on (Push the "ON/OFF" button). If a message is blinking on the display, press "ENTER" to proceed to the "MAIN DISPLAY".
- b) Before you change any setups and to delete the last run push the "RESET" button.

Screen display should be:

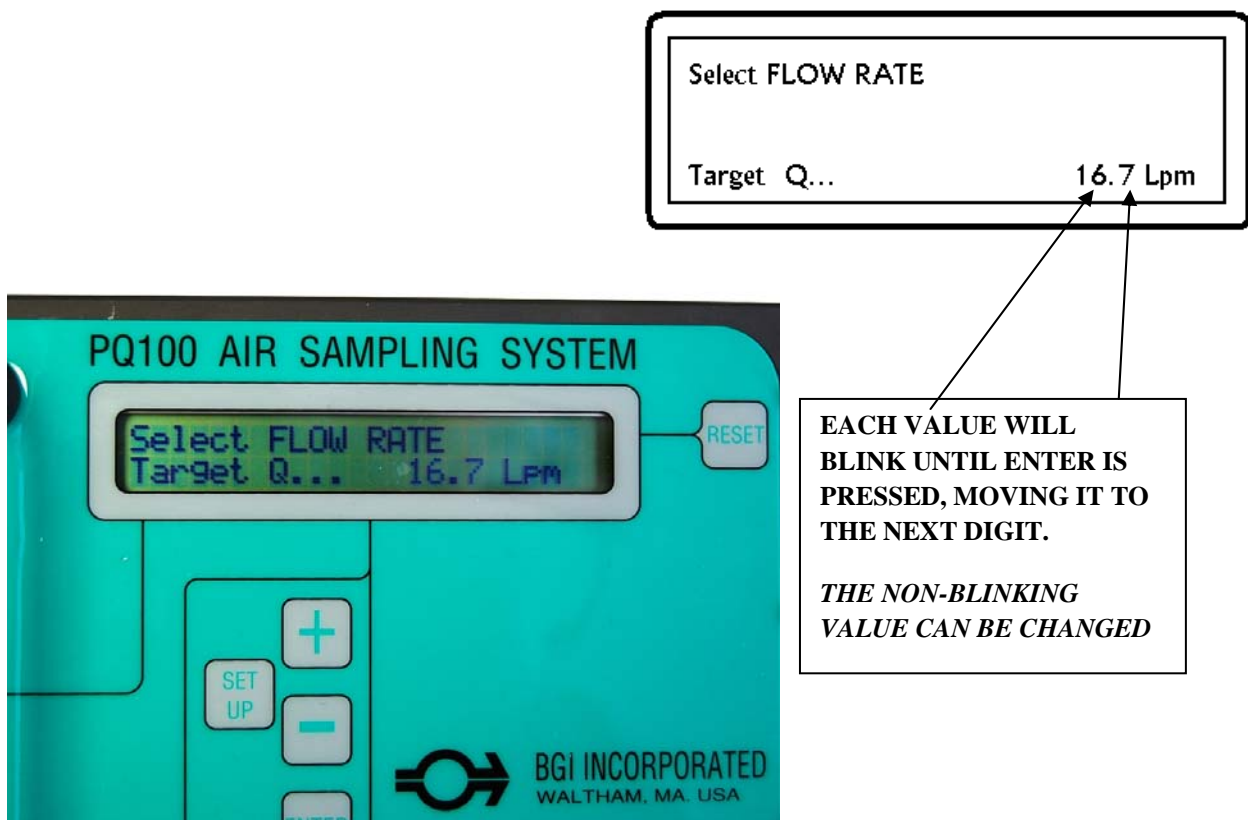


3) Press "SETUP"

Screen reads; "Select FLOW RATE"

a) To change TARGET FLOW RATE:

- a) Press **ENTER** (Whole number value will remain on constant while the tenths still **blink**); use "+" or "-" to increase or decrease until 16 is displayed.
- b) Press **ENTER** (Tenths value will now remain constant while whole number **blinks**); use "+" or "-" to increase or decrease until .7 is displayed.

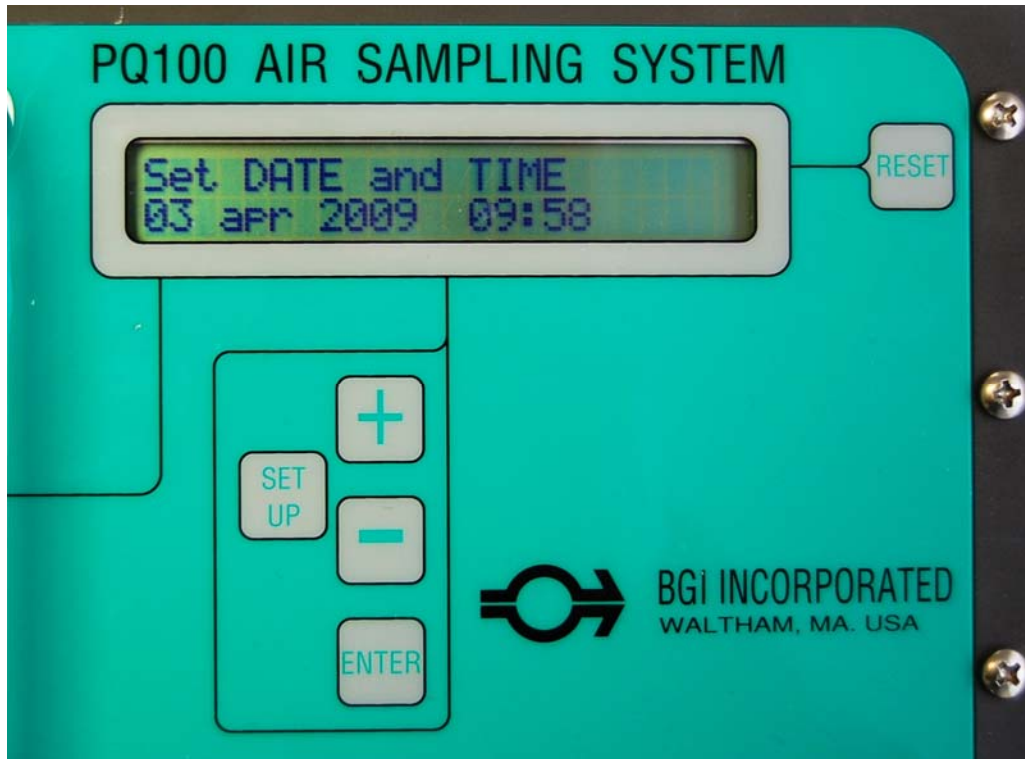


Press "SETUP" TO SAVE AND MOVE TO NEXT SCREEN

4) Screen reads;

"Set DATE and TIME"

NOTE: FACTORY SET TO EASTERN STANDARD TIME EST (US)



a) TO CHANGE THE DATE AND TIME:

- a) **Calendar day:** Press **ENTER** and change by pressing the + or - key.
- b) When the day is correct, press **ENTER**.
- c) **MONTH:** To change, press + or - key. When correct, press **ENTER**.
- d) **YEAR:** To change, press + or - key. When correct, press **ENTER**.
- e) **TIME (hrs):** To change, press + or - key. When correct, press **ENTER**.
- f) **TIME (mins):** To change, press + or - key. When correct, press **ENTER**

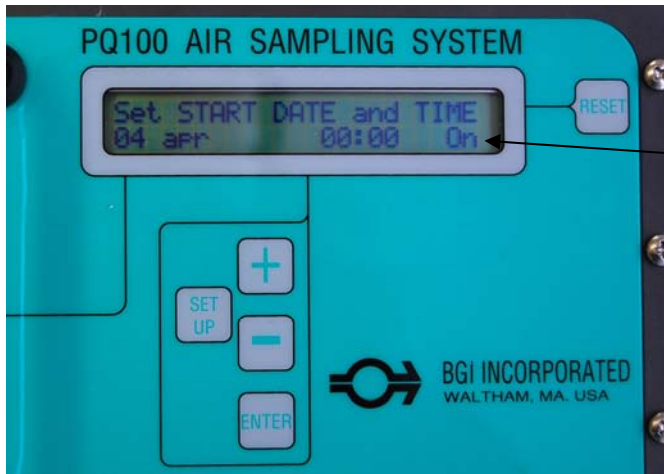
Press "SETUP" TO SAVE AND MOVE TO NEXT SCREEN

5) Screen reads:

"Set START DATE and TIME"

This determines when you wish to start a sample job.

It always defaults to midnight of the current day.



**THIS MUST BE SET
"ON" TO INITIATE
SCHEDULED RUN**

(SEE LINE f BELOW)

TO CHANGE THE START DATE AND TIME:

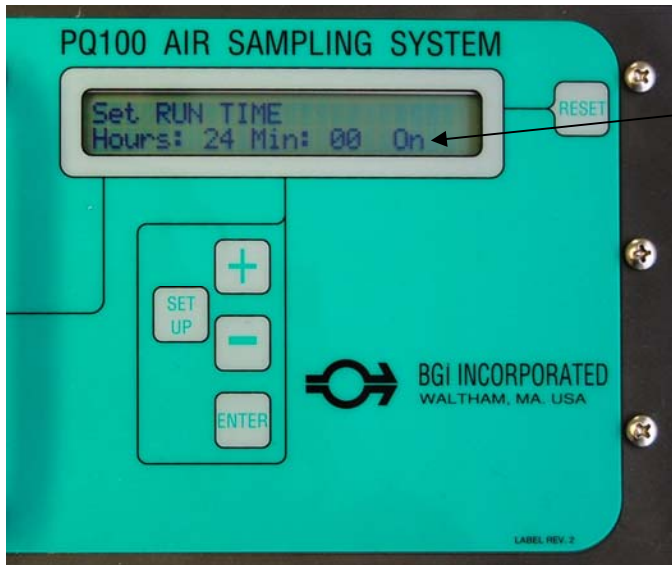
- a) **Calendar day:** Press **ENTER** and change by pressing the + or - key.
When correct, press **ENTER**.
- b) **MONTH:** To change, press + or - key. When correct, press **ENTER**.
- c) **YEAR:** To change, press + or - key. When correct, press **ENTER**.
- d) **TIME (hrs):** To change, press + or - key. When correct, press **ENTER**.
- e) **TIME (mins):** To change, press + or - key. When correct, press **ENTER**.
- f) **ON/OFF:** This is to turn this function On or Off. If "Off" then a sample job (pump starts running) is initiated as soon as the "RUN/STOP" key is pressed from the "MAIN DISPLAY".
If "On" then the sample job is initiated when the start date and time are reached.

Press "SETUP" TO SAVE AND MOVE TO NEXT SCREEN

6) Screen reads;

"Set RUN TIME"

This is for when you wish to set the length of time that the pump will run for, Other than for 24 hrs). It always defaults to 24 hrs 0 min.



**THIS MUST BE SET
"ON" TO INITIATE
SCHEDULED RUN**

(SEE LINE c BELOW)

TO CHANGE RUN TIME:

- a) **HOURS:** Press ENTER and change by pressing the + or - key. When the hours are correct, press ENTER.
- b) **MINUTES:** To change, press + or - key. When correct, press ENTER.
- c) **ON/OFF:** This is to turn this function On or Off. If "On" then the pump will run for the amount of time specified and then power itself off.
- d) When correct, press ENTER.

Press "SETUP" TO SAVE AND MOVE TO NEXT SCREEN

7) Screen reads;

"To Initiate a Timed Run

Press Run/Stop Now!"

THIS CONFIRMS A TIMED

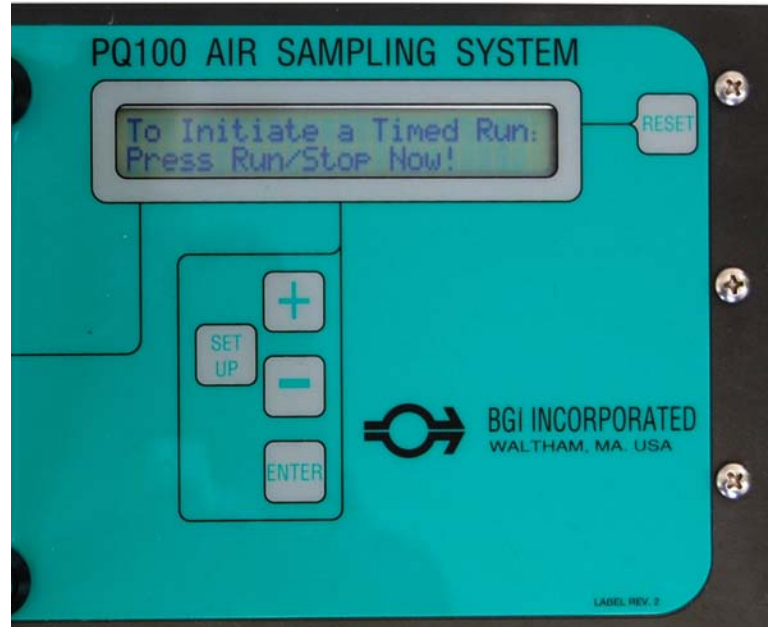
RUN HAS BEEN SET.

a) Press "SETUP"

b) Screen reads;

"EVENT TRIGGERED RUN

POWERING DOWN"

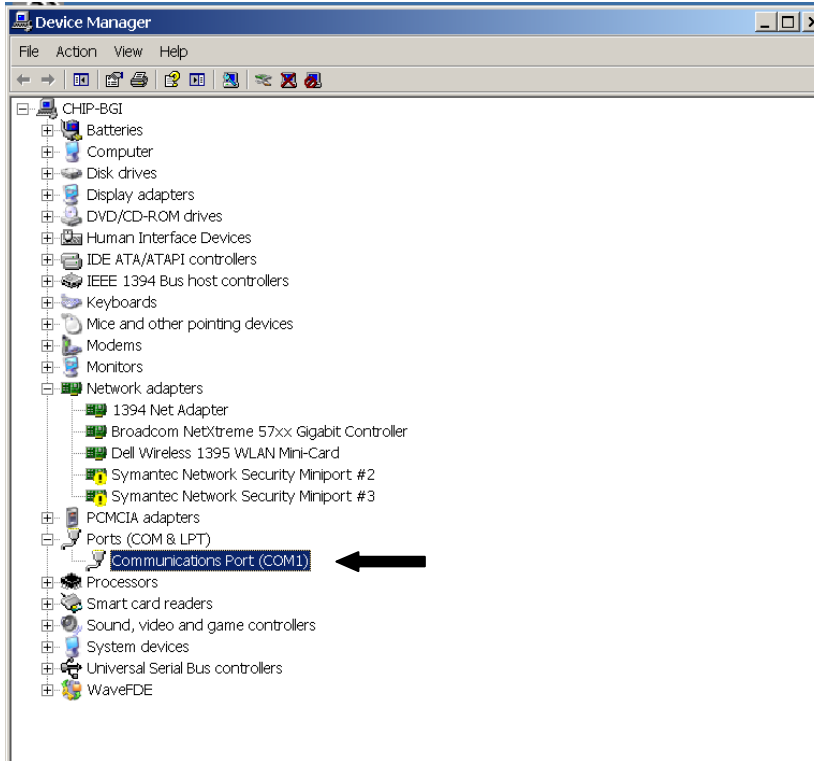


The FRM sampler is now programmed to run according to the defined start and stop time.

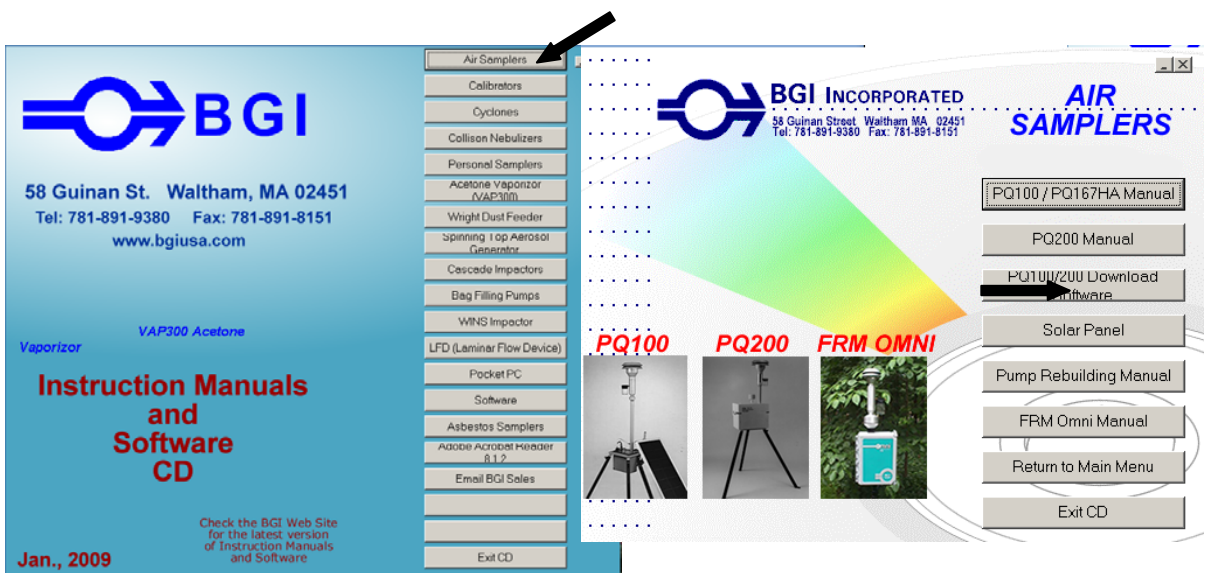
NOTE: THE PQ100 DOES NOT REQUIRE A LEAK TEST. CUTTING OFF THE FLOW OF AIR BY COVERING OR RESTRICTING THE AIR FLOW TO THE INLET WILL CAUSE DAMAGE TO THE INTERNAL PUMP AND WILL VOID THE WARRANTY.

III. `Downloading (A Quick Start Overview)

1. Using device Manager on the pc/laptop, note the com-port to be used.



2. Install PQ200 job controller software (“PQ100/200 DOWNLOAD SOFTWARE”) from disk on pc/laptop. Click **Air Samplers** and then click **PQ100/PQ167HA MANUAL**.



3. Click on “Air Samplers” tab and Install “PQ100/200 DOWNLOAD SOFTWARE”.
4. Follow screen instructions until installed.



5. Set up program for use: Pq200.exe
 - a. Open FILE, user prefs; select serial port you wish to download to.
 - b. Fill-in any appropriate new job information, NOTE OR CHANGE THE DEFAULT DATA DIRECTORY, then click SAVE.
6. Start download:
 - a. Click FILE, NEW, fill-in any site/job specific information as required, and SAVE. NOTE OR CHANGE THE DEFAULT DATA DIRECTORY, then click SAVE. (YOU WILL SEE A SPREADSHEET APPEAR)
7. To DOWNLOAD:
 - a. Click DOWNLOAD, BEGIN,(You will see data scrolling down the window).
 - b. When it stops click RETURN.
 - c. Information will appear in the spreadsheet.
8. You can print the data sheet if desired by using the print function under the FILE tab.