

ORDERING INFORMATION

MODEL : M1EXV-4

PLEASE FILL IN THIS SECTION



Model
Company
Name
P/O No.

FACTORY USE ONLY



Job No.	Approved by (Sales office)
Ser No.	Issued by (Sales office)
Sales	Approved by (Factory)
	Set by (Factory)
	Ser No.

Specify the items you want to change.

Default setting will be used if not specified.

■ CH1 INPUT SETTING

ITEM	SET VALUE	DEFAULT VALUE	COMMENTS	Factory Internal check
Chanel enable	<input type="checkbox"/> Enable <input type="checkbox"/> Disable	Enable	Specify enable or disable.	<input type="checkbox"/>
Input range	<input type="checkbox"/> 0 to 20 mA DC <input type="checkbox"/> -5 to +5 V DC <input type="checkbox"/> -10 to +10 V DC	-5 to +5 V DC	Choose among 3 types	<input type="checkbox"/>
0 % input setting		4.000 mA 1.000 V -10.000 V	Specify within settable range in the table 1.	<input type="checkbox"/>
100 % input setting		20.000 mA 5.000 V 10.000 V		
Filter time constant*1		0 sec.	Specify the range between 0 and 30 sec.	<input type="checkbox"/>

■ CH1 OUTPUT SETTING

ITEM	SET VALUE	DEFAULT VALUE	COMMENTS	Factory Internal check
Output range	<input type="checkbox"/> 0 to 20 mA DC <input type="checkbox"/> -5 to +5 V DC <input type="checkbox"/> -10 to +10 V DC	0 to 20 mA DC	Choose among 3 types	<input type="checkbox"/>
0 % output setting		4.000 mA -5.000 V -10.000 V	Specify within settable range in the table 2.	<input type="checkbox"/>
100 % output setting		20.000 mA 5.000 V 10.000 V		

■ CH2 INPUT SETTING

ITEM	SET VALUE	DEFAULT VALUE	COMMENTS	Factory Internal check
Chanel enable	<input type="checkbox"/> Enable <input type="checkbox"/> Disable	Enable	Specify enable or disable.	<input type="checkbox"/>
Input range	<input type="checkbox"/> 0 to 20 mA DC <input type="checkbox"/> -5 to +5 V DC <input type="checkbox"/> -10 to +10 V DC	-5 to +5 V DC	Choose among 3 types	<input type="checkbox"/>
0 % input setting		4.000 mA 1.000 V -10.000 V	Specify within settable range in the table 1.	<input type="checkbox"/>
100 % input setting		20.000 mA 5.000 V 10.000 V		
Filter time constant*1		0 sec.	Specify the range between 0 and 30 sec.	<input type="checkbox"/>

■ CH2 OUTPUT SETTING

ITEM	SET VALUE	DEFAULT VALUE	COMMENTS	Factory Internal check
Output range	<input type="checkbox"/> 0 to 20 mA DC <input type="checkbox"/> -5 to +5 V DC <input type="checkbox"/> -10 to +10 V DC	0 to 20 mA DC	Choose among 3 types	<input type="checkbox"/>
0 % output setting		4.000 mA -5.000 V -10.000 V	Specify within settable range in the table 2.	<input type="checkbox"/>
100 % output setting		20.000 mA 5.000 V 10.000 V		

■ CH3 INPUT SETTING

ITEM	SET VALUE	DEFAULT VALUE	COMMENTS	Factory Internal check
Chanel enable	<input type="checkbox"/> Enable <input type="checkbox"/> Disable	Enable	Specify enable or disable.	<input type="checkbox"/>
Input range	<input type="checkbox"/> 0 to 20 mA DC <input type="checkbox"/> -5 to +5 V DC <input type="checkbox"/> -10 to +10 V DC	-5 to +5 V DC	Choose among 3 types	<input type="checkbox"/>
0 % input setting		4.000 mA 1.000 V -10.000 V	Specify within settable range in the table 1.	<input type="checkbox"/>
100 % input setting		20.000 mA 5.000 V 10.000 V		
Filter time constant*1		0 sec.	Specify the range between 0 and 30 sec.	<input type="checkbox"/>

■ CH3 OUTPUT SETTING

ITEM	SET VALUE	DEFAULT VALUE	COMMENTS	Factory Internal check
Output range	<input type="checkbox"/> 0 to 20 mA DC <input type="checkbox"/> -5 to +5 V DC <input type="checkbox"/> -10 to +10 V DC	0 to 20 mA DC	Choose among 3 types	<input type="checkbox"/>
0 % output setting		4.000 mA -5.000 V -10.000 V	Specify within settable range in the table 2.	<input type="checkbox"/>
100 % output setting		20.000 mA 5.000 V 10.000 V		

■ CH4 INPUT SETTING

ITEM	SET VALUE	DEFAULT VALUE	COMMENTS	Factory Internal check
Chanel enable	<input type="checkbox"/> Enable <input type="checkbox"/> Disable	Enable	Specify enable or disable.	<input type="checkbox"/>
Input range	<input type="checkbox"/> 0 to 20 mA DC <input type="checkbox"/> -5 to +5 V DC <input type="checkbox"/> -10 to +10 V DC	-5 to +5 V DC	Choose among 3 types	<input type="checkbox"/>
0 % input setting		4.000 mA 1.000 V -10.000 V	Specify within settable range in the table 1.	<input type="checkbox"/>
100 % input setting		20.000 mA 5.000 V 10.000 V		
Filter time constant*1		0 sec.	Specify the range between 0 and 30 sec.	<input type="checkbox"/>

■ CH4 OUTPUT SETTING

ITEM	SET VALUE	DEFAULT VALUE	COMMENTS	Factory Internal check
Output range	<input type="checkbox"/> 0 to 20 mA DC <input type="checkbox"/> -5 to +5 V DC <input type="checkbox"/> -10 to +10 V DC	0 to 20 mA DC	Choose among 3 types	<input type="checkbox"/>
0 % output setting		4.000 mA -5.000 V -10.000 V	Specify within settable range in the table 2.	<input type="checkbox"/>
100 % output setting		20.000 mA 5.000 V 10.000 V		

*1. Filter time constant

Set filter time constant of the first order lag filter. The first order lag filter is available with setting time. When '0' is set to this parameter, the first order lag filter is not available (Response time: ≤ 0.5 sec. (0 \rightarrow 90 %)). The first order lag filter is equivalent to general CR filter. The setting time constant is the time to follow until about 63 %, when input varies from 0 % to 100 %.

■ CH1 DISPLAY SETTING

ITEM	SET VALUE	DEFAULT VALUE	COMMENTS	Factory Internal check
0 % input scaling		0.00	Specify within the range between –99999 and 999999. Decimal point position can be set arbitrarily.	<input type="checkbox"/>
100 % input scaling		100.00	Specify within the range between –99999 and 999999. Decimal point position is same as 0 % input scaling.	<input type="checkbox"/>
Unit (INP Scaling)		%	Choose from the table 3, or specify from the table 4 'Settable characters' within 13 characters.	<input type="checkbox"/>

■ CH2 DISPLAY SETTING

ITEM	SET VALUE	DEFAULT VALUE	COMMENTS	Factory Internal check
0 % input scaling		0.00	Specify within the range between –99999 and 999999. Decimal point position can be set arbitrarily.	<input type="checkbox"/>
100 % input scaling		100.00	Specify within the range between –99999 and 999999. Decimal point position is same as 0 % input scaling.	<input type="checkbox"/>
Unit (INP Scaling)		%	Choose from the table 3, or specify from the table 4 'Settable characters' within 13 characters.	<input type="checkbox"/>

■ CH3 DISPLAY SETTING

ITEM	SET VALUE	DEFAULT VALUE	COMMENTS	Factory Internal check
0 % input scaling		0.00	Specify within the range between –99999 and 999999. Decimal point position can be set arbitrarily.	<input type="checkbox"/>
100 % input scaling		100.00	Specify within the range between –99999 and 999999. Decimal point position is same as 0 % input scaling.	<input type="checkbox"/>
Unit (INP Scaling)		%	Choose from the table 3, or specify from the table 4 'Settable characters' within 13 characters.	<input type="checkbox"/>

■ CH4 DISPLAY SETTING

ITEM	SET VALUE	DEFAULT VALUE	COMMENTS	Factory Internal check
0 % input scaling		0.00	Specify within the range between –99999 and 999999. Decimal point position can be set arbitrarily.	<input type="checkbox"/>
100 % input scaling		100.00	Specify within the range between –99999 and 999999. Decimal point position is same as 0 % input scaling.	<input type="checkbox"/>
Unit (INP Scaling)		%	Choose from the table 3, or specify from the table 4 'Settable characters' within 13 characters.	<input type="checkbox"/>

■ OTHER SETTING

ITEM	SET VALUE	DEFAULT VALUE	COMMENTS	Factory Internal check
Display1 setting	Upper: Lower:	Upper: Ch1 INPUT Lower: Ch1 OUTPUT	Choose from the setting value in the table 5.	<input type="checkbox"/>
Display2 setting	Upper: Lower:	Upper: Ch2 INPUT Lower: Ch2 OUTPUT	Choose from the setting value in the table 5.	<input type="checkbox"/>
Display3 setting	Upper: Lower:	Upper: Ch3 INPUT Lower: Ch3 OUTPUT	Choose from the setting value in the table 5.	<input type="checkbox"/>
Display4 setting	Upper: Lower:	Upper: Ch4 INPUT Lower: Ch4 OUTPUT	Choose from the setting value in the table 5.	<input type="checkbox"/>
Display change time		3 sec.	Specify the range from 0, 1 to 60 min. Set to '0' when the display need not switch automatically.	<input type="checkbox"/>
Brightness		4	Specify among 1 (darkest) to 4 (brightest).	<input type="checkbox"/>
Display timeout		10 min.	Specify the range from 0, 1 to 60 min. Set '0' to display 'always on'.	<input type="checkbox"/>

■ CH1 USER'S TABLE LINEARIZATION

ITEM	SET VALUE	DEFAULT VALUE	COMMENTS	Factory Internal check
User's table linearization	<input type="checkbox"/> Disable <input type="checkbox"/> Enable	Disable	Specify enable or disable. When enable, specify the table in the page 10 to 12.	<input type="checkbox"/>

■ CH2 USER'S TABLE LINEARIZATION

ITEM	SET VALUE	DEFAULT VALUE	COMMENTS	Factory Internal check
User's table linearization	<input type="checkbox"/> Disable <input type="checkbox"/> Enable	Disable	Specify enable or disable. When enable, specify the table in the page 13 to 15.	<input type="checkbox"/>

■ CH3 USER'S TABLE LINEARIZATION

ITEM	SET VALUE	DEFAULT VALUE	COMMENTS	Factory Internal check
User's table linearization	<input type="checkbox"/> Disable <input type="checkbox"/> Enable	Disable	Specify enable or disable. When enable, specify the table in the page 16 to 18.	<input type="checkbox"/>

■ CH4 USER'S TABLE LINEARIZATION

ITEM	SET VALUE	DEFAULT VALUE	COMMENTS	Factory Internal check
User's table linearization	<input type="checkbox"/> Disable <input type="checkbox"/> Enable	Disable	Specify enable or disable. When enable, specify the table in the page 19 to 21.	<input type="checkbox"/>

Table 1

INPUT RANGE		MIN. SPAN	SETTABLE RANGE
Current input	0 to 20 mA DC	1.000 mA	0.000 to 20.000 mA
Voltage input	-5 to +5 mV DC	0.250 V	-5.000 to +5.000 V
	-10 to +10 V DC	1.000 V	-10.000 to +10.000 V

Table 2

OUTPUT RANGE		MIN. SPAN	SETTABLE RANGE
Current output	0 to 20 mA DC	1.000 mA	0.000 to 20.000 mA
Voltage output	-5 to +5 mV DC	0.250 V	-5.000 to +5.000 V
	-10 to +10 V DC	1.000 V	-10.000 to +10.000 V

Table 3**AVAILABLE UNITS**

DC, AC, mV, V, kV, μ A, mA, A, kA, mW, W, kW, var, kvar, Mvar, VA, Hz, Ω , k Ω , M Ω ,
cm, mm, m, m/sec, mm/min, cm/min, m/min, m/h, m/s², inch, L,
L/s, L/min, L/h, m³, m³/sec, m³/min,
m³/h, Nm³/h, N·m, N/m², g, kg, kg/h, N, kN, Pa, kPa, Mpa, t, t/h,
°C, °F, K, %RH, J, kJ, MJ, rpm, sec, min, min⁻¹, pH, %, ppm, deg, (blank),

Table 4**SETTABLE CHARACTERS**

0-9A-Za-z!"#\$%&'()*=-+*^|
@`[]{};:<>?_.,./

Table 5**Upper**

SETTING VALUE	DESCRIPTION
Ch1 INPUT	Ch1 input engineering unit value
Ch1 INPUT (Scaling)	Ch1 input scaling
Ch1 PERCENT	Ch1 percent value*2
Ch1 OUTPUT	Ch1 output engineering unit value
Ch2 INPUT	Ch2 input engineering unit value
Ch2 INPUT (Scaling)	Ch2 input scaling
Ch2 PERCENT	Ch2 percent value*2
Ch2 OUTPUT	Ch2 output engineering unit value
Ch3 INPUT	Ch3 input engineering unit value
Ch3 INPUT (Scaling)	Ch3 input scaling
Ch3 PERCENT	Ch3 percent value*2
Ch3 OUTPUT	Ch3 output engineering unit value
Ch4 INPUT	Ch4 input engineering unit value
Ch4 INPUT (Scaling)	Ch4 input scaling
Ch4 PERCENT	Ch4 percent value*2
Ch4 OUTPUT	Ch4 output engineering unit value
None*3	No display

Lower

SETTING VALUE	DESCRIPTION
Ch1 INPUT	Ch1 input engineering unit value
Ch1 INPUT (Scaling)	Ch1 input scaling
Ch1 PERCENT	Ch1 percent value*2
Ch1 OUTPUT	Ch1 output engineering unit value
Ch2 INPUT	Ch2 input engineering unit value
Ch2 INPUT (Scaling)	Ch2 input scaling
Ch2 PERCENT	Ch2 percent value*2
Ch2 OUTPUT	Ch2 output engineering unit value
Ch3 INPUT	Ch3 input engineering unit value
Ch3 INPUT (Scaling)	Ch3 input scaling
Ch3 PERCENT	Ch3 percent value*2
Ch3 OUTPUT	Ch3 output engineering unit value
Ch4 INPUT	Ch4 input engineering unit value
Ch4 INPUT (Scaling)	Ch4 input scaling
Ch4 PERCENT	Ch4 percent value*2
Ch4 OUTPUT	Ch4 output engineering unit value
None	No display

*2. The value displayed is the value converted into 0.00 to 100.00% based on the input setting value.

*3. The upper part of 'Display1 setting' cannot be set to 'None'.

■ CH1 LINEARIZATION

Factory
Internal
check

Specify the input & output values and the units.

X[n] = Input Value of n-th (mA, mV, V, %)

Y[n] = Output Value of n-th (mA, mV, V, %)

-5% ≤ X[n] ≤ +105%, -5% ≤ Y[n] ≤ +105%, X[n] < X[n+1]

When scaling value is put, place the check mark on the check box.

The value is converted to %, and the value rounded off is entered to the unit.

<input type="checkbox"/>

n	X <input type="checkbox"/> Engineering value <input type="checkbox"/> Percent value <input type="checkbox"/> Scaling value	Y <input type="checkbox"/> Engineering value <input type="checkbox"/> Percent value <input type="checkbox"/> Scaling value	n		
001			024		
002			025		
003			026		
004			027		
005			028		
006			029		
007			030		
008			031		
009			032		
010			033		
011			034		
012			035		
013			036		
014			037		
015			038		
016			039		
017			040		
018			041		
019			042		
020			043		
021			044		
022			045		
023			046		

■ CH1 LINEARIZATION

047			076		
048			077		
049			078		
050			079		
051			080		
052			081		
053			082		
054			083		
055			084		
056			085		
057			086		
058			087		
059			088		
060			089		
061			090		
062			091		
063			092		
064			093		
065			094		
066			095		
067			096		
068			097		
069			098		
070			099		
071			100		
072			101		
073			102		
074			103		
075			104		

■ CH1 LINEARIZATION

105			109		
106			110		
107			111		
108					

■ CH2 LINEARIZATION

Specify the input & output values and the units.

X[n] = Input Value of n-th (mA, mV, V, %)

Y[n] = Output Value of n-th (mA, mV, V, %)

-5% ≤ X[n] ≤ +105%, -5% ≤ Y[n] ≤ +105%, X[n] < X[n+1]

When scaling value is put, place the check mark on the check box.

The value is converted to %, and the value rounded off is entered to the unit.

Factory Internal check
<input type="checkbox"/>

n	X	Y	n		
	<input type="checkbox"/> Engineering value <input type="checkbox"/> Percent value <input type="checkbox"/> Scaling value	<input type="checkbox"/> Engineering value <input type="checkbox"/> Percent value <input type="checkbox"/> Scaling value			
001			024		
002			025		
003			026		
004			027		
005			028		
006			029		
007			030		
008			031		
009			032		
010			033		
011			034		
012			035		
013			036		
014			037		
015			038		
016			039		
017			040		
018			041		
019			042		
020			043		
021			044		
022			045		
023			046		

■ CH2 LINEARIZATION

047			076		
048			077		
049			078		
050			079		
051			080		
052			081		
053			082		
054			083		
055			084		
056			085		
057			086		
058			087		
059			088		
060			089		
061			090		
062			091		
063			092		
064			093		
065			094		
066			095		
067			096		
068			097		
069			098		
070			099		
071			100		
072			101		
073			102		
074			103		
075			104		

■ CH2 LINEARIZATION

105			109		
106			110		
107			111		
108					

■ CH3 LINEARIZATION

Specify the input & output values and the units.

$X[n]$ = Input Value of n-th (mA, mV, V, %)

$Y[n]$ = Output Value of n-th (mA, mV, V, %)

$-5\% \leq X[n] \leq +105\%$, $-5\% \leq Y[n] \leq +105\%$, $X[n] < X[n+1]$

When scaling value is put, place the check mark on the check box.

The value is converted to %, and the value rounded off is entered to the unit.

Factory Internal check
<input type="checkbox"/>

n	X <input type="checkbox"/> Engineering value <input type="checkbox"/> Percent value <input type="checkbox"/> Scaling value	Y <input type="checkbox"/> Engineering value <input type="checkbox"/> Percent value <input type="checkbox"/> Scaling value	n		
001			024		
002			025		
003			026		
004			027		
005			028		
006			029		
007			030		
008			031		
009			032		
010			033		
011			034		
012			035		
013			036		
014			037		
015			038		
016			039		
017			040		
018			041		
019			042		
020			043		
021			044		
022			045		
023			046		

■ CH3 LINEARIZATION

047			076		
048			077		
049			078		
050			079		
051			080		
052			081		
053			082		
054			083		
055			084		
056			085		
057			086		
058			087		
059			088		
060			089		
061			090		
062			091		
063			092		
064			093		
065			094		
066			095		
067			096		
068			097		
069			098		
070			099		
071			100		
072			101		
073			102		
074			103		
075			104		

■ CH3 LINEARIZATION

105			109		
106			110		
107			111		
108					

■ CH4 LINEARIZATION

Specify the input & output values and the units.

$X[n]$ = Input Value of n-th (mA, mV, V, %)

$Y[n]$ = Output Value of n-th (mA, mV, V, %)

$-5\% \leq X[n] \leq +105\%$, $-5\% \leq Y[n] \leq +105\%$, $X[n] < X[n+1]$

When scaling value is put, place the check mark on the check box.

The value is converted to %, and the value rounded off is entered to the unit.

Factory Internal check
<input type="checkbox"/>

n	X	Y	n		
	<input type="checkbox"/> Engineering value <input type="checkbox"/> Percent value <input type="checkbox"/> Scaling value	<input type="checkbox"/> Engineering value <input type="checkbox"/> Percent value <input type="checkbox"/> Scaling value			
001			024		
002			025		
003			026		
004			027		
005			028		
006			029		
007			030		
008			031		
009			032		
010			033		
011			034		
012			035		
013			036		
014			037		
015			038		
016			039		
017			040		
018			041		
019			042		
020			043		
021			044		
022			045		
023			046		

■ CH4 LINEARIZATION

047			076		
048			077		
049			078		
050			079		
051			080		
052			081		
053			082		
054			083		
055			084		
056			085		
057			086		
058			087		
059			088		
060			089		
061			090		
062			091		
063			092		
064			093		
065			094		
066			095		
067			096		
068			097		
069			098		
070			099		
071			100		
072			101		
073			102		
074			103		
075			104		

■ CH4 LINEARIZATION

105			109		
106			110		
107			111		
108					