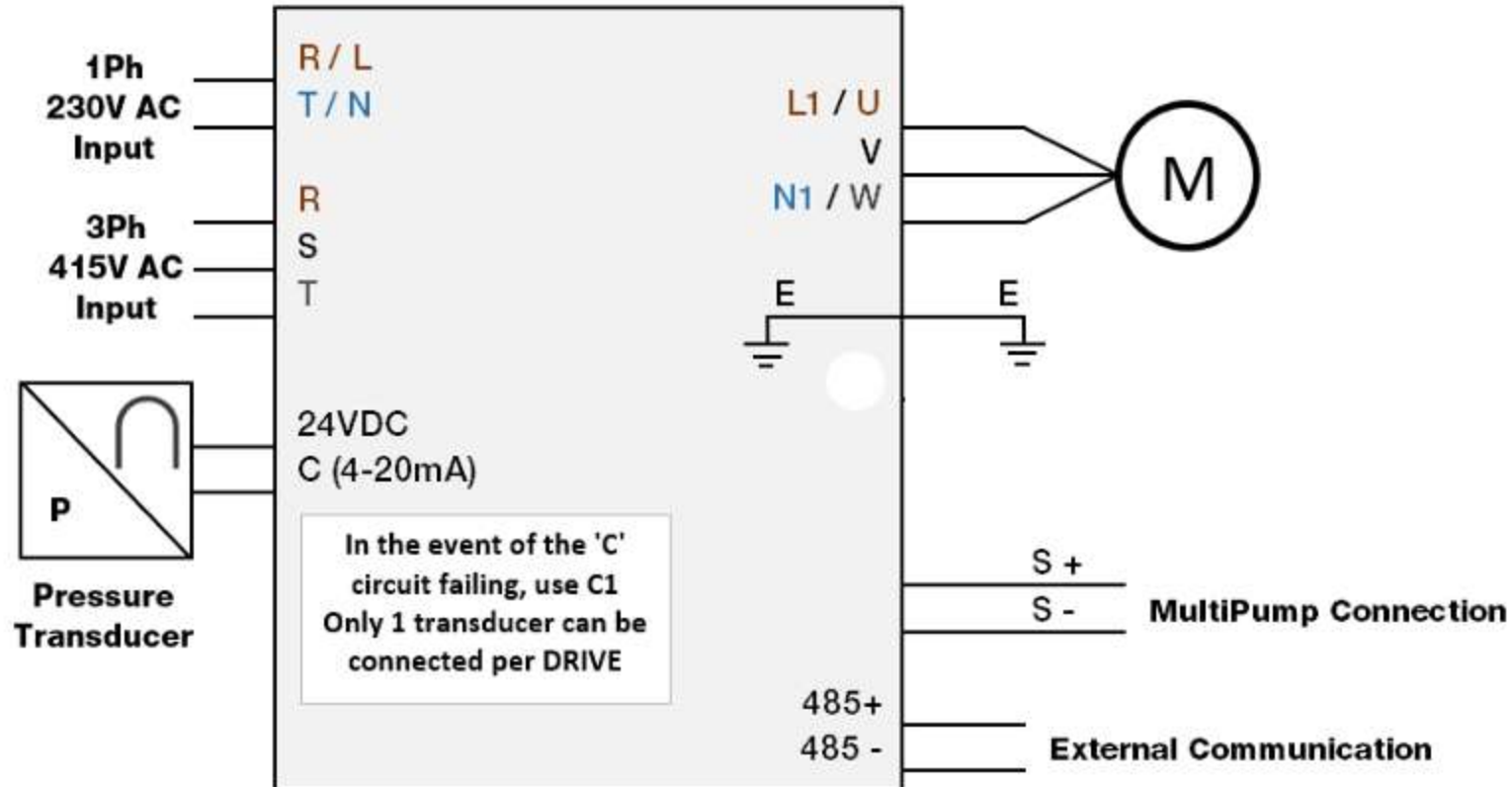


BIA-NXT-DRIVES

Wiring & Programming Wizard



Wiring



Notes:

Pressure Transducer:

Red wire to **24V**

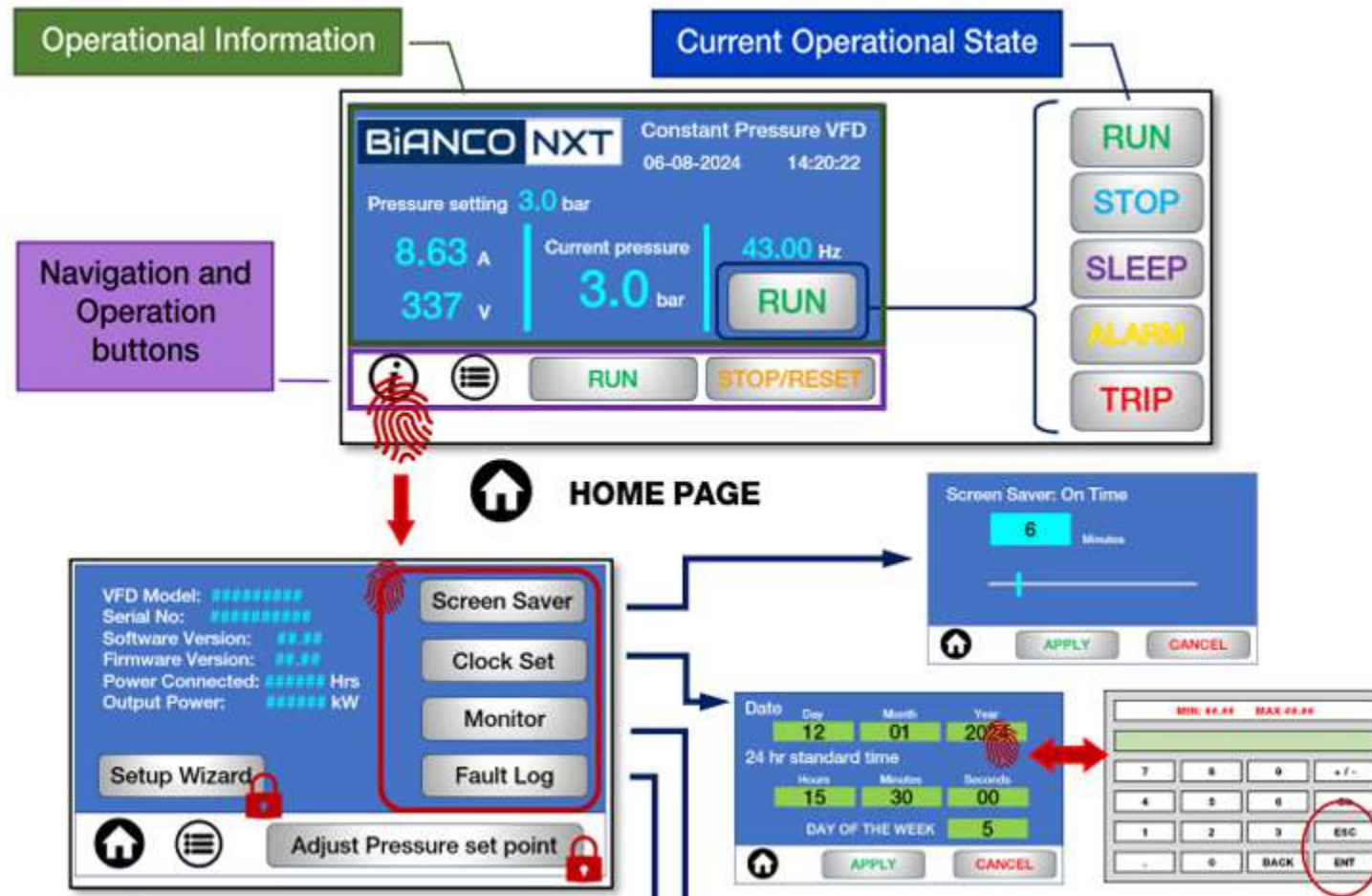
Black wire to **C**

Multi Pump Connection:

S+ to S+ & S- to S- in series

Programming

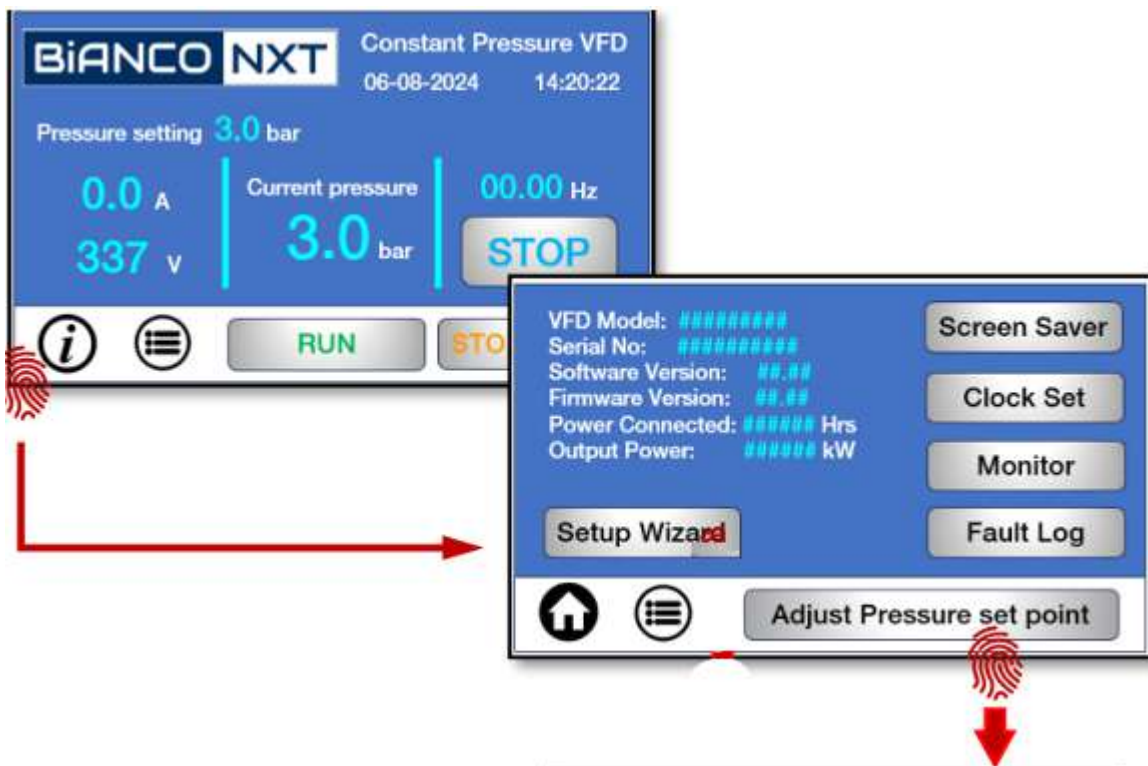
Screen Layout



Step 1

Set the Clock:

- Select the 'i' button.
- Select 'Clock Set'.
- Set Date and Time.



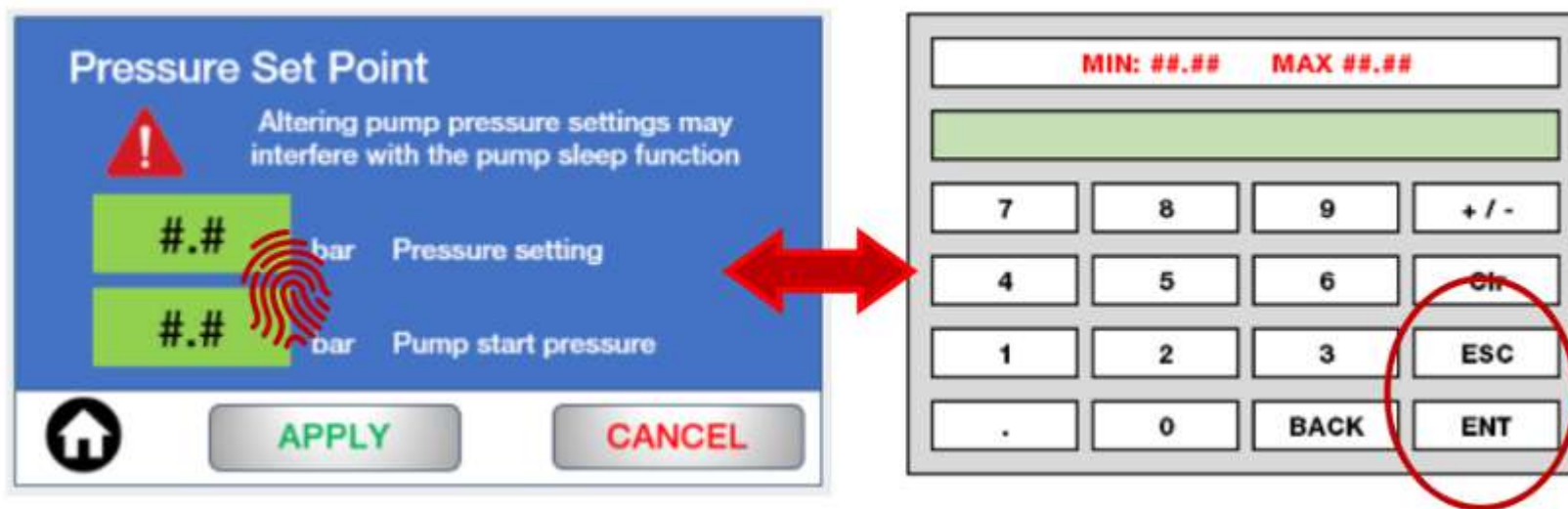
Step 2

Adjust Set Point Pressure:

→ Enter Password: 65535

→ Adjust Pressure Setting to **5bar**
(unless specified by customer on the PO)

→ Adjust Pump Start Pressure to 4bar OR 1bar
below the specified Pressure Setting.





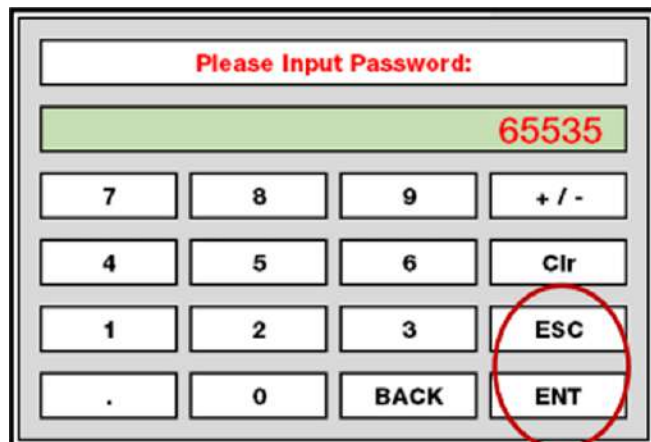
Step 3:

Setup Wizard

→ Select the 'i' button.

→ Select 'Setup Wizard'.

→ Enter Password: 65535



Setup wizard: Constant Pressure, Sleep Enabled, Auto Restart

Nameplate kW	##.##	Rated kW
Nameplate Voltage	###	Rated Voltage
Rated Motor Speed	####	RPM
Rated Current	##.	Amp
Max Hz	##.	Hz




 Pg 1 of 4

Upper Limit Hz	50	Hz
Sleep Option	1	0 = Off, 1 = On
Sleep Freq	30	Hz
Sleep detect time	30	Sec
Sleep Delay	1.0	0.1 - 200.0 sec
Auto-Start Option	0	0 = Not allowed 1 = Start when power on





 Pg 2 of 4

Step 4

Pg 1.

Set data as per Nameplate of the motor.

Pg 2.

Upper Limit Hz = Match Max Hz of the motor

Sleep Option = 1

Sleep Frequency =

* Set to 23Hz for Vertical Multistage / Surface Pumps

* Set to 30hz for Bore pumps

(refer to pump curves to set accurately)

Sleep Detect Time = 30 sec

Sleep Delay = 1 sec

Auto Start Option = 1

Pg 3.

Minimum Hz =

- * Set to 25Hz for Vertical Multistage pumps/Surface Pumps
 - * Set to 32hz for Bore pumps
- (refer to pump curves to set accurately)

Motor Direction = 0

Acceleration =

- * Set to 8 sec for Vertical Multistage pumps/Surface Pumps
- * Set to 2 sec for Bore pumps

Deceleration =

- * Set to 8 sec for Vertical Multistage pumps/Surface Pumps
- * Set to 2 sec for Bore pumps

Low Voltage Protection = 85%

Water Shortage Detect Mode = 2

Minimum Hz	30	Hz
Motor Direction	0	0 = Forward 1 = Reverse 2 = Not allowed
Acceleration time	8	Seconds
Deceleration time	8	Seconds
Low V Protection	85%	70.0 - 100.0%
W.S. detect mode	##.	0 = Off 1 = By Current 2 = By Press 3 = Current&Press 4 = Terminal

Pg 3 of 4

Pg 4.

Water Shortage Detect Value = 0.5bar

Water Shortage Detect Time = 50Sec

High Pressure Alarm = 8 bar
(Or 3 bar higher than Set point pressure)
unless specified by the customer.

High Pressure Detect Time = 3 sec

Sleep Delay = 1 sec

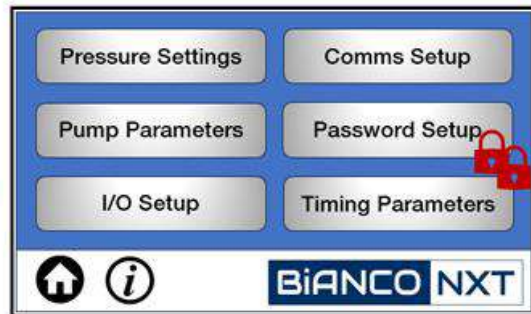
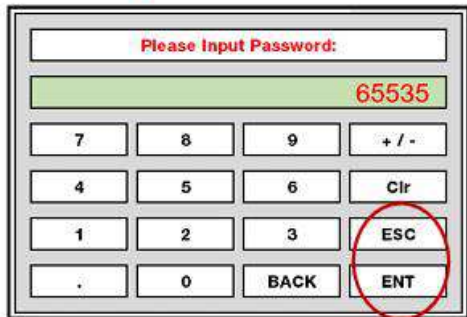
Water Shortage Detect Current = 85% of Rated
current from pg1.

Step 5


Press the HOME button
(note settings will autosave once entered)

W.S detect value	0.5	Bar
W.S. detect time	50	Sec
H.P. alarm	15	Bar
H.P. detect time	3	Sec
W.S. detect current	###	Amps (suggest 85% FLC)
End of setup wizard		

Pg 4 of 4

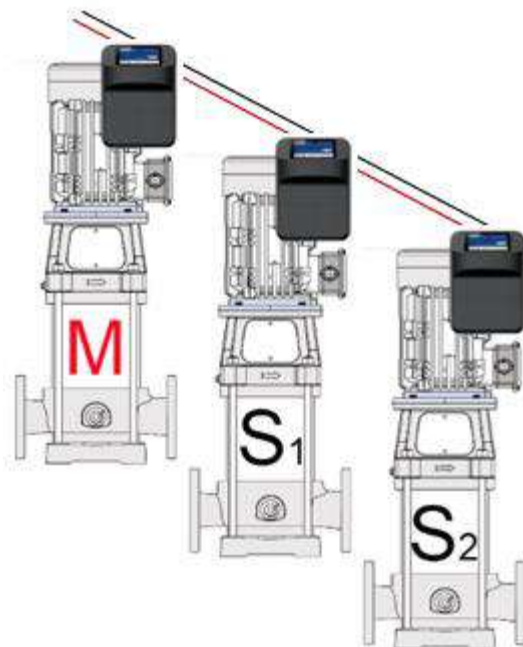


Step 6 (only applicable for Multi pump sets)

- Select the  button.
- Enter Password: 65535
- Select 'Comms Setup'

Setup always as 1 master and remaining as Auxiliary/Slave.
Example: For a triple pump set, 1 Master, 2 Slaves

Function	Value	Unit
Comm. Address	x	1,2 for Loader 3~5 for Follow
Alternation time	480	0 - 60000 min
Follow Qty	x	0 - 4
Multi-pump control	x	0=Loader/Follow 1= Simultaneous
Pump adding delay	1.0	0.1 - 600.0 sec



For Master pump, set as per below

Pump 1 Master controller COMM GROUP Parameters		
#4	Multi Pump Control 0 = Master / Slave	0
#1	Comm Address (Master)	1
#3	Follow/ Slave Quantity Set according to system	0 - 4

For Slave/Follow pumps, set as per below

Set every slave controller as follows	
Pump 2 Slave 1	COMM GROUP / Parameter #1: [Comm Address] = 1 PUMP GROUP / Parameter #9: [Stop/Start] = 2 (Communication) PUMP GROUP / Parameter #10: [Freq Input] = 2 (Communication)
Pump 3 Slave 2	COMM GROUP / Parameter #1: [Comm Address] = 2 PUMP GROUP / Parameter #9: [Stop/Start] = 2 (Communication) PUMP GROUP / Parameter #10: [Freq Input] = 2 (Communication)