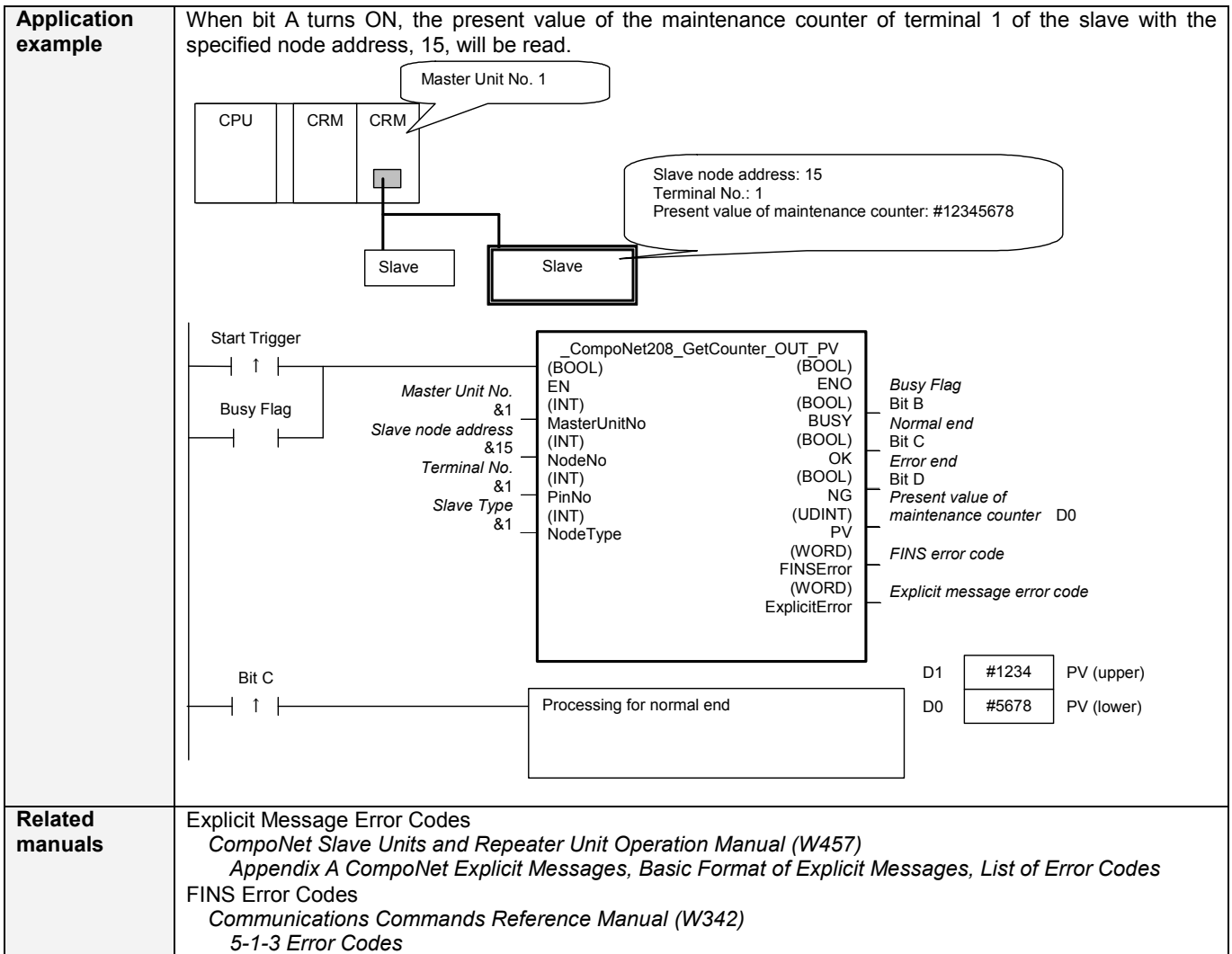| CompoNet -208	Read Output Terminal Maintenance Counter Present Value: _CompoNet208_GetCounter_OUT_PV

Basic function	Reads the present values of terminal maintenance counters from slaves connected to CompoNet. Use this FB for output terminals.
Symbol	

```
Start Trigger
    ┤ ↑ ├──────────────┐
                        │        _CompoNet208_GetCounter_OUT_PV
Busy Flag               │     (BOOL)                    (BOOL)
    ┤   ├──────────────┘     EN                          ENO
                             (INT)                       (BOOL)        Busy Flag
          Master Unit No. ─ MasterUnitNo                BUSY
                             (INT)                       (BOOL)        Normal end
        Slave node address ─ NodeNo                      OK
                             (INT)                       (BOOL)        Error end
             Terminal No. ─ PinNo                        NG            Present value of
                             (INT)                       (UINT)        maintenance counter
               Slave Type ─ NodeType                     PV            FINS error code
                                                         (WORD)        (May be omitted.)
                                                        FINSError      Explicit message error code
                                                         (WORD)        (May be omitted.)
                                                        ExplicitError
```

File name	Lib\FBL\omronlib\RemoteIO\CompoNet_CompoNet208_GetCounter_OUT_PV10.cxf
Applicable models	Applicable Master Units	CS1W-CRM21 and CJ1W-CRM21
	Applicable Slave Units	CRT1-OD16, CRT1B-OD02S, CRT1B-OD02SP, CRT1B-MD04SLP
	CPU Unit	CS1*-CPU**H Unit version 3.0 or higher CJ1*-CPU**H Unit version 3.0 or higher CJ1M-CPU** Unit version 3.0 or higher CP1H
	CX-Programmer	Version 5.0 or higher.
Conditions for usage	CPU Unit Settings 　PLC Setup: Shared Settings for Communications Instructions in FBs 　　・CompoNet Response Timeout Time (default: 2 s)　　10 s recommended 　　・Number of retries (default: 0) Shared Resources 　　・Communications ports (internal logical ports) Other 　　・Communications must be within one network and cannot cross to another network.	
Function description	The present value of the maintenance counter is read from the CompoNet slave specified by the Master Unit No., the Slave Node Address and Slave Type. Refer to the FINS error code and explicit message error code if an error occurs. Both error codes will be output as #0000 for a normal end.	
FB precautions	・The FB is processed over multiple cycles. The BUSY output variable can be used to check whether the FB is being processed. ・OK or NB will be turned ON for one cycle only after processing is completed. Use these flags to detect the end of FB processing. Timechart	

```
Start Trigger      ON
                   OFF

Busy Flag (BUSY)   ON
                   OFF

Normal end (OK)    ON
or Error end (NG)  OFF
                              ↑ FB exection completed.
```

EN input condition	Connect EN to an OR between an upwardly differentiated condition for the start trigger and the BUSY output from the FB.
Restrictions 　Input 　variables	・Always use an upwardly differentiated condition for EN. ・If the input variables are out of range, the ENO Flag will turn OFF and the FB will not be processed.
Output 　variables	・This FB requires multiple cycles to process. Always connect an OR including the BUSY output variable to the EN input variable to ensure that the FB is processed to completion (see *Symbol*). ・Do not turn the BUSY output variable ON or OFF outside the FB.

Application example	When bit A turns ON, the present value of the maintenance counter of terminal 1 of the slave with the specified node address, 15, will be read.

Master Unit No. 1

CPU	CRM	CRM

Slave node address: 15
Terminal No.: 1
Present value of maintenance counter: #12345678

Slave		Slave

Start Trigger

```
                        _CompoNet208_GetCounter_OUT_PV
  ──┤↑├──────────────   (BOOL)                    (BOOL)
                         EN                          ENO        Busy Flag
  Busy Flag             (INT)                     (BOOL)        Bit B
          Master Unit No.  &1                       BUSY        Normal end
  ──┤ ├──┤ ├──  MasterUnitNo                       (BOOL)       Bit C
       Slave node address  &15                         OK       Error end
                        (INT)                       (BOOL)      Bit D
                         NodeNo                         NG      Present value of
             Terminal No.  &1                      (UDINT)      maintenance counter   D0
                        (INT)                           PV
                         PinNo                      (WORD)      FINS error code
               Slave Type  &1                    FINSError
                        (INT)                      (WORD)       Explicit message error code
                         NodeType                ExplicitError
```

Bit C

			D1	#1234	PV (upper)
──┤↑├──┤ ├──	Processing for normal end		D0	#5678	PV (lower)

Related manuals	Explicit Message Error Codes
	  CompoNet Slave Units and Repeater Unit Operation Manual (W457)
	    Appendix A CompoNet Explicit Messages, Basic Format of Explicit Messages, List of Error Codes
	FINS Error Codes
	  Communications Commands Reference Manual (W342)
	    5-1-3 Error Codes

Variable Tables
Input Variables

Name	Variable name	Data type	Default	Range	Description
EN	EN	BOOL			1 (ON): FB started. 0 (OFF): FB not started.
Master Unit No.	MasterUnitNo	INT	&0	&0 to &99 #0 to #63	Specify the unit number of the CompoNet Master Unit.
Slave node address	NodeNo	INT	&0	&0 to &127	Specify the node address of the slave.
Terminal No.	PinNo	INT	&0	&0 to &31	Specify the terminal (pin) number for which the present value is to be read.
Slave Type	NodeType	INT	&1	&1 to &7	Slave Type 1: Word Slave IN 2: Word Slave OUT 3: Word Slave MIX 4: Bit Slave IN 5: Bit Slave OUT 6: Bit Slave MIX 7: Repeater

Output Variables

Name	Variable name	Data type	Range	Description
ENO (May be omitted.)	ENO	BOOL		1 (ON): FB processed normally. 0 (OFF): FB not processed or ended in an error.
Busy Flag	BUSY	BOOL		Automatically turns OFF when processing is completed.
Normal end	OK	BOOL		Turns ON for one cycle when processing ends normally.
Error end	NG	BOOL		Turns ON for one cycle when processing ends in an error.
Present value of maintenance counter	PV	UDINT		The present value of the maintenance counter is output. The present value is either the total ON time or the number of operations. (Unit: seconds for total ON time, operations for the number of operations)
FINS error code (May be omitted.)	FINSError	WORD		The FINS error code is output. A code of #0000 is output for a normal end. Refer to the Related Manuals for details on the error codes.
Explicit message error code (May be omitted.)	ExplicitError	WORD		Outputs the explicit message error code. A code of #0000 is output for a normal end. Refer to the Related Manuals for details on the error codes.

Version History

Version	Date	Contents
1.00	2006.9.	Original production

Note
This manual is a reference that explains the function block functions.
It does not explain the operational limitations of Units, components, or combinations of Units and components. Always read and understand the Operation Manuals for the system's Units and other components before using them.