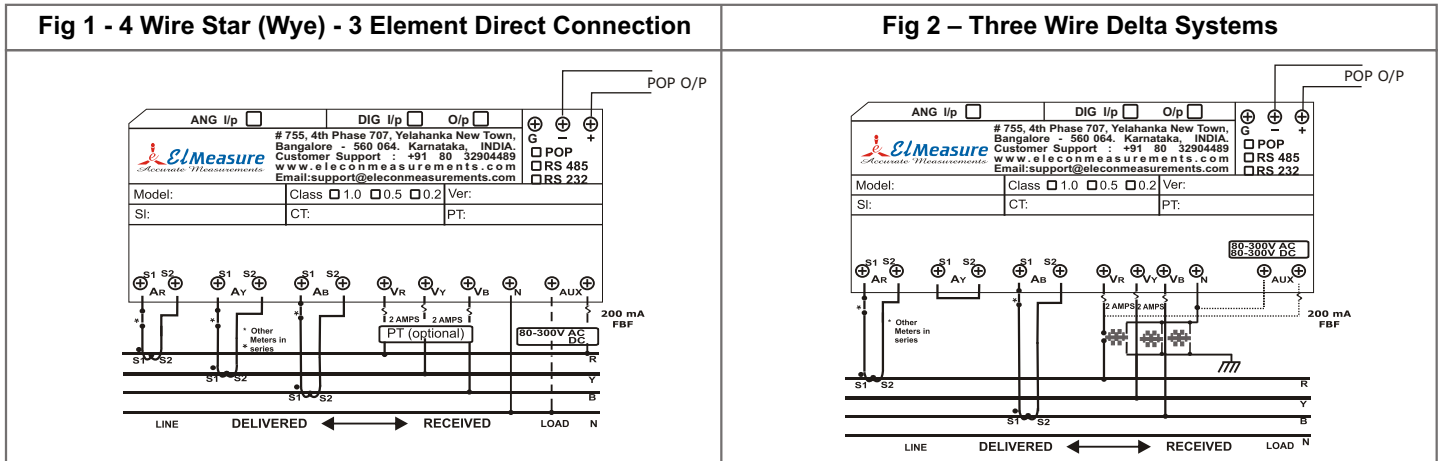


PROGRAMMING GUIDE - Little Genius 3 Row Series

1. UNIQUE FEATURES

- STAR (Wye)/ Delta Programmable.
- Universal Auxiliary (80 - 300V AC) supply.
- "OLD" Register for storing Cleared Energy.
- 4 digits 3 Rows display with **Auto scaling** and **Auto Scrolling**
- User configurable (Editable) password
- Clearance & creepage distance meets UL508 standard.
- Compact size and Weight
- Universal Voltage Input (80 - 550 VAC) and Current Secondary (1A or 5A)

2. WIRING DIAGRAM



3. KEY FUNCTIONS

Key	In SET (Programming) mode	In RUN(Measurement) mode
RIGHT	To change last set value and to set the changed value	No action
UP	To edit the value/system type up-ward in edit mode and scroll through the parameters.	To scroll up the pages to look at different parameters.
DOWN	To edit the value/system type down-ward in edit mode and scroll through the parameters.	To scroll down the pages to look at different parameters

4. ENTERING CONFIGURATION (SETUP) MODE

To configure the setup parameters in Little Genius series of meters through front panel keys, the following steps need to be followed.

Step	Actions	Display Reads	Range/Options / Comments
1	Press RIGHT and UP keys together to enter programming mode.	SEtP (SETUP)	
2	Press DOWN key	Row 1: PwD (Password) is displayed. Row 2: 0000 with first digit "0" blinking	
3	Press Up button for the first digit to increment to "1".	PASSWORD = 1000(default/factory set).	
4	Press RIGHT key four times to accept the password.	Row 1: display : ELE(element) Row 2: displays either StAr or dELt(Delta) or 1.Ph (Single phase) which was last programmed.	Defines the power system configuration. Options: StAr (Star/Wye), dLtA (Delta) and 1.Ph (Single phase) ⁽¹⁾
5	Press RIGHT key to select the mode required	Row 1: display : ELE Row 2: Blinks StAr or dLtA or 1. Ph	
6	Press UP / DOWN key to select dELtA/1. PhASE	Row 1: display : ELE Row 2: Blinks selected mode (StAr/dLtA/1. Ph)	
7	Press RIGHT key to accept	Row 1: display : ELE Row 2: selected mode (StAr/dLtA/1. Ph)	
8	Press DOWN button.	Row 1: Pt.Pr (PT primary) Row 2: xxxx (415.0 -default/factory set)	
9	Press RIGHT key to set the PT primary value	Row 1: Pt.Pr (PT primary) Row 2: First digit blinking can be edited using UP/DOWN key.	
10	Press RIGHT key to accept the edited value	Row 1: Pt.Pr (PT primary) Row 2: Second digit blinking, can be edited using UP/DOWN key. Press RIGHT key to accept the edited value. Continue the same method till fourth digit.	Defines the full-scale input reading (in Volts) program Range : 100V to 99kV

11	Press RIGHT key	Row 1: Pt. Pr (PT primary) Row 2: Decimal point blinking. Can be set at appropriate location using UP/DOWN key. Ascertain the correct scale (Kilo) is selected. Press RIGHT key to accept the edited value.	Eg: To set 11.00kV Set first four digits (1100) as explained above, keep pressing UP/DOWN key to place decimal point at appropriate location, while kilo LED should be "ON"
12	Press DOWN key to go to the next parameter.	Row 1: Pt.SE (PT secondary). Value up to allowable limit can be set. Follow the procedure as described in steps 9 to 11. Repeat steps 9 to 11 in such case. Row 2: xxxx (415.0 -default/factory set)	Range : 50V to 530V If value set is above the limit, display returns to the Maximum PT sec value.
13	Press DOWN key to go to the next parameter.	Row 1: Ct.Pr (CT primary) Row 2: xxxx(5.000 -default/factory set) Repeat steps 9 to 11 to change the settings.	Defines the full-scale input reading (in Amps) program Range : 1A to 50kA
14	Press DOWN key to go to the next parameter	Row 1: Ct.SE (CT secondary). Value up to allowable limit can be set. Repeat steps 9 to 11 in such case. Row 2: xxxx (5.000 -default/factory set)	Range : 1A to 6A If value set is above the limit, it returns to the maximum CTSE value.
15 ⁽¹⁾	Press DOWN key to go to the next parameter	Row 1: r.L.Lo./ rEV.L. (reverse lock) Row 2: no	No/YES. Reverse Lock 'YES' allows only position energy to accumulate.
16 ⁽³⁾	Press DOWN key to go to the next parameter	Row 1: PAr Row 2: WAtt / PF	Field Programmable Optional Parameter.
16 ⁽¹⁾	Press DOWN key to go to the next parameter.	Row 1: VA.SL Row 2: Arth or Vctr or Vec.H which was last programmed	Vec.H(Vector Harmonics)/Vctr(Vector)/Arth(Arithmetic)
17 ⁽⁴⁾	Press DOWN key to go to next parameter	Row 1: PAr 1 Row 2: W / A / VLL / PF	1 st Field Programmable Optional Parameter.
18 ⁽⁴⁾	Press DOWN key to go to next parameter	Row 1: PAr 2 Row 2: W / A / VLL / PF	2nd Field Programmable Optional Parameter.
17 ⁽¹⁾	Press DOWN key to go to the next parameter	Row 1: bAUd (baud rate). Communication speed. Applicable When instrument is connected to the application software running in PC. Row 2: xxxx (9600 -default/factory set)	Defines the baud rate. Option : 600, 1200, 2400, 4800, 9600, 19.20k
18 ⁽¹⁾	Press DOWN key to go to the next parameter.	Row 1: PrtY (Parity). Internal communication error check. Applicable when instrument is connected to the application software running in PC. Row 2: EUEn	EUEn/odd/no
19 ⁽¹⁾	Press DOWN key to go to the next parameter.	Row 1: dEU.Id (Device ID) Row 2: 1.000	Defines the communications identification (ID) number (1 to 247)
20 ⁽¹⁾	Press DOWN key to go to the next parameter.	Row 1: Pwd (Password). User programmable password, settable between 1001 to 9999 CAUTION: Memorize the password. Use the same password for programming/editing next time. Instrument will reject other passwords. Row 2: - - - -	If password is forgotten in such case the meter has to be reset and recalibrated at "ELECON measurements" factory only.
21 ⁽²⁾	Press DOWN key	Row 1: AUTO Row 2: dISA	dISA(Disable)/EnbL(Enable) Auto Scrolling
22	Press DOWN key	Row 1: SAVE Row 2: "Y" blinking.	
23	Press RIGHT key to memorize /store the changes done.	Display returns to run mode.	

⁽¹⁾ Parameters not applicable for LG 1300 & LG 3310. ⁽²⁾ Applicable only for LG 1300. ⁽³⁾ Applicable only for LG 4300. ⁽⁴⁾ Applicable only for LG 3999.

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

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

Sl.No	Parameter	Default factory setup	Range
1	Connection mode(ELE)	Star	StAr(Star), dLtA (Delta), 1.Ph (Single phase)
2	PT Primary (Pt.Pr)	415.0	100V - 99kV
3	PT Secondary (Pt.SEC)	415.0	50V - 530V
4	CTPrimary(Ct.Pr)	5.000	1A - 50kA
5	CT.Secondary (Ct.SEC)	5.000	1A - 6A
6 ⁽¹⁾	Reverse lock(r.L.LO)	no	Yes/no
7 ⁽⁴⁾	PAr	PF	WAtt / PF
8 ⁽³⁾	PAr 1	W	W/A /VLL /PF
9 ⁽³⁾	PAr 2	PF	W/A /VLL /PF
10 ⁽¹⁾	VA Selection(VA.SL)	Arth	Vec.H/Vctr/Arth
11 ⁽¹⁾	Baud rate (bAUd)	9600	600 or 1200 or 2400 or 4800 or 9600 or 19.20k
12 ⁽¹⁾	Parity (PrtY)	EVEEn	EVEEn (or) odd (or) no
13 ⁽¹⁾	Device Id (dV.Id)	1.000	1.000 to 247.0
14 ⁽¹⁾	Password (PwD)	1000	1000 to 9999

5 LED INDICATIONS

LED status	Meaning
'KILO' ON	Kilo
'MEGA' ON	Mega
'KILO' & 'MEGA' ON	Giga
'KILO' & 'MEGA' OFF	Direct reading
'-' ON	Lag/Minus
'-' OFF	Lead/Plus

6 Clearing the Integrator

To Clear parameters of the Little Genius from the front panel, *Press UP and DOWN Keys together*, and 'Clr' is shown on the display. Enter the Password (default password is 1000. Set up and clear has the same password) and it will display Clr.I (Integ Clear). Press right key for selecting Clr.I (Integ Clear). Press UP/DOWN key for changing YES/NO and Press the RIGHT key to do the operation. User can return to display mode at any time by again pressing OPTIONS button.

7 Enabling and disabling of Auto scrolling

Enabling auto scrolling: Press UP key continuously for 5 seconds or until display shows **EnbL Auto** for upward scrolling. Press Down key continuously for 5 seconds or until display shows **EnbL Auto** for downward scrolling.

Disabling auto scrolling: Press any key (RIGHT/UP/DOWN), display show **dSbL Auto** and returns to normal mode.