

Elecon Measurements

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PROGRAMMING GUIDE

Little Genius Plus LCD

www.elmeasure.com

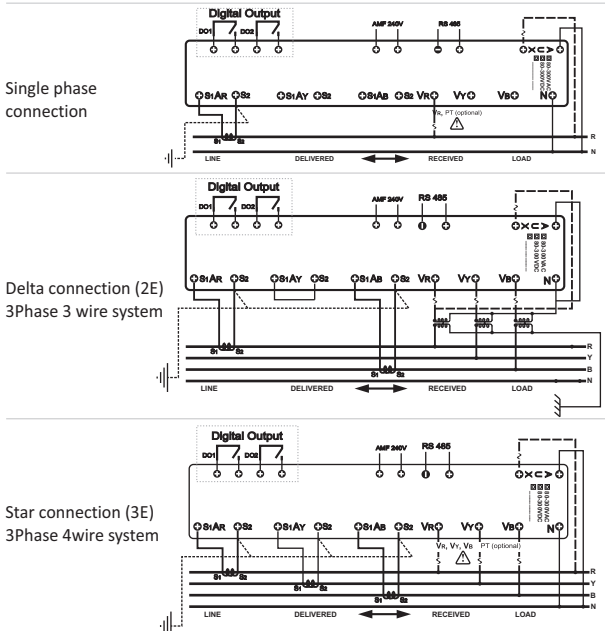
1. FEATURES

- STAR (Wye)/ DELTA/1 Phase Programmable.
- Universal Auxiliary (80 - 300 VAC/DC) supply
- True RMS measurement
- Active energy, positive energy accumulation & reverse Lock.
- User configurable (Editable) password
- 'OLD' register to store the previously cleared energy value
- Simultaneous sampling of Volts & Amps
- Universal Voltage Input (50 - 550 VAC) and Current Secondary (0.5A to 6A).
- PT ratio / CT ratio programmable including CT secondary.



2. UNIQUE FEATURES

- 1 row 7 digit displays for readability.
- Auto-scaling of kilo, mega & decimal point
- Energy selection: Wh/VAh.
- Optional Programmable relay output maximum 2 and tripping time up to 180 seconds.
- Energy display programmable-counter based or resolution based. Energy resetting at 999999KVAh x multiplication factor.

3. WIRING DIAGRAM - LG+5110L








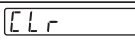



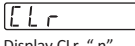


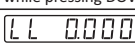

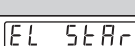






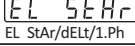



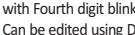

4. KEY FUNCTIONS

Key	In SET (Programming) mode	In RUN (Measurement) mode
Right/UP 	To select the value for editing and accept the value after editing	To scroll pages to look at different parameters in Upward direction.
DOWN 	To edit the value/system type downward in edit mode and scroll through the parameters.	To scroll pages to look at different parameters in Downwards direction.

5. ENTERING CONFIGURATION (SETUP) MODE

To configure the setup parameters through front panel, the following steps can be followed.

Step	Actions	Display Reads	Range/Options/Comments
1	Press RIGHT & DOWN keys together to enter SETUP  	 first digit "0" is blinking	
2	Press DOWN key to decrement the first digit to "9" sequentially come to digit "1" 	 first digit "1" blinking.	If any other password is already use DOWN keys to reach the right password 
3	Press RIGHT key four times to accept the password. 		Defines the clearing option for the meter.
Press DOWN key for SETUP Mode Press RIGHT key for CLEAR Mode			

CLEAR MODE			
4	Press RIGHT key 	 Display CLR "n" Options can be changed by pressing DOWN key. Display will prompt to 'y' or 'n' while pressing DOWN key.	Option : (YES) / (NO) Y (for clearing) N (for not clearing) 
5	Press RIGHT key  To accept the edited option.	 Displays Home page (Clear Mode ends here)	
SETUP MODE			
6	Press DOWN key 		Defines the power system configuration. Displays the previously set configuration
7	Press RIGHT key to select the configuration options 		Options: STAR/DELTA/1.Ph with selected mode blinking
8	Press DOWN key 	 EL StAr/dELt/1.Ph	Use DOWN KEY to select 
9	Press RIGHT key to accept STAR/DELTA/1. PHASE 	 EL StAr/dELt/1.Ph	selected mode stops blinking
10	Press DOWN key to navigate to next parameter 	 default/factory set (PT Primary)	PT Primary value
11	Press RIGHT key to select the PT primary value for editing 	 with Fourth digit blinking. Can be edited using DOWN key.	

12	Press RIGHT key to accept the edited value for Fourth digit.		Program Range for PT Primary : 100V to 999kV. If value set is above the limit, display returns to the maximum PT Pri value
13	Press RIGHT key		Eg: To set 11.00kV Set first four digits (1100) as explained above keep pressing DOWN key to place decimal point at appropriate location. USE DOWN KEY. Letter K/M will indicate the Kilo/Mega.
14	Press DOWN key to go to the next parameter.		Range: 50V to 550V If value set is above the limit, display returns to the maximum PT sec value.
15	Press DOWN key		Program Range for CT Primary 0.5A to 99kA

29	Press DOWN key		Energy value format i.e., the energy accumulated in the meter to be displayed in Resolution (default) or Counter format. Options can be changed using RIGHT & DOWN keys.
30	Press DOWN key		Range: 50 to 500ms Can be set using RIGHT & DOWN keys as in step Repeat steps 11 to 13 to change the
31	Press DOWN key		Energy Selection. Option : Wh/VAh
32	Press DOWN key		If "n"(no) is selected then Meter enters into RUN mode without affecting any edited Values in the setup

Once the required parameter is programmed press the DOWN key continuously till it reaches SAVE page directly.

6 The List of parameters that can be configured and the range is given below

Sl.No.	Parameter	Default setup	Range / Options
1	Connection mode(EL)	STAR	STAR/ DELTA/1.Ph.
2	PT Primary (P.P)	415.0	100V- 999kV
3	PT Secondary (P.S)	415.0	50V - 550V
4	CT Primary (C.P)	5.000	0.5A - 99kA

16	Press DOWN key		CT Secondary Range: 0.5A to 6A
17	Press DOWN key		Option : NO/YES. Reverse lock if yes, blocks energy accumulation in case the CT polarity is reverse.
18	Press DOWN key		Arithmetic (Arth), Vector harmonics (UEC.H). Vector (UECT).Can be edited using RIGHT/DOWN key.
19	Press DOWN key		1st digital output parameter can be selected using DOWN key. OPTION: Disable, Single Phase, Over V/A/F/Watts/Wh, Under V/A/F/PF
20	Press DOWN key		1st digital output threshold value Range : 0.001 to 999.9M
21	Press DOWN key		2nd digital output parameter can be selected using DOWN key. OPTION: Disable, Single Phase, Over V/A/F/Watts /Wh, Under V/A/F/PF
22	Press DOWN key		2nd digital output threshold value Range : 0.001 to 999.9M

5	CT Secondary (C.S)	5.000	0.5A - 6A
6	Reverse Lock (rE)	no	0.5A - 6A
7	VA selection (UA)	VEC.H	Arithmetic (Arth), Vector harmonics (UEC.H). Vector (UECT).
8	Digital Output 1 (d1)	dSbL	Disable, Single Phase, Over V/A /F/Watts/Wh, Under V/A/F/PF.
9	Digital Output 1 threshold value (d1).	1000	0.001 to 999.9M
10	Digital Output 2 (d2).	dSbL	Disable, Single Phase, Over V/A /F/Watts/Wh, Under V/A/F/PF.
11	Digital Output 2 threshold value (d2).	1000	0.001 to 999.9M
12	Baud rate (bA)	9600	2400 to 19.2k
13	Parity (Pr)	Even	Even/ Odd/ no
14	Device Id (dU)	1.000	1.000 to 247.0
15	Reverse lock(rE)	no	Yes/no
16	Password (PW)	1000	1000 to 9999
17	Energy (En)	rESL	rESL /COUP
18	POP ON time (PO)	250.0	50 to 500 milliseconds
19	Energy Selection (E.S)	Wh.	Wh/VAh

7. Enabling and disabling of Auto scrolling

Enabling auto scrolling: Press UP key continuously for 5 seconds or until display shows **EnbL Au.** for upward scrolling. Press Down key continuously for 5 seconds or until display shows **EnbL Au.** for downward scrolling.
Disabling auto scrolling: Press any key (UP/DOWN), display shows **dSbL Au.** and returns to normal mode.

23	Press DOWN key		Range: 1 to 180 seconds (digital output trip delay time, default /factory set :3.000)
24	Press DOWN key		Range: 1 to 180 seconds (baud rate) (9600 default /factory set)
25	Press DOWN key		EUEn (even)/odd(odd)/no (no parity) Internal communication error check
26	Press DOWN key		Defines the (ID) communications identification number.1 to 247 Follow steps 11 to 13 to change the value.
27	Press DOWN key		Range: 1000-9999. (Password user definable). CAUTION: memorize the Password. Use the same Password for next time. Instruments will reject other Passwords.
28	Press RIGHT key to view the password		CAUTION: Password can be reset only at the factory. Follow steps 11 to 13 to change the settings.

8. LED INDICATION

LED Status	Meaning
	Communication ON
TI	Pulse / Reserved

9. Mechanical Specification:

Dimension Bezel:
96 x 96 mm (Depth 50mm behind Bezel)

Panel Cutout:
90⁺² x 90⁺² mm

