

## CD MODBUS RTU

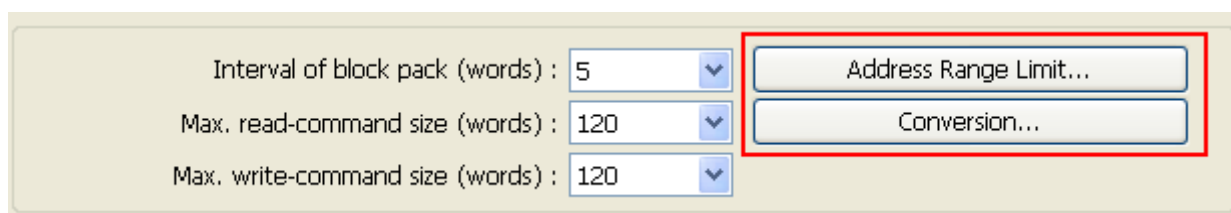
Supported Series : REVO-CL / REVO-M / REVO E / CD3000E / MULTIDRIVE / REVO-TC / REVO-PC

Website : <http://www.cdautomation.com/>

### HMI Setting:

Parameters	Recommended	Options	Notes
PLC type	CD MODBUS RTU		
PLC I/F	RS485	RS232/RS485	
Baud rate	9600	9600~115200	
Data bits	8	7, 8	
Parity	Even	Even, Odd, None	
Stop bits	1	1, 2	
PLC sta. no.	1	0-255	

Online simulator	YES	Broadcast	YES
Extend address mode	YES		



#### [Address Range Limit]

The address range of 0x, 1x, and 0x\_multi\_coils device types can be set.

#### [Conversion]

The 3x\_Double and 4x\_Double address types are added. If [ABCD ->CDAB] check box is selected, please select 3x\_Double and 4x\_Double address types.

## Device Address:

Bit/Word	Device type	Format	Range	Memo
B	0x	DDDDD	1 ~ 65535	Output bit
B	0x_multi_coils	DDDDD	1 ~ 65535	Write multiple coils
B	0x_single_Bit	DDDDD	1 ~ 65535	
B	1x	DDDDD	1 ~ 65535	Input bit (read only)
B	1x_single_Bit	DDDDD	1 ~ 65535	
B	3x_Bit	DDDDDdd	100 ~ 6553515	Input Register bit (read
B	4x_Bit	DDDDDdd	100 ~ 6553515	Output Register bit
B	6x_Bit	DDDDDdd	100 ~ 6553515	Output Register bit
B	0x_1 ~ 0x_9	DDDDD	1 ~ 65535	
B	1x_1 ~ 1x_9	DDDDD	1 ~ 65535	
W	3x	DDDDD	1 ~ 65535	Input Register (read only)
W	3x_MAX1W	DDDDD	1 ~ 65535	Display 32 bits *Note1
DW	3x_MAX2W	DDDDD	1 ~ 65535	*Note1
DW	3x_Double	DDDDD	1 ~ 65535	*Note2
DW	3x_QWord	DDDDD	1 ~ 65535	*Note2
W	4x	DDDDD	1 ~ 65535	Output Register
W	4x_MAX1W	DDDDD	1 ~ 65535	Display 32 bits *Note1
DW	4x_MAX2W	DDDDD	1 ~ 65535	*Note1
DW	4x_Double	DDDDD	1 ~ 65535	*Note2
DW	4x_QWord	DDDDD	1 ~ 65535	*Note2
W	4x_32Bit	DDDDD	1 ~ 65535	Output Registerv *Note1
W	0x_single_coil	DDDDD	1 ~ 65535	*Note3
DW	5x	DDDDD	1 ~ 65535	4x double word swap
W	6x	DDDDD	1 ~ 65535	4x single word write

Note1: MAX1W and 4X\_32Bit reads/writes 1 word for each packet and displays a 32-bit value, whereas MAX2W reads/writes 2 words for each packet.

Note2: Go the [System Parameter Settings] -> [Device Properties] and click [Conversion] to set the data format of device types 3x, 4x, 6x, 3x\_double, 4x double, 3x\_QWord, 4x\_QWord.

Conversion

3x

☐ AB -> BA

4x

☐ AB -> BA

6x

☒ AB -> BA

3x\_Double

☐ AB -> BA ☒ ABCD -> CDAB

4x\_Double

☐ AB -> BA ☒ ABCD -> CDAB

3x\_QWord

☒ AB -> BA ☐ ABCD -> DCBA ☒ ABCDEFGH -> FEHGBADC

4x\_QWord

☒ AB -> BA ☒ ABCD -> DCBA ☒ ABCDEFGH -> HGFEDCBA

\* AB : 16-bit type, ABCD : 32-bit data, ABCDEFGH : 64-bit data

OK

Cancel

Note3: Read/write a Bit at a time. Value 0 and 1 are used to represent ON or OFF status where 0 means set OFF and 1 means set ON.

Note4: The number of bits to read can be set in Macro; therefore, it is recommended to use 0x address type for functions such as GetData() and SetData(), in order to increase reading speed.

To read/write multiple 0x address type in macro, use 0x\_multi\_coils to increase write speed.

Note5: Please assign all the addresses to Even addresses, or all to Odd addresses, in order to prevent communication failure.

Note6: EBPro V6.03.02 or later supports 64 bits data type (**cMT Series only**), but please note that the address limit range is 48 bits in maximum..

## NOTE:

Address type “5x” is mapping to Hold Reg. The communication protocol of 5x is almost the same as “4x” except that “5x” swaps double word.

If 4x contains the following information:

Address	1	2	3	4	5	6	...
Data in word	0x1	0x2	0x3	0x4	0x5	0x6	
Data	0x20001		0x40003		0x60005		

For 5x, it will be:

Address	1	2	3	4	5	6	...
Data in word	0x2	0x1	0x4	0x3	0x6	0x5	
Data	0x10002		0x30004		0x50006		

Modbus RTU function code:

Device type	Read	Write
0x	0x01 Read coil	0x05 write single coil
0x_multi_coils	0x01 Read coil	0x0f write multiple coils
1x	0x02 Read discrete input	X
3x / 3x_Bit	0x04 Read input register	X
4x / 4x_Bit	0x03 Read holding register	0x10 write multiple registers
5x	0x03 Read holding register	0x10 write multiple registers
6x	0x03 Read holding register	0x06 write single register
0x_single_coil	0x01 Read coil	0x05 write single coil

## Wiring Diagram:

### RS-485 2W

The serial port pin assignments may vary between HMI models, please click the following link for more information.

