DIO Configuration and Pinout sample

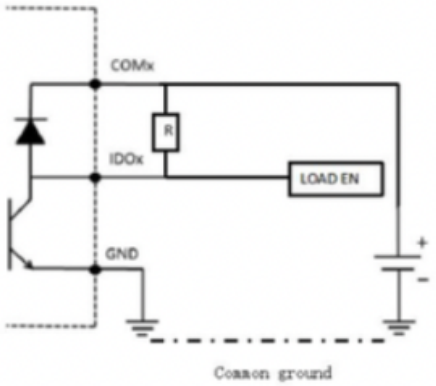
Output wiring diagram:

1 Resistive loading wiring.

1.1 For IDOx pinout (Resistive loading) :

Table 2.9: DIO Port Pin Assignments

Pin	DIO Signal	Pin	DIO Signal
1	DI0	11	DO0
2	DI1	12	DO1
3	DI2	13	DO2
4	DI3	14	DO3
5	DI4	15	DO4
6	DI5	16	DO5
7	DI6	17	DO6
8	DI7	18	DO7
9	ECOM1	19	E_GND
10	VCC_ISO	20	PCOM1

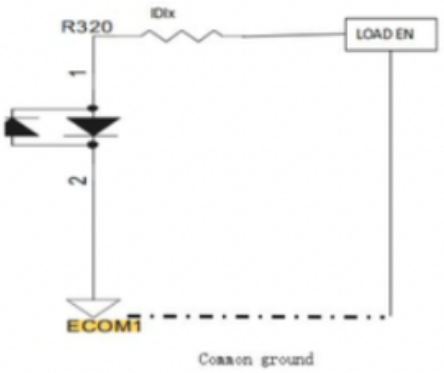


Pin	DIO Signal	Diagram Symbol
p11	DO0	IDOx
p19	E_GND	GND
p20	PCOM1	COMx

1. LOAD is the terminal device.
2. VCC is connected to COMx (PCOM1 pinout, pin 20)
3. GND is Ground (E_GND pinout, pin 19)
4. LOAD(+) is connected to IDOx (DO0, pin 11)
5. LOAD(-) is connected to GND
6. Resistance R is the pull-up resistance for each Bit of I/O output. Resistor R (Recommendation 1KΩ) should be connected COMx and power supply(+) on one side, and connected IDOx and LOAD terminals on the other side.
   Note: GND and the negative pole of the power supply are common GND.

1.2 For IDIx pinout (Resistive loading) :

Table 2.9: DIO Port Pin Assignments			
Pin	DIO Signal	Pin	DIO Signal
1	DI0	11	DO0
2	DI1	12	DO1
3	DI2	13	DO2
4	DI3	14	DO3
5	DI4	15	DO4
6	DI5	16	DO5
7	DI6	17	DO6
8	DI7	18	DO7
9	ECOM1	19	E_GND
10	VCC_ISO	20	PCOM1



Pin	DIO Signal	Diagram Symbol
p1	DI0	IDIx
p9	ECOM1	ECOM1

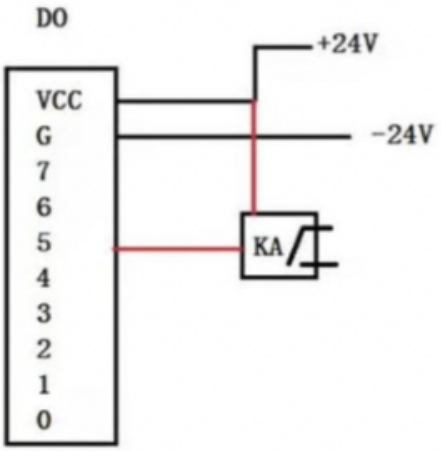
1. LOAD is the terminal device.
2. GND is ECOM1 (ECOM1 pinout, pin9)
3. LOAD(+) is connected to IDIx (DI0, pin 1), so you can control ON/OFF by logic
4. LOAD(-) is connected to GND (ECOM1).
   Note: ECOM1 and the negative pole of the power supply are common GND.

2 Inductive loading wiring.

2.1 For IDOx pinout (Inductive loading) :

Table 2.9: DIO Port Pin Assignments

Pin	DIO Signal	Pin	DIO Signal
1	DI0	11	DO0
2	DI1	12	DO1
3	DI2	13	DO2
4	DI3	14	DO3
5	DI4	15	DO4
6	DI5	16	DO5
7	DI6	17	DO6
8	DI7	18	DO7
9	ECOM1	19	E_GND
10	VCC_ISO	20	PCOM1

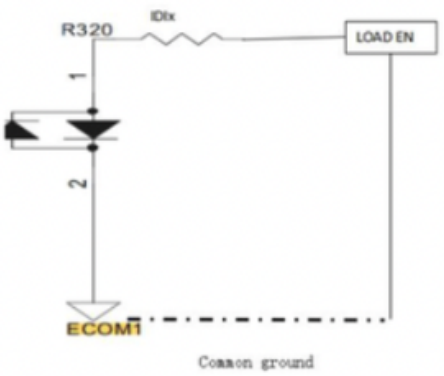


Pin	DIO Signal	Diagram Symbol
p16	DO5	5
p19	E_GND	G
p20	PCOM1	VCC

1. KA is the terminal device.
2. VCC+ is +24V and is connected to VCC (PCOM1 pinout, pin 20)
3. VCC- (GND) is -24V and is connected to G (E_GND pinout, pin 19)
4. KA(+) is connected to +24V and VCC
5. KA(-) is connected to 5 pin (DO5 pinout, pin 16)

2.2 For IDIx pinout (Inductive loading) :

Table 2.9: DIO Port Pin Assignments			
Pin	DIO Signal	Pin	DIO Signal
1	DI0	11	DO0
2	DI1	12	DO1
3	DI2	13	DO2
4	DI3	14	DO3
5	DI4	15	DO4
6	DI5	16	DO5
7	DI6	17	DO6
8	DI7	18	DO7
9	ECOM1	19	E_GND
10	VCC_ISO	20	PCOM1



Pin	DIO Signal	Diagram Symbol
p1	DI0	IDIx
p9	ECOM1	ECOM1

5. LOAD is the terminal device.
6. GND is ECOM1 (ECOM1 pinout, pin9)
7. LOAD(+) is connected to IDIx (DI0, pin 1), so you can control ON/OFF by logic
8. LOAD(-) is connected to GND (ECOM1).
   Note: ECOM1 and the negative pole of the power supply are common GND.

Please notice that , in output wiring circuit:

- DIO Signal (DI pins) wiring diagram is the same between inductive loading and resistive loading,
- DIO Signal (DO pins) wiring diagram is different between inductive loading and resistive loading.

Input Wiring Diagram:

DIO input can directly connect the input signal to the corresponding input Bit, and common ground should be connected to GND pin.

1. DIO pin is connected to signal input.
2. GND is connected to common ground. (ECOM1 pin9 or E_GND pin19)

Table 2.9: DIO Port Pin Assignments			
Pin	DIO Signal	Pin	DIO Signal
1	DI0	11	DO0
2	DI1	12	DO1
3	DI2	13	DO2
4	DI3	14	DO3
5	DI4	15	DO4
6	DI5	16	DO5
7	DI6	17	DO6
8	DI7	18	DO7
9	ECOM1	19	E_GND
10	VCC_ISO	20	PCOM1