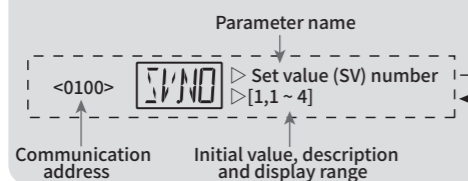


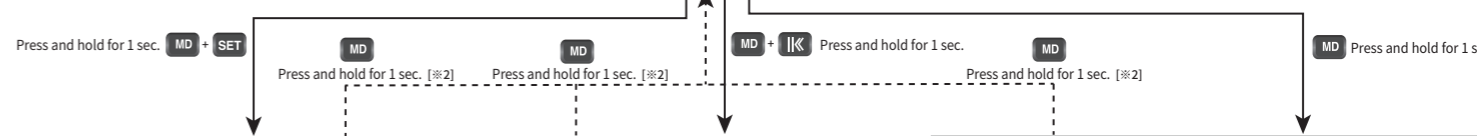
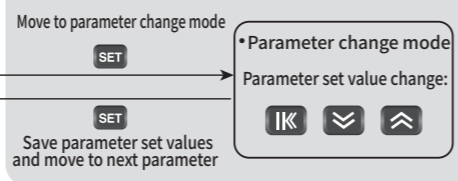


Parameter configuration

How to read parameters (example)



How to change parameter set values



**Full Menu:** press and hold **MD + SET** for 1 sec.

Group	Parameter	Description	Range	
SV group	<0100> SV/NO	Set value (SV) number	[1,1 ~ 4]	
	<0101> SV-H	Set value (SV) high limit	[1370, refer to input range]	
	<0102> SV-L	Set value (SV) low limit	[-200, refer to input range]	
	<0103> SV-1	Set value 1 (SV 1)	[200, refer to input range]	
	<0104> SV-2	Set value 2 (SV 2)	[-200, refer to input range]	
	<0105> SV-3	Set value 3 (SV 3)	[-200, refer to input range]	
	<0106> SV-4	Set value 4 (SV 4)	[-200, refer to input range]	
	<a+0> nP	n. proportional band (heating)	[EUS 5.0%, *1]	
	<a+1> nI	n. integral time (heating)	[240, OFF or 1 ~ 6000]	
	<a+2> nD	n. derivative time (heating)	[60, OFF or 1 ~ 6000]	
	<a+3> nMP	n. manual reset	[50.0, -5.0 ~ 105.0]	
	<a+4> nPC	n. proportional band (cooling)	[EUS 5.0%, *1]	
	<a+5> nIC	n. integral time (cooling)	[240, OFF or 1 ~ 6000]	
	<a+6> nDC	n. derivative time (cooling)	[60, OFF or 1 ~ 6000]	
<a+8> nDB	n. heating/cooling deadband	[3.0, 1000 ~ 500]		
CONTROL group	<0200> AT/ND	Auto-tuning mode	[STND, STND or LOW]	
	<0207> AT	Auto-tuning (AT)	[OFF, OFF or ON]	
	<0208> ARW	Anti-reset wind-up (ARW)	[Auto, Auto or 50.0 ~ 200.0]	
	<0209> ALPA	Alpha	[50, 0 ~ 100]	
	<a=0210> 1PID	1. PID group		
	<a=0219> 2PID	2. PID group		
	<a=0228> 3PID	3. PID group		
	<a=0237> 4PID	4. PID group		
	<0246> RUP	Ramp-up	[OFF, refer to input range]	
	<0247> UPTM	Ramp-up time	[01.00, 00.01 ~ 99.59]	
	<0248> RDW	Ramp-down	[OFF, refer to input range]	
	<0249> DWTM	Ramp-down time	[01.00, 00.01 ~ 99.59]	
ALARM group	<0300+(n-1)x4> ARTV	Alarm n type	[*1, 0 ~ 13]	
	<0301+(n-1)x4> AL-n	Alarm n value	[*1]	
	<0302+(n-1)x4> ARL-n	Alarm n deadband	[1, *1]	
	<0303+(n-1)x4> ARLS	Alarm n output hold status	[RST, RST or SET]	
	<0316> LBTM	Loop break alarm time	[480, 0 ~ 7200]	
	<0317> LBSV	Loop break alarm set value	[2, EUS 0.0 ~ 5.0%]	
	<0318> LBD	Loop break alarm deadband	[2, EUS 0.0 ~ 5.0%]	
	<0319> LBS	Loop break alarm output hold status	[RST, RST or SET]	
	<0320> HB-1	Heater break alarm 1 set value	[OFF, 1.0 ~ 50.0]	
	<0321> HDB1	Heater break alarm 1 deadband	[0.5, 0.1 ~ 50.0]	
	<0015> CTM1	Current detection 1 monitoring	[0.0, 0.0 ~ 55.0]	
	<0322> HB-2	Heater break alarm 2 set value	[OFF, 1.0 ~ 50.0]	
	<0323> HDB2	Heater break alarm 2 deadband	[0.5, 0.1 ~ 50.0]	
	<0016> CTM2	Current detection 2 monitoring	[0.0, 0.0 ~ 55.0]	
<0324> HBS	Heater break alarm output hold status	[RST, RST or SET]		
TRANS group	<0400> RETT	Retransmission output type	[PV, PV/SV/MV]	
	<0401> T-SH	Retransmission output high limit	[1370, *1]	
	<0402> T-SL	Retransmission output low limit	[-200, *1]	
	<0403> T-AH	Retransm. output high adjust. value	[0, *1]	
	<0404> T-AL	Retransm. output low adjust. value	[0, *1]	
	<0405> REME	Enable remote input	[OFF, OFF or ON]	
	<0406> REMH	Remote input high limit	[5.000, 1.000 ~ 5.000]	
	<0407> REML	Remote input low limit	[1.000, 1.000 ~ 5.000]	
	<0408> R-SH	Remote input high scale value	[OFF, 1.0 ~ 50.0]	
	<0409> R-SL	Remote input low scale value	[-200, *1]	
	<0410> R-AH	Remote input high adjust. value	[0, *1]	
	<0411> R-AL	Remote input low adjust. value	[0, *1]	
	SUB group	<0500> SUB1	Sub 1 output type	[ALM1, *1]
		<0501> SUB2	Sub 2 output type	[ALM2, *1]
<0502> SUB3		Sub 3 output type	[ALM3, *1]	
<0503> SUB4		Sub 4 output type	[ALM4, *1]	
<0504+(n-1)x4> ANND		Alarm n ON delay time	[0, 0 ~ 999]	
<0505+(n-1)x4> ANFD		Alarm n OFF delay time	[0, 0 ~ 999]	
<0506+(n-1)x4> ANEC		Alarm n contact type	[N.O, N.O or N.C]	
<0507+(n-1)x4> ANLT		Alarm n output hold	[OFF, OFF or ON]	
<0520> LOND		Loop break alarm ON delay time	[0, 0 ~ 999]	
<0521> LOFD		Loop break alarm OFF delay time	[0, 0 ~ 999]	
<0522> LDEC		Loop break alarm contact type	[N.O, N.O or N.C]	
<0523> LOLT		Loop break alarm output hold	[OFF, OFF or ON]	
<0524> HDBE		Enable heater break alarm 2	[OFF, OFF or ON]	
<0525> HOND		Heater break alarm ON delay time	[0, 0 ~ 999]	
<0526> HOFD	Heater break alarm OFF delay time	[0, 0 ~ 999]		
<0527> HDEC	Heater break alarm contact type	[N.O, N.O or N.C]		
<0528> HOLT	Heater break alarm output hold	[OFF, OFF or ON]		
INPUT group	<0900> INP	Input type	[K0, *1]	
	<0901> UNIT	Unit	[°C, *1]	
	<0904> DP-P	Decimal point position	[1, *1]	
	<0905> SL-H	Scale high limit	[100.0, -1999 ~ 9999]	
	<0906> SL-L	Scale low limit	[0.0, -1999 ~ 9999]	
	<0907> RJC	Reference junction compensation	[ON, OFF or ON]	
	<0908> FILT	Input filter	[OFF, OFF or 1 ~ 120]	
	<0909> DIAS	Input bias	[0, *1]	
	OUTPUT group	<0800> CNT1	OUT1 control mode	[PID, ONOF or PID]
		<0801> CNT2	OUT2 control mode	[PID, NONE/ONOF/PID]
		<0802> OACT	Control direction	[PEV, REV or DIR]
		<0803> CP	Control cycle (OUT1)	[*1]
		<0804> CPC	Control cycle (OUT2)	[*1]
		<0805> HYS1	ON/OFF control hysteresis (OUT1)	[1, *1]
<0806> HYS2		ON/OFF control hysteresis (OUT2)	[1, *1]	
<0807> EO		Emergency output (OUT1)	[0, 0, *1]	
<0808> EOC		Emergency output (OUT2)	[0, 0, *1]	
<0809> QL-H		Control output high limit	[100, *1]	
<0810> QL-L		Control output low limit	[0, 0, *1]	
SET group		<0700> DTM	Digital input mode	[OFF, OFF or ON]
		<0701> PDOM	Operation mode after power on	[RUN, STOP or RUN]
		<0702> PINT	Parameter initialization	[OFF, OFF or ON]
	<0703> LOCK	Parameter set value lock	[0, 0 ~ 2]	
	<0704> E2PL	EEPROM lock during operation	[OFF, OFF or ON]	
COMM group	<0600> PPS	Communication protocol	[PCK, *1]	
	<0601> BPS	Baud rate	[9.6K, *1]	
	<0602> PRT	Parity bit	[NONE, *1]	
	<0603> STOP	Stop bit	[1, 1 ~ 99]	
	<0604> DLEN	Data length	[8, 7 or 8]	
	<0605> ADDR	Address	[1, 1 ~ 99]	
	<0606> RPTM	Response delay time	[0, 0 ~ 10]	
	<0701> PDOM	Operation mode after power on	[RUN, STOP or RUN]	
	<0703> LOCK	Parameter set value lock	[0, 0 ~ 2]	

**Basic Menu:** press and hold **MD + I/K** for 1 sec.

<0900> INP	Input type	[K0, *1]
<0909> DIAS	Input bias	[0, *1]
<0800> CNT1	OUT1 control mode	[PID, ONOF or PID]
<0801> CNT2	OUT2 control mode	[PID, NONE/ONOF/PID]
<0802> OACT	Control direction	[REV, REV or DIR]
<0803> CP	Control cycle (OUT1)	[*1]
<0804> CPC	Control cycle (OUT2)	[*1]
<0300> ARTV	Alarm 1 type	[3, 0 ~ 13]
<0301> AL-1	Alarm 1 value	[1570, *1]
<0302> ALDB	Alarm 1 deadband	[1, *1]
<0304> ARTV	Alarm 2 type	[10, 0 ~ 13]
<0305> AL-2	Alarm 2 value	[1570, *1]
<0306> ALDB	Alarm 2 deadband	[1, *1]
<0308> ARTV	Alarm 3 type	[1, 0 ~ 13]
<0309> AL-3	Alarm 3 value	[1370, *1]
<0310> ALDB	Alarm 3 deadband	[1, *1]
<0312> ARTV	Alarm 4 type	[2, 0 ~ 13]
<0313> AL-4	Alarm 4 value	[-200, *1]
<0314> ALDB	Alarm 4 deadband	[1, *1]
<0600> PPS	Communication protocol	[PCK, *1]
<0601> BPS	Baud rate	[9.6K, *1]
<0602> PRT	Parity bit	[NONE, *1]
<0603> STOP	Stop bit	[1, 1 or 2]
<0604> DLEN	Data length	[8, 7 or 8]
<0605> ADDR	Address	[1, 1 ~ 99]
<0606> RPTM	Response delay time	[0, 0 ~ 10]
<0701> PDOM	Operation mode after power on	[RUN, STOP or RUN]
<0703> LOCK	Parameter set value lock	[0, 0 ~ 2]

**Simple menu:** press and hold **MD** for 1 sec.

<0201> AT	Auto-tuning	[OFF, OFF or ON]
<0301> AL-1	Alarm 1 setting	[1570, *1]
<0305> AL-2	Alarm 2 setting	[1570, *1]
<0309> AL-3	Alarm 3 setting	[1370, *1]
<0313> AL-4	Alarm 4 setting	[-200, *1]
<a=0210> 1PID	PID No.1	
<a=0219> 2PID	PID No.2	
<a=0228> 3PID	PID No.3	
<a=0237> 4PID	PID No.4	
<0805> HYS1	ON/OFF control hysteresis (OUT1)	[1, *1]
<0806> HYS2	ON/OFF control hysteresis (OUT2)	[1, *1]
<a+0> nP	n. proportional band (heating)	[EUS 5.0%, *1]
<a+1> nI	n. integral time (heating)	[240, OFF or 1 ~ 6000]
<a+2> nD	n. derivative time (heating)	[60, OFF or 1 ~ 6000]
<a+3> nMP	n. manual reset	[50.0, -5.0 ~ 105.0]
<a+4> nPC	n. proportional band (cooling)	[EUS 5.0%, *1]
<a+5> nIC	n. integral time (cooling)	[240, OFF or 1 ~ 6000]
<a+6> nDC	n. derivative time (cooling)	[60, OFF or 1 ~ 6000]
<a+8> nDB	n. heating/cooling deadband	[3.0, 100.0 ~ 50.0]

**※ 1 : Refer to the User's Manual**  
 ※ Please visit our homepage ([www.hynux.com](http://www.hynux.com)) and refer to the user manual in the archive.

**※ 2 : Key to move to operation mode screen**  
 Press and hold **MD** in the parameter setting screen for 1 sec. to move to operation mode screen

**※ 3 : Move to group name display**  
 Press **MD** during parameter display to move to group name (but during parameter display in n.PID, it moves to n.PID).

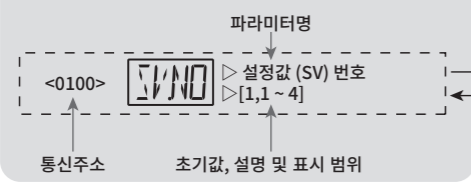
**※ The parameter display differs depending on suffix code options and parameter settings.**



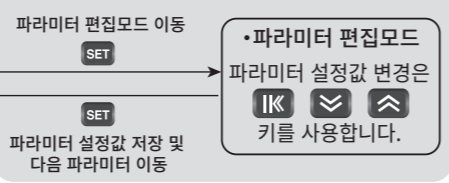


■ 파라미터 구성

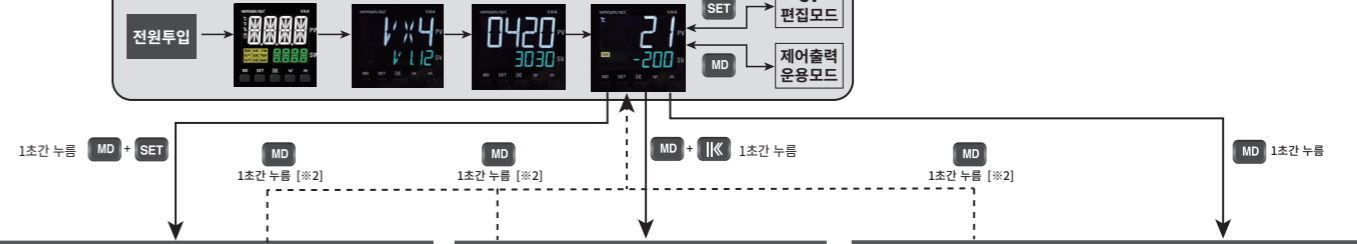
※ 파라미터 읽는 방법 (예)



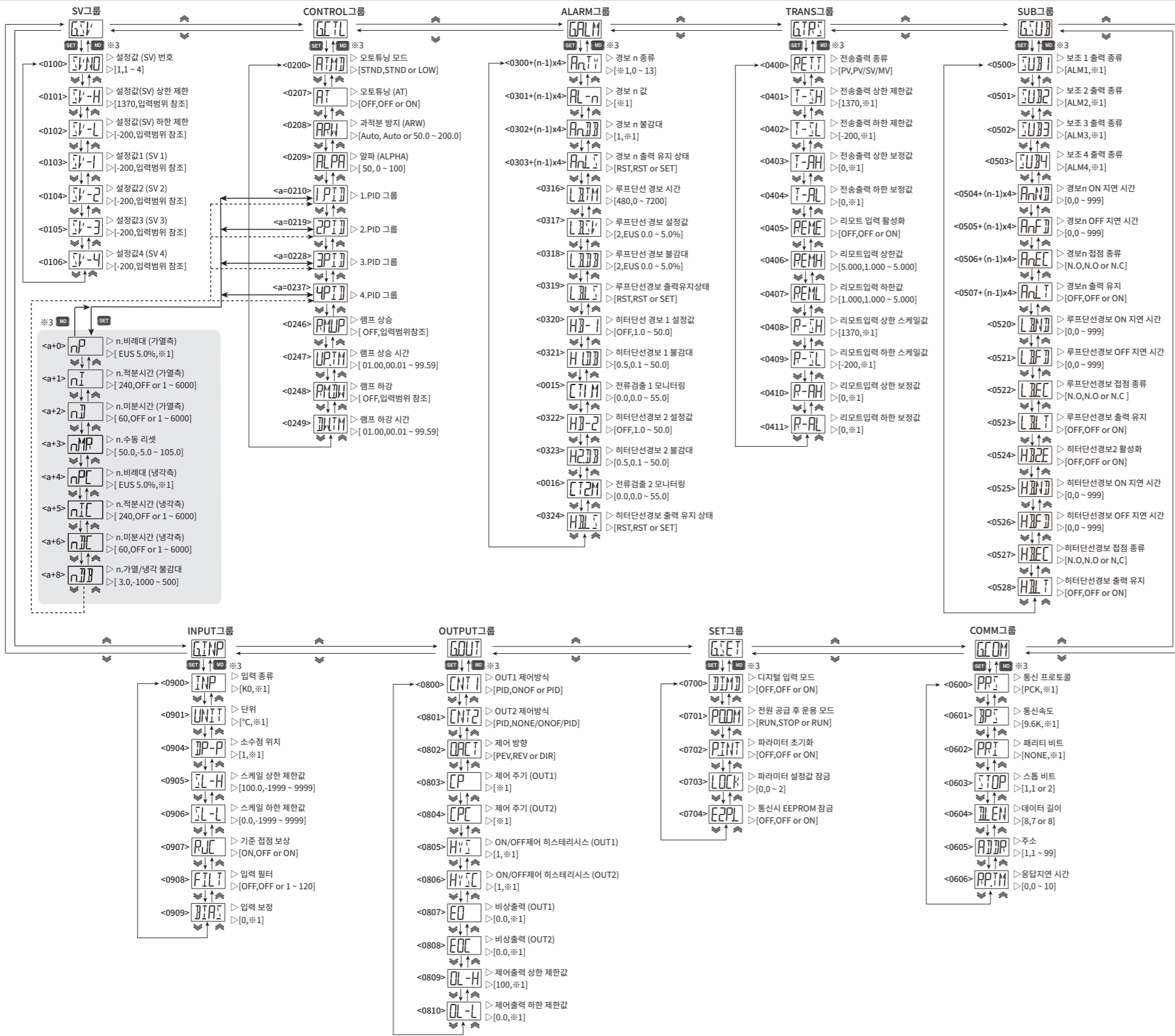
※ 파라미터 설정값 편집 방법



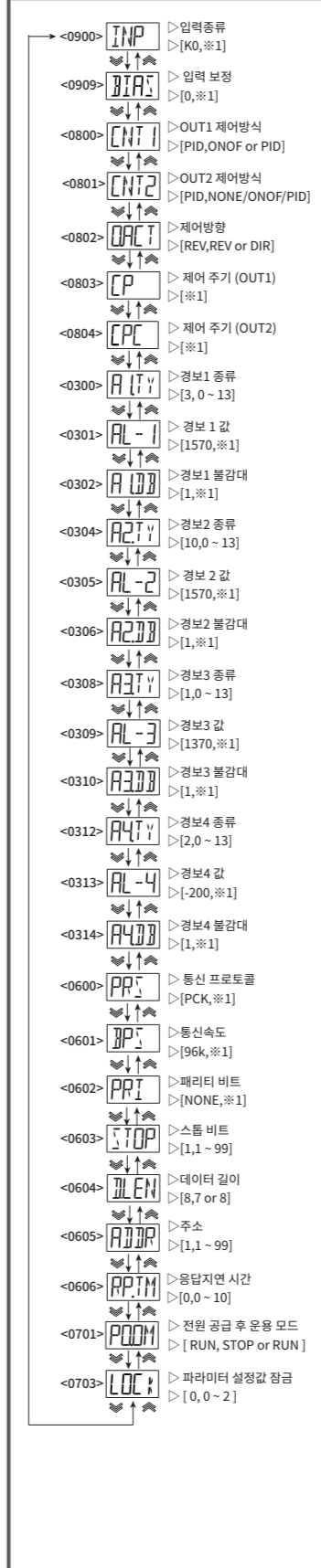
※ 운용모드



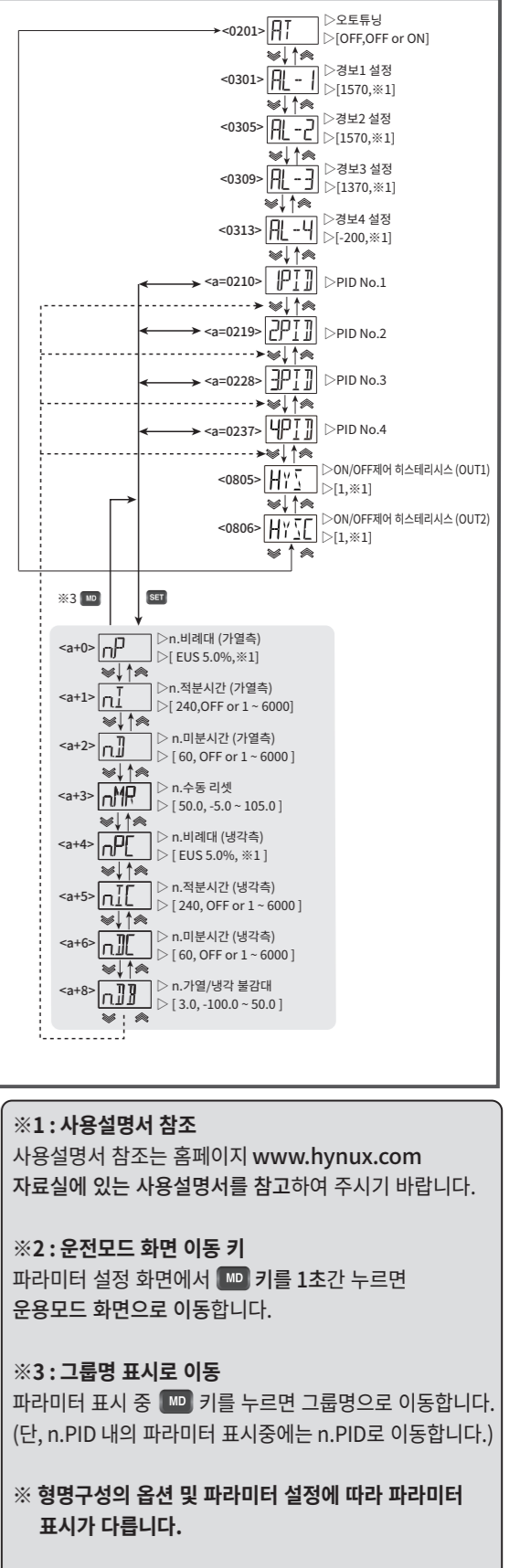
전체메뉴 MD + SET 1초간 누름



기본메뉴 MD + IK 1초간 누름



간편메뉴 MD 1초간 누름



※1 : 사용설명서 참조  
 사용설명서 참조는 홈페이지 [www.hynux.com](http://www.hynux.com) 자료실에 있는 사용설명서를 참고하여 주시기 바랍니다.

※2 : 운전모드 화면 이동 키  
 파라미터 설정 화면에서 MD 키를 1초간 누르면 운용모드 화면으로 이동합니다.

※3 : 그룹명 표시로 이동  
 파라미터 표시 중 MD 키를 누르면 그룹명으로 이동합니다. (단, n.PID 내의 파라미터 표시중에는 n.PID로 이동합니다.)

※ 형명구성의 옵션 및 파라미터 설정에 따라 파라미터 표시가 다릅니다.