ELGI ENCAP DUPLEX-MODE CONNECTION GUIDE

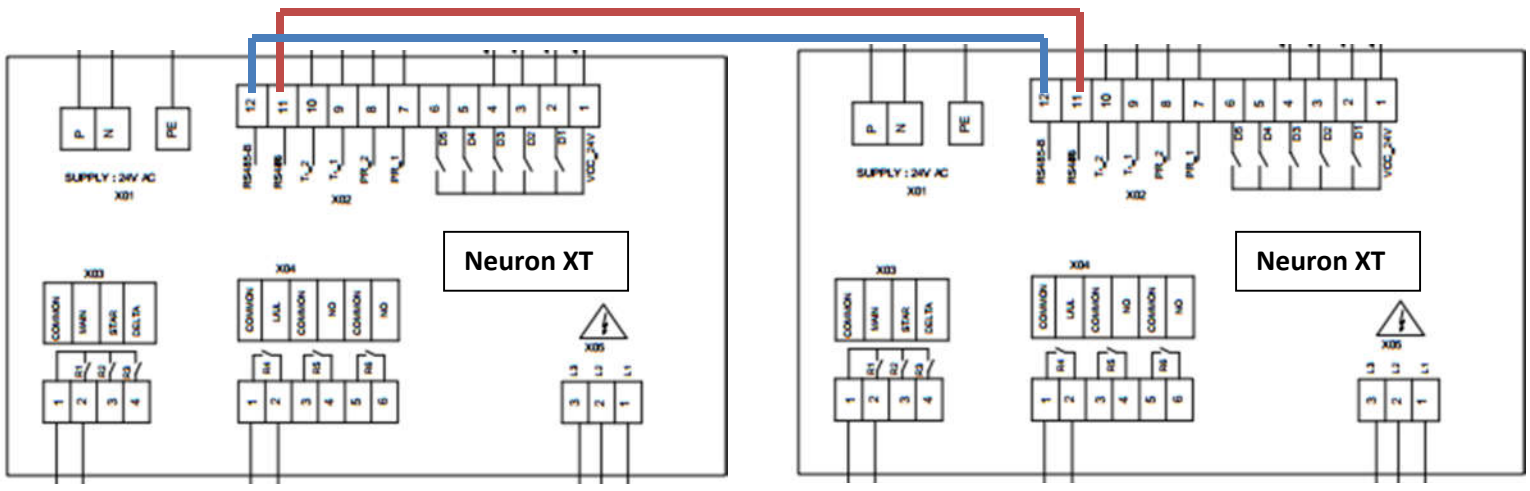
Connection Guide

The Neuron XT PLC must have firmware revision V2p04_D .

To Verify This: Navigate to Customer Care In controller menu

Diagram

Controller Connection Via RS485



ENCAP UNIT #1

ENCAP UNIT #2

SEE BELOW FOR SETUP GUIDE

1. Set each Unit's controller **DCS ID** in PLC settings to its compressor position

   I.E : ID 1 for Compressor 1, ID 2 for compressor 2

   To change DCS ID: navigate to **OPERATOR (passcode 4545) – DCS PORT – ID**

Controller Menu Navigation | MODBUS ID CHANGE

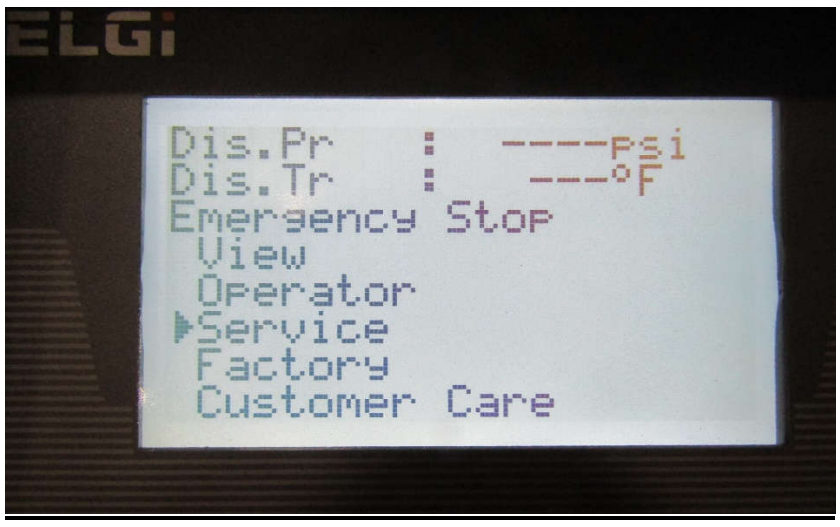
Operator	**Mode**	Control mode	Local / Remote / DCS
		Auto restart	On/ Off
		Pressure unit	Bar/psi
		Temperature unit	Fahren / centi
	Pressure	Unload pressure	X X . X b or p (bar or psi)
		Load pressure	X X . X b or p
		Pr. schedule	ON/ OFF
	Delay	Warn RST delay	X X X s (second)
		Star delay	X X s
		DTR delay	X X s
		RTS delay	X X s
		Standby time	X X m (minute)
		St/Sp PH	X X
	DCS port	Type	Modbus
		ID	X X
		Baud	9600/19200
		Parity	None / Even / Odd
		Length	8 / 7
		Stop bit	2 / 1

2. Navigate to **OPERATOR > Machine** – **Scroll down to "LD / UL Source"** – **Change to "DCS"**

3. **Match each Units A(LEAD) & B(LAG) Pressure Settings on EACH NXT (REQUIRED!)** – this seems redundant, but is required for each unit to operate as LEAD when **lead/lag rotation** occurs – use the following guide [**Media 1-1 – 1-8**] & [**table 1-1**] and see example pressure setup [**Media 1-9**]:

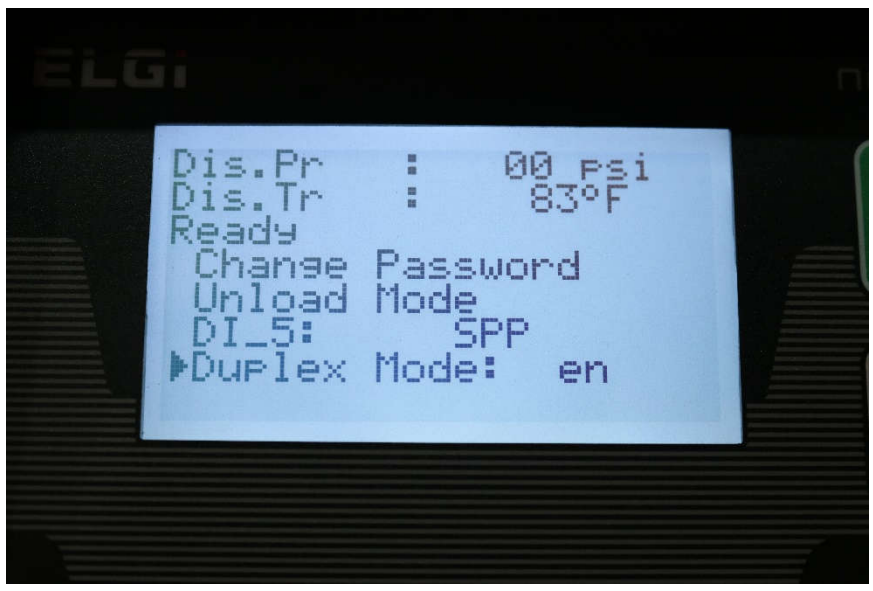
Menu SETUP Guide

Media 1-1



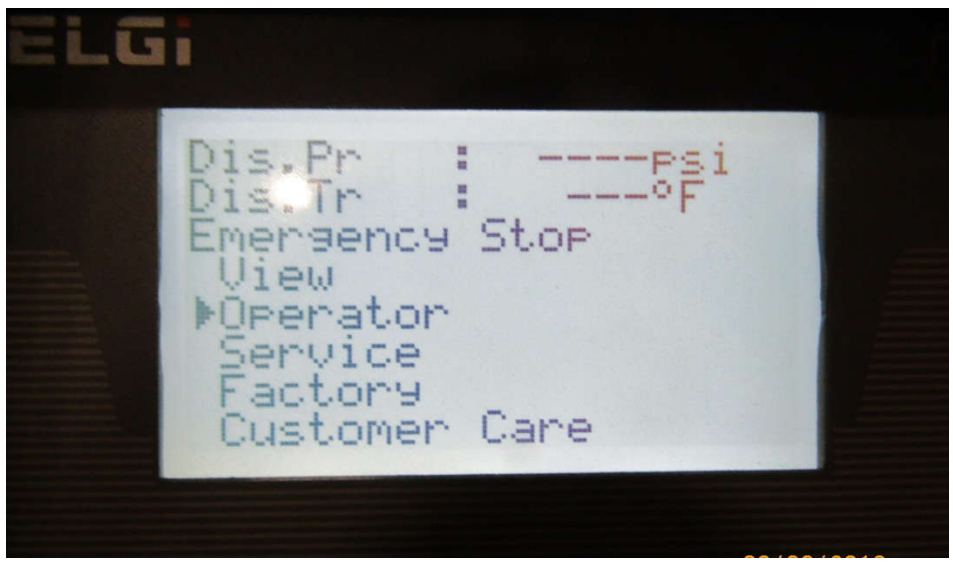
Navigate to the SERVICE (Code 3434) menu

Media 1-2



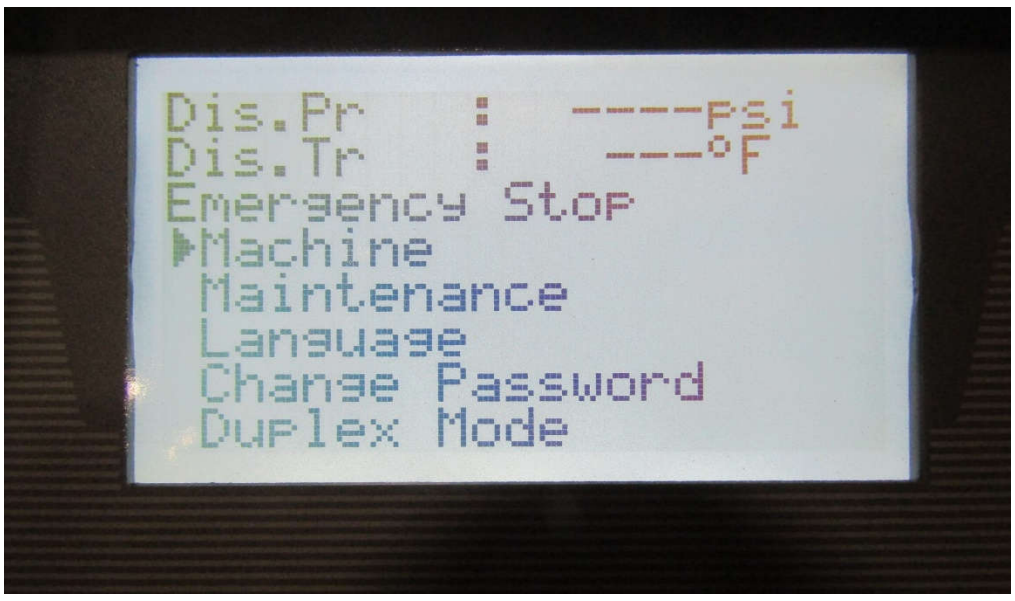
Select and enable "Duplex Mode" (at bottom of menu)

Media 1-3



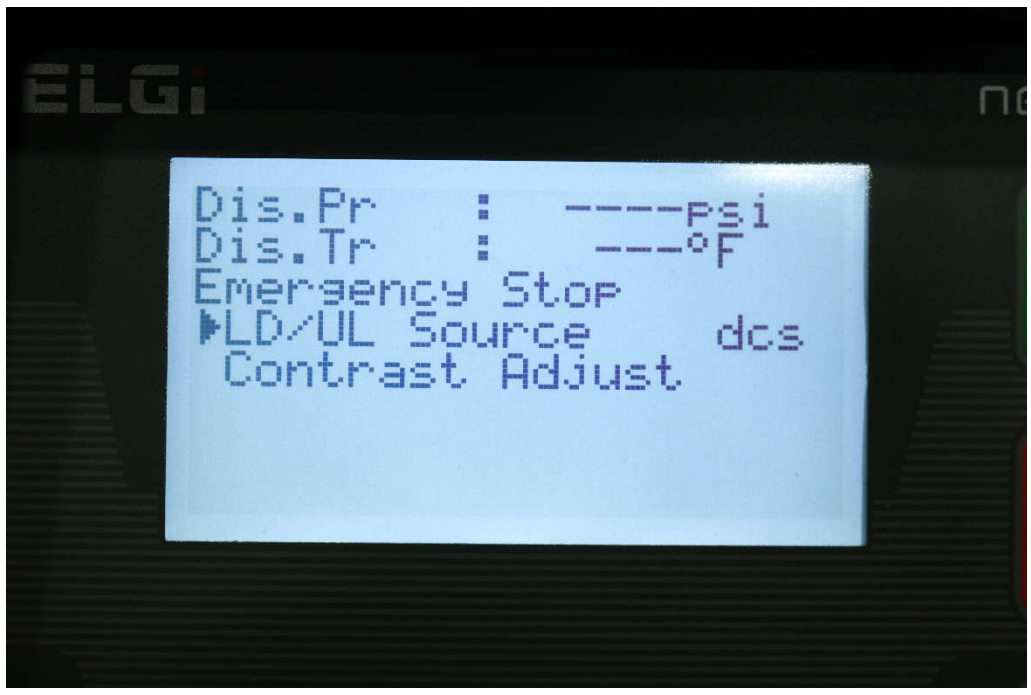
Navigate to OPERATOR (Code 4545) menu

Media 1-4



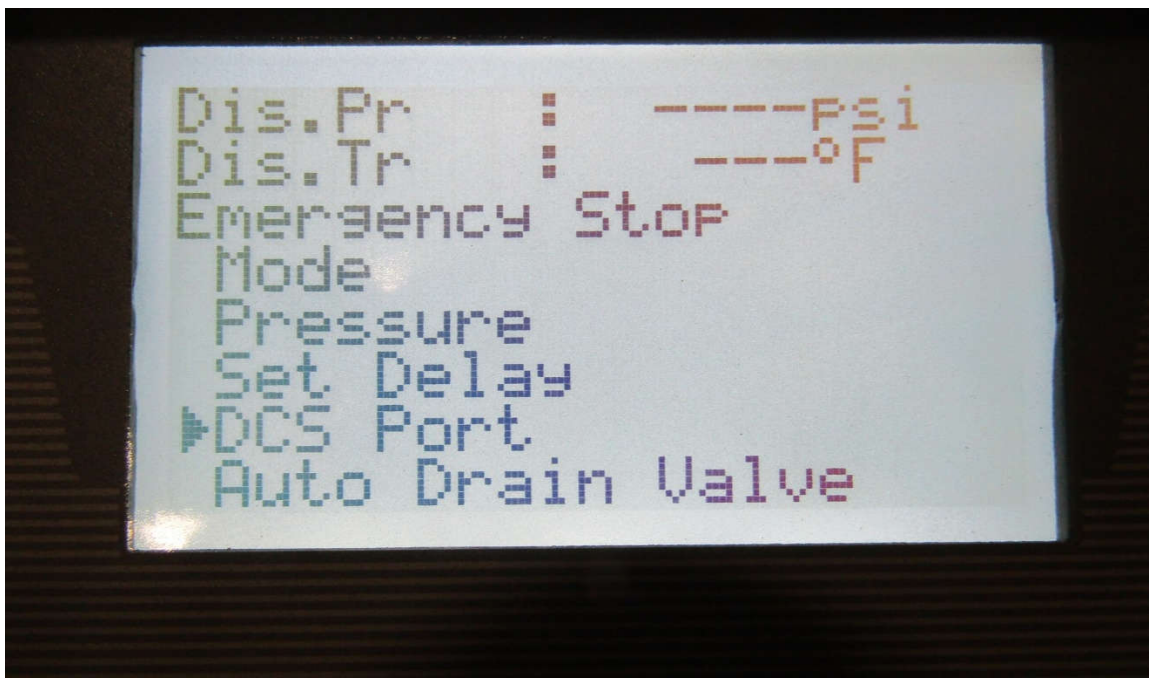
Navigate to "Machine"

Media 1-5



Select "LD/UL Source" (Bottom of menu) – Change to "DCS"

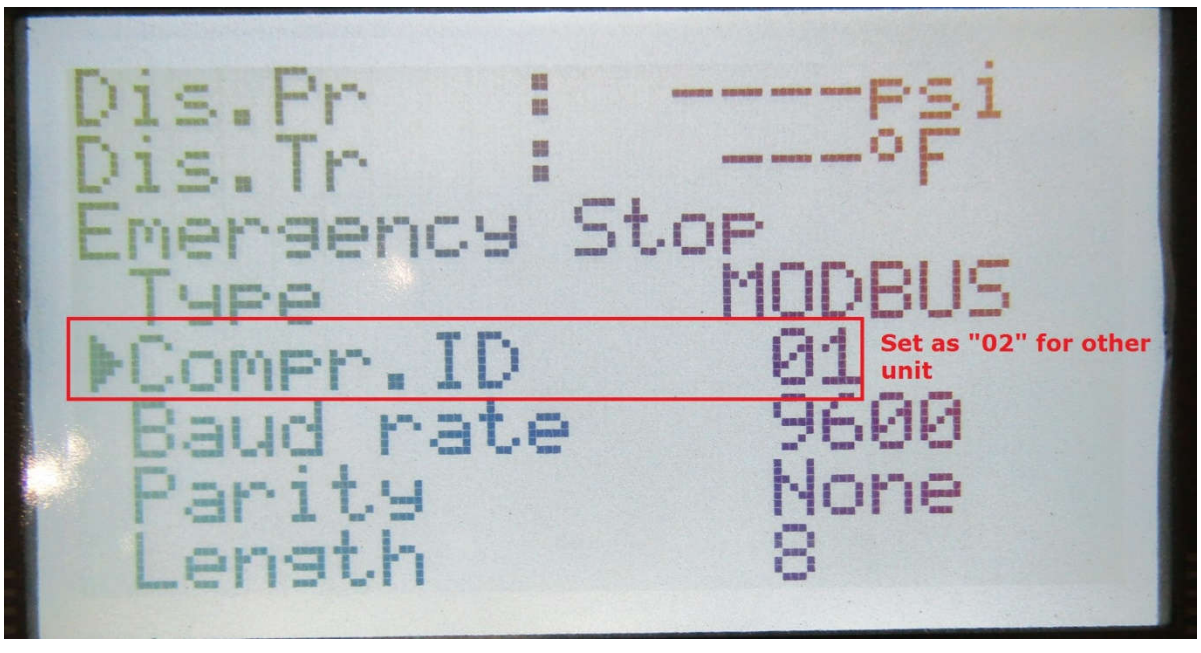
Media 1-6



Navigate BACK one menu screen (Using Yellow RESET key)

Navigate to "DCS Port"

Media 1-7



Verify DCS ID is correct (01 for LEAD unit – 02 for LAG unit) – Set on each units controller

- **Exit from DCS PORT and MACHINE menus (head to main OPERATOR menu)**

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- Media 1-8

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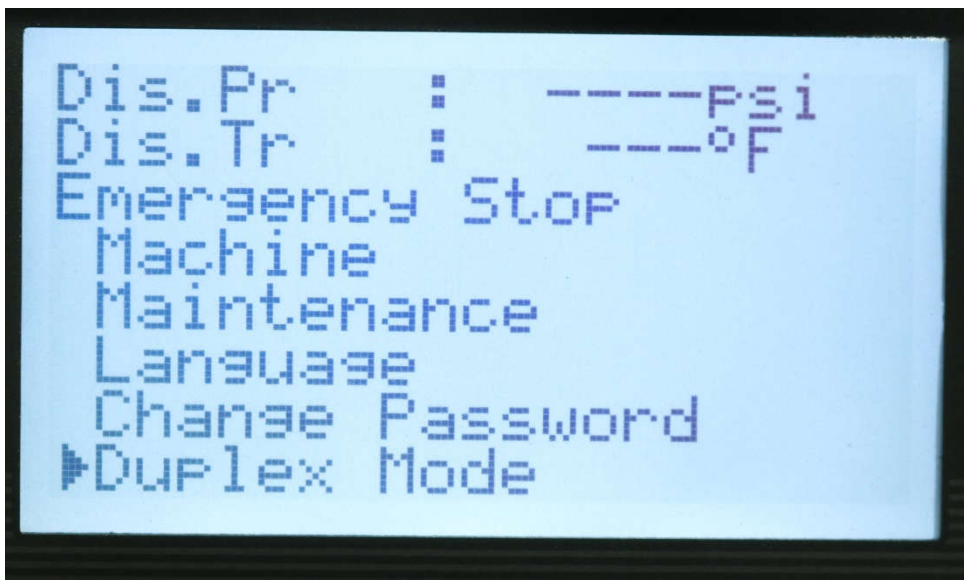


Navigate to "Duplex Mode"

You will set Lead(A) & Lag(B) Operating pressure ranges (LOAD/UNLOAD) in this menu [*See Below*]

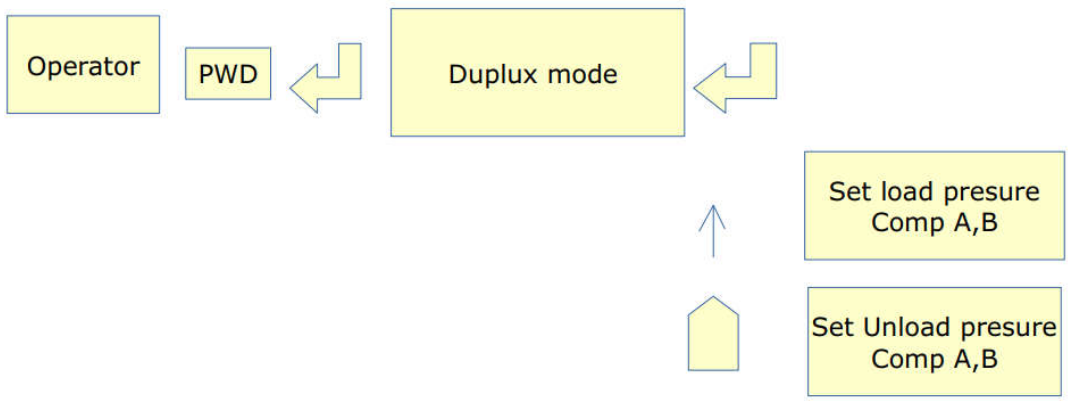
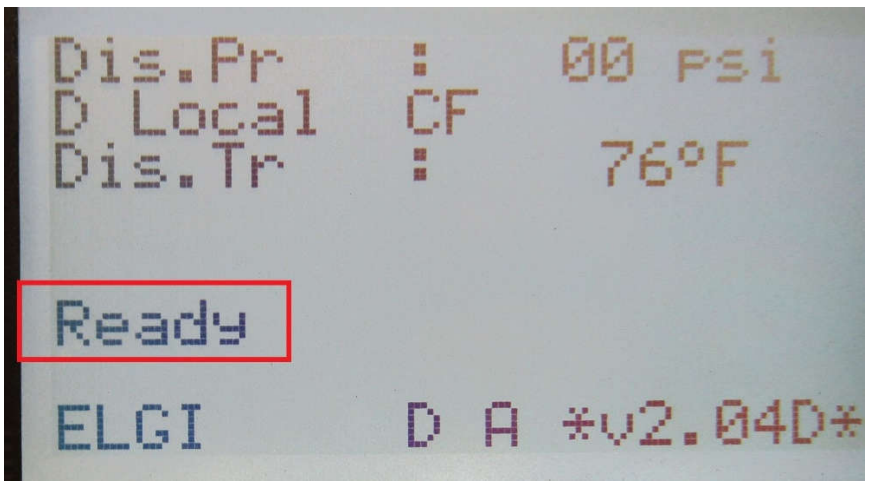


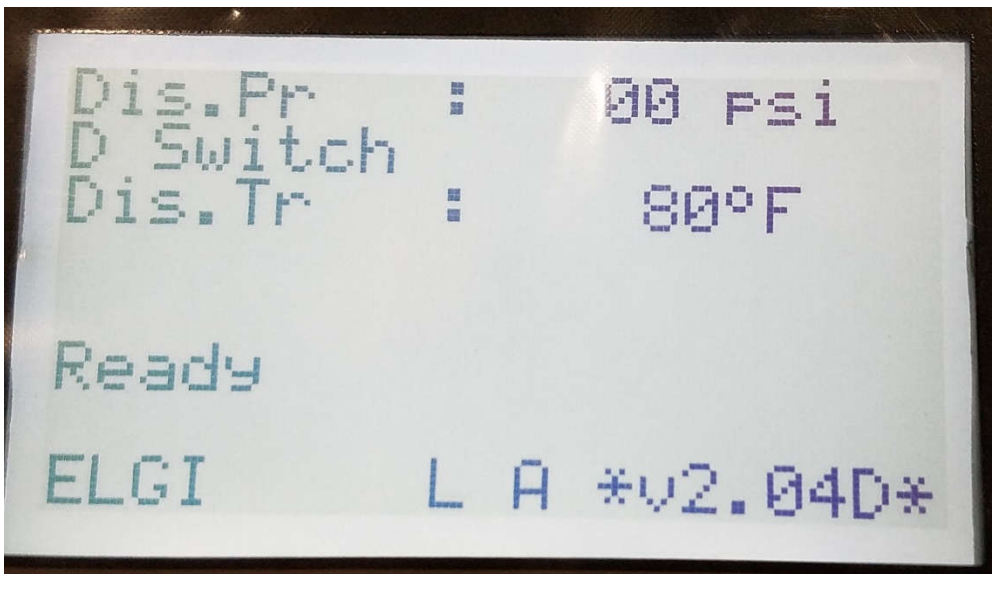
Table 1-1

Compressor	Pressure Set-Point (MUST MATCH between EACH NxT Controller!!) – [	Operating Pressure	Sequence hour rotation	Sequence Rotation Delay
DCS ID #1 (A)	A – 103 – 125psi	A – 103 – 125	4 Hours	0-5 Min
	B – 85 – 105psi			
DCS ID #2 (B)	A–103 – 125psi	B – 85 – 105		0-5 Min
	B–85–105psi			

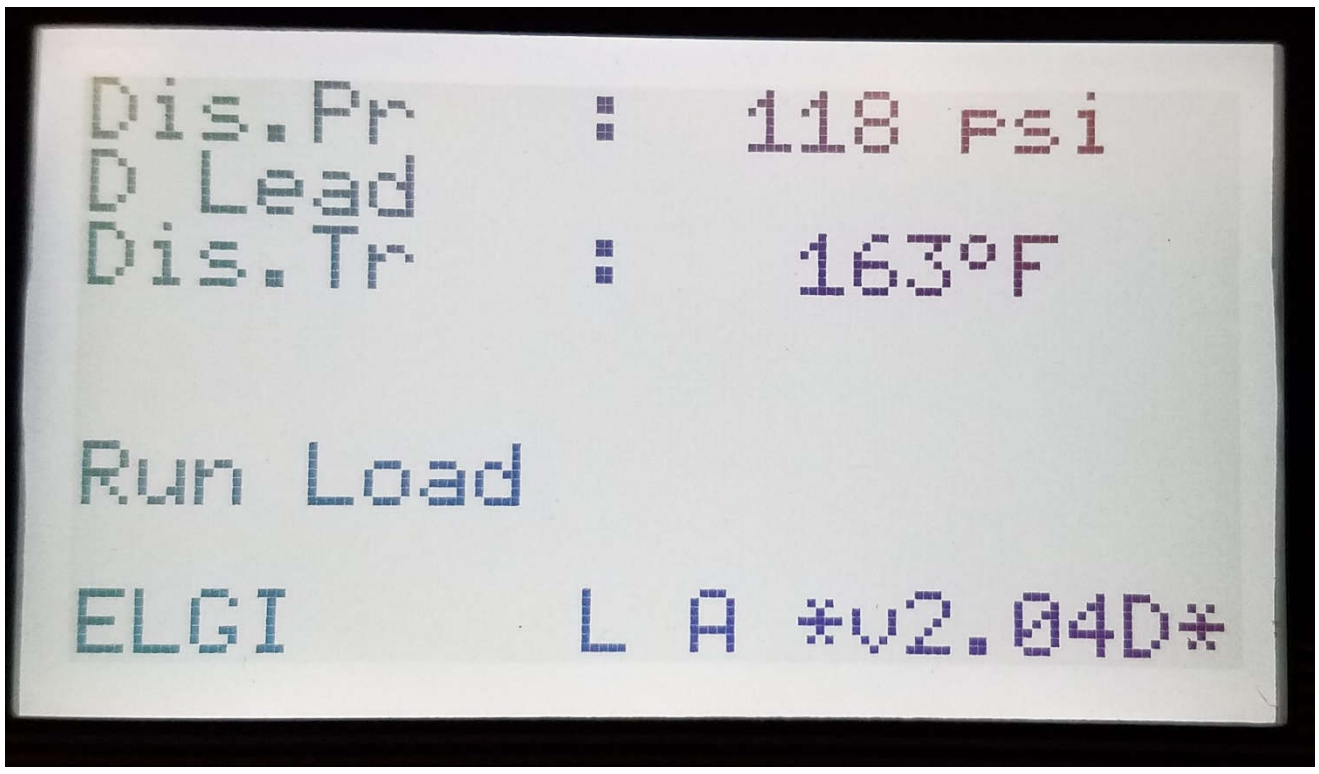
After the above settings have been completed – Press Reset until back at front screen of NxT- Press the start button ONCE on each NxT Controller until "Ready" status is displayed:



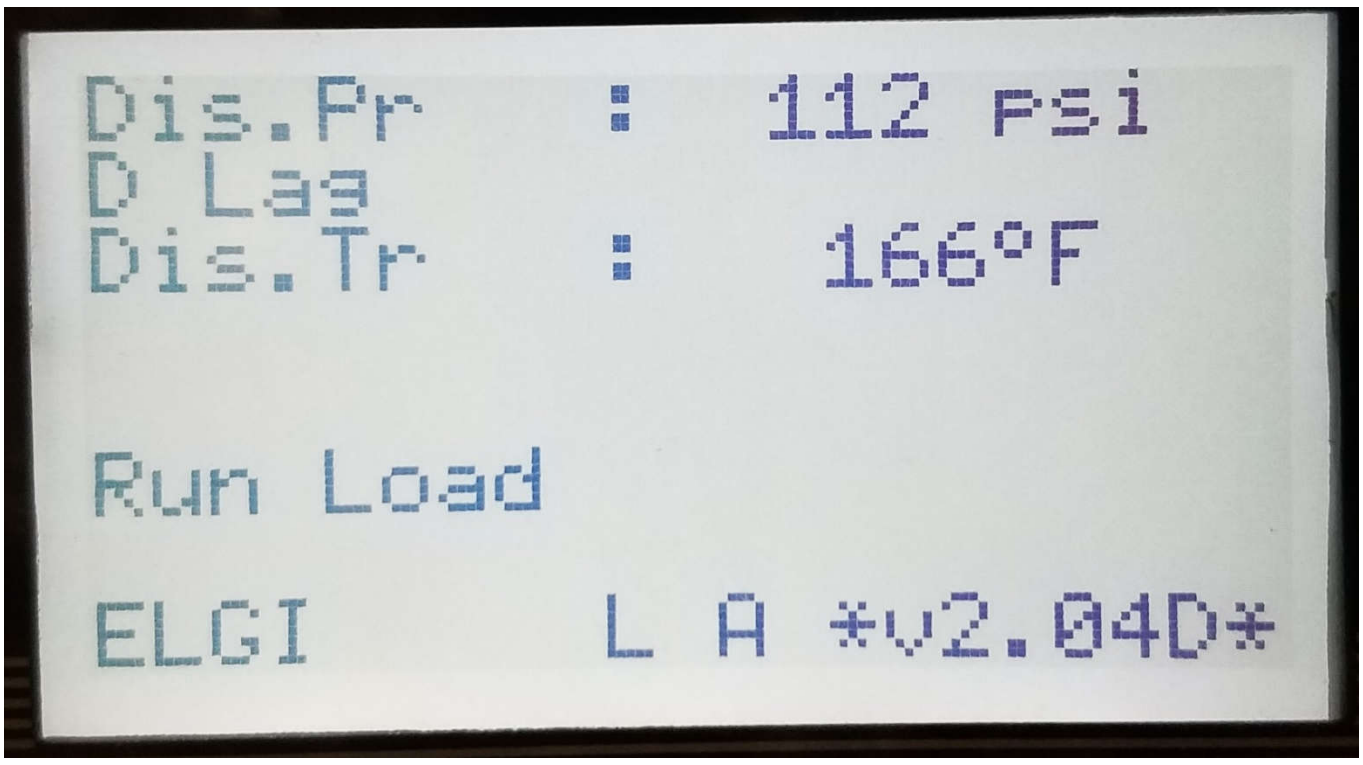
Unit in "Ready" Status



Initialization of "READY" status may also display "D Switch" – meaning units have fallen within rotation interval for initialization. This is normal and can be ignored



Press start button and begin running of Compressor ID #1, LEAD, unit.



Press start button and begin running of Compressor ID #2, LAG, unit

Allow both units to unload, stay unloaded, and shutdown on the 5 MIN (default) Standby countdown time

Both units are now in "Standby Status" – After-pressure drops again and LEAD unit starts/loads – LEAD/LAG will be automated.

This guide is purposed to allow running of ELGI units using UM Sequencers via basic settings

END OF GUIDE

Thank you