



HMI (Human Machine Interface) System User Manual

March 2021

1. Screen's Definition :

Main Screen

The screenshot shows the 'Main Screen' of the Flo-Fab pump system HMI. The window title is 'Delta DOP-107EG Emulator, V1.0110, Offline Mode'. The top bar displays the time '20:20:54', the day 'MONDAY', the date '03/29/2021', and the status 'CONNECTED'. The 'Home' section includes 'Flo-Fab pump system HMI for Vacon', 'Version : 1.8', and 'Released : 2021 02 23'. The main area is divided into sections for 'Multi-pump state', 'Speed (Hz)', 'Current (A)', and 'Run time (Hr)'. It features two pump control panels (P1 and P2), each with a 'LOCKED' indicator, an 'Auto' status, and 'ON/OFF' buttons. Each panel also has a speed gauge and digital readouts for 'AMPS' and 'F.L.A.'. A 'Setpoint' display on the right shows '0.0 FT' with a vertical scale below it. The bottom bar contains 'SETTINGS', 'LOCKED', 'SYSTEM OK', and 'EMERGENCY STOP' buttons. Eight numbered callouts (1-8) point to specific UI elements: 1 points to the P1 'Auto' indicator, 2 to the P2 'Auto' indicator, 3 to the 'SETTINGS' button, 4 to the 'LOCKED' button, 5 to the 'SYSTEM OK' button, 6 to the 'EMERGENCY STOP' button, 7 to the vertical scale, and 8 to the 'Setpoint' display.

1.1 Main screen glossary :

The main screen giving access the system when you press “LOCKED “ (#4) screen button.

1: Pump #1: Button “Auto”: choose if you want put in automatic mode or manual mode.

2: Pump #2: Button “Auto”: choose if you want put in automatic mode or manual mode.

3: Settings: Giving access for all system settings.

4: LOCKED: Security access button. Need to press for accessing HMI System.

5: SYSTEM OK: Define if the system is up and running.

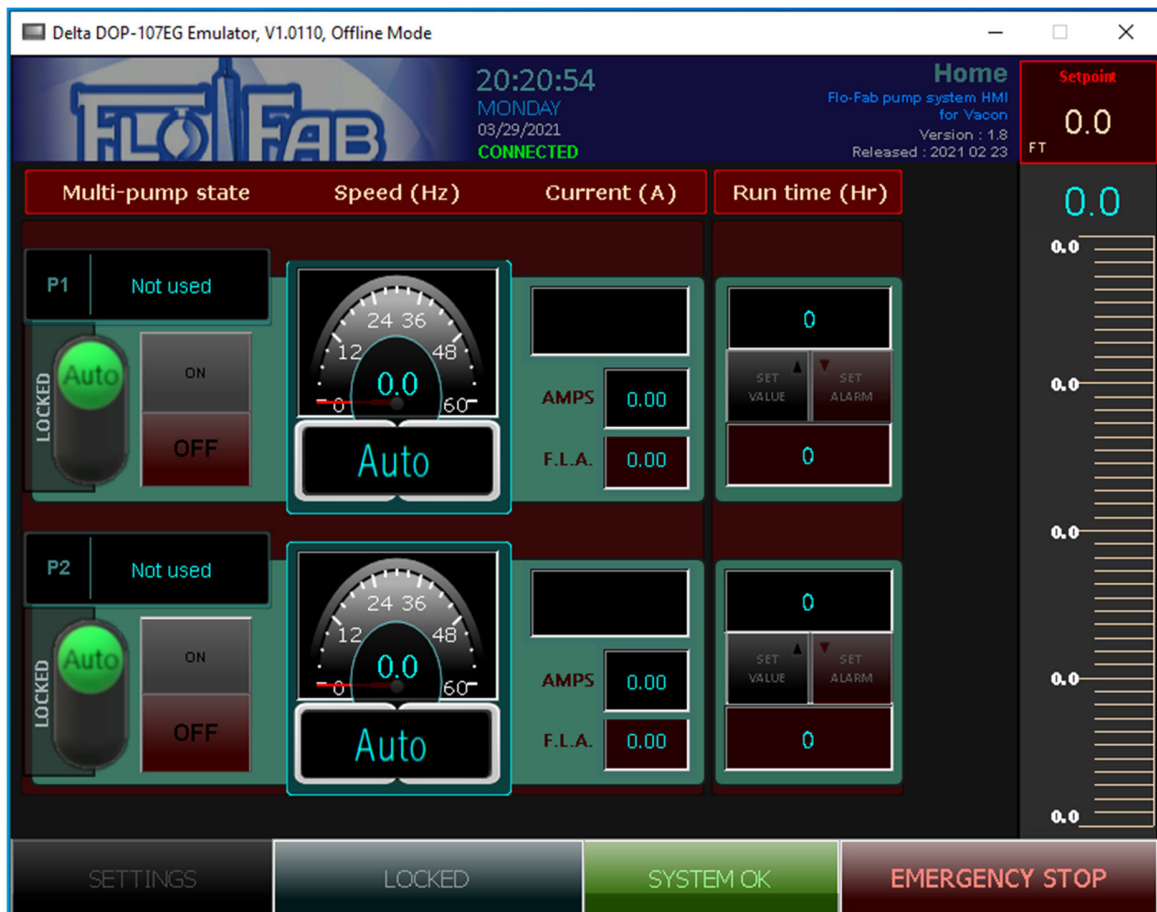
6: EMERGENCY STOP: Press when you want to stop the system in emergency mode.

7: SCALE: Graphic scale.

8: SETPOINT: Setpoint setting that you determine in feet.

2. First step: Unlock your screen.

2.1: Need to press "LOCKED" function:

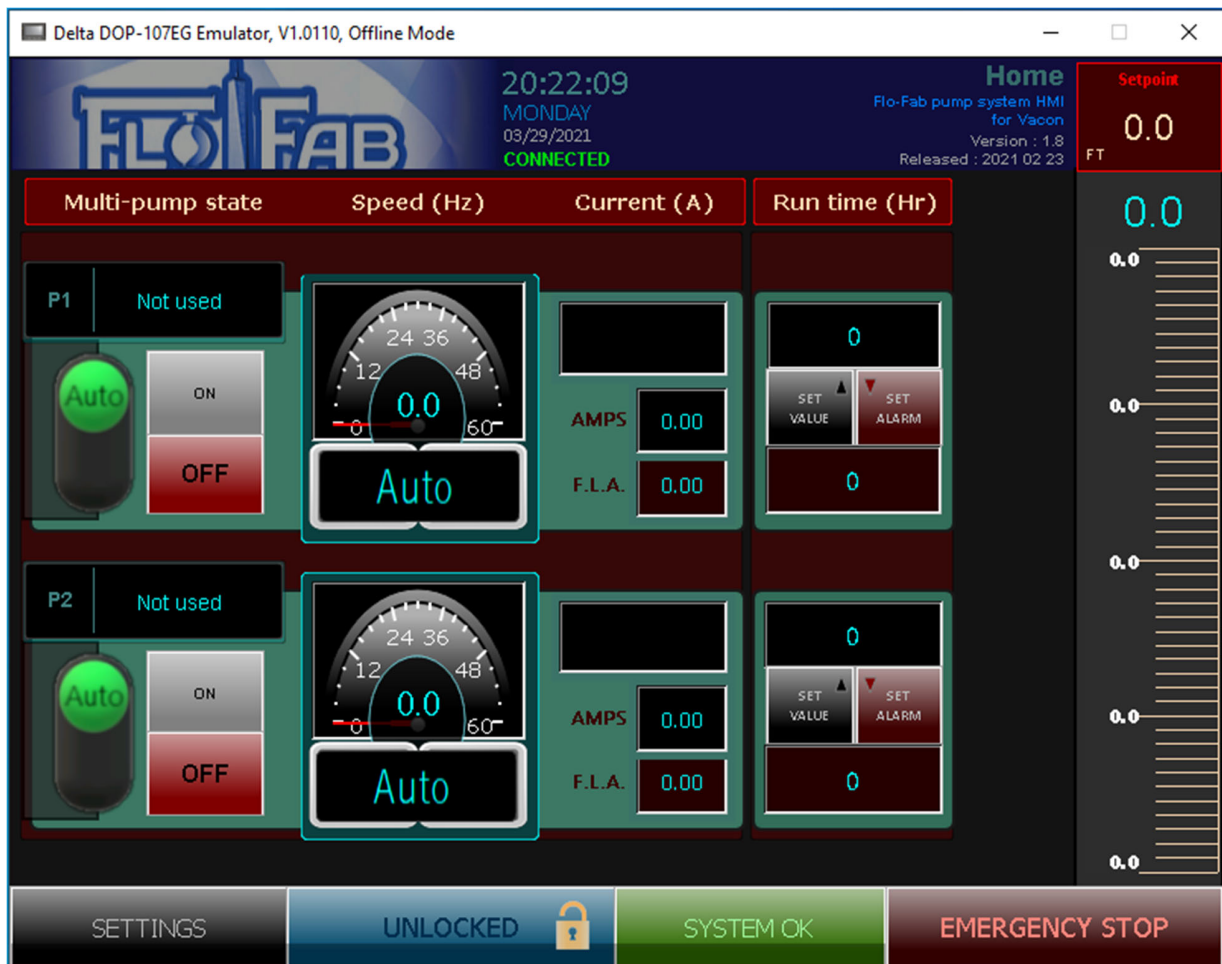


2.2: Press '1111' (1) for unlock function and press "ENT" (2) :



2.3: Access to you HMI System:

After unlocking HMI, you see that the status of the HMI is “UNLOCKED” (1).



Now, it's time to configure your system.

3. Configure you HMI System:

Go to settings (1):



3.1 Discovering Settings.

The screenshot displays the Delta DOP-107EG Emulator interface in 'Offline Mode'. The window title is 'Delta DOP-107EG Emulator, V1.0110, Offline Mode'. The interface shows a 'Multi-pumps configuration' screen (1/2). A warning message at the top states: 'Unproper changes made in this page could affect system performance. All drives should be stopped before sending new values otherwise these may not be saved correctly. If enabled, the "EMERGENCY STOP" button below can be use as a shortcut to this step.'

The main settings area contains five rows of parameters, each with a red-bordered input field and a unit:

- 1. ACCEL. TIME: 1.0 s
- 2. DECEL. TIME: 1.0 s
- 3. SLEEP FREQUENCY: 20 Hz
- 4. SLEEP DELAY: 20 s
- 5. WAKE-UP DIFFERENTIAL: 0

 To the right of these settings are two 'Drive #1 operating time' and 'Drive #2 operating time' sections, each with a refresh icon and a time display showing 0 yr(s), 0 day(s), 0 hr(s), and 0 min(s).

The right sidebar contains several system functions:

- SAVE parameters to picture (highlighted in red)
- Touch calibration
- Date & Time
- Enter password
- Password Manager
- Emergency button ENABLED (highlighted in green)
- Display scale: 0.0 FT

The bottom navigation bar includes buttons for HOME, PREVIOUS, NEXT, SYSTEM OK (highlighted in green), and EMERGENCY STOP (highlighted in red). Callouts 6 and 7 point to the NEXT and HOME buttons, respectively.

3.1 Settings definition.

1: ACCEL. TIME: put number of second that you need for accelation.

2: DECEL. TIME: put number of second that you need for deceleration.

3: SLEEP FREQUENCY: put number of Hertz for the sleep frequency.

4: SLEEP DELAY: put number of second for sleep delay

5: WAKE-UP DIFFERENTIAL: put number of feet about differential.

6: After finishing enter first page of setting, click "NEXT".

7: Return to home page.

3.3 Settings: second section.

Delta DOP-107EG Emulator, V1.0110, Offline Mode

20:26:40

Home

Unproper changes made in this page could affect system performance. All drives should be stopped before sending new values otherwise these may not be saved correctly. If enabled, the "EMERGENCY STOP" button below can be use as a shortcut to this step.

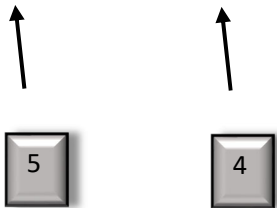
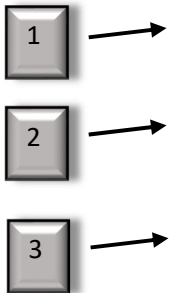
SAVE parameters to picture

Multi-pumps configuration 2/2

				P1	P2	
PID MIN FREQUENCY	#	Hz	Nominal power	0.00	0.00	HP
PID MAX FREQUENCY	#	Hz	Nominal voltage	0	0	V
AUTOCHANGE INTERV.	0.0	Hr(s)	Nominal frequency	0	0	Hz
			Nominal speed	0	0	RPM
			Nominal current	0.00	0.00	A

Emergency button ENABLED

HOME PREVIOUS NEXT SYSTEM OK EMERGENCY STOP



3.4 Second section definition.

1: PID MIN FREQUENCY: Put the number of Hertz for minimum frequency.

2: PID MAX FREQUENCY: Put the number of Hertz for maximum frequency.

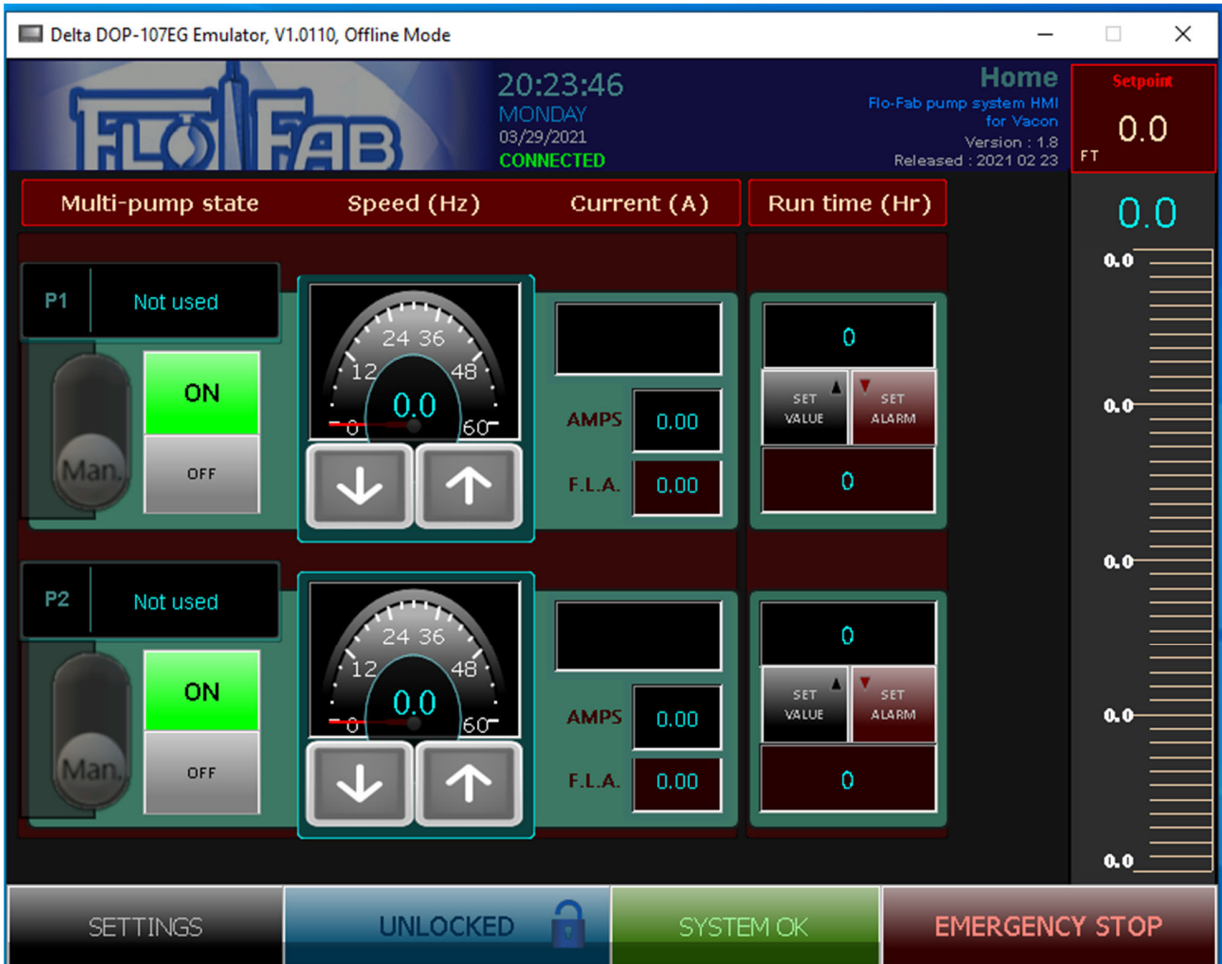
3: AUTOCHANGE INTERV.: Put number of hour and minute for auto-change interval.

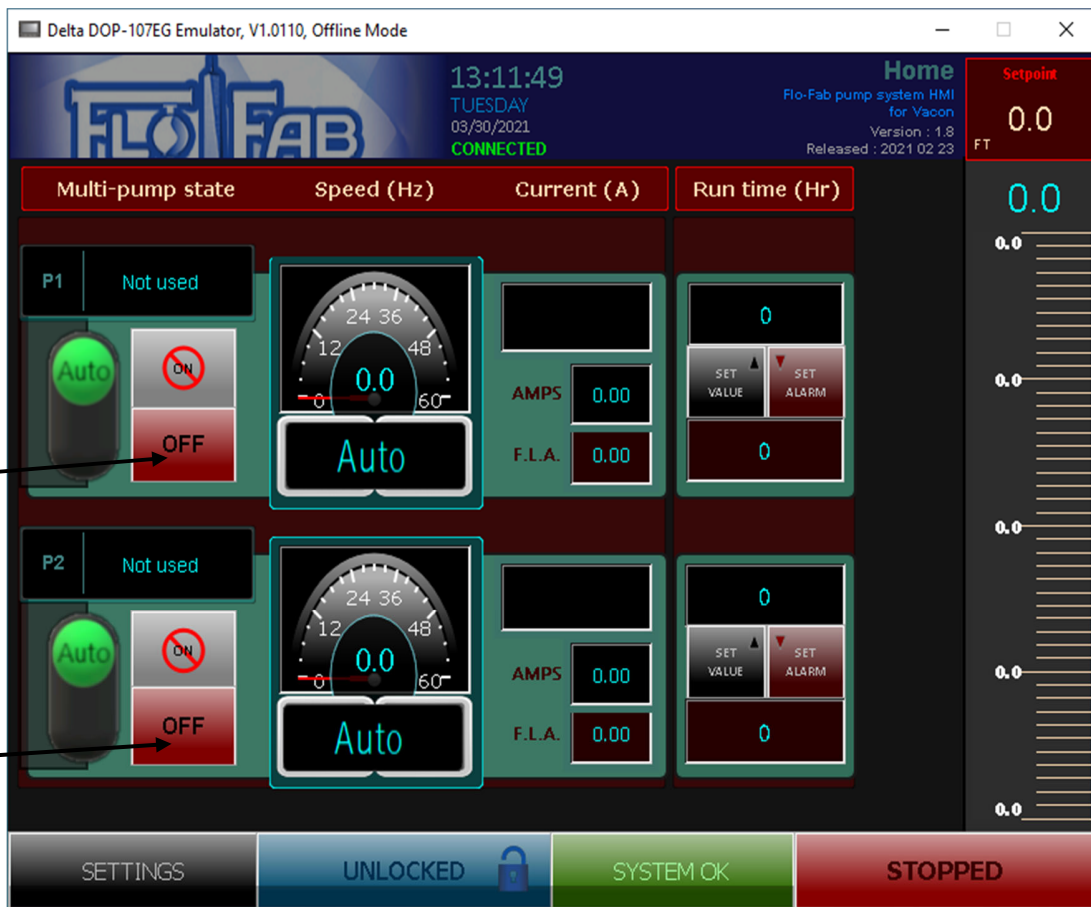
4: You can click PREVIOUS if you want to go first page of settings.

5: You can click HOME to go home page.

4.0 Emergency Stop.

When you press Emergency Stop button (1), see next page the status:





1: Pump #1 turns OFF status and close the system.

2: Pump #2 turns OFF status and close the system.

3: Status of emergency turns to STOPPED.

For restarting system, click on STOPPED (3) and system will be restarting with the same settings.