

Publication date: 10-1-18

Article covers: ALL Legacy Chiller Systems air cooled process chillers equipped with the VFD / ECM controlled condenser fan motors.

Purpose: This technical bulletin address minor calibrations to the VFD / ECM settings to achieve peak refrigeration performance.

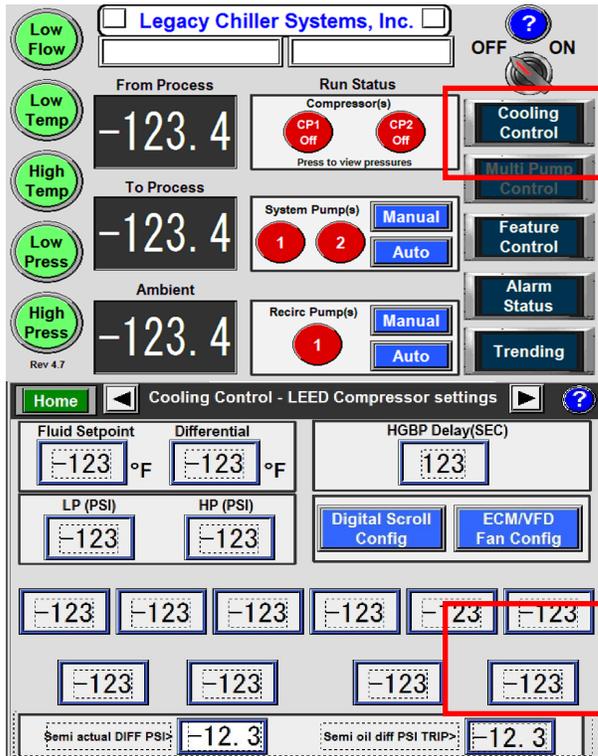
WARNING: DO NOT ATTEMPT TO MAKE THE FOLLOWING CHANGES TO YOUR CHILLER UNLESS YOU ARE QUALIFIED TO INSTALL, SERVICE AND MAINTAIN PROCESS CHILLER EQUIPMENT. IN ADDITION TO EQUIPMENT DAMAGE, ATTEMPTING TO PEFORM SUCH WORK WHILE NOT QUALIFIED MAY BE INJUURED OR KILLED.

STEP #1 Accessing factory setup: To make calibrations to the VFD settings you first need to log into the factory mode. Once logged in, if there is no activity for TEN MINUTES you will be automatically logged out and will need to repeat this step.

- ⇒ To access the factory settings area, using your finger firmly press on the white space to the right or left side of the screens marque. In the picture to left the red circles show the hidden button positions.
- ⇒ After 2-3 seconds, a keypad should appear on the screen. Press the up and down arrows in the upper left to say “Factory”.
- ⇒ ENTER 6115 then ENT.
- ⇒ Once the code is accepted press the HOME button to return to the home screen.

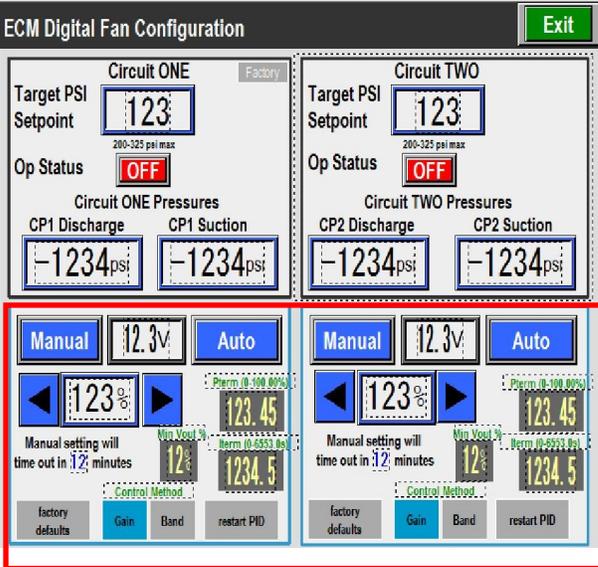
Important note: Legacy Chiller Systems is constantly making improvements to our chiller control system. Unlike any chiller control system on the market, customers can get copies of the latest factory software from the Legacy on-line Knowledge Base (KB). As a result of our constant improvements, the screens you actually see may differ a bit from what is illustrated in this booklet. If you have any questions related to initial programming of these controls or how to get software updates, please check our on-line KB or contact Legacy Engineering at: 877-988-5464.





STEP #2 Calibrating your VFD / ECM fans: Once you have successfully logged in as a factory user, follow these steps to access the VFD / ECM fan settings.

< A. From the home screen, press “Cooling” Control.



< B. From the LEED compressor setup screen, press “ECM/VFD Fan Config”.

< C. When logged into as a factory user the bottom (Calibration) area will be visible.

There are only THREE values that you should change as part of fan calibration for ckt 1 and or ckt 2 fans:

> **Min V Out%:** The factory default value for this setting is 40%. This is the minimum signal output to the condenser fans. You should never go below 35% however you can increase as high as 90% if you wish.

> **Pterm:** This setting should be set for “1”. DO NOT change this setting without factory approval.

Iterm: Factory default for this setting is “3”. If your fan is rapidly cycling up and down consider INCREASING this setting. If your fan is reacting to slow, allowing your compressor head pressure to hunt more than 25 PSI consider DECREASING this setting. NEVER increase this setting lower than “1” or higher than “5” without factory approval.