

# MICROFLEX TOWER CONTROLLER QUICK START GUIDE

## CONTROLLER OPTIONS:

Match the model number with your controller to ensure you have the correct equipment for your application.

**M2T** (MicroFLEX 2 relay cooling controller)

**CO-IN**—Base model includes selectable Inhibitor feed based on a watermeter or % time or blowdown, selectable blowdown control on conductivity, % time or watermeter.

## OPTIONS: (Only room for 1 per controller)

**CL**—Add a 4-20mA output card to provide the conductivity value to a remote device or system

**LB**—Add an Ethernet port. This allows you to connect directly to the controller with a PC or to connect the controller to the plant network whereby the entire plant will have controller access. (Don't have this option? Place this link in your Internet Browser to **view a MicroFLEX controller live**). <http://66.146.13.222>

**AR**—Alarm dry contact. Can be used to turn on a light, horn or as an input to the plant system.

## KEYPAD FUNCTIONS:


Apply power (120VAC) to the unit. You should see the POWER UP SCREEN:

Note the serial number. Open the cover panel (two Latches) and compare the displayed serial number with the sticker inside the cover.



Note the Controller has no Clock. It has a Count up Timer from date of startup and is totalized.

The keys: **Enter**,  **Cursor Up**,  **Cursor Down**,  **Cursor Right**,  and **Escape**. 

Note the cursor on the right-hand side of the display.  press the **Enter** key, you will open the sub-menu

This cursor indicates the line you are monitoring. If you options for this item.

## THE MAIN MENU:

Press the **Down arrow** repeatedly until the display has cycled through the entire menu and returned to the power up screen. Note the line indicated by the cursor. Press the **Enter** key. Note the submenu. Press the **Down arrow** key to view the menu choices. Press **Enter** to open a submenu or activate a command. Press the **Escape** key to exit.

## HOW TO:

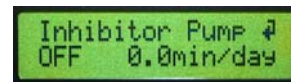
### PRIME A PUMP OR BLEED VALVE:

Either relay can be primed for 5 minutes. To cancel the prime action, clear the alarm for that relay.

Exercise: Prime the Inhibitor relay for 5 minutes, then clear prior to time out;

Use the **arrow keys** to locate the **Inhibitor Pump** relay and press **Enter**.

Use the **arrow keys** to scroll up or down to **Prime Pump**. Press **Enter**.



The relay will turn on for 5 minutes unless the flow switch is OFF. **Relays do not operate when the flow is off.**

To cancel the Prime, **scroll** to **Alarms** and press **Enter twice**. Relay turns off.

Note: Inhibitor and Bleed LED indicators are located inside the controller in the lower right-hand corner.

## CALIBRATE A SENSOR:

To calibrate conductivity, move the cursor **down or up** until you see the Conductivity sensor.

Press **Enter**. You will see **Calibrate/Alarms**. Press **Enter** to edit the current Conductivity value. Notice the cursor under one of the digits. (Number 6 in this picture).

Move this underline using the **Right Arrow** to scroll through the digits to the digit you wish to change and press the **up** or **down** arrow to edit. Move the cursor and repeat as necessary. Press **Enter** when complete.



value. Or press **Escape** to disregard the new value and reset the input to factory defaults. You should at a minimum inspect/clean the sensor and re-calibrate. If the value you enter is still out of range, you should consider a new sensor.

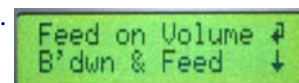
### EDIT THE SETPOINT – Example: Bleed Setpoint

To edit the blowdown setpoint, scroll down to **Bleed Solenoid** and press **Enter**. See **Setpoint** and press **Enter**. See **Turn On** and press **Enter** or scroll down to **Turn Off** and press **Enter**. Use **Up**, **Down** and **Right** arrows to edit the values. When done, press **Enter** then **Escape** two times to return to the top menu.



### INHIBITOR CONTROL:

Scroll down to inhibitor control and press **Enter**. You will see two selections. **Setpoints** and **Feed Mode**. Press the **Down arrow** for **Feed Mode** and press **Enter**. The factory default mode is **Feed on Volume**. If using a different **Feed Mode**, enter the Inhibitor pump menu, scroll down to **Feed Mode** and press **Enter**. Scrolling down will give you four **Control Modes**; FEED ON VOLUME, BLEED & FEED, BLEED THEN FEED, PERCENT TIME. The first, **Feed on Volume** is described here.



Selecting **Feed on Volume**. If you are not changing **Control Modes**, press **Enter** to go directly into **Setpoints**. In **Setpoints** you have two points to change. The first is **Measure Volume of Gallons** which will accumulate to setpoint. To edit, press **Enter**, then use the **Up**, **Down** and **Right** arrows to change the value. Press **Enter** to save. Scroll down to **Feed** and press **Enter**. Use **Up**, **Down** and **Right** arrows to edit the values when done, press **Enter**. Then press **Escape** twice to return to the main menu.

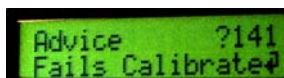
Selecting **Bleed & feed** control mode. Press **Enter** from Inhibitor Pump and scroll down to Feed mode and press **Enter**. Scroll down to Bleed & Feed and press **Enter**. Now scroll up to Setpoints and press **Enter** to make changes to Bleed & Feed based on 100% of Blow down each 5 minutes. Press **Enter**. Use **Up**, **Down** and **Right** arrows to edit the values. When done, press **Enter**. Then press **Escape** two times to return to main menu.

Selecting **Bleed then Feed** control mode. Press **Enter** from Inhibitor Pump, scroll down to Feed mode and press **Enter**. Scroll down to Bleed then Feed and press **Enter**. Scroll up to Setpoints and press **Enter**. Press **Enter** to make changes to Bleed then Feed based on adjustable % of Blow down each 5 minutes. Press **Enter**. Use **Up**, **Down** and **Right** arrows to edit the values. When done, press **Enter**. Then press **Escape** two times to return to main menu.

**Percent Timer Control**. Scroll down to Inhibitor pump and press **Enter**. You will see Setpoints and Feed Mode. Scroll down to Feed mode and press **Enter**. Scroll down to Percent timer and press **Enter** to select mode. Then scroll up to Setpoints and press **Enter**. This is a Feed Timer based only on a Percentage of Time based on a five minute cycle. Press **Enter**. Use **Up**, **Down** and **Right** arrows to edit the values from 0 to 100% of 5 minutes. When done, press **Enter**. Then press **Escape** two times to return to main menu.

### HELP!

What does “**?141 Fails Calibrate**” mean?



Throughout the controller menu, there are embedded help references. They are identified by the question mark and a three digit number. The Help document can be downloaded from our web site at [www.aquatrac.com](http://www.aquatrac.com). Look under the tab for Literature, microFlex and Technical Manuals. The file is entitled ‘**MicroFLEX\_HELP\_Definitions**’.

The user manual, AQC2\_User, has pictures of sensor wiring on pages 6 and 7.

Call Technical support for other troubleshooting tips. 800/909-9283