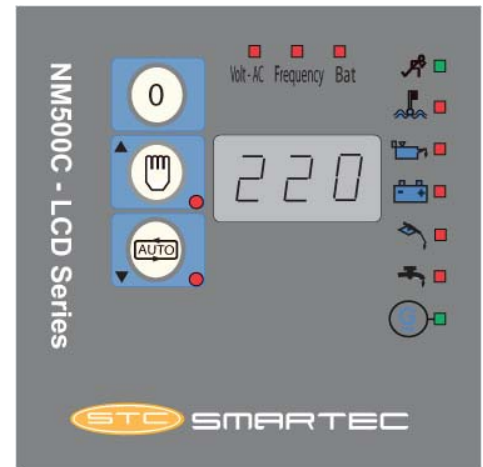


**Main Features:**

- True **RMS AC** measurement.
- True **Frequency** measurement.
- True **Battery** measurement.
- **Over / Under Voltage** and **shut down** measurements.
- Built-in Display for programming.
- Custom Microcontroller based design.
- Transistor short-circuit protected outputs.
- Front panel LEDs for status and alarm indication.
- Operated by 3 push buttons.
- Automatic engine starting and stopping.
- DIN standard (72x72)mm panel mount.
- Automatic shut down on fault condition
- Low oil pressure alarm and shut down
- High engine temperature alarm and shut down
- Dynamo fails alarm and shut down
- Low fuel alarm and shut down
- Over / under speed alarm and shut down
- Coolant level alarm and shut down
- Over / Under Load.
- Oil Changes Hour Meter when alarm expired and shut down.

*Actual Size (72 x 72) mm*


**New hardware  
and software  
Design**


**Off Button**

**Manual Button**

**Auto button**
**There are 4 sub menu :**

- 1) **Prn**: Parameters Menu
- 2) **Err**: Error Menu
- 3) **uEr**: Firmware Version Menu
- 4) **out**: To exit from main Menu

- press on **Manual** button to switch between 4 sub menu.
- Press on **OFF** button to select any of the above sub menu.
- Press on **Auto** button to select the next menu
- Press on **Manual** button to select the previous menu.

### How to enter programming:

Press and hold on **Auto** or **Manual** button to turn on Genflex LCD . This will appear on the screen.



### Prn Menu

Press on **Manual** or **Auto** button until the parameter menu appear on the screen.



- Press on Manual button to switch between parameters in ascending order.
- Press on Auto button to switch between parameters in descending order.
- Press on OFF button to see the parameter value.

**Note:** if you didn't press any button for 3 sec , the LCD will turn OFF



### How to change the parameter value:

Select the parameter value you want to change and press on **OFF** button until the parameter value blinks.



- Press on Manual button to increase value
- Press on Auto button to decrease value.
- Press on Off button to save the value.
- To exit parameter page, select **OUT Menu** then press on **OFF** button.

### Err Menu

Select the **Err** menu and press on **OFF** button to enter the fault page. If there is no Error, this will appear on the screen.



- Press on Auto button to switch between faults in ascending order.
- Press on Manual button to switch between faults in descending order.
- Press on OFF button to exit Error page.

**Note:** Every Error number appear will light the Led Fault.

### uEr Menu:

Select **uEr** menu and press on **OFF** button to see the firmware version (version 104).

**Out Menu:** To exit from Main menu.



**Parameters**

Parameters	Codes	Description	Units	Default Values	Range
A01	VtS	Time between valve and starter	sec	001	1 → 20
A02	StA	Starter time	sec	005	0 → 10
A03	rEd	Retry Delay	sec	005	0 → 30
A04	Ind	Initial delay	sec	006	0 → 30
A05	SAt	Start attempt		004	0 → 10
A06	ofb	Off button action		000	0: shut down immediate 1: cool the n shutdown
A07	Uup	Warm-up delay	sec	015	0 → 300
A08	oFd	Load shut down delay	sec	009	0 → 300
A09	coL	Cool time delay	sec	090	0 → 300
A10	OiL	Oil delay	sec	003	Dis: 1 → 300
A11	uFS	Under frequency	Hz	045	0 → 50
A12	uFd	Under frequency delay	sec	005	Dis: 1 → 300
A13	oFS	Over frequency	Hz	055	50 → 75
A14	oFd	Over frequency delay	sec	005	Dis: 1 → 300
A15	inF	Initial fault delay	sec	diS	Dis: 1 → 10
A16	uLt	Under volt	volt	190	0 → 200
A17	uLd	Under volt delay	sec	005	Dis: 1 → 300
A18	oLt	Over volt	volt	245	0 → 300
A19	oLd	Over volt delay	sec	005	Dis: 1 → 300
A20	rhr	Oil hour		diS	Dis: 1 → 300
A21	cot	Coolant threshold		diS	Dis: 1 : Switch Analog : 2 → 10
A22	cod	Coolant delay	sec	012	Dis: 0 → 300
A23*	dyt	Dynamo threshold	volt	009	0 → 18
A24	Dyd	Dynamo delay	sec	013	0 → 300
A25	tEd	Temperature SW delay	sec	008	0 → 300
A26	A1d	Aux.1 delay	sec	005	Dis, 1: Emergency stop 2 → 300
A27	ALr	Alarm timeout	sec	000	0 → 300
A28	bat	Battery under volt		005	5 → 20
A29	OiS	Oil check on start up		diS	0: Disable oil at startup 1: Oil check at startup, disconnect crank 2: Oil check before valve
A30	Sdr	Scroll LCD run values		000	0 → 3 0: Display AC volt 1: Display Hertz 2: Display battery volt 3: scroll all 15: Calibration (internal use only)

\* To disable Dynamo : A23 = 0 , A33 = 32 , A34 = 30

\* For 24 Volt Battery : A23 = 20 , A33 = 32 , A34 = 27

\* For 12 Volt Battery : A23 = 9 , A33 = 16 , A34 = 14

Parameters	Codes	Description	Units	Default Values	Range
A31	SPR	Spare output function		diS	Dis: 1 → 4 1: Preheat 2: Energize to stop solenoid valve 3: Excitation valve 4: Limit Off
A32	Spt	Spare output timer	sec	000	Dis: 0 → 30
A33*	Och	Dynamo over charge	volt	016	13 → 32
A34*	dyS	Dynamo voltage to stop starter	volt	014	13 → 32
A35	Nod	Mode of parameter		000	0: A mode // 1: Letter mode
A38	Fcd	Frequency threshold to disconnect Crank		035	30 → 50
A39	Ucd	Volt threshold to disconnect Crank	volt	160	80 → 220
A60	LFS	Update memory		000	Min: No // Max: Yes
A70	I1p	Input 1 polarity		000	0: Low → 1: Hi
A71	I2p	Input 2 polarity		000	0: Low → 1: Hi
A72	I3p	Input 3 polarity		000	0: Low → 1: Hi
A75	I1A	Input 1 action		001	Dis: 1 → 10
A76	I2A	Input 2 action		002	Dis: 1 → 10
A77	I3A	Input 3 action		003	Dis: 1 → 10
A94	Bps	Basic password			
A95	IPs	Installer password			
A96	Eps	Expert password			
A98	Roi	Reset total oil hour		000	Min: No // Max: Yes
OUT	out	Exit from parameter menu			

\* To disable Dynamo : A23 = 0 , A33 = 32 , A34 = 30

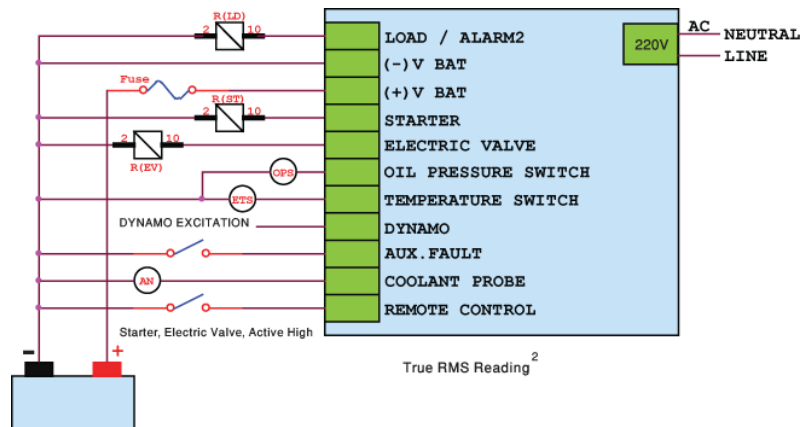
\* For 24 Volt Battery : A23 = 20 , A33 = 32 , A34 = 27

\* For 12 Volt Battery : A23 = 9 , A33 = 16 , A34 = 14

### Reset Oil hours

Press and hold on **Auto** and **Manual** buttons for **5 sec** to reset the oil counter. When this action is done, the LCD will display the **oil hour** with **0** value.

### Connection of Genflex



2 : US Patented Pending