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PG/LG3RN/V1/0919

## PROGRAMMING MANUAL

### LG 64xx

LG 6400 | LG 6445  
LG 6435 | LG 6425

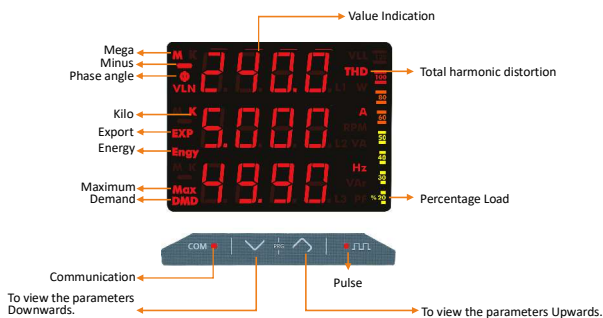


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## 1. FEATURES

- True RMS measurements.
- Simultaneous sampling of voltage and current.
- STAR, DELTA and 1PHASE Programmable wiring connections.
- Universal Auxiliary supply 80 - 300V AC/DC.
- Auto Scaling of Decimal point and Auto scrolling.
- Old register to store previously cleared Energy values.
- Programmable CT & PT Ratio.
- Bar graph programmable for Amps/Watts/VA
- User programmable password protection.
- Energy Import and Export, number of interruptions available.
- Individual Phase energy through communication.
- Demand measurement for watts, VA & Var (only for LG 6400).
- THD measurement upto 15th harmonics.
- 3-Row 12-digits display with unique look.
- Individual phase angle measurement.

## 2. KEY & DISPLAY INDICATION



## 3. PROGRAMMING MODE

### 3.1 Programming Keys

- To select / Edit & save Value
- To decrement value

### 3.2 Setup Procedure

- Press + to enter setup mode .  
Enter Password (default 1000) blinking of digit indicates Edit is possible.  
Press to decrement value from 9 to 1.  
Press to move to the next digit till 4th digit .  
If Password is correct, editing is possible.  
Enters into clear mode and meter displays Clr.l (Refer 3.3A).  
(Refer 3.3B only for 6400).  
Press key to view and press key to edit.  
Press to decrement values or to select from available options.  
Press to save the value / parameter.  
Press to edit next parameter till end of last parameter & display screen will prompt **SAVE** display reads **y** (YES).  
Press to change to **n** (NO) .  
Press to save.

### 3.3A Clear Mode : Clear Integrator

Press <b>Up</b> key	Meter displays Clr.l. 'n' (with n is blinking)	Meter displays Clr.M
Press <b>Down</b> Key	Displays Clr.l 'n' options can be changed by pressing <b>Down</b> Key. Display will prompt to 'y'(or) 'n' while pressing <b>Down</b> key.	Option : (YES)/(NO) 'y'(for clearing) 'n' (for not clearing)
Press <b>Up</b> key to accept the edited option	Comes back to Default page (Clear Mode ends here)	

### 3.3B Clear Mode : Clear Demand

Press <b>Up</b> key	Meter displays Clr.M.	
Press <b>Up</b> Key	Displays Clr.M 'n' options can be changed by pressing <b>Down</b> Key. Display will prompt to 'y'(or) 'n' while pressing <b>Down</b> key.	Option : (YES)/(NO) 'y'(for clearing) 'n' (for not clearing)
Press <b>Up</b> key to accept the edited option	Comes back to Default page (Clear Mode ends here)	

### 3.4 Display

Programming Parameter	Default	Option/Range
ELEMENT Defines the power system configuration	STAR ELEn	STAR /DELTA/IPH (SINGLE PHASE)
PT Primary	4150 P.P.1	100V-999kV To set 11kV Set first four digits (1100) as explained above. Press <b>Up</b> / <b>Down</b> key to place decimal point at appropriate location. LED K will indicate Kilo
PT Secondary	4150 P.S.EC	50V - 550V
CT Primary	5000 C.P.1	0.5A - 99KA
CT Secondary	5000 C.S.EC	0.5A - 6A

VA selection(UA.SL)	UECH UASL	Vector. harmonic/Vector/ Arithmetic.
Baud rate (bAUd)	9600 6AUd	2400/4800/9600/19.20k /38.40k
Parity (PrTY)	EUE n P.r.t.Y	Odd/ no(none)/EVEN
Device Id (dU.Id)	1000 dU.I.d	1.000 - 247.0
Password	---- P.y.d	1000 - 9999
Energy value format Selection(ENER)	COUN ENER	COUN (Counter) / RESL (Resolution)
Pulse output On time	2500 P.O.P.E	Range: 50ms to 500ms

Starting Current (A.SUP)		0.02% to 10.00% of FS
Starting Voltage (V.SUP)		10V - 40V
Parameter 1 selection <sup>(1)</sup>		bASC/thd/Vrh.E/Enr.E/VAr/EnrG POWr (Only for 6425,6435,6445)
Parameter 2 selection <sup>(2)</sup>		bASC/thd/Vrh.E/Enr.E/VAr/EnrG POWr (Only for 6425,6435,6445)
Parameter 3 selection <sup>(3)</sup>		bASC/thd/Vrh.E/Enr.E/VAr/EnrG POWr (Only for 6435,6445)
Parameter 4 selection <sup>(4)</sup>		bASC/thd/Vrh.E/Enr.E/VAr/EnrG POWr (Only for 6445)
Demand Period <sup>(5)</sup>		1 - 30 (Only for 6400)

Bar graph		A/VA/WAtS
Frequency selection		nor (Normal)/dISt (Distortion)
No of Poles(POLES)		2 - 28 poles

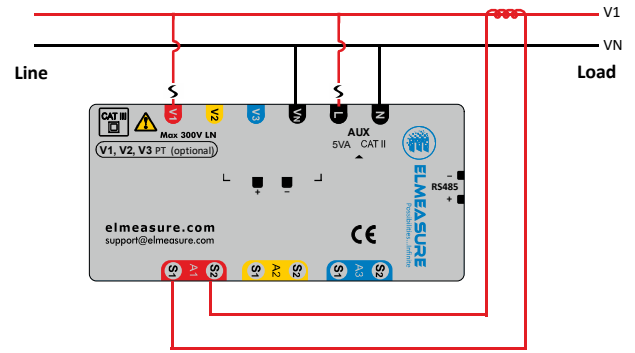
### 3.5 Enabling and Disabling Auto Scrolling

Press  **Down** key for 5 Secs. Display shows : Again press down key to disable. Display shows :

### 3.6 Entering and Exit for Old Parameter

Press  **Up** key for 5 Secs. Display shows : Again press up key for 5 Secs to exit. Display shows :

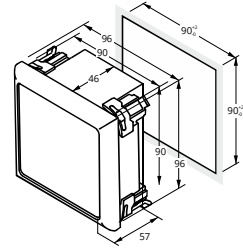
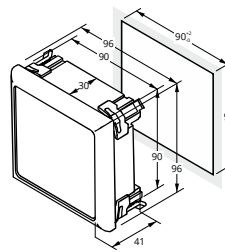
### Single phase Connection



## 5. MECHANICAL SPECIFICATION

**Dimension Bezel:** 96 x 96 mm  
(Depth 30/46mm behind Bezel)

**Panel Cutout:**  
90<sup>+2</sup> x 90<sup>+2</sup> mm



## 6. TROUBLE SHOOTING

- Meter display does not turn ON.
  - Check that there is power supply applied on AUX supply terminals.
  - Check fuse connection (Use fuse connection of specified ratings).
- Data displayed / reading incorrect.
  - Check that CT/PT ratios are properly set.
  - Check if proper configuration mode Star/Delta/1Phase is correctly set.
  - Check if proper frequency selection normal, distortion is selected properly.
- PT reading are incorrect / Active Power reading is negative.
  - CT connections may be reversed, check and correct CT connection.
  - Check Voltage and current phases are connected in proper sequence.
- RS485 communication does not work.
  - Check baud rate & parity maintained in the connected computers is same as meter.
  - Memory mapping in software is correct.
  - Check device ID of meter is unique & properly maintained.
  - Check converter is working properly.



## 7. INFORMATION

Manufacturer assumes no responsibility for a hazard or damage caused by incorrect or non-application of any of the instructions mentioned herein. ELMEASURE shall not be liable for any consequential or resulting injury or for loss, damage or expense directly or indirectly from the use of this product under any circumstances.

ELMEASURE does not claim any responsibility for the damage caused by using the product directly or indirectly as sufficient care has been taken to provide all information regarding the product. The user is advised to use according to the operating instructions, professional practices, wiring rules, codes, safety regulations applicable to the given installation.



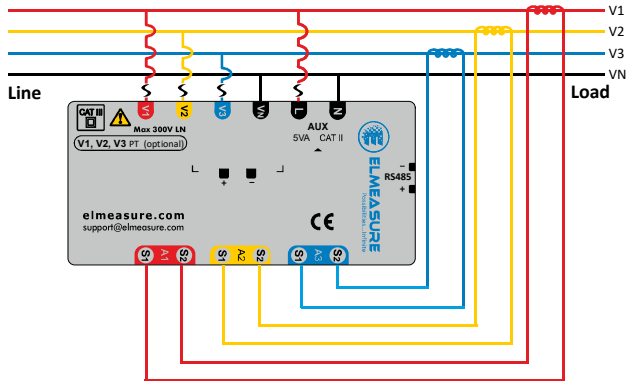
## 8. CAUTION

During normal operation of this instrument, hazardous voltages are present at the rear terminals, which may cause injury or death. Installation, disconnection or removal of the meter should be carried out only by qualified, trained personnel, after de-energizing connected circuit. The warranty will become void incase the seal is broken, improper installation as well as improper grounding.



## 4. WIRING DIAGRAM

### Star Connection (3E) 3 Phase 4 Wire system



\*Note: ⚡ Fuse rating 500mA slow blow fuse.

### Delta Connection (2E) 3 Phase 3 Wire system

