

INPUT / OUTPUT PARAMETERS : PAGE 12		
Parameters	Settings (Default Value)	
Hand (manual) made Enable/ Disable HRnd	EnbL Enable d5bL Disable (Default : Disable)	
Quick Adjustment of Setpoint Enable/Disable SP	EnbL Enable d5bL Disable (Default : Enable)	
Control Output Type C-OP	rLY Relay SSr SSR 0-20 0-20mA 4-20 4-20mA (Default : Relay)	
Sensor Input Type INPt	tC-J Type J tC-K Type K tC-T Type T tC-R Type R tC-S Type S tC-b Type B tC-n Type N rESu Reserved rtD RTD Pt100 0-20 0-20mA 4-20 4-20mA 0050 0 to 50mV 0200 0 to 200mV 125 0 to 1.25mV 50 0 to 5.0mV 100 0 to 10.0mV (Default : Type K)	
Resolution For PV rSLn	Refer Table 1 for the available max / min Ranges & Resolution for each input type. (Default : 1)	
Range Low For PV rLo	Same as above (Default : 0)	
Range High For PV rHi	Same as above (Default : 1000)	
Setpoint Low SPLo	Same as above (Default : -200)	
Setpoint High SPHi	Same as above (Default : 1300)	
Offset for PV OFSE	-1999 to 9999 (Default : 0)	
Digital Filter For PV FLtE	0.5 to 25.0 (Default : 1.0)	

CONTROL PARAMETERS : PAGE 10		
Parameters	Settings (Default Value)	
Control Setpoint SP	Setpoint Low to Setpoint High (Default : 0)	
Proportional Band Pb	0 to 999 Units (Default : 50 units)	
Hysteresis HYSr	1 to 250 (Default : 2)	
Integral Time It	0 to 1000 Seconds (Default : 100 Sec.)	
Derivative Time dt	0 to 250 Seconds (Default : 25 Sec.)	
Cycle Time Ct	0.5 to 120.0 (Default : 20.0)	
Relative cool Gain rELG	0.1 to 10.0 (Default : 1.0)	
Cool Cycle Time CCt	0.5 to 120.0 (Default : 20.0)	
Power Low Limit PL	0 to less than Power High (Default : 0)	
Power High Limit PH	Greater than Power Low to 100 (Default : 100)	

OP2 & OP3 FUNCTION PARAMETERS : PAGE 14		
Parameters	Settings (Default Value)	
Output-2 Function Selection OP2F	ALrñ Alarm CCon Cool control PFEu Profile Event (Default : Alarm)	
Output-2 Type OP2t	rLY Relay SSr SSR 0-20 0-20mA 4-20 4-20mA (Default : Relay)	
Output-3 Function Selection OP3F	ALrñ Alarm rEC Recorder PFEu Profile Event (Default : Alarm)	
Recorder Output Type rECo	0-20 0-20mA 4-20 4-20mA (Default : 0-20mA)	
Recorder Low rECL	Range Low to Range High (Default : 0)	
Recorder High rECH	Range Low to Range High (Default : 0)	

ALARM PARAMETERS : PAGE 11		
Parameters	Settings (Default Value)	
Alarm-1 Type AL-1	nonE None P_Lo Process Low P_Hi Process High dE Deviation Band bRnd Window Band EOP End of Profile (Default : None)	
Alarm-1 Setpoint AlSP	Throughout the range for the selected input type (Default : 0)	
Alarm-1 Deviation Band Alde	-999 to 999 (Default : 0)	
Alarm-1 Window Band AlbA	3 to 999 (Default : 3)	
Alarm-1 Hysteresis AlHY	1 to 999 (Default : 2)	
Alarm-1 Logic AlL	dir Direct rEu Reverse (Default : Direct)	
Alarm-1 Inhibit Alh	no No YES Yes (Default : No)	
Alarm-2 Type AL-2	nonE None P_Lo Process low P_Hi Process high dE Deviation Band bRnd Window Band EOP End of Profile (Default : None)	
Alarm-2 Setpoint A2SP	Throughout the range for the selected input type (Default : 0)	
Alarm-2 Deviation Band A2de	-999 to 999 (Default : 0)	
Alarm-2 Window Band A2bA	3 to 999 (Default : 3)	
Alarm-2 Hysteresis A2HY	1 to 999 (Default : 2)	
Alarm-2 Logic A2L	dir Direct rEu Reverse (Default : Direct)	
Alarm-2 Inhibit A2h	no No YES Yes (Default : No)	

PROFILE : SEGMENT PARAMETERS : PAGE 15		
Parameters	Settings (Default Value)	
Select Profile Number PrFn	1 to Max. configured	
Select Set Number SEtn	1 to Max. configured	
Ramp Rate rRtE	0.00 to 99.99 (Default : 0.00)	
Target Setpoint tSP	Range Low to Range High (Default : 0)	
Soak Time SOAP	0 to 9999 (Default : 0)	

PROFILE : CONFIGURATION PARAMETERS : PAGE 18		
Parameters	Settings (Default Value)	
Profile Enable/Disable PrOF	EnbL Enable d5bL Disable (Default : Enable)	
Output(S) Off OPOF	no No YES Yes (Default : No)	
Numbers of Profile nPrF	1 to 2	
Select Profile Number PrFn	1 to Max. configured	
Numbers of Sets for the Selected Profile nSEt	1 to 8	
Number of Programs nPrG	1 to 16	
Reset Programs Set-UP rStP	no No YES Yes (Default : No)	

PROFILE : BAND / EVENT PARAMETERS : PAGE 16		
Parameters	Settings (Default Value)	
Select Profile Number PrFn	1 to Max. configured	
Ramp Hold Band rbnd	0 to 250 (Default : 0)	
Soak Hold Band Sbnd	0 to 250 (Default : 0)	
Select Segment Number SEtn	1 to twice the Max. configured Sets	
Output-2 Event Time 02Et	0 to 9999 (Default : 0)	
Output-2 Event Status 02ES	ON, OFF (Default : ON)	
Output-3 Event Time 03Et	0 to 9999 (Default : 0)	
Output-3 Event Status 03ES	ON, OFF (Default : ON)	

UTILITY PARAMETERS : PAGE 13		
Parameters	Settings (Default Value)	
Self Tune Commands tUnE	no No YES Yes (Default : No)	
Overshoot Inhibit oS.h	EnbL Enable d5bL Disable (Default : Disable)	
Baud Rate bAud	1200, 2400, 4800, 9600 (Default : 9600)	
Controller ID Number Id	1 to 31 (Default : 1)	
Communication Write Enable ConE	no No YES Yes (Default : No)	

TABLE- 1		
Option	Range (Min. to Max.)	Resolution
tC-J J Type T/C	0 to +760°C / +32 to +1400°F	Fixed 1°C / 1°F
tC-K K Type T/C	-200 to +1300°C / -328 to +2372°F	
tC-t T Type T/C	-200 to +350°C / -328 to +662°F	
tC-r R Type T/C	0 to +1770°C / +32 to +3092°F	
tC-S S Type T/C	0 to +1700°C / +32 to +3092°F	User settable 1°C / 1°F or 0.1°C / 0.1°F
tC-b B Type T/C	+200 to +1700°C / +392 to +3092°F	
tC-n N Type T/C	0 to +1300°C / +32 to +2372°F	
rESu RTD Pt100	-199 to +600°C / -328 to +1112°F or -199.9 to 600.0°C / -199.9 to 999.9°F	
0-20 0 to 20mA DC	-1999 to +9999 units	User settable 1 / 0.1 / 0.01 / 0.001 units
4-20 4 to 20mA DC		
0050 0 to 50mV DC		
0200 0 to 200mV DC		
125 0 to 1.25V DC		
50 0 to 5.0V DC		
100 0 to 10.0V DC		

FRONT PANEL LAYOUT

Front Panel

Upper Readout → **350.0** → Ramp Indicator

Lower Readout → **350.0** → Soak Indicator

Output-2 Indicator → OP1

Output-1 Indicator → OP2

PAGE Key → [PAGE] → Output-3 Indicator

DOWN Key → [DOWN] → ENTER Key

UP Key → [UP]

Keys Operation

Symbol	Key	Function
[PAGE]	PAGE	Press to enter or exit set-up mode.
[DOWN]	DOWN	Press to decrease the parameter value. Pressing once decreases the value by one count; keeping pressed speeds up the change.
[UP]	UP	Press to increase the parameter value. Pressing once increases the value by one count; keeping pressed speeds up the change.
[ENTER]	ENTER	Press to store the set parameter value and to scroll to the next parameter on the PAGE.

PV Error Indications

Message	PV Error Type
Or	Over-range (PV above Max. Range)
Ur	Under-range (PV below Min. Range)
OPEn	Open (Sensor open / broken)

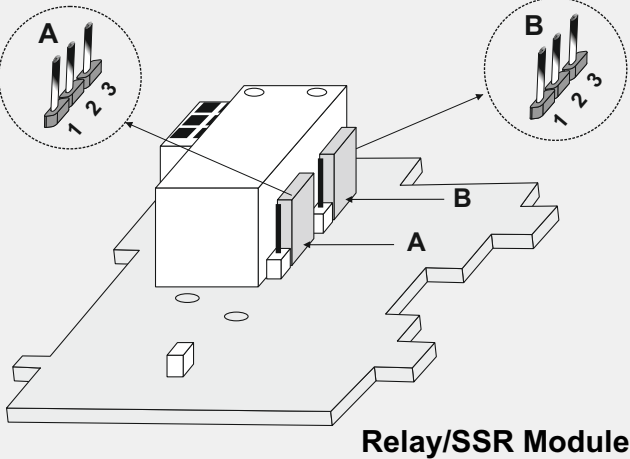
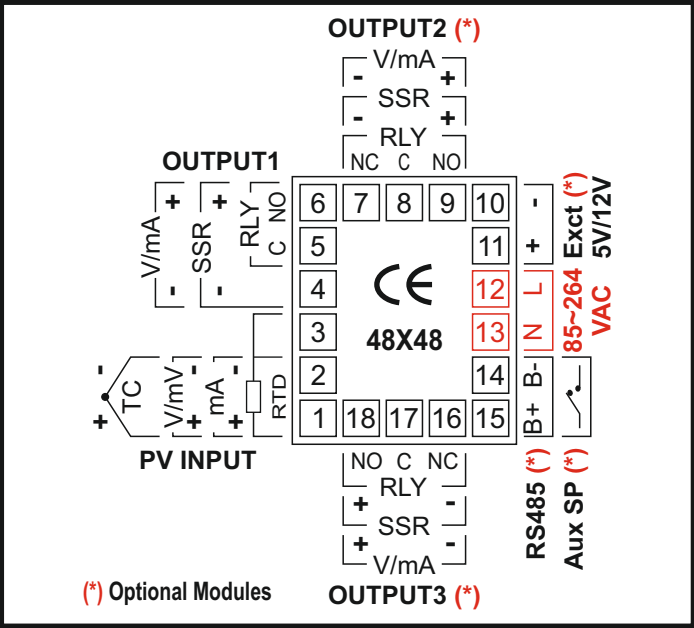
NOTE : For Page 17 Kindly Refer the Detailed Manual on www.ppiindia.net

ELECTRICAL CONNECTIONS

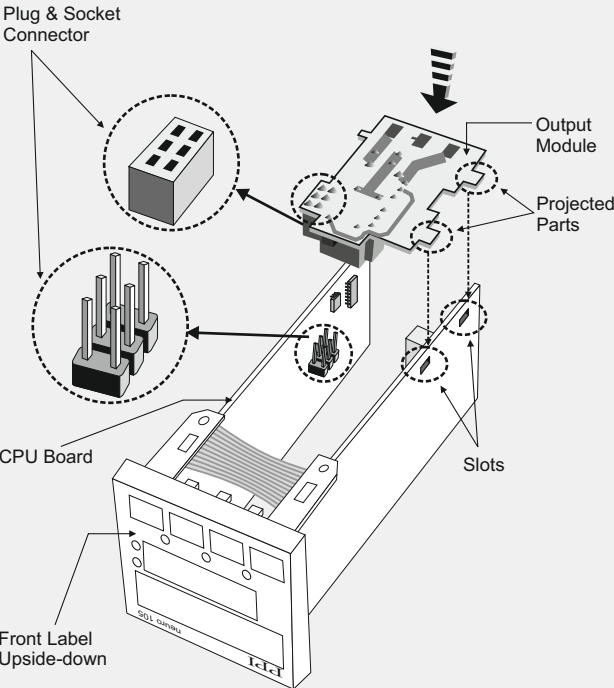
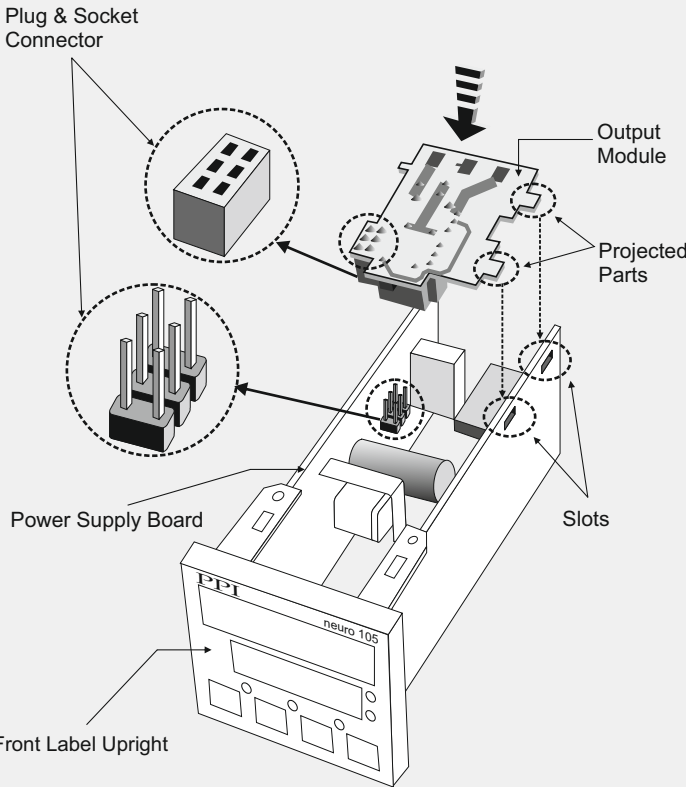
JUMPER SETTINGS
OUTPUT-2 & OUTPUT-3

MOUNTING DETAILS
OUTPUT-2 MODULE

MOUNTING DETAILS
OUTPUT-3 MODULE



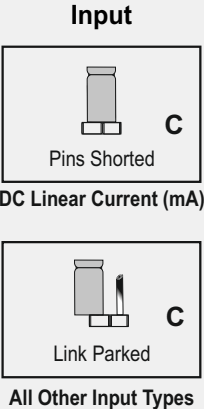
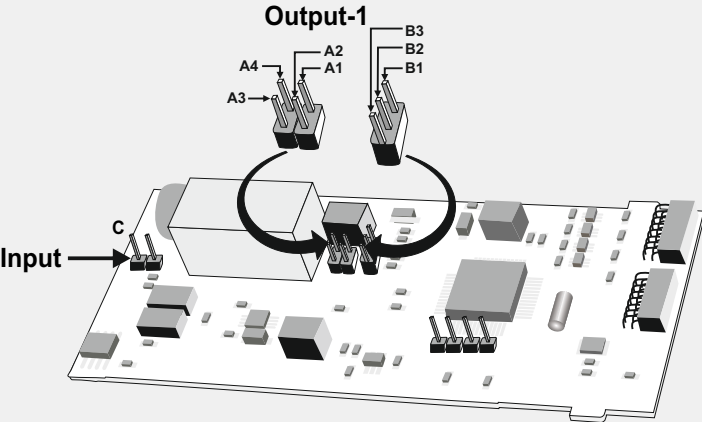
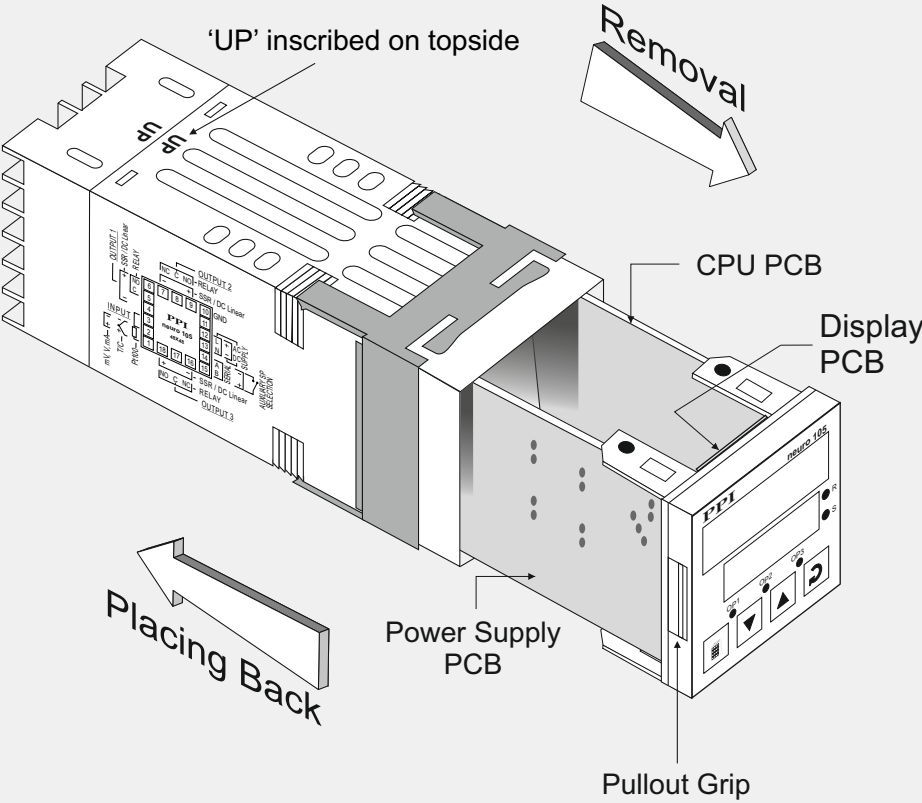
Output Type	Jumper Setting - A	Jumper Setting - B
Relay		
SSR		



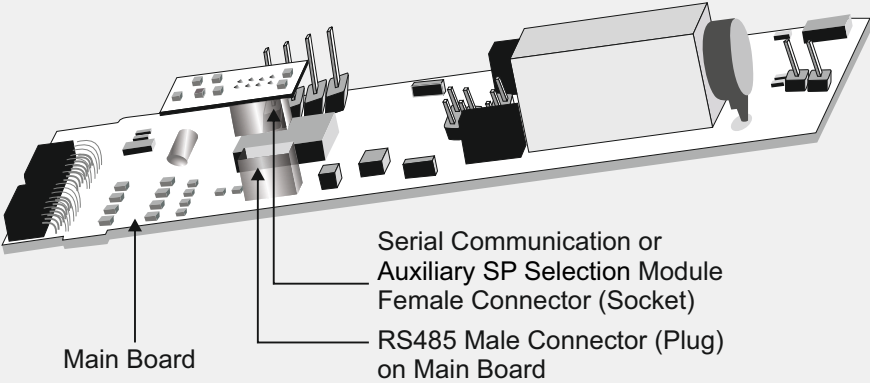
ENCLOSURE ASSEMBLY

JUMPER SETTINGS
INPUT & OUTPUT-1

MOUNTING DETAILS



Output Type	Jumper Settings
Relay	Shorting Link A : Short Pins A1 & A4 Shorting Link B : Park
SSR Drive	Shorting Link A : Short Pins A3 & A4 Shorting Link B : Short Pins B2 & B3
DC Linear Current (or Voltage)	Shorting Link A : Short Pins A2 & A3 Shorting Link B : Short Pins B1 & B2



INPUT / OUTPUT PARAMETERS : PAGE 12		
Parameters	Settings (Default Value)	
Hand (manual) made Enable/ Disable HAnd	EnbL Enable dSbL Disable (Default : Disable)	
Quick Adjustment of Setpoint Enable/Disable SP	EnbL Enable dSbL Disable (Default : Enable)	
Control Output Type C_OP	rLY Relay SSr SSR 0-20 0-20mA 4-20 4-20mA (Default : Relay)	
Sensor Input Type INPt	tC-J Type J tC-K Type K tC-T Type T tC-R Type R tC-S Type S tC-b Type B tC-n Type N rESu Reserved rtd RTD Pt100 0-20 0-20mA 4-20 4-20mA 0050 0 to 50mV 0200 0 to 200mV 125 0 to 1.25mV 50 0 to 5.0mV 100 0 to 10.0mV (Default : Type K)	
Resolution For PV rSLn	Refer Table 1 for the available max / min Ranges & Resolution for each input type. (Default : 1)	
Range Low For PV rLo	Same as above (Default : 0)	
Range High For PV rHi	Same as above (Default : 1000)	
Setpoint Low SPLo	Same as above (Default : -200)	
Setpoint High SPHi	Same as above (Default : 1300)	
Offset for PV OFSE	-1999 to 9999 (Default : 0)	
Digital Filter For PV F.Lt	0.5 to 25.0 (Default : 1.0)	

CONTROL PARAMETERS : PAGE 10		
Parameters	Settings (Default Value)	
Control Setpoint SP	Setpoint Low to Setpoint High (Default : 0)	
Proportional Band Pb	0 to 999 Units (Default : 50 units)	
Hysteresis HYSE	1 to 250 (Default : 2)	
Integral Time It	0 to 1000 Seconds (Default : 100 Sec.)	
Derivative Time dt	0 to 250 Seconds (Default : 25 Sec.)	
Cycle Time Ct	0.5 to 120.0 (Default : 20.0)	
Relative cool Gain rELG	0.1 to 10.0 (Default : 1.0)	
Cool Cycle Time CCt	0.5 to 120.0 (Default : 20.0)	
Power Low Limit PL	0 to less than Power High (Default : 0)	
Power High Limit PH	Greater than Power Low to 100 (Default : 100)	

OP2 & OP3 FUNCTION PARAMETERS : PAGE 14		
Parameters	Settings (Default Value)	
Output-2 Function Selection OP2F	ALrñ Alarm CCOn Cool control PFEu Profile Event (Default : Alarm)	
Output-2 Type OP2t	rLY Relay SSr SSR 0-20 0-20mA 4-20 4-20mA (Default : Relay)	
Output-3 Function Selection OP3F	ALrñ Alarm rEC Recorder PFEu Profile Event (Default : Alarm)	
Recorder Output Type rECo	0-20 0-20mA 4-20 4-20mA (Default : 0-20mA)	
Recorder Low rECL	Range Low to Range High (Default : 0)	
Recorder High rECH	Range Low to Range High (Default : 0)	

ALARM PARAMETERS : PAGE 11		
Parameters	Settings (Default Value)	
Alarm-1 Type AL-1	nonE None P_Lo Process Low P_Hi Process High dE Deviation Band bAnd Window Band EOP End of Profile (Default : None)	
Alarm-1 Setpoint A1SP	Throughout the range for the selected input type (Default : 0)	
Alarm-1 Deviation Band A1dE	-999 to 999 (Default : 0)	
Alarm-1 Window Band A1bA	3 to 999 (Default : 3)	
Alarm-1 Hysteresis A1HY	1 to 999 (Default : 2)	
Alarm-1 Logic A1L	dir Direct rEu Reverse (Default : Direct)	
Alarm-1 Inhibit A1h	no No YES Yes (Default : No)	
Alarm-2 Type AL-2	nonE None P_Lo Process low P_Hi Process high dE Deviation Band bAnd Window Band EOP End of Profile (Default : None)	
Alarm-2 Setpoint A2SP	Throughout the range for the selected input type (Default : 0)	
Alarm-2 Deviation Band A2dE	-999 to 999 (Default : 0)	
Alarm-2 Window Band A2bA	3 to 999 (Default : 3)	
Alarm-2 Hysteresis A2HY	1 to 999 (Default : 2)	
Alarm-2 Logic A2L	dir Direct rEu Reverse (Default : Direct)	
Alarm-2 Inhibit A2h	no No YES Yes (Default : No)	

PROFILE : SEGMENT PARAMETERS : PAGE 15		
Parameters	Settings (Default Value)	
Select Profile Number PrFn	1 to Max. configured	
Select Set Number SEtn	1 to Max. configured	
Ramp Rate rRtE	0.00 to 99.99 (Default : 0.00)	
Target Setpoint tSP	Range Low to Range High (Default : 0)	
Soak Time SOAP	0 to 9999 (Default : 0)	

PROFILE : CONFIGURATION PARAMETERS : PAGE 18		
Parameters	Settings (Default Value)	
Profile Enable/Disable PrOF	EnbL Enable dSbL Disable (Default : Enable)	
Output(S) Off OPOF	no No YES Yes (Default : No)	
Numbers of Profile nPrF	1 to 2	
Select Profile Number PrFn	1 to Max. configured	
Numbers of Sets for the Selected Profile nSEt	1 to 8	
Number of Programs nPrG	1 to 16	
Reset Programs Set-UP rStP	no No YES Yes (Default : No)	

PROFILE : BAND / EVENT PARAMETERS : PAGE 16		
Parameters	Settings (Default Value)	
Select Profile Number PrFn	1 to Max. configured	
Ramp Hold Band rband	0 to 250 (Default : 0)	
Soak Hold Band Sbnd	0 to 250 (Default : 0)	
Select Segment Number SEtn	1 to twice the Max. configured Sets	
Output-2 Event Time 02Et	0 to 9999 (Default : 0)	
Output-2 Event Status 02ES	ON, OFF (Default : ON)	
Output-3 Event Time 03Et	0 to 9999 (Default : 0)	
Output-3 Event Status 03ES	ON, OFF (Default : ON)	

UTILITY PARAMETERS : PAGE 13		
Parameters	Settings (Default Value)	
Self Tune Commands tUnE	no No YES Yes (Default : No)	
Overshoot Inhibit oS.h	EnbL Enable dSbL Disable (Default : Disable)	
Baud Rate bAud	1200, 2400, 4800, 9600 (Default : 9600)	
Controller ID Number id	1 to 31 (Default : 1)	
Communication Write Enable ConE	no No YES Yes (Default : No)	

TABLE- 1		
Option	Range (Min. to Max.)	Resolution
 J Type T/C	0 to +760°C / +32 to +1400°F	Fixed 1°C / 1°F
 K Type T/C	-200 to +1300°C / -328 to +2372°F	
 T Type T/C	-200 to +350°C / -328 to +662°F	
 R Type T/C	0 to +1770°C / +32 to +3092°F	
 S Type T/C	0 to +1700°C / +32 to +3092°F	
 B Type T/C	+200 to +1700°C / +392 to +3092°F	
 N Type T/C	0 to +1300°C / +32 to +2372°F	
 Reserved for customer specific Thermocouple type not listed above.		
 RTD Pt100	-199 to +600°C / -328 to +1112°F or -199.9 to 600.0°C / -199.9 to 999.9°F	User settable 1°C / 1°F or 0.1°C / 0.1°F
 0 to 20mA DC	-1999 to +9999 units	User settable 1 / 0.1 / 0.01 / 0.001 units
 4 to 20mA DC		
 0 to 50mV DC		
 0 to 200mV DC		
 0 to 1.25V DC		
 0 to 5.0V DC		
 0 to 10.0V DC		

FRONT PANEL LAYOUT

Keys Operation

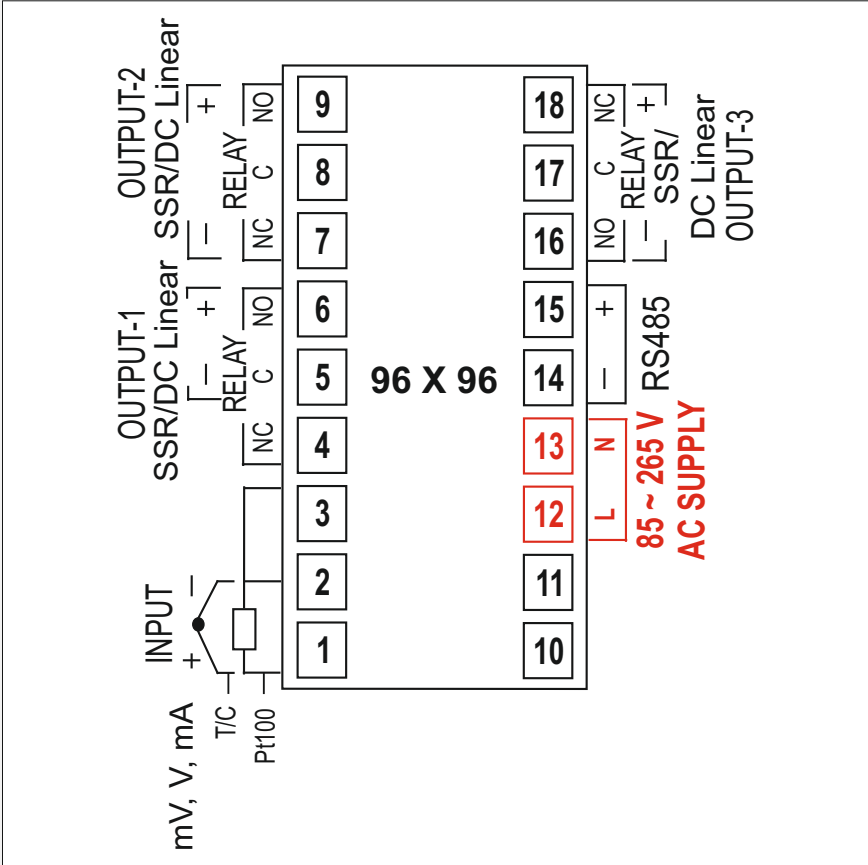
Symbol	Key	Function
	PAGE	Press to enter or exit set-up mode.
	DOWN	Press to decrease the parameter value. Pressing once decreases the value by one count; keeping pressed speeds up the change.
	UP	Press to increase the parameter value. Pressing once increases the value by one count; keeping pressed speeds up the change.
	ENTER	Press to store the set parameter value and to scroll to the next parameter on the PAGE.

PV Error Indications

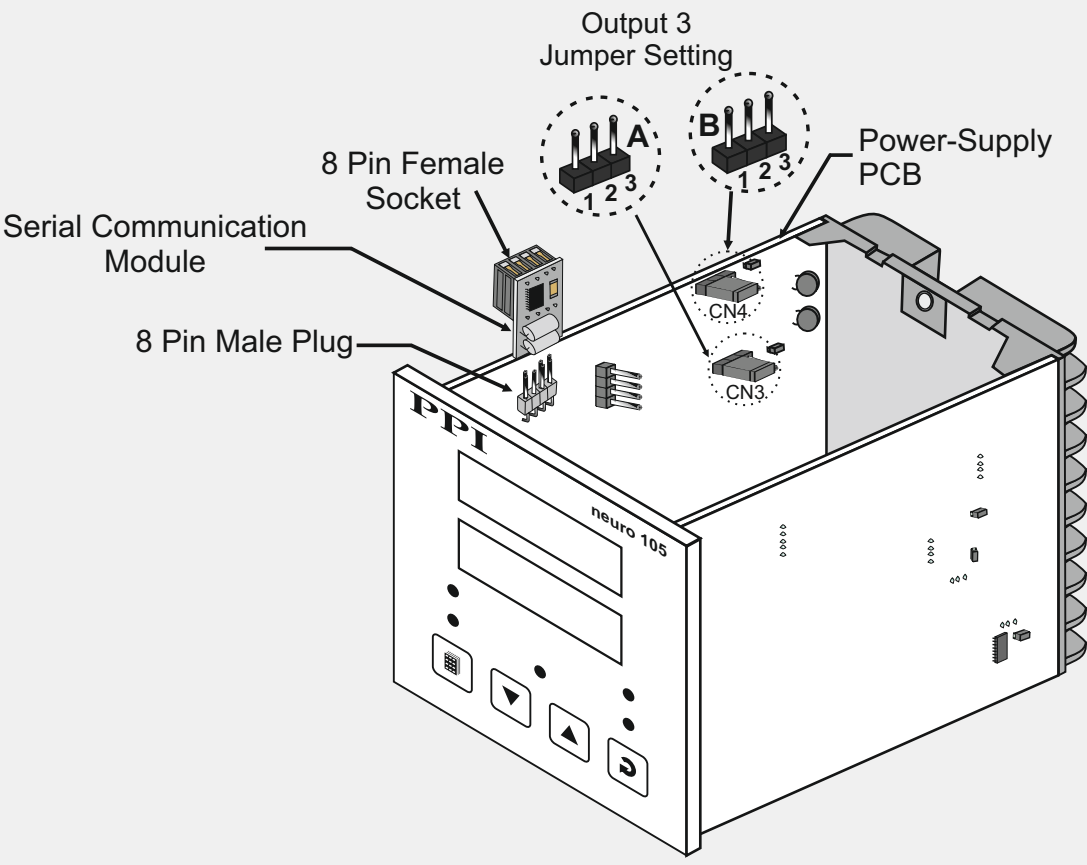
Message	PV Error Type
Or	Over-range (PV above Max. Range)
Ur	Under-range (PV below Min. Range)
OPEn	Open (Sensor open / broken)

NOTE : For Page 17 Kindly Refer the Detailed Manual on www.ppiindia.net

ELECTRICAL CONNECTIONS



SERIAL COMMUNICATION MODULE



INPUT & OUTPUT HARDWARE JUMPER SETTINGS

Input

Input Type	Jumper 'A' Setting
Thermocouple, RTD Pt100, mV & V	
DC Linear Current (mA)	

Output-1

Output Type	Jumper Setting - B	Jumper Setting - C
Relay		
SSR Drive		
DC Linear Current (or Voltage)		

Output-2

Output Type	Jumper Setting - D	Jumper Setting - E
Relay		
SSR		

Output-3

Output Type	Jumper Setting - A	Jumper Setting - B
Relay		
SSR		

