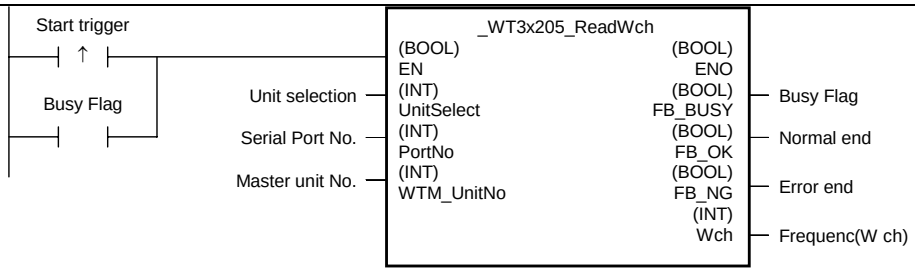
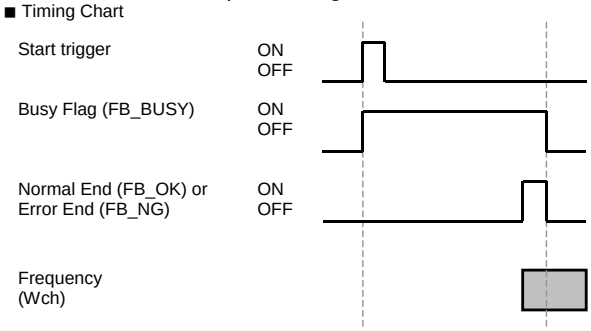
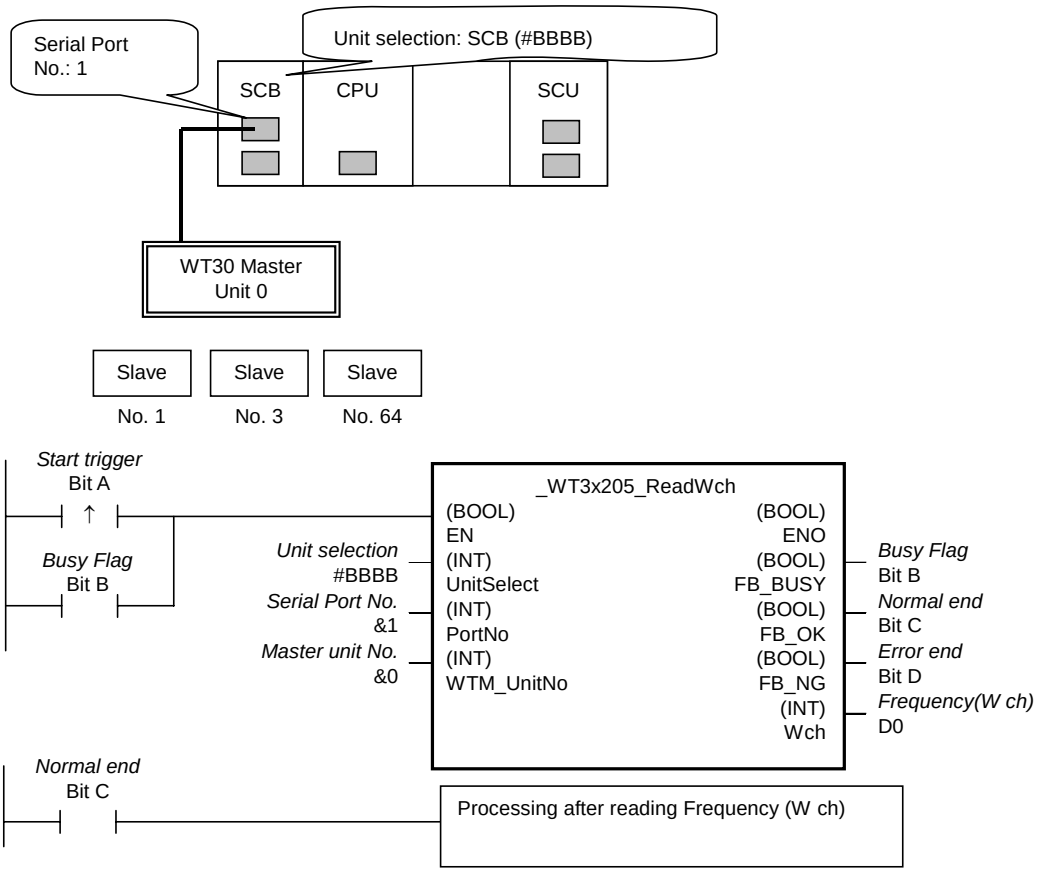
WT3x 205	Read Frequency: _WT3x205_ReadWch

Basic function	Reads the frequency being used (W ch).	
Symbol		
File name	Lib\FBL\omronlib\WirelessTerminal\WT30_WT3x205_ReadWch10.cxf	
Applicable models	Master	WT30-M01-FLK
	Slave	WT30-SID16/SMD16/SMD16-1
	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 CP1L (except 10 points CPU)
	Serial Communications Units/Boards	CS1W-SCU21-V1, CJ1W-SCU21-V1, CJ1W-SCU41-V1 Unit Version 1.2 or higher CS1W-SCB21-V1 and CS1W-SCB41-V1 Unit Version 1.2 or higher
	CX-Programmer	Version 5.0 or higher
Conditions for usage	WT30 FA Wireless SS Terminal • This function block can be used only in RUN mode. This function block cannot be used in TEST or SET mode. Communications Settings The communications settings of the serial port must be the same as those of the WT30 FA Wireless SS Terminal. • The communications settings of the specified serial port can be set to the default WT30 settings using the Set Communications Port (_WT3x600_SetComm) function block, and the other WT30 settings using the Set Serial Gateway Mode (_SCx604_SetPortGATEWAY) function block. • Use Serial Communications Unit (SCU) or Serial Communications Board (SCB) unit version 1.2 or later. CPU Unit Settings PLC Setup: Shared Settings for Communications Instructions in FBs • Communications Instruction Response Timeout Time (default: 2 s) • Number of Retries (default: 3) Shared Resources • Communications ports (internal logical ports)	
Function description	When the Start Trigger turns ON, the frequency being used (W ch) is read.	
FB precautions	• The FB is processed over multiple cycles. The FB_BUSY output variable can be used to check whether the FB is being processed. • *FB_OK* or *FB_NG* will be turned ON for one cycle only after processing is completed. Use these flags to detect the end of FB processing. ■ Timing Chart 	
EN input condition	Connect EN to an OR between an upwardly differentiated condition for the start trigger and the FB_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	• The Frequency is set when the Normal End flag turns ON. • This FB requires multiple cycles to process. Always connect an OR including the FB_BUSY output variable to the EN input variable to ensure that the FB is processed to completion (see *Symbol*). • Do not turn the FB_BUSY output variable ON or OFF outside the FB.	

Application example

A WT30 FA Wireless SS Terminal is connected to serial port 1 on a Serial Communications Board (SCB). When the bit A turns ON, the frequency being used by master 0 is read.



Variable Tables

Input Variables

Name	Variable name	Data type	Default	Range	Description
EN	EN	BOOL			ON: FB started OFF: FB not started.
Unit selection	UnitSelect	INT	&0	At right.	Specify the Unit and the serial port.
Serial Port No.	PortNo	INT	&1	&1 to &2	Only serial port 2 of CP1H/CP1L M-type CPU unit is possible to use this FB. ■ Connected to CPU Unit Unit selection: #FFFF Serial port No.: Not accessed. (CP1H/CP1L-M: Serial Port2 CP1L-L14/20: Serial Port1) ■ Connected to Serial Communication Board(SCB) Unit selection: #BBBB Serial port No.: &1: Serial Port 1 &2: Serial Port 2 ■ Connected to Serial Communication Unit(SCU) Unit selection: SCU Unit No. (&0 to &15) Serial port No.: &1: Serial Port 1 &2: Serial Port 2
Master unit No.	WTM_UnitNo	INT	&0	&0 to &99	Specify the unit number of the master.

Output Variables

Name	Variable name	Data type	Range	Description
ENO (May be omitted.)	ENO	BOOL		ON: FB processed normally. OFF: FB not processed or ended in an error.
Busy Flag	FB_BUSY	BOOL		Automatically turns OFF when processing is completed.
Normal end	FB_OK	BOOL		Turns ON for one cycle when processing ends normally.
Error end	FB_NG	BOOL		Turns ON for one cycle when processing ends in an error.
Frequency(W ch)	Wch	INT	&1 to &83	The frequency being used (unit: Hz)

Internal Variables

Internal variables are not output from the FB.

If the NG Flag from the FB turns ON, the following internal variables can be monitored to obtain information on the error.

Name	Variable name	Data type	Range	Description
FINS error code	FINS_ErrorCode	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.
CompoWay/F error code	CompowayF_Error Code	WORD		Outputs the CompoWay/F error code. A code of #0000 is output for a normal end. See below for details on errors.

CompoWay/F Error Codes

Code	Contents	Meaning
#0000	Normal end	
#2203	Operation error	• The operating mode is incorrect (execution is not possible in the current mode). • An error occurred in EEPROM.

Version History

Version	Date	Contents
1.00	2004.12.	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.