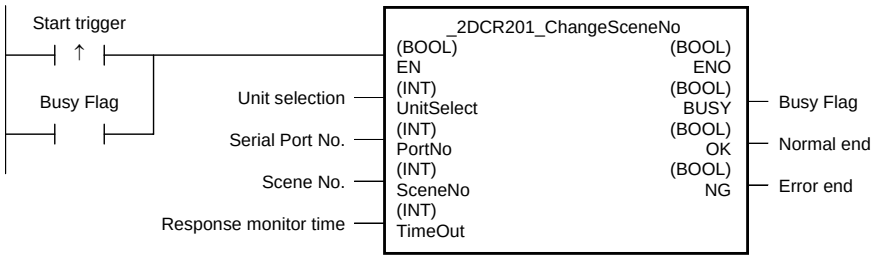
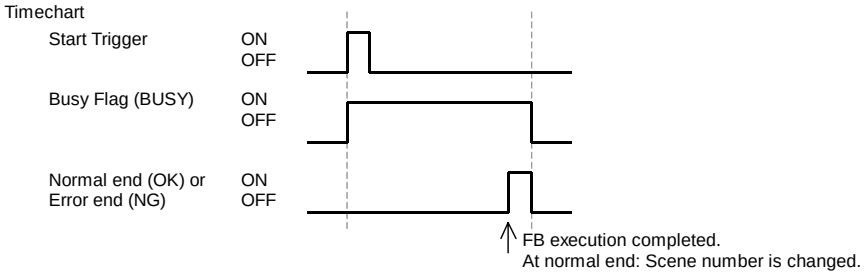
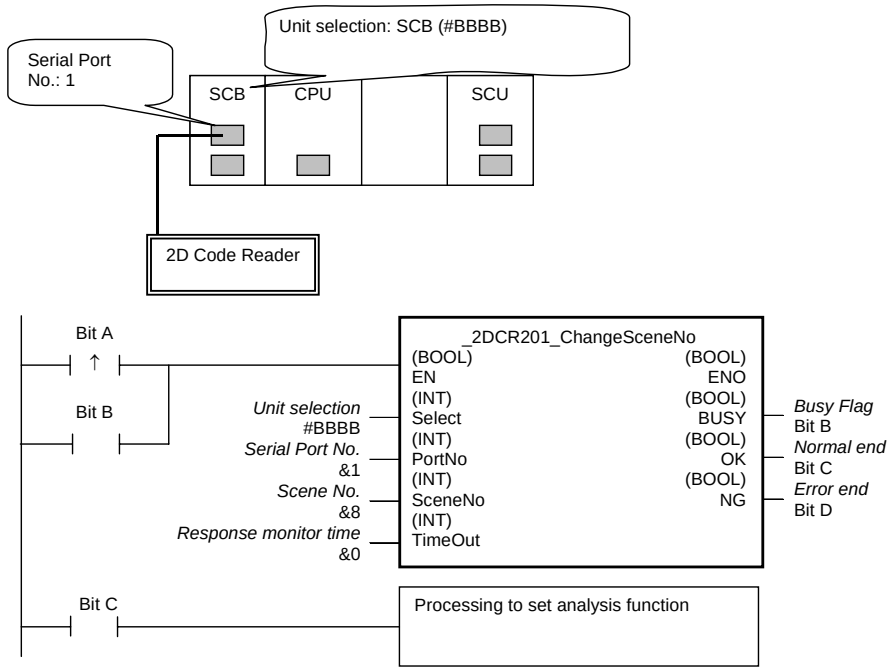
2DCR -201	Change Scene Number: _2DCR201_ChangeSceneNo

Basic function	Changes the scene number of the 2D Code Reader.	
Symbol		
File name	Lib\FBL\omronlib\Barcode Scanner\2DCR_2DCR201_ChangeSceneNo10.cxf	
Applicable models	2D Code Reader	V530-R2000 Series, V530-R160 Series, and V530-R150V3 Series
	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	External Connections • Can be used only for 1:1 connections. • Communications must be within one network and cannot cross to another network. • This FB is invalid when the serial port error is happend. • Multiple FBs cannot simultaneously perform processing for one Code Reader. • When the PLC system is turned ON, the serial port may receive unexpected data, resulting in a communication error. It is recommended to restart the serial port one time after starting up the PLC system. Communications Settings The communications settings(No-protocol Mode) of the serial port must be the same as those of the 2D Code Reader. • The communications settings of the specified serial port can be set to the default 2D Code Reader settings using the Set Communications Port (_2DCR600_SetComm) function block, and the other 2D Code Reader settings using the Set No-protocol Mode (_SCx603_SetPortNOPRTCL) function block. Shared Resources • When a Serial Communications Unit is specified: Communications ports (internal logical ports) Code Reader Settings • Always set the 2D Code Reader scene number before using this FB.	
Function description	When the Start Trigger turns ON, the scene number is changed for the 2D Code Reader connected to the serial port and specified by the Unit Selection and Serial Port Number.	
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. 	
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	A 2D Code Reader is connected 1:1 to serial port 1 on a Serial Communications Board (SCB). When bit A turns ON, the scene number is changed to scene 8 for the 2D Code Reader. 
Related manuals	2D Code Reader V530-R2000 User's Manual (Q134) Section 7 Host Communications, Serial Interface 2D Code Reader V530-R160E/V530-R160EP User's Manual (Z169) Section 8 Communications with the Host, Serial Interface (Normal) V530-R150E-3, V530-R150EP-3 2-Dimensional Code Reader (Fixed Type) Operation Manual (Z155) Section 4 RS-232C

■ **Variable Tables**

Input Variables

Name	Variable name	Data type	Default	Range	Description
EN	EN	BOOL			1 (ON): FB started. 0 (OFF): FB not started.
Unit selection	UnitSelect	INT	&0	At right.	Specify the Unit and the serial port. 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
Serial Port No.	PortNo	INT	&1	&1 to &2	
Scene No.	SceneNo	INT	&0	&0 to &9	Specify the scene number.
Response monitor time	TimeOut	INT	&0	&0 to &990	Specify the response monitor time (unit: 100 ms). &0: Default (99 seconds)

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.

Version History

Version	Date	Contents
1.00	2004.6.	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.