

CAN-2054D Quick Start

Hardware Specification

CAN Interface	
DeviceNet Specification	Volume I, Release 2.0 & Volume II, Release 2.0, Errata 5
DeviceNet Subscribe	Group 2 Only Server
Supported Connection	1 connection for Explicit Messaging 1 connection for Polled I/O 1 connection for Bit-Strobe I/O connection
Node ID	0~63 selected by rotary switch
Baud Rate (bps)	125 k, 250 k, 500 k, selected by rotary switch
Heartbeat Message	Yes
Shutdown Message	Yes
Terminator Resistor	Switch for 120 Ω terminator resistor
Connector	5-pin screwed terminal block (CAN_GND, CAN_L, CAN_SHLD, CAN_H, CAN_V+)
Digital Input	
Channels	8 (Sink/Source)
On Voltage Level	+3.5~+30 V _{DC}
Off Voltage Level	+1 V _{DC} Max.
Input Impedance	3 k Ω , 0.3W
Intra-module Isolation	3750 V _{rms}
ESD Protection	+/-4 kV, Contact for each channel
Digital Output	
Channels	8(Sink)
Load Voltage	+5~30 V _{DC}
Output Max. Load Current	700 mA per channel
Output Type	Open Collector
Intra-module Isolation	3750 V _{rms}
ESD Protection	+/-4 kV, Contact for each channel
LED	
Status LED	PWR LED, NET LED, MOD LED
Terminal Resister LED	Terminal Resister Indicator
DI/DO LED	8 LEDs as Digital Input LED Indicators 8 LEDs as Digital Output LED Indicators
Power	
Input range	Unregulated +10 ~ +30 V _{DC}
Power Consumption	1.5 W

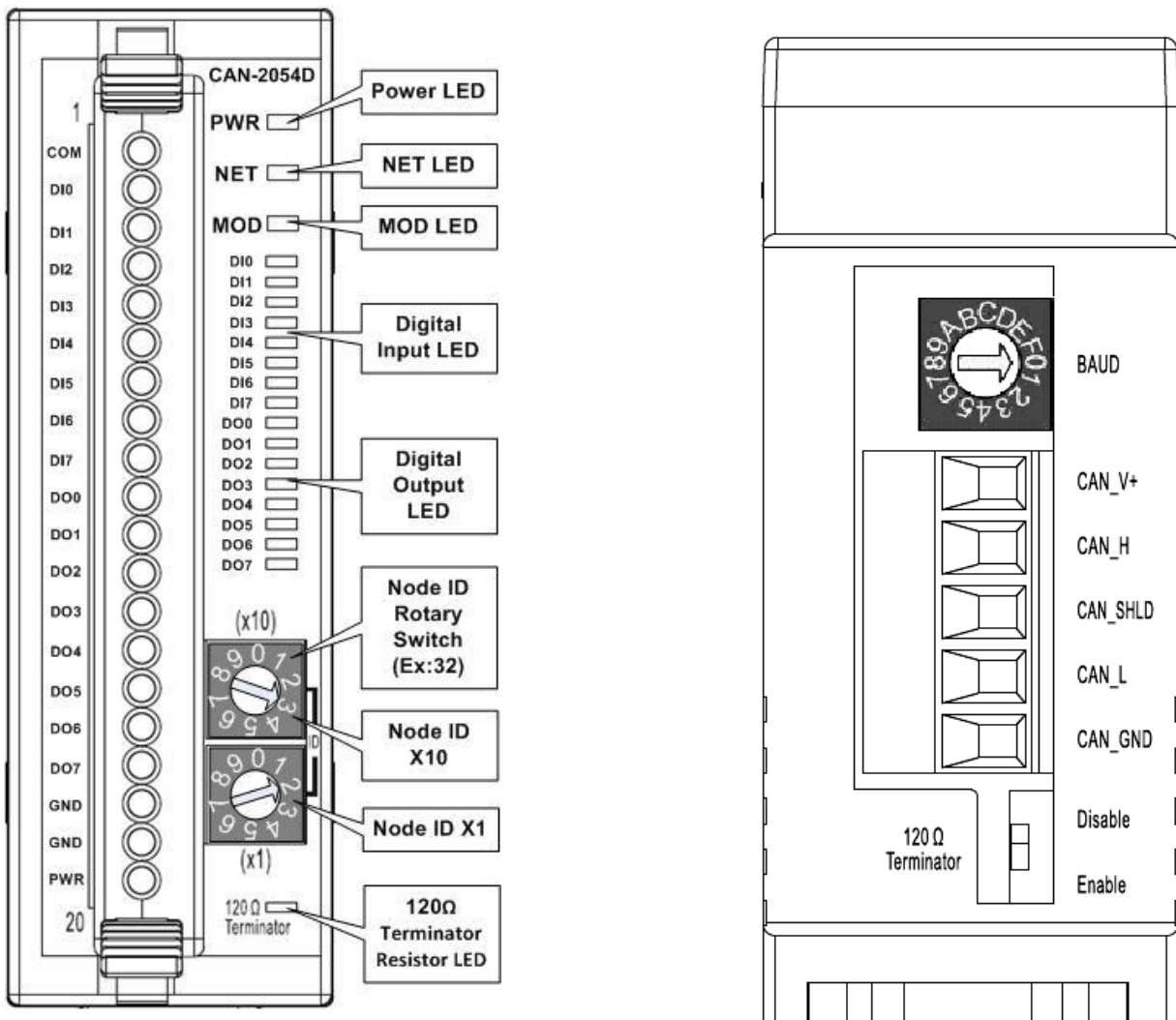
Environment

Operating Temp.	-25 ~ 75 °C
Storage Temp.	-30 ~ 80 °C
Humidity	10 ~ 90% RH, non-condensing

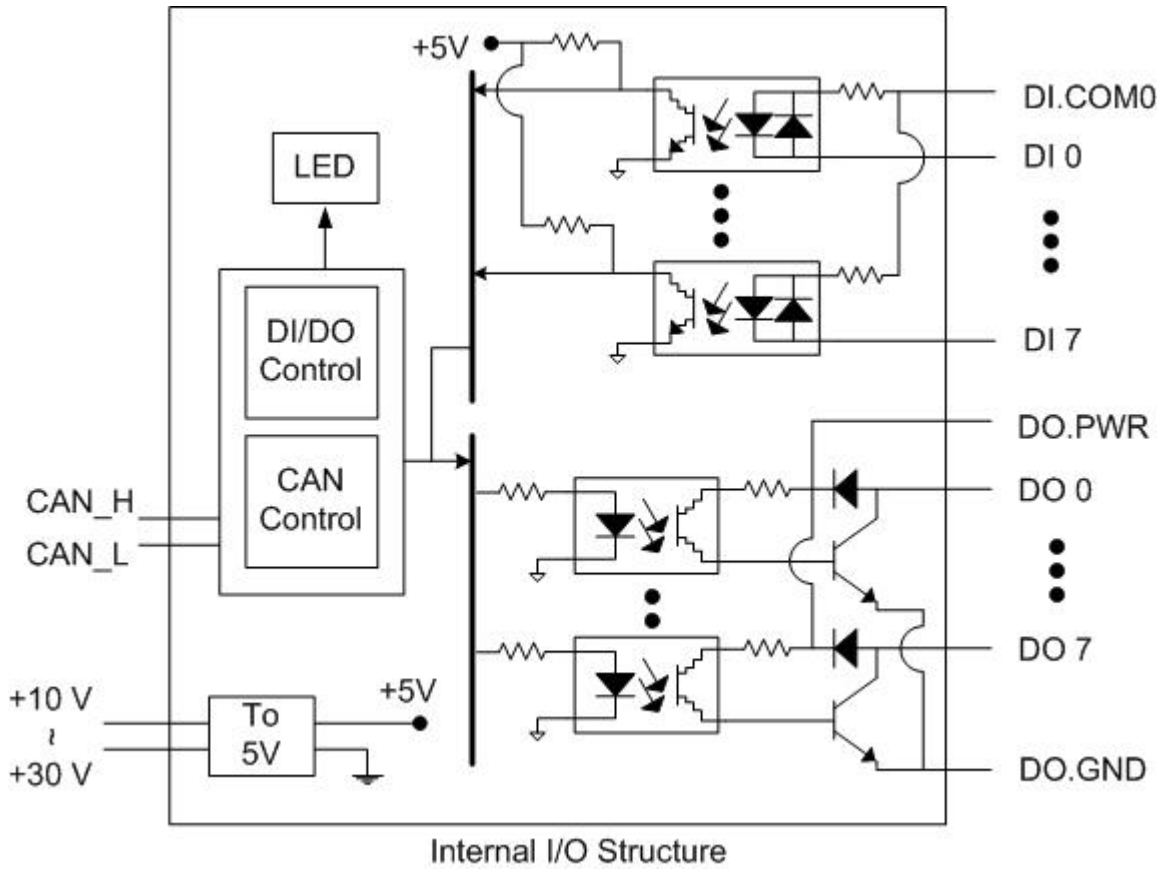
For more information about CAN-2054D, please visit the following website:

http://www.icpdas.com/products/Remote_IO/can_bus/can-2054d.htm

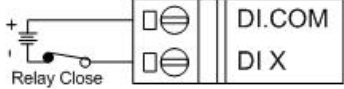
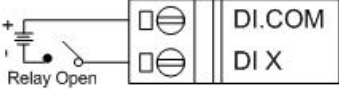



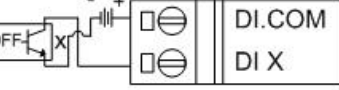
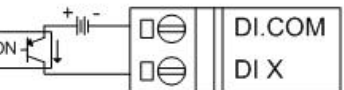
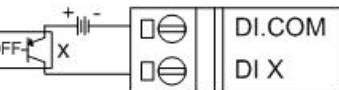
CAN-2054D Pin Assignments

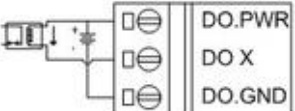

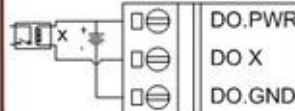
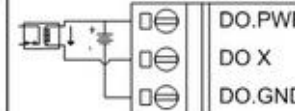
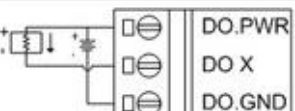

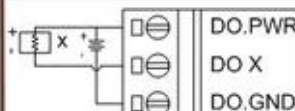
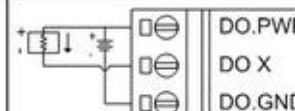


CAN-2054D Internal I/O Structure

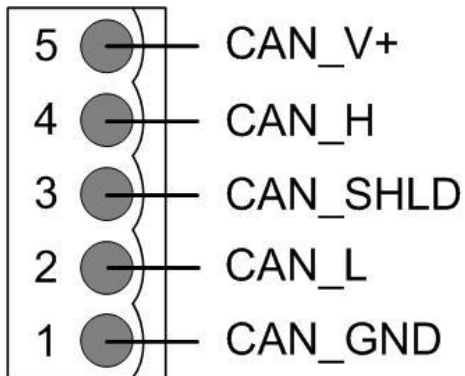


CAN-2054D Wiring Connection Type

Module Name	CAN-2054C / CAN-2054D	
Input Type	ON State LED ON Readback as 1	OFF State LED OFF Readback as 0
Relay Contact	Relay On	Relay Off
		
TTL/CMOS Logic	Voltage > 3.5 V	Voltage < 1 V
		
NPN Output	Open Collector On	Open Collector Off
		
PNP Output	Open Collector On	Open Collector Off
		

Module Name	CAN-2054D		CAN-2054C	
Output Type	ON State LED ON Readback as 1	OFF State LED OFF Readback as 0	ON State LED ON Readback as 1	OFF State LED OFF Readback as 0
Drive Relay	Relay On	Relay Off	Relay Off	Relay On
				
Resistance Load				

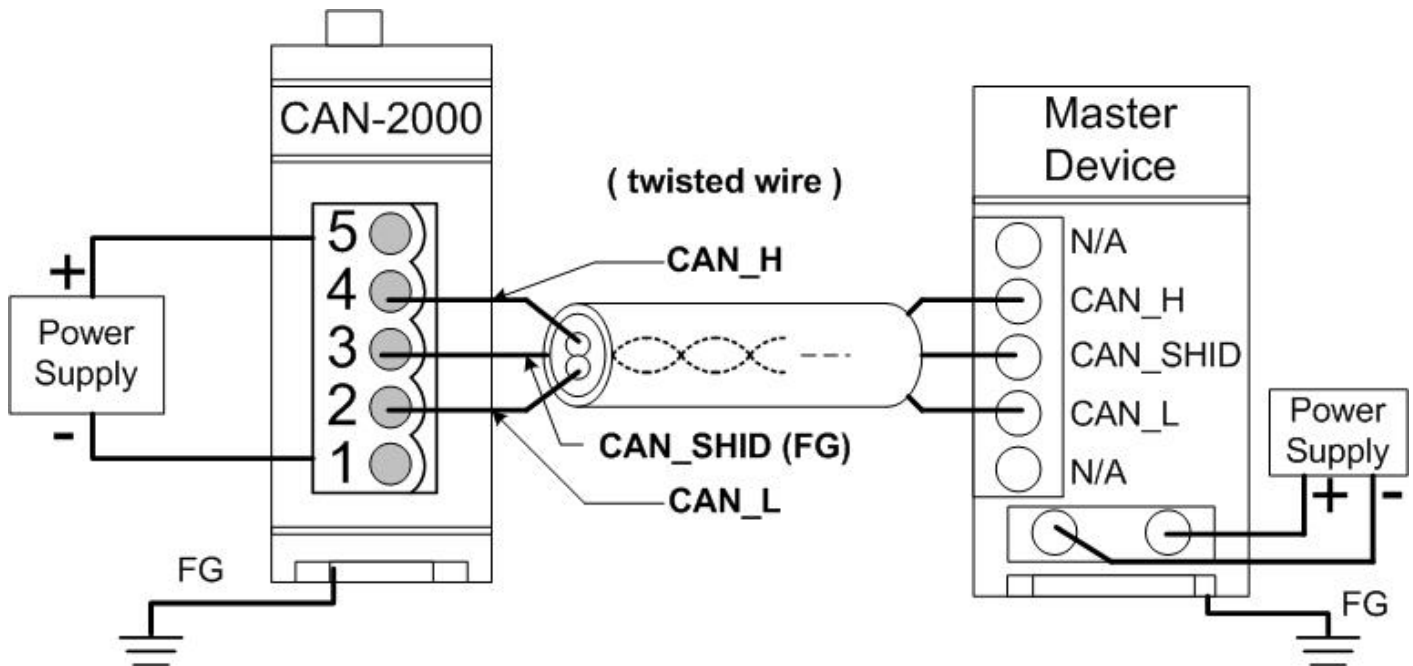
CAN-2054D CAN Bus Wire Connection



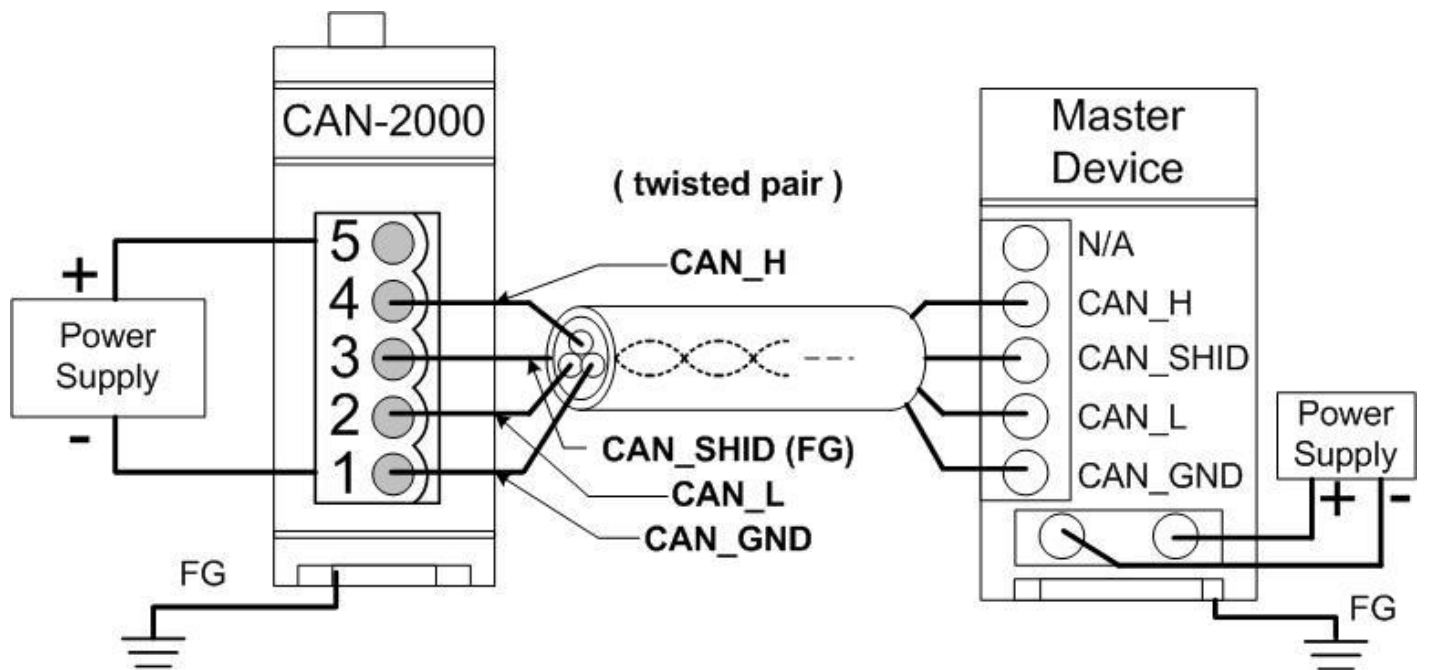
Pin	Signal	Description
5	CAN_V+	Power positive
4	CAN_H	Signal high of CAN Bus line
3	CAN_SHLD	Cable Shield (FG)
2	CAN_L	Signal low of CAN Bus line
1	CAN_GND	CAN ground

* CAN_SHLD (FG) is Optional.

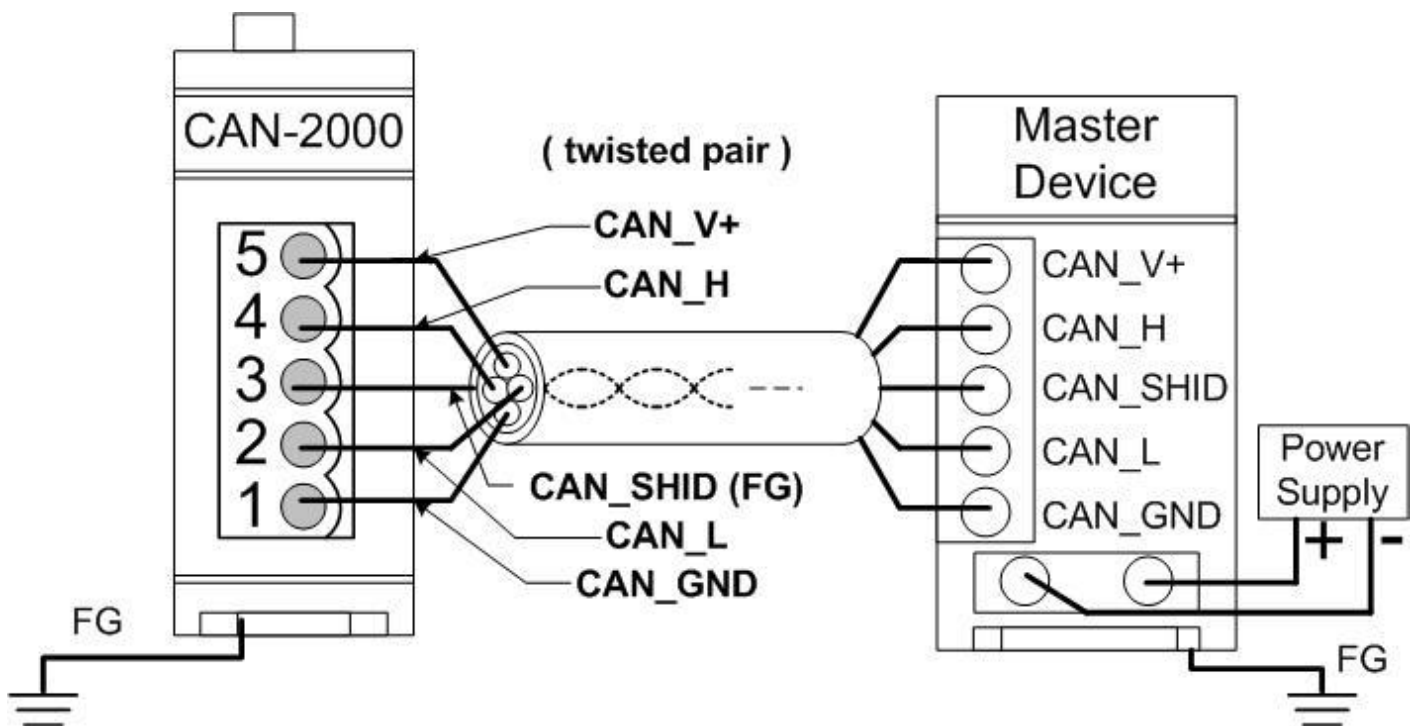
2-Wire Connection



3-Wire Connection

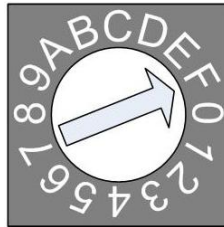


4-Wire Connection (The CAN-2000 is powered by the master device)



CAN-2054D Firmware Update

Step 1 – Set Module to “Bootloader” mode (set baud rate to 0xF). Then power on the module. After power on, the module’s led(PWR, NET, MOD) will be flashed at the same time. It means that the module have entered into “Bootloader” mode.



Baud Rate Rotary Switch

Step 2 – Run FW_Update_CAN Utility



(FW_Update_CAN Utility)

[1] CAN Device :

The below ICP DAS CAN products are supported by FW_Update_CAN utility for firmware update.

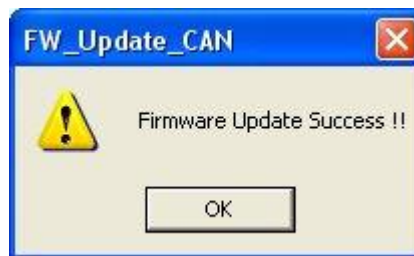
- (1) RS232 to CAN : I-7530
- (2) Ethernet to CAN : I-7540D
- (3) USB to CAN : I-7565, I-7565-H1, I-7565-H2
- (4) CAN Card : PISO-CM100(U),
PISO-/PCM-/PEX-CAN200 / CAN400

Before firmware update, users need to set the below parameters.

- (1) Select CAN hardware interface
- (2) set Dev_Port or Board_ID
- (3) set CAN_Port” number

[2] Download Firmware :

- (1) Click “**Browser...**” button to choose firmware file, can_2054d_vX.X.fw.
- (2) Click “**Start Firmware Update**” button to start firmware update and it will show the total percentage of firmware update in progress bar. After the firmware update finished, it will show the “Firmware Update Success !!” message.



CAN-2054D firmware Download:

ftp://ftp.icpdas.com.tw/pub/cd/fieldbus_cd/devicenet/slave/can-2000d/can-2054d/firmware/

FW_Update_CAN Utility Download:

ftp://ftp.icpdas.com.tw/pub/cd/fieldbus_cd/devicenet/slave/can-2000d/tools/fw_update_can_tool/