Operation Manual

Digital Panel Meter MD-N2638 Ver1.0

MAXTHERMO®

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1. Parameter Description

A. Level 1 : User level — Press the ▼ key to level 1

Parameter		Range	Description	Ex-factory
AL 1S	AL1S	LoAn~HiAn	Alarm 1 set value	30.0
AL 2S	AL2S	LoAn~HiAn	Alarm 2 set value	30.0
AL 3S	AL3S	LoAn~HiAn	Alarm 3 set value	30.0
AL 4S	AL4S	LoAn~HiAn	Alarm 4 set value	30.0
PVoF	PVoF	-200~200.0	PV offset	0.0

B. Level 2 : Input type — Press the SET key for 4 seconds to level 2

Parameter		Input type		Measuring range ℃	Measuring range ℉	Ex-factory
inPt	Input type selection	tc-K	T/C K type	0~1300	32~2372	K
		tc-J	T/C J type	0~1200	32~2192	
		tc-t	T/C t type	-200~400	-328~752	
		tc-r	T/C r type	0~1700	32~3092	
		tc-E	T/C E type	0~1000	32~1832	
		tc-S	T/C S type	0~1700	32~3092	
		tc-b	T/C b type	0~1800	32~3272	
		tc-n	T/C n type	-200~1300	-328~2372	
		Pt	PT-100Ω	-200~850	-328~1562	
		50mV	0-50mV	-1999~9999		
		5V	0-5V			
		10V	0-10V			
		24V	0-24V			
		0-20	0-20mA			
		4-20	4-20mA			

C. Level 2 : Parameter set — Press the SET key for 4 seconds to level 2

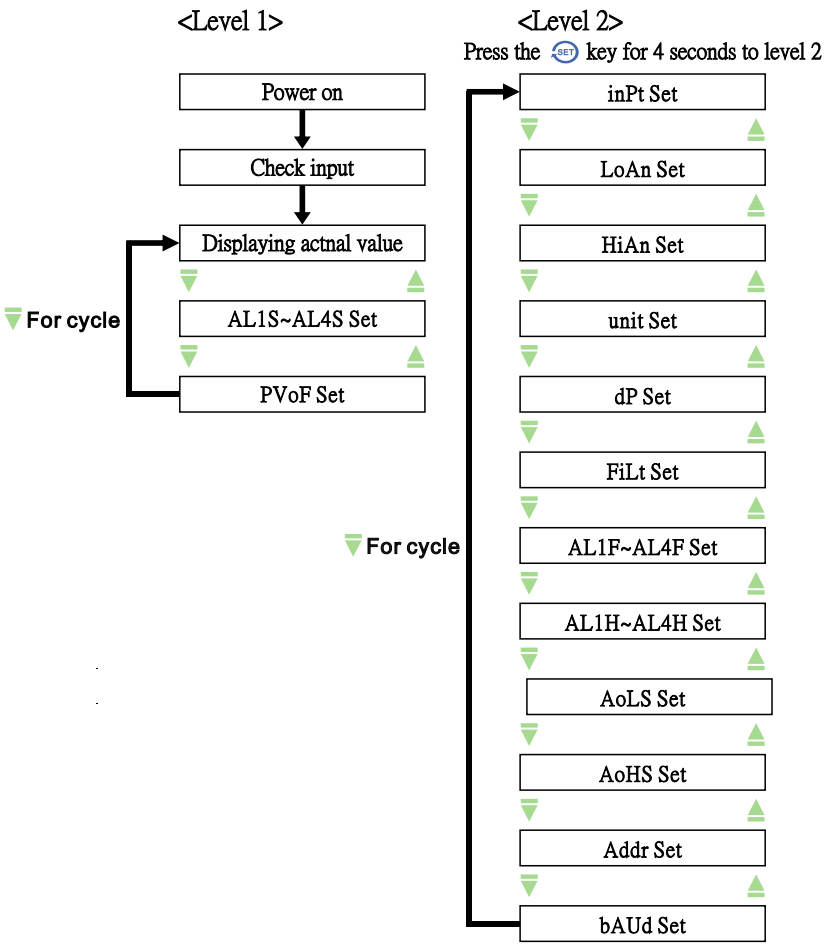
Parameter		Range	Description	Ex-factory
LoAn	LoAn	LoAn~HiAn	Low limit of input scaling	0
HiAn	HiAn	LoAn~HiAn	High limit of input scaling	1300
unit	unit	℃ / ℉ / non	Unit selection	℃
dP	dP	0 / 0.0 / 0.00 / 0.000	Decimal point	0.0
FiLt	FiLt	0.001~1.000	PV digital filter	0.600
AL 1F	AL1F	non / HiAL / LoAL	Alarm 1 function	non
AL2F	AL2F	non / HiAL / LoAL	Alarm 2 function	non
AL 3F	AL3F	non / HiAL / LoAL	Alarm 3 function	non
AL 4F	AL4F	non / HiAL / LoAL	Alarm 4 function	non
AL 1H	AL1H	0.0~200.0	Alarm 1 hysteresis	0.1
AL2H	AL2H	0.0~200.0	Alarm 2 hysteresis	0.1
AL 3H	AL3H	0.0~200.0	Alarm 3 hysteresis	0.1
AL 4H	AL4H	0.0~200.0	Alarm 4 hysteresis	0.1
AoLS	AoLS	0~4095	Low limit analog output scaling	760
AoHS	AoHS	0~4095	High limit analog output scaling	3850
Addr	Addr	0~255	Device address	1
bAUd	bAUd	9.6K~115.2K	Communication speed	9.6K

Data Frame:

Data Bits	Parity	Start Bit	Stop Bit
8	None	1	1

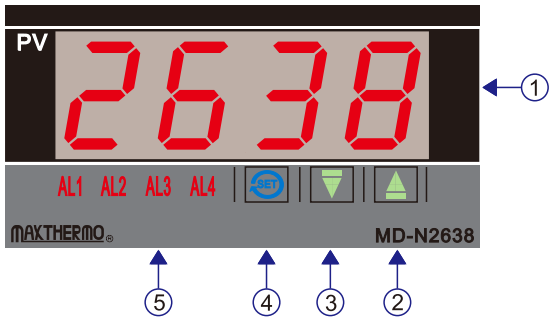
2. Parameter Flow Chart & Operation

Note: Return to PV display after 30 seconds no push any key.



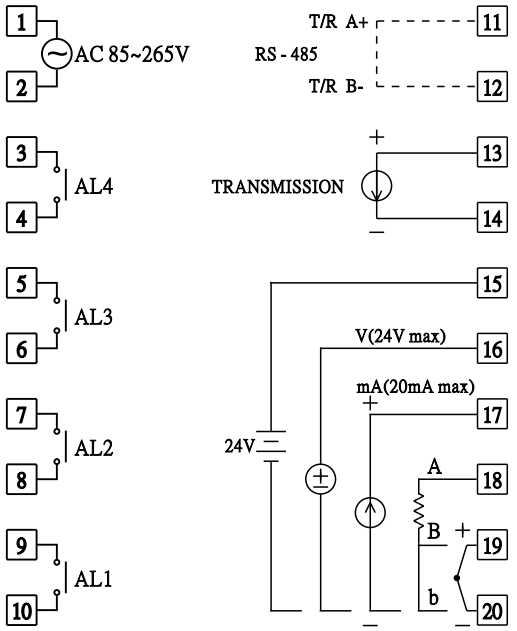
1. Press ▼ to enter level 1 and press ▼ to select parameter value.
   (After 30 seconds without action, it will return to PV display)
2. Press SET for 4 seconds to enter level 2 and press ▼ to select parameter value. Press SET for 4 seconds to return to PV display.
   (After 30 seconds without action, it will return to PV display)
3. To set parameter value : First find the parameter, ex. Input, after pressing the SET key to enter the parameter, the digit blinks, then press ▲ or ▼ to adjust. Press SET key after confirming the value.
4. When adjusting parameter value, press ▲ or ▼ to increase or decrease the value, press the ▲ or ▼ for 5 sec to speed up the adjustment.

3. Panel function



1.	Process value display (0.8"red LED)
2.	Up key & Back key
3.	Down key & Next key
4.	Set key & Enter key
5.	Alarm 1 ~ Alarm 4 action indicator

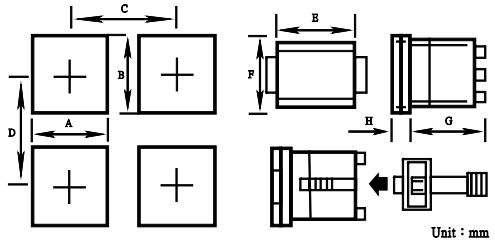
4. External terminal



Wiring Precautions:

1. Please confirm if the specification is according to the ordered specification.
2. Before wiring please check wiring diagram. If it is thermocouple or analog input, please be aware of the polarity. For thermocouple input please use the correct compensating lead wine.
3. To prevent electromagnetic interference, please note to nave isolation between power cable and signal cable.

5. Dimension & Cut-Out



Model	A	B	C	D	E	F	G	H
MD-N2638	$90^{+0.5}_{0}$	$44.5^{+0.5}_{0}$	111	70	96	50	80	17

6. Order Information

MD – N2638 – 004 – 102
A B C D

A. Model No. :
MD-N2638 Size 96x48mm (DIN1/8)Horizontal

B. Alarm :
0 - None
4 - Four set alarm

C. Transmitter :
0 - None
1 - 4~20mA (Adjustable) B - 0~10V (Adjustable)
2 - 0~20mA (Adjustable) C - 1~5V (Adjustable)
A - 0~5V (Adjustable) D - 2~10V (Adjustable)

D. Communication :
0 - None
2 - RS-485

Parameter Description

Parameter		Register number	Relative address	Corresponding function code	Range	Symbol description
PV	Process value	40001	0000(h)	read(03h)	LoAn~HiAn	0
AL1S	Alarm 1 set value	40002	0001(h)	read(03h) / write(06h)	LoAn~HiAn	1300
AL2S	Alarm 2 set value	40003	0002(h)	read(03h) / write(06h)	LoAn~HiAn	℃
AL3S	Alarm 3 set value	40004	0003(h)	read(03h) / write(06h)	LoAn~HiAn	0.0
AL4S	Alarm 4 set value	40005	0004(h)	read(03h) / write(06h)	LoAn~HiAn	0.600
PVOF	PV offset	40006	0005(h)	read(03h) / write(06h)	-200~200.0	non
INPT	Input	40007	0006(h)	read(03h) / write(06h)	K type~4-20mA	Decimal : 4 = E type 8 = PT-100Ω 12 = 0~24V 0 = K type 5 = S type 9 = 50mV 13 = 0~20mA 1 = J type 6 = b type 10 = 0~5V 14 = 4~20mA 2 = t type 7 = n type 11 = 0~10V
LOAN	Low setting limmit	40008	0007(h)	read(03h) / write(06h)	LoAn~HiAn	non
HIAN	High setting limmit	40009	0008(h)	read(03h) / write(06h)	LoAn~HiAn	0.1
UNIT	Unit selection	40010	0009(h)	read(03h) / write(06h)	℃ / ℉ / non	Decimal : 0 = ℃ / 1 = ℉ / 2 = non
DP	Decimal point	40011	000A(h)	read(03h) / write(06h)	0 / 0.0 / 0.00 / 0.000	Decimal : 0 = 0 / 1 = 0.0 / 2 = 0.00 / 3 = 0.000
FILT	Digital filter	40012	000B(h)	read(03h) / write(06h)	0.001~1.000	0.1
AL1F	Alarm 1 action function	40013	000C(h)	read(03h) / write(06h)	non / HiAL / LoAL	Decimal : 0 = non / 1 = HiAL / 2 = LoAL
AL2F	Alarm 2 action function	40014	000D(h)	read(03h) / write(06h)	non / HiAL / LoAL	Decimal : 0 = non / 1 = HiAL / 2 = LoAL
AL3F	Alarm 3 action function	40015	000E(h)	read(03h) / write(06h)	non / HiAL / LoAL	Decimal : 0 = non / 1 = HiAL / 2 = LoAL
AL4F	Alarm 4 action function	40016	000F(h)	read(03h) / write(06h)	non / HiAL / LoAL	Decimal : 0 = non / 1 = HiAL / 2 = LoAL
AL1H	Alarm 1 hysteresis	40017	0010(h)	read(03h) / write(06h)	0.0~200.0	9.6K
AL2H	Alarm 2 hysteresis	40018	0011(h)	read(03h) / write(06h)	0.0~200.0	9.6K
AL3H	Alarm 3 hysteresis	40019	0012(h)	read(03h) / write(06h)	0.0~200.0	9.6K
AL4H	Alarm 4 hysteresis	40020	0013(h)	read(03h) / write(06h)	0.0~200.0	9.6K
AOLS	Transmission low setting limit	40021	0014(h)	read(03h) / write(06h)	0~4095	9.6K
AOHS	Transmission high setting limit	40022	0015(h)	read(03h) / write(06h)	0~4095	9.6K
ADDR	Address	40023	0016(h)	read(03h) / write(06h)	0~255	9.6K
BAUD	Baud rate	40024	0017(h)	read(03h) / write(06h)	9.6K~115.2K	Decimal : 1 = 19.2K 3 = 57.6K 0 = 9.6K 2 = 38.4K 4 = 115.2K

I/O status	40025	0018(h)	read(03h)	bit0~bit3 / bit15	non