

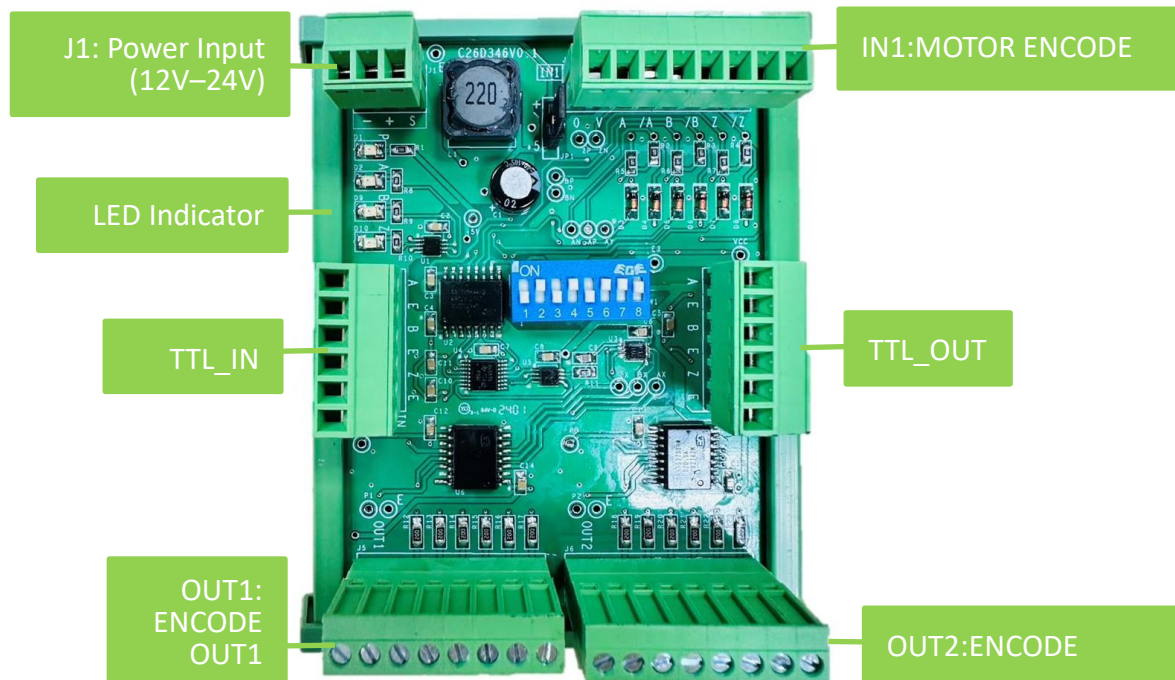


User Manual

Encoder Signal Splitter

Encoder Splitter User Manual (Maximum 300kHz)

Appearance Overview



J1	-	+	S					
IN1	0	+V	A	/A	B	/B	Z	/Z
OUT1	E1	V1	A	/A	B	/B	Z	/Z
OUT2	E2	V2	A	/A	B	/B	Z	/Z
TTL_IN	A	E	B	E	Z	E		
TTL_OUT	A	E	B	E	Z	E		

(Single Encoder)

-	+	S
Power Supply Connection		
+ : Connect to 24V power supply		
- : Connect to 0V		
S : Connect to		

(1-to-4 Splitter)

-	+	S
Power Supply Connection		
+ : Connect to 24V power supply		
- : Connect to 0V		
S : Connect to +		

IN1	0V	5V~24V	A	/A	B	/B	Z	/Z
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Motor Encoder Connection

- Connect to the motor encoder and use the DIP switch to configure signal routing.
- Factory Default Settings: DIP switch positions 2, 4, 6, 7, and 8 are set to ON.
- **J8 Settings**
 - When J8 is ON: The encoder power output (V) is fixed at 5V.
 - When J8 is OFF: The encoder power output (V) follows the main power supply voltage.
- **Signal Inputs**
 - IN1: A / $\bar{A}$ (Differential A signal)
 - IN2: B / $\bar{B}$ (Differential B signal)
 - IN3: Z / $\bar{Z}$ (Differential Z signal)



OUT1&OUT2

OUT1	E1	V1	A	/A	B	/B	Z	/Z
OUT2	E2	V2	A	/A	B	/B	Z	/Z

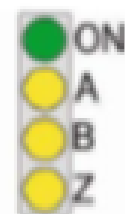
Signal Distribution Output

- **V1 & V2:** Provide power (5–30V) to **OUT1 & OUT2** devices.
 - **5V output:** Connection is optional.
 - **12V–24V output:** Requires an external **12V–24V power supply**.
- **E1 & E2:** Provide **0V (ground)** for **OUT1 & OUT2** devices.
- **OUT1:** A / $\bar{A}$, B / $\bar{B}$, Z / $\bar{Z}$ → **Square wave output** (Voltage determined by V1 & E1).
- **OUT2:** A / $\bar{A}$, B / $\bar{B}$, Z / $\bar{Z}$ → **Square wave output** (Voltage determined by V2 & E2).

LED Indicator Display

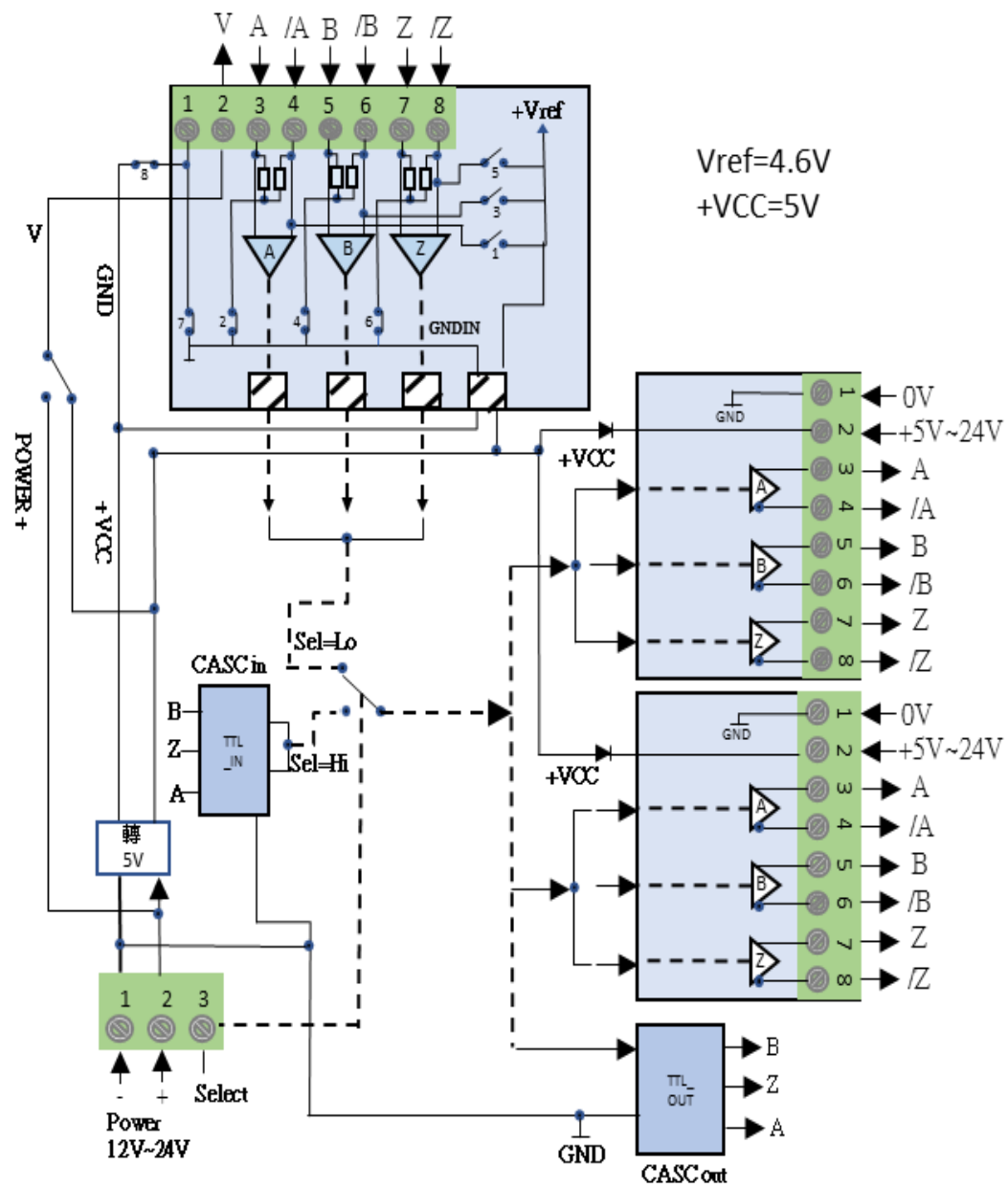
The LEDs indicate the following statuses:

- **POWER:** Power status
- **A Signal:** Receiving A signal
- **B Signal:** Receiving B signal
- **Z Signal:** Receiving Z signal



Note: When only the 24V control power is supplied, **all LEDs will light up green**.

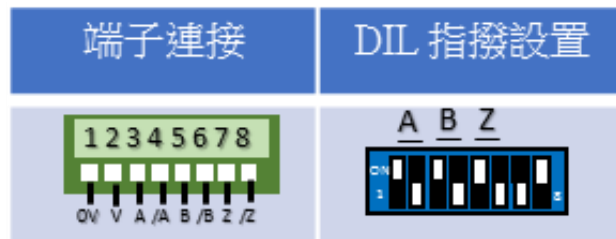
DIP Switch Configuration Diagram



Motor Encoder Input Wiring

Factory Default Setting:

Suitable for encoders with an output voltage of TTL (5V DC) or HTL (10–30V DC).



Single-Ended Mode

Designed for encoders with single-ended outputs and without complementary signals.

(Applicable only to HTL encoders with an output voltage of 10–30V DC.)



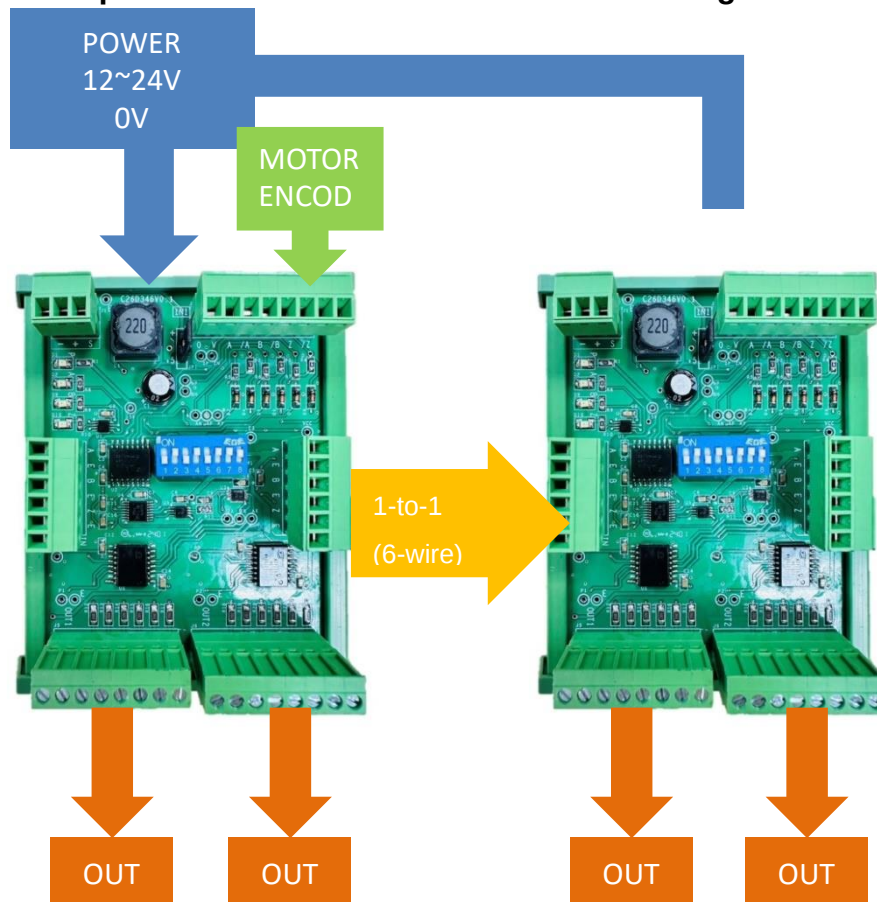
Additional 24V Power Supply

In addition to the standard factory configuration shown above, the device supports custom input configurations as required by specific applications.

For example: It is possible to connect differential encoder signals to channels A, /A, B, and /B, while using a single-ended index signal on channel Z.

The corresponding DIP switch settings for such configurations are illustrated below:

Example: Two Modules Combined for 1-to-4 Signal Distribution



DIP Switch Setting (Both Modules):

DIP switches 2, 4, 6, 7, 8 = ON (other switches OFF)

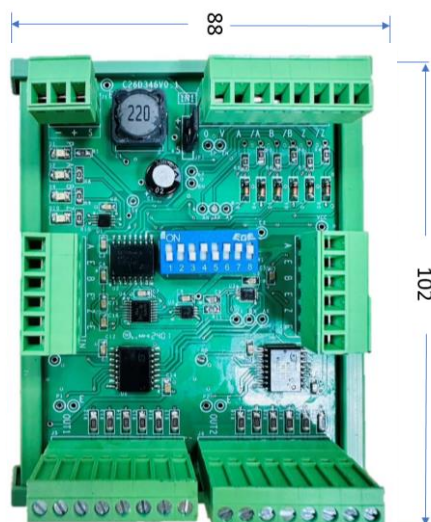
Wiring Instructions:

Left Module (Master):

Terminal J1_S connected to POWER 0V

Right Module (Slave):

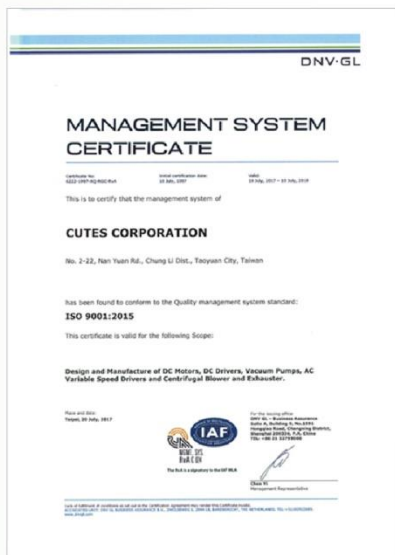
Terminal J1 S connected to POWER +24V



Enclosure Specification
Model: Dinkle KMR-0100
Unit: mm



Get ISO 9001 international quality certification



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