EBTRON® BRIDGE
I-P Units

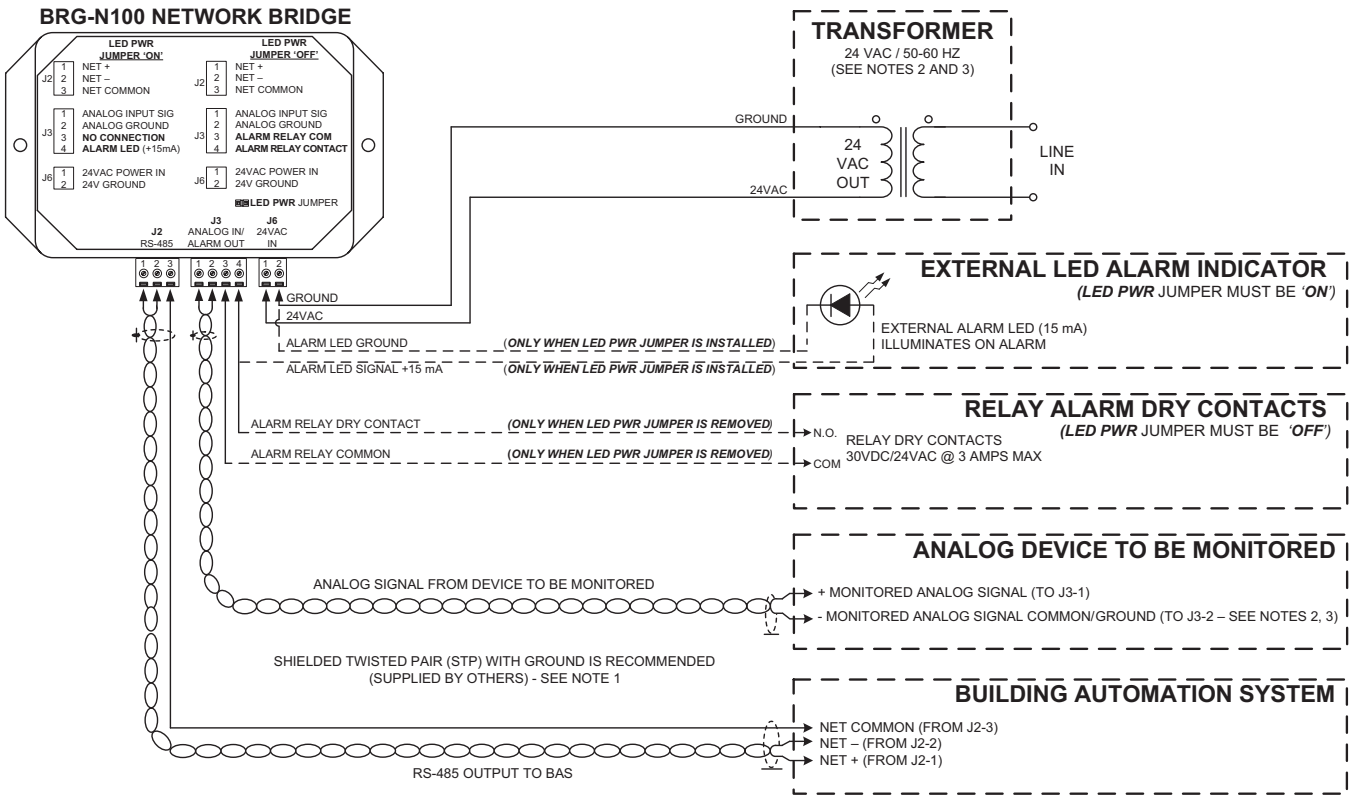
RS-485 Network Bridge with Configurable Display and Alarm Capability

100 SERIES
BRG-N100

INSTALL / SETUP

DOCUMENT PN: 930-0560

BRG-N100 TYPICAL WIRING DIAGRAM



NOTES:

1: CONNECT ANALOG SIGNAL AND NETWORK CABLE DRAINS TO EARTH GROUND AT ONE END OF CABLE ONLY.

2. THE BRG-N100 IS A NON-ISOLATED DEVICE USING A HALF-WAVE RECTIFIER ON THE 24VAC POWER INPUT. IF MULTIPLE DEVICES ARE POWERED BY THE SAME TRANSFORMER OUTPUT, ALL GND CONNECTIONS MUST BE COMMON, OR A DEDICATED TRANSFORMER MAY BE USED TO PREVENT EQUIPMENT DAMAGE.

3. ALL DEVICES ON MULTIPLE BRG-N100 INSTALLATIONS WITH A COMMON 24VAC SOURCE MUST BE WIRED IN-PHASE TO THE SAME TERMINALS (e.g.: J6-1 to J6-1, J6-2 to J6-2).

4. SHIELDED TWISTED PAIR (STP) WIRING WITH GROUND IS RECOMMENDED (SUPPLIED BY OTHERS).

5. DRY RELAY CONTACT RATING MAXIMUM 30VDC/24VAC @ 3 AMPS MAXIMUM.

○ BACNET OBJECTS LIST

BRG-N100 BACnet Objects

Type, ID	Name	Default Units	Notes
Device	BRG-N100		
AI, 1	Analog Input	FPM	
AI, 2	Alarm Status	None	
BO, 1	Relay	None	INACTIVE = Open, ACTIVE = Close; Write at any Priority less than 16
BO, 2	LED	None	INACTIVE = Off, ACTIVE= On; Write at any Priority less than 16

Notes:

Writable Properties: Present Value, COV, Out of Service, Units, Max Present Value, Min Present Value, Polarity (Relay).

Default Baud is 76,800.

Internal write is at Priority 16.

Priority 1-8 are non-volatile.

○ MODBUS REGISTER MAP

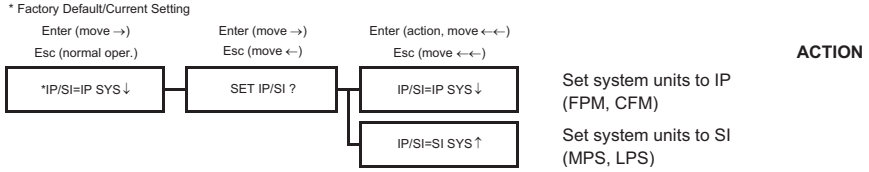
BRG-N100 Modbus Register Map

Function	Address	Type	Description	Range/Value
2	10001	boolean	Trouble Status	0:OK, 1:Trbl
4	30001-30002	float	AI1 Scaled Value	Minscale to Fullscale
4	30003	16 bit unsigned	Alarm Status - Write 0 to clear	0: No alarm 1: High Alarm 2: Low Alarm 3: Both
4	30005-30006	float	Analog Input Fullscale	0 to 999,999
4	30007-30008	float	Analog Input Minscale	-999,999 to 999,999
4	30009	16 bit unsigned	Relay	0 = Open, 1 = Closed; Any other value clears write
4	30010	16 bit unsigned	LED	0 = Off, 1 = On; Any other value clears write
4	30201	16 bit unsigned	Float word order	0: high word first; 1: low word first

Note: Default is 19,200, even parity, 1 stop bit.

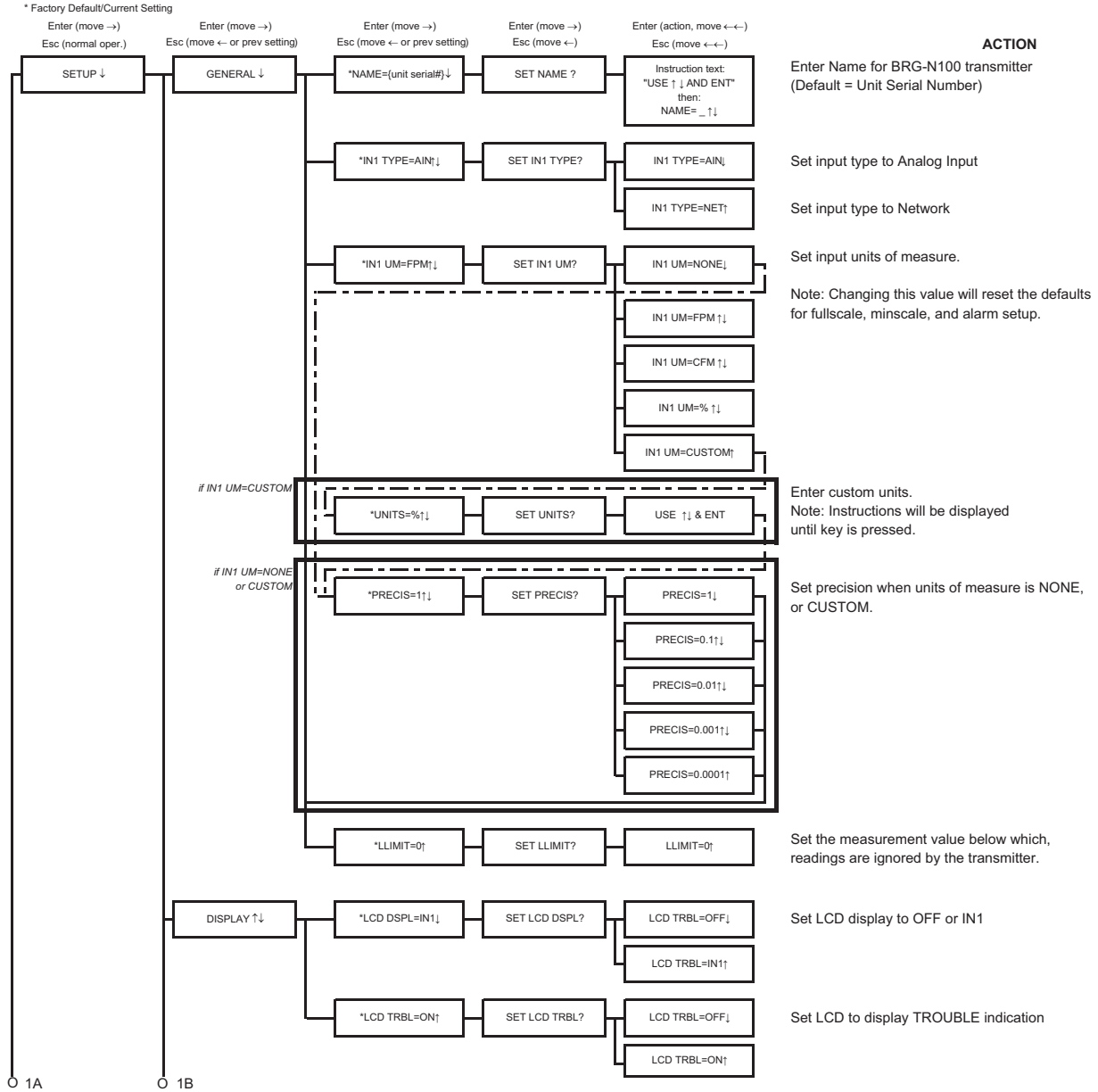
SYSTEM OF UNITS MENU

Simultaneously depress/release ENTER + ESC keys during normal operation to select



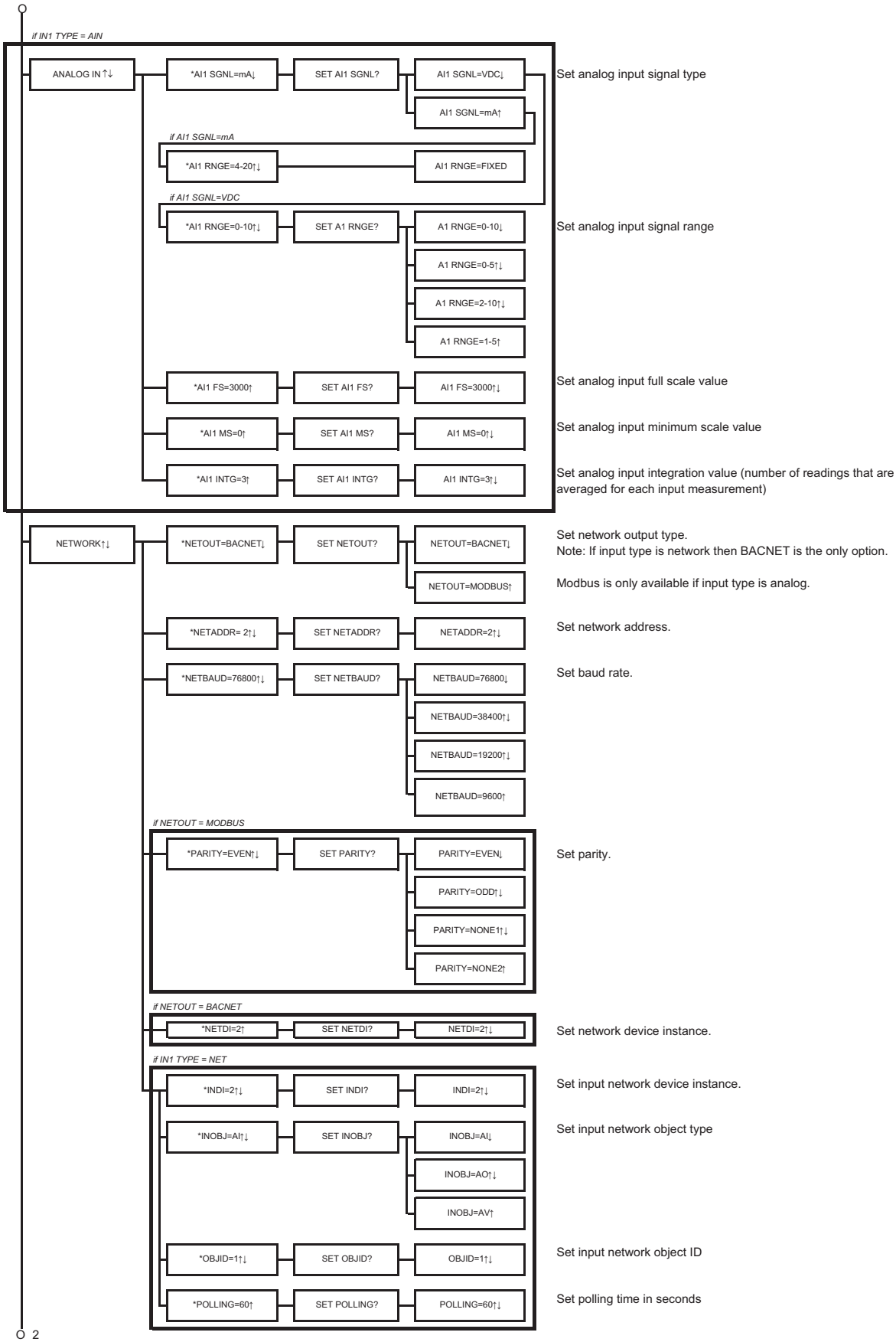
SETUP MENUS (PART 1 OF 4)

SETUP MENU
Simultaneously depress/release ↑ + ↓ keys during normal operation to select



SETUP MENUS (PART 2 OF 4)

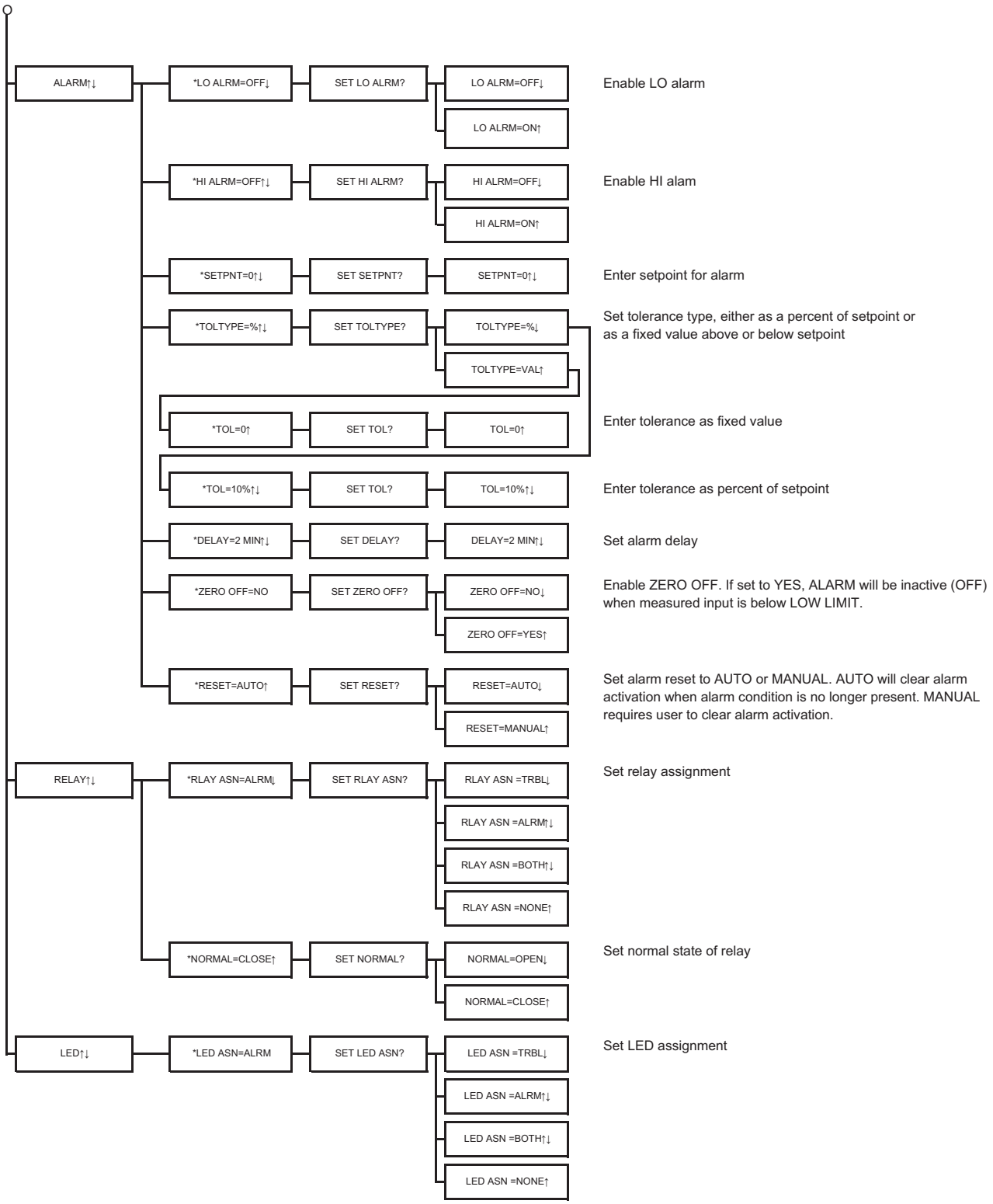
FROM PART 1B



TO PART 3

SETUP MENUS (PART 3 OF 4)

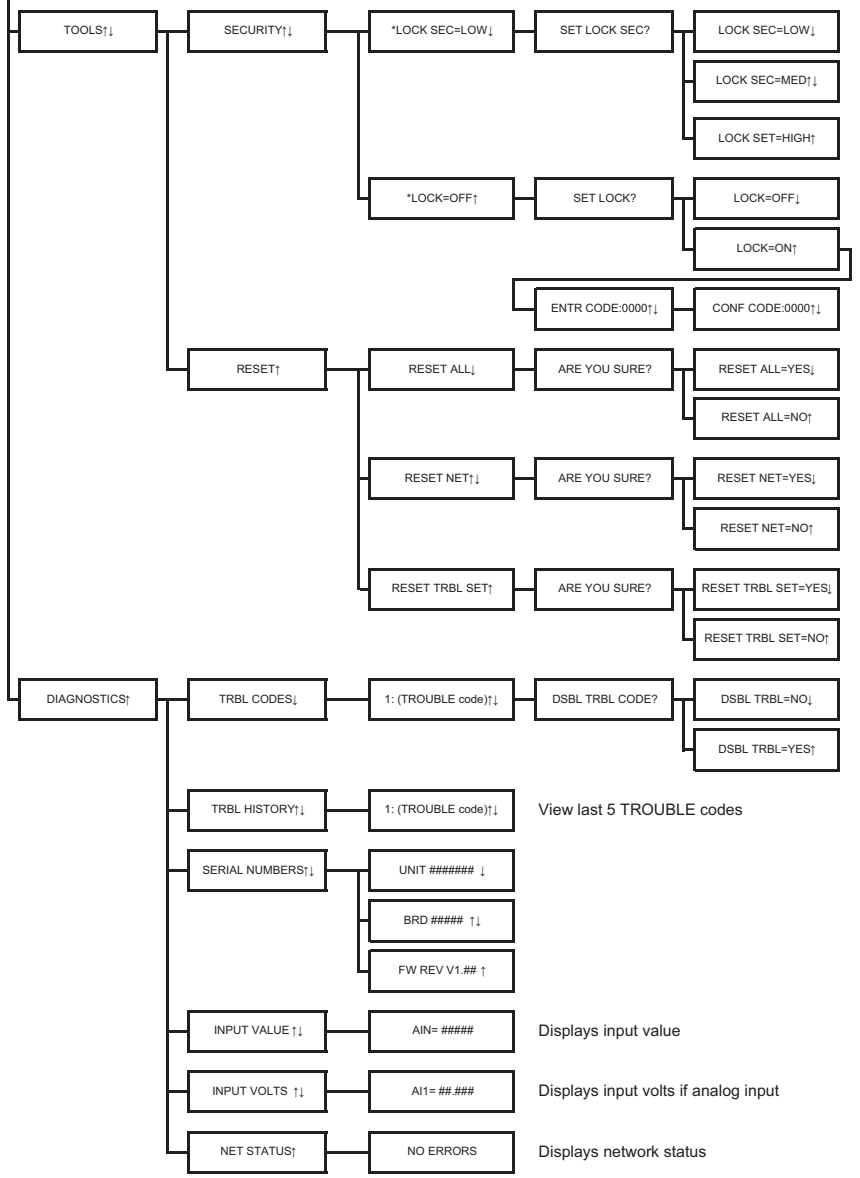
FROM PART 2



SETUP MENUS (PART 4 OF 4)

FROM PART 1'A'

4



Enable LOW setting where code is last four digits of board serial number.

Enable MED setting where code is entered from user. Contact Customer Service to unlock if code is lost.

Enable HIGH setting where code is entered from user. **If code is lost, unit must be returned to factory to unlock.**

Enter code and confirm code
(NOTE: if LOCK SEC= HIGH, DO NOT lose code!)

Reset transmitter to defaults

Reset network settings

Resets any disabled trouble codes

Do not disable active TROUBLE indication

Disable active TROUBLE indication

View last 5 TROUBLE codes

Displays input value

Displays input volts if analog input

Displays network status

IG_BRG-N100_R1C