

DA13-NA / DA20-NA / DA25-NA / DA40-NA

Programming instruction digital panelmeters with analogue input (Version 08/2002)

The keys and the switch are available behind the front glass.

Switch S1: changes between normal and programming mode (menu-point display indicates).

Key T1: selects the menu-point (MP).

Key T2: carries out the adjustment of the selected digit.

Key T3: selects the programming digit (is shown by the luminous decimal point).

Special function: The final value of display is assigned to **MP 1 + 3** by using of key T3 after the minimal and maximal input signal is connected.

MP Display Function/Description

0	---	Adjustment of the minimal value of display The minimal value of display must be positive (> 0). If you need a negative one please adjust the display to the value « 0 0 0 » and connect under MP 1 the belong input signal.
1	P - L	Take-over of the minimal input signal Connect the minimal input signal with the back connector plug. Press the key T3 and the minimal value of display adjusted under MP 0 will be assigned to the minimal input signal. The display indicates « P - L ».
2	---	Adjustment of the maximal value of display If need a decimal point you have to place it on the right position before leaving this menu-point. If you have a meter with a display of 3 ½ or 4 ½ digits you can choose: - = negative value with sign, positive value without sign + = negative value without sign, positive value with sign. + / - = negative and positive value with sign. - - - = negative and positive value without sign
3	P - H	Take-over of the maximal input signal Connect the maximal input signal with the back connector plug. Press the key T3 and the maximal value of display adjusted under MP 2 will be assigned to the maximal input signal. The display indicates « P - H ».
4	---	Adjusted value Adjustment of the average value of 01 - 500 measurements. It will be shown on the display.
5	---	Roundness of the last digit This value effects only the display. Without (0) or in 2 (2), 5 (5), 10 (10) steps
6	__0 _0_ 0__	Reciprocal value of display (0 = off, 1 = on). Line break indication (0 = on, 1 = on), only by input 4-20mA. If the value falling 25% below measured value (< 3mA), the display indicates « - - » Analogue output 0/4-20mA (0 = 0-20mA, 1 = 4-20mA), only by option " 2 "



Only by option : " 7 " (1 Switching point), " 8 " (2 Switching points), " R " (2 Relay outputs):

MP Display Function / Description

7	---	Switching point S1 , upper trigger level (indicator value)
8	---	Switching point S1 , lower trigger level (indicator value)
9	-- 0 - 0 - - 1 - - 2 - - 3 - 0 - - 1 - -	Switching point S1 , (0 = off, 1 = on) Working current, Max-Contact (by exceed of the switching point - Relay tightend, LED on) Quiescent current, Max-Contact (by exceed of the switching point - Relay drop, LED on) Working current, Min-Contact (by fall below of the switching point - Relay tightend, LED on) Quiescent current, Min-Contact (by fall below of the switching point:- Relay drop, LED on) Display flashes not, if relay is tightend Display flashes, if relay is tightend
A	---	Switching point S2 , upper trigger level (indicator value)
b	---	Switching point S2 , lower trigger level (indicator value)
C	-- 0 - 0 - - 1 - - 2 - - 3 - 0 - - 1 - -	Switching point S2 , (0 = off, 1 = on) Working current, Max-Contact (by exceed of the switching point - Relay tightend, LED on) Quiescent current, Max-Contact (by exceed of the switching point - Relay drop, LED on) Working current, Min-Contact (by fall below of the switching point - Relay tightend, LED on) Quiescent current, Min-Contact (by fall below of the switching point:- Relay drop, LED on) Display flashes not, if relay is tightend Display flashes, if relay is tightend

Only by option: " S " (Serial Output RS232):

MP Display Funktion

7	---	0	Transmission rate	150 Baud
	---	1		300 Baud
	---	2		600 Baud
	---	3		1200 Baud
	---	4		2400 Baud
	---	5		4800 Baud
	---	6		9600 Baud
	---	7		19200 Baud
			Parity check	
	_	0	Without parity bit,	8 Data bit
	_	1	Parity even,	7 Data bit
	_	2	Parity odd,	7 Data bit
	_	3	Parity even,	8 Data bit
	_	4	Parity odd,	8 Data bit
			Data output	
	0	---	switched off	
	1	---	Sign, amount	
	2	---	STX / sign / amount / ETX	
	3	---	STX / address / sign / amount / ETX	
	4	---	SOH / address / STX / sign / amount / ETX	

8	---	---	Request for transmission	
	---	0	switched off	
	---	1	Address (Device send after receipt of the adjusted address)	
	---	2	STX / adresse / ETX (Device send after receipt of STX / the adjusted address / ETX)	
			Device address	
	_	1	Address 10 ⁰	
	1	---	Address 10 ¹	