

INPUT/OUTPUT CONFIGURATION PARAMETERS : PAGE 12

Parameters	Settings (Default Value)
Control Action [CACT]	[OnOff] On-Off [PULS] Pulse [PID] PID (Default : PID)
Control Logic [CTRL]	[REv] Reverse [DIR] Direct (Default : Reverse)
Setpoint Low Limit [SPLo]	Min. Range to Setpoint High for the selected Input Type (Default : -199)
Setpoint High Limit [SPHi]	Setpoint Low to Max. Range for the selected Input Type (Default : 1376)
Sensor Break Output Power % [SBOP]	0 to 100 (Default : 0)
Input Type [INPt]	Refer Table 1 (Default : Type K)
PV Units [Unit]	[OC] °C [OF] °F (Default : °C)

Signal Low	Input Type	Settings	Default
[SLo]	0 to 20 mA	0.00 to Signal High	0.00
	4 to 20 mA	4.00 to Signal High	4.00
	0 to 80 mV	0.00 to Signal High	0.00
	Reserved	0.0 to Signal High	0.0
	0 to 1.25 V	0.000 to Signal High	0.000
	0 to 5 V	0.000 to Signal High	0.000
	0 to 10 V	0.00 to Signal High	0.00
	1 to 5 V	1.000 to Signal High	1.000

Signal High	Input Type	Settings	Default
[SHi]	0 to 20 mA	Signal Low to 20.00	20.00
	4 to 20 mA	Signal Low to 20.00	20.00
	0 to 80 mV	Signal Low to 80.00	80.00
	Reserved	Signal Low to 80.00	80.00
	0 to 1.25 V	Signal Low to 1.250	1.250
	0 to 5 V	Signal Low to 5.000	5.000
	0 to 10 V	Signal Low to 10.00	10.00
	1 to 5 V	Signal Low to 5.000	5.000

PV Resolution [RSLn]	Refer Table 1 (Default : 1)
PV Range Low [rLo]	-1999 to 9999 (Default : 0)
PV Range High [rHi]	-1999 to 9999 (Default : 1000)
Offset for PV [OFSt]	For DC mA/mV/V : 1 to 9999 counts For Thermocouples/RTD : 1 to 999 or 0.1 to 999.9 (Default : 0)
Digital Filter Time Constant [FILT]	0.5 to 60.0 Seconds (in steps of 0.5 Seconds) (Default : 2.0 Sec.)

CONTROL PARAMETERS : PAGE 10

Parameters	Settings (Default Value)
Proportional Band [Pb]	1 to 9999 counts (Default : 500)
Integral Time [It]	0 to 3600 Seconds (Default : 100 Sec.)
Derivative Time [dt]	0 to 600 Seconds (Default : 16 Sec.)
Cycle Time [Ct]	0.5 to 100.0 Seconds (in steps of 0.5 secs.) (Default : 10.0 Sec.)

Parameters	Settings (Default Value)
Relative Cool Gain [rELC]	0.1 to 10.0 (Default : 1.0)
Cool Cycle Time [CCt]	0.5 to 100.0 Seconds (in steps of 0.5 secs.) (Default : 10.0 sec.)
Hysteresis [HYSt]	1 to 9999 counts (Default : 2)
Pulse Time [PLt]	Pulse ON Time to 120.0 Seconds (Default : 2.0 sec.)
Pulse On Time [Ont]	0.1 to Value set for Pulse Time (Default : 1.0)
Cool Hysteresis [CHYS]	1 to 9999 counts (Default : 2)
Cool Pulse Time [CPLt]	Cool ON Time to 120.0 Seconds (Default : 2.0)
Cool Pulse ON Time [COnT]	0.1 to Value set for Cool Pulse Time (Default : 1.0)
Heat Power Low [PL]	0 to Heat Power High (Default : 0)
Heat Power High [PH]	Heat Power Low to 100 (Default : 100)
Cool Power Low [CPL]	0 to Cool Power High (Default : 0)
Cool Power High [CPH]	Cool Power Low to 100 (Default : 100)

SUPERVISORY PARAMETERS : PAGE 13

Parameters	Settings (Default Value)
Self-Tune Command [tUnE]	[no] No [YES] Yes (Default : No)
Overshoot Inhibit [OSh]	[dSbL] Disable [EnbL] Enable (Default : Disable)
Overshoot Inhibit Factor [O.h.F]	1.0 to 2.0 (Default : 1.0)
SP Adjustment on Lower Readout [SPLR]	[dSbL] Disable [EnbL] Enable (Default : Enable)
SP Adjustment on Operator Page [SPOP]	[dSbL] Disable [EnbL] Enable (Default : Enable)
Manual Mode [HRnd]	[dSbL] Disable [EnbL] Enable (Default : Disable)
Alarm SP Adjustment on Operator Page [ALSP]	[dSbL] Disable [EnbL] Enable (Default : Disable)
Standby Mode [Stby]	[dSbL] Disable [EnbL] Enable (Default : Disable)
Profile Abort Command on Page - 1 [Abrt]	[dSbL] Disable [EnbL] Enable (Default : Disable)

Parameters	Settings (Default Value)
Controller ID Number [ID]	1 to 127 (Default : 1)
Baud Rate [BRUD]	[48] 4800 [96] 9600 [192] 19200 (Default : 9.6)
Communication Parity [PRr]	[nonE] None [EvEn] Even [Odd] Odd (Default : Even)
Communication Write Enable [CoñE]	[no] No [YES] Yes (Default : No)

OP1, OP2 & OP3 FUNCTION PARAMETERS : PAGE 15

Parameters	Settings (Default Value)
Output-1 Type [OP1t]	[rLY] Relay [SSr] SSR [0-20] 0 - 20mA [4-20] 4 - 20mA [0-5] 0 - 5 V [0-10] 0 - 10 V (Default : Relay)
Output-2 Function Selection [OP2F]	[nonE] None [ALrñ] Alarm [EOP] *End of Profile [CCOn] Cool Control (Default : None)
Alarm-1 Logic [AL1G]	[norñ] Normal [REv] Reverse (Default : Normal)
Output-2 Type [OP2t]	[rLY] Relay [SSr] SSR [0-20] 0 - 20mA [4-20] 4 - 20mA [0-5] 0 - 5 V [0-10] 0 - 10 V (Default : Relay)
OP2 Event Status [O2ES]	[On] ON [OFF] OFF (Default : ON)
OP2 Event Time Units [O2Ut]	[SEC] Seconds [ñin] Minutes [Hour] Hours (Default : Seconds)
OP2 Event Time [O2Et]	0 to 9999 (Default : 0)

Parameters	Settings (Default Value)
Output-3 Function Selection [OP3F]	[nonE] None [AL-2] Alarm-2 [EOP] *End of Profile [rEC] Recorder (Default : Alarm)
Alarm-2 Logic [A2LG]	[norñ] Normal [REv] Reverse (Default : Normal)
OP3 Event Status [O3ES]	[On] ON [OFF] OFF (Default : ON)
OP3 Event Time Units [O3Ut]	[SEC] Seconds [ñin] Minutes [Hour] Hours (Default : Seconds)
OP3 Event Time [O3Et]	0 to 9999 (Default : 0)
Recorder Output Type [RECO]	[0-20] 0 to 20mA [4-20] 4 to 20mA [0-5] 0 to 5 Volts [0-10] 0 to 10 Volts (Default : 0 to 20mA)

ALARM AND RETRANSMISSION (RECORDER) 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 (Default : None)
Alarm-1 Setpoint [AL1SP]	Min. to Max. Range specified for the selected Input Type (Default : Min or Max Range)
Alarm-1 Deviation Band [AL1dE]	For DC mA/mV/V : -1999 to 9999 counts For Thermocouples/RTD : -999 to 999 or -1.999 to 999.9 (Default : 5)
Alarm-1 Window Band [AL1bR]	For DC mA/mV/V : 3 to 9999 counts For Thermocouples/RTD : 3 to 999 or 0.3 to 999.9 (Default : 5)
Alarm-1 Hysteresis [AL1HY]	For DC mA/mV/V : 1 to 9999 counts For Thermocouples/RTD : 1 to 999 or 0.1 to 999.9 (Default : 2)
Alarm-1 Inhibit [AL1h]	[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 (Default : None)

Parameters	Settings (Default Value)
Alarm-2 Setpoint [A2SP]	Min. to Max. Range specified for the selected Input Type (Default : Min or Max Range)
Alarm-2 Deviation Band [A2dE]	For DC mA/mV/V : -1999 to 9999 counts For Thermocouples/RTD : -999 to 999 or -1.999 to 999.9 (Default : 5)
Alarm-2 Window Band [A2bR]	For DC mA/mV/V : 3 to 9999 counts For Thermocouples/RTD : 3 to 999 or 0.3 to 999.9 (Default : 5)
Alarm-2 Hysteresis [A2HY]	For DC mA/mV/V : 1 to 9999 counts For Thermocouples/RTD : 1 to 999 or 0.1 to 999.9 (Default : 2)
Alarm-2 Inhibit [A2h]	[no] No [YES] Yes (Default : No)
PV/SP Selection For Retransmission [trns]	[Pv] Process Value [SP] Setpoint (Default : Process Value)
Recorder (Retransmission) Low [RECL]	Min. to Max. Range Specified for the Selected Input Type (Default : -199)
Recorder (Retransmission) High [RECH]	Min. to Max. Range Specified for the Selected Input Type (Default : 1376)

PROFILE CONFIGURATION PARAMETERS : PAGE 16

Parameters	Settings (Default Value)
Profile mode Enable [PrOF]	[dSbL] Disable [EnbL] Enable (Default : Disable)
Number of Segments [nSEG]	1 to 16 (Default : 16)
Number of Repeats [nrPt]	1 to 9999 (Default : 1)
Common Holdback [CoHb]	[no] No [YES] Yes (Default : Yes)
Output Off [OPOF]	[no] No [YES] Yes (Default : No)
Power Fail Strategy [PrFL]	[Abrt] Abort [Cont] Continue (Default : Continue)

PROFILE SETTING PARAMETERS : PAGE 14

Parameters	Settings (Default Value)
Segment Number [SEGn]	1 to 16 (Default : 1)
Target Setpoint [t.SP]	Min. to Max. Range specified for the selected Input Type (Default : -199)
Time Interval [t.inE]	0 to 9999 Minutes (Default : 0)
Holdback Type [Hbty]	[nonE] None [UP] Up [dn] Down [both] Both (Default : None)
Holdback Value [HbUL]	For DC mA/mV/V : 1 to 9999 counts For Thermocouples/RTD : 1 to 999 or 0.1 to 999.9 (Default : 1)

ON-LINE ALTERATIONS : PAGE 1

Parameters	Settings (Default Value)
End of Profile Acknowledge [EOPR]	[no] No [YES] Yes (Default : No)
Profile Start Command [Strt]	[no] No [YES] Yes (Default : No)
Profile Abort Command [Abrt]	[no] No [YES] Yes (Default : No)
Profile Pause Command [PAUS]	[no] No [YES] Yes (Default : No)
Segment Skip Command [SPIP]	[no] No [YES] Yes (Default : No)
Segment Time Interval [t.inE]	0 to 9999 Minutes
Segment Holdback Type [Hbty]	[nonE] None [UP] Up [dn] Down [both] Both
Segment Band Value [HbUL]	For DC mA/mV/V : 1 to 9999 counts For Thermocouples/RTD : 1 to 999 or 0.1 to 999.9
Profile Repeat Counter [brPt]	1 to 9999

OPERATOR PAGE PARAMETERS : PAGE 0

Parameters	Settings (Default Value)
(De)Activate Standby Mode [Stby]	[no] No [YES] Yes (Default : No)
Control Setpoint [SP]	Setpoint Low Limit to Setpoint High Limit (Default : -1999)
Alarm-1 Setpoint [AL1SP]	Min. to Max. Range specified for the selected Input Type (Default : Min or Max Range)
Alarm-1 Deviation Band [AL1dE]	For DC mA/mV/V : -1999 to 9999 counts For Thermocouples/RTD : -999 to 999 or -1.999 to 999.9 (Default : 0)
Alarm-1 Window Band [AL1bR]	For DC mA/mV/V : 3 to 9999 counts For Thermocouples/RTD : 3 to 999 or 0.3 to 999.9 (Default : 0)
Alarm-2 Setpoint [A2SP]	Same as that for Alarm-1 above but applied to Alarm-2.
Alarm-2 Deviation Band [A2dE]	Same as that for Alarm-1 above but applied to Alarm-2.
Alarm-2 Window Band [A2bR]	Same as that for Alarm-1 above but applied to Alarm-2.
Auxiliary Control Setpoint [AUSP]	Setpoint Low Limit to Setpoint High Limit (Default : -1999)

REMOTE SETPOINT PARAMETERS : PAGE-17

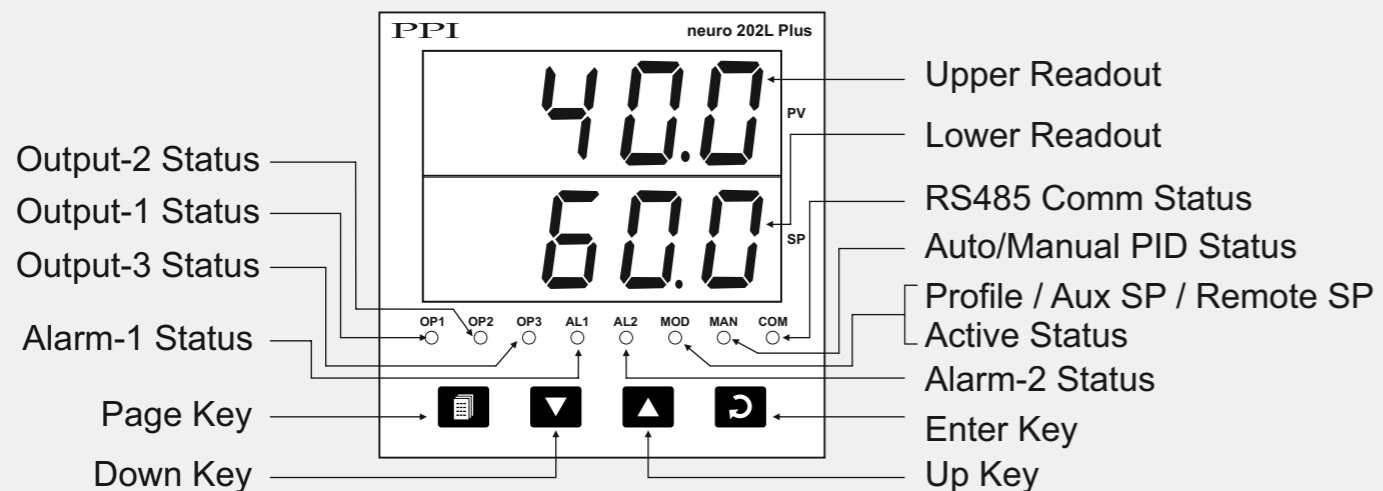
Parameters	Settings (Default Value)
Remote Setpoint Feature Enable [rSEn]	[no] No (disable) [YES] Yes (enable) (Default : No)
Remote Setpoint Input Signal Type [rSSU]	[0-20] 0 to 20mA [4-20] 4 to 20mA [0-5] 0 to 5 Volts [0-10] 0 to 10 Volts (Default : 0 to 20mA)
Remote Setpoint Range Low [rSLo]	Min. Range for the selected Input Type to Remote Setpoint Range High (Default : -199)
Remote Setpoint Range High [rSHi]	Remote Setpoint Range Low to Max. Range for the selected Input Type (Default : 1376)

TABLE- 1

Option	Range (Min. to Max.)	Resolution
[tC-d] J Type T/C	0 to +960°C / +32 to +1760°F	Fixed 1°C / 1°F
[tC-P] K Type T/C	-200 to +1376°C / -328 to +2508°F	
[tC-t] T Type T/C	-200 to +385°C / -328 to +725°F	
[tC-r] R Type T/C	0 to +1770°C / +32 to +3218°F	
[tC-S] S Type T/C	0 to +1765°C / +32 to +3209°F	
[tC-b] B Type T/C	0 to +1825°C / +32 to +3092°F	
[tC-n] N Type T/C	0 to +1300°C / +32 to +2372°F	User settable 1°C / 1°F or 0.1°C / 0.1°F
[tC-E] E Type T/C	-200 to +1000°C / -328 to +1832°F	
[rtd] 3-wire 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	User settable 1 / 0.1 / 0.01 / 0.001 units
[4-20]	4 to 20mA DC	
[0080]	0 to 80mV DC	
[rESu]	Reserved	
[1.25]	0 to 1.25V DC	User settable 1 / 0.1 / 0.01 / 0.001 units
[5.0]	0 to 5.0V DC	
[10.0]	0 to 10.0V DC	
[1-5]	1 to 5.0V DC	

FRONT PANEL LAYOUT

Front Panel



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
	Over-range (PV above Max. Range)
	Under-range (PV below Min. Range)
	Open (Sensor open / broken)

ELECTRICAL CONNECTIONS

