

Extension Card

CONEXT1616 DI/DO Card



Contents

1. CONEXT1616 CARD	5
1.1 DI/DO CONNECTOR FUNCTION	5
1.2 HARDWARE COMPONENT	8
1.2.1 CONEXT1616 CARD PICTURE	8
1.2.2 CONEXT1616 CARD COMPONENT DESCRIPTION	9
1.3 CONEXT1616 CARD CONNECTION	10
1.3.1 HOW TO CONNECT TO CAPTURE CARD	10
1.3.2 DI/DO CONNECTION	10

Extension Card – CONEXT1616 DI/DO Card

1. ConExt1616 Card

1.1 DI/DO Connector Function

1.1.1 Digital Input(DI) : for sensor input

- Number of channel : 16
- Type : Relay Type, Voltage Type

▶ Input Requirement(ON)

Voltage Type : Min : 3V, Typ : 5V, Max : 12V

Relay Type : Min : 0Ω, Max : 170Ω

- ▶ Sensor input value changes according to DI Type(Voltage / Relay) & External Sensor Type (Normal Open / Normal Close). Please check the value of 0(L)/1(H) after S/W(Application) setting.

ex) For Relay Type & Normal Open Sensor, it shows on SW

Normal => 0(L), Sensor working => 1 (H)

For Relay Type & Normal Close Sensor, it shows on SW

Normal => 1(H), Sensor working => 0(L)

DI Type	External Sensor Type	Sensor	Display on S/W
Voltage Type	Normal Open	Default	1(H)
		Working	0(L)
	Normal Close	Default	0(L)
		Working	1(H)
Relay Type	Normal Open	Default	0(L)
		Working	1(H)
	Normal Close	Default	1(H)
		Working	0(L)

Please refer to the below for details.

1.1.2 Function Description

■ DI Circuit

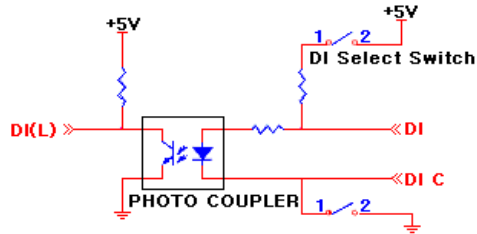


그림 1 DI Select Switch

■ DI Select Switch(S1)



SWITCH	TYPE
ON	Relay Type
OFF	Voltage Type

■ Relay Type

- ▶ When the connection interface is on, "DI" is connected to "DI C." (See the Picture 1)
- ▶ Type : magnetic switch, button, relay

■ Voltage Type

- ▶ The power flows into DI port to make PHOTO COUPLER work. When it is on, the power inflows to DI port. (See the above Picture 1)
- ▶ Type : PNP open collector output sensor

1.1.3 Function Description for Sensor Devices

■ Normal Open / Normal Close

▶ Relay Type

Normal Open	Normal: disconnected, Working: connected
Normal Close	Normal: connected, Working: disconnected

▶ Voltage Type

Normal Open	Normal: 0V, Working: 5V
Normal Close	Normal: 5V, Working: 0V

- When devices connected to sensor are Normal Open,

- ▶ Relay Type

Relay Sensor	DI Value on S/W
Default	L (0)
Working	H (1)

- ▶ Voltage Type

Voltage Sensor	DI Value on S/W
Default	H (1)
Working	L (0)

- When devices connected to sensor are Normal Close,

- ▶ Relay Type

Relay Sensor	DI Value on S/W
Default	H (1)
Working	L (0)

- ▶ Voltage Type

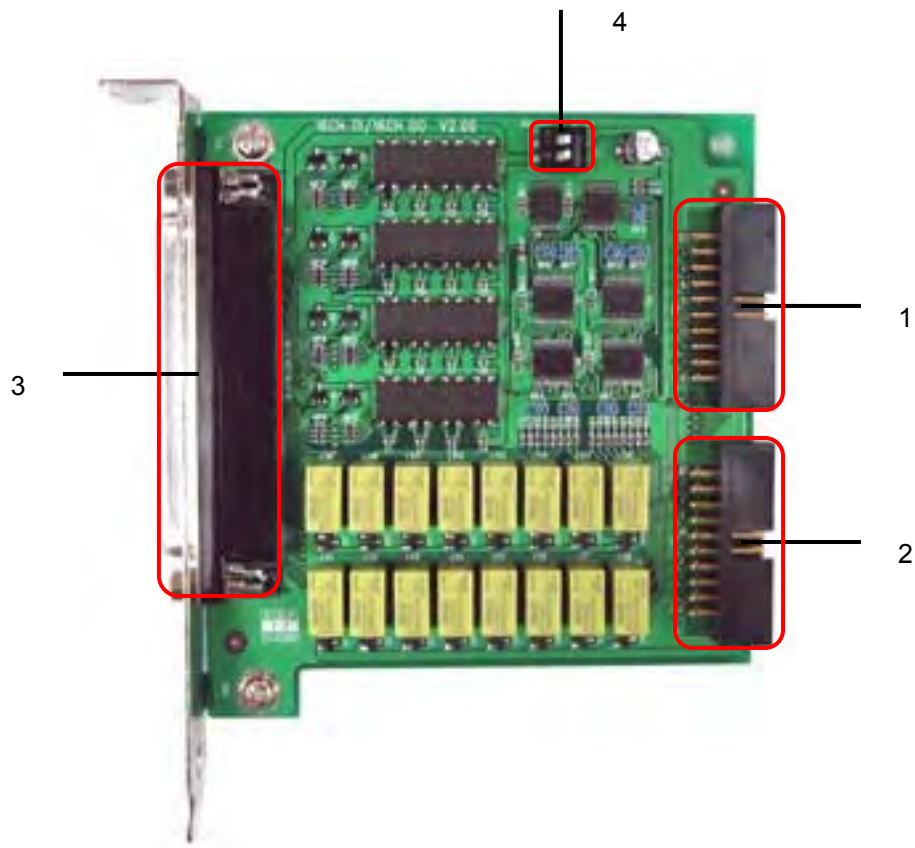
Voltage Sensor	DI Value on S/W
Default	L (0)
Working	H (1)

1.1.4 Digital Output(DO) : for relay out

- Number of channel : 16
- Output Type : relay
- Absolute Max. Ratings of Relay : 125V, 0.5A, 30W
- Relay Type: set as Normal Open
- Default: set as OFF on S/W

1.2 Hardware Component

1.2.1 ConExt1616 Card Picture



1. DIO (J2) : 20Pin Box Connector
2. DIO (J3) : 20Pin Box Connector
3. DI 1-16/DO 1-16(J1) : DSUB-37 Female Connector
4. S1 : DI Type Setting Switch

1.2.2 ConExt1616 Card Component Description

1 DIO 20Pin Box Connector (J2)

This connector is used for DI 1-16 and DO 1-16 and connected to capture card.

2 DIO 20Pin Box Connector (J3)

This is the same connector as J2 and used to connect to another extension card.

3 DI 1-16/DO 1-16(J1)

This is DSUB-37pin female connector for DI signal input from external and DO signal output to external. DI signals are transferred into No.1 ~ No.18 pin. Among the pins, No.9 and No.18 are common pins. (See the below Picture 1.) When the common pin is connected to a channel port by sensor or switch, it is possible to see the sensor or the switch ON/OFF on S/W. No.20 ~ No. 36 pin of the connector outputs DO signals. No. 28 and No. 37 are common pins. (See the Picture 1.) DO signals are controlled by S/W. When DO is turned ON, the channel port which was operated by the relay switch of capture card is connected to common port.

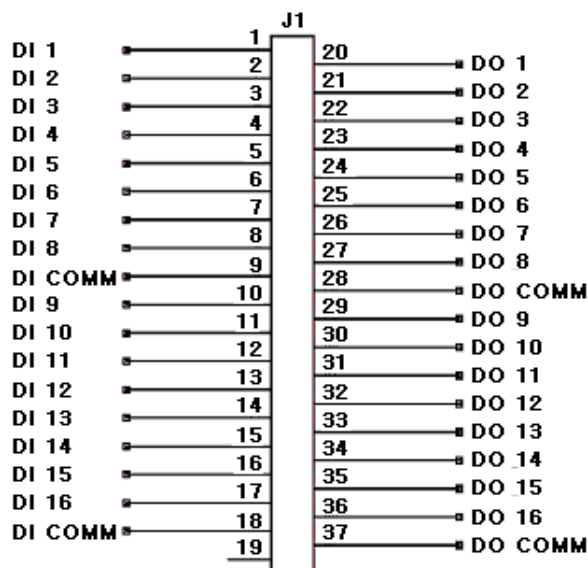


그림 1

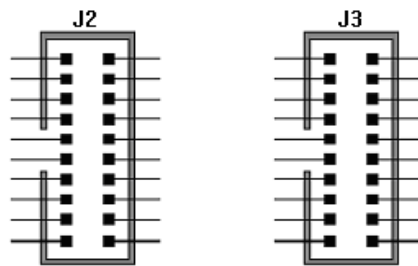
4 DI Select Switch(S1)

This is a switch to select DI type. Set Switch1 and 2 to ON or OFF to select Relay Type or Voltage Type.

1.3 ConExt1616 Card Connection

1.3.1 How to Connect to Capture Card

Connect to capture card with DIO 20Pin Connector (J2, J3). Refer the Capture Card Manual for details.



1.3.2 DI/DO Connection

DI is connected to external sensor or switch while DO to external buzzer or bell etc., both by DSUB-37Pin Female Connector (J1). See the below picture.

