

ROE DELTA ROTARY OPTICAL ENCODER INSTRUCTION SHEET

(English Version)

CIRCUIT OF OUTPUT SIGNALS

Before connecting the encoder wirings to the receiver, please identify the type of the output signal with the specification.

1. Connection Table

■ ES/EH/ET Series

Connect the shield wire (bare wire) with the grounding end of equipment for better performance.

Wire Color	Brown	Blue	Black	Black /Red	White	White /Red	Orange	Orange /Red
Function	Vcc	0V	A	\bar{A}	B	\bar{B}	Z	\bar{Z}
Voltage Output	○	○	○	-	○	-	○	-
Open Collector	○	○	○	-	○	-	○	-
Line Driver	○	○	○	○	○	○	○	○
Push Pull	○	○	○	-	○	-	○	-

NOTE

- Vcc: It depends on model type (EXX-XXXXX5XX: 5V or EXX-XXXXX8XX: 5~12V or EXX-XXXXX9XX: 7~24V).
- Voltage Output: Internal 2K Ω pull up resistor is included.
- Line Driver: It is compatible with 26LS32 differential line receiver.

■ AS/AH Series (AXX-XXCXXXXX, AXX-XXVXXXXX)

Wire Color	Function	Wire Color	Function
Red	Vcc	Blue	2 ⁴
Black	0V	Purple	2 ⁵
Brown	2 ⁰	Gray	2 ⁶
Orange	2 ¹	White	2 ⁷
Yellow	2 ²	Pink	2 ⁸
Green	2 ³	Light Blue	2 ⁹

■ MH4/MT4 Series

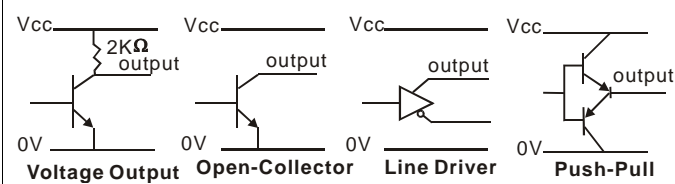
Wire Color	Function	Wire Color	Function
Black	A	Yellow	U
Black/Red	\bar{A}	Yellow/Red	\bar{U}
White	B	Green	V
White/Red	\bar{B}	Green/Red	\bar{V}
Orange	Z	Pink	W
Orange/Red	\bar{Z}	Pink/Red	\bar{W}
Brown	DC +5V	Blue	0V

■ CS7 Series

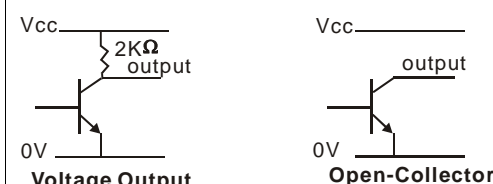
Pin No.	Function	Pin No.	Function
H	Vcc	K	0V
A	A	N	\bar{A}
C	B	R	\bar{B}
B	Z	P	\bar{Z}
T	Shielding	-	-

2. Output Circuit

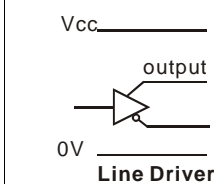
■ ES/EH/ET Series



■ AS/AH Series (AXX-XXCXXXXX, AXX-XXVXXXXX)



■ MH4/MT4/CS7 Series



ROE DELTA ROTARY ENCODER KULLANIMI

(Türkçe Version)

ÇIKIŞ SİNYALİ DEVRESİ

Encoder bağlantısı yapılmadan önce aşağıdaki tabloya göre çıkış tipi belirlenmelidir.

1. Bağlantı Tablosu

■ ES/EH/ET Serisi

Daha iyi bir performans için topraklama ucuna shield (aynalı kablo) kullanın.

Kablo Rengi	Kahve	Mavi	Siyah	Siyah/ Kırmızı	Beyaz	Beyaz/ Kırmızı	Turuncu	Turuncu/ Kırmızı
Fonksiyon	Vcc	0V	A	\bar{A}	B	\bar{B}	Z	\bar{Z}
Voltaj Çıkışı	○	○	○	-	○	-	○	-
Open Kollektör	○	○	○	-	○	-	○	-
Line Driver	○	○	○	○	○	○	○	○
Push Pull	○	○	○	-	○	-	○	-

NOTE

- Vcc: Model tipine bağlıdır (EXX-XXXXX5XX: 5V veya EXX-XXXXX8XX: 5~12V veya EXX-XXXXX9XX: 7~24V).
- Voltaj Çıkışı: Dahili 2K Ω pull up resistor bulundurulur.
- Line Driver: 26LS32 differansiel line receiver ile uyumludur.

■ AS/AH Serisi (AXX-XXCXXXXX, AXX-XXVXXXXX)

Kablo Rengi	Fonksiyon	Kablo Rengi	Fonksiyon
Kırmızı	Vcc	Mavi	2 ⁴
Siyah	0V	Mor	2 ⁵
Kahve	2 ⁰	Gri	2 ⁶
Turuncu	2 ¹	Beyaz	2 ⁷
Sarı	2 ²	Pembe	2 ⁸
Yeşil	2 ³	Açık Mavi	2 ⁹

■ MH4/MT4 Serisi

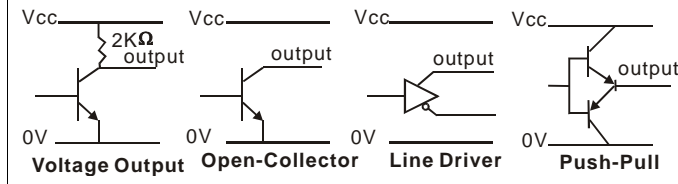
Kablo Rengi	Fonksiyon	Kablo Rengi	Fonksiyon
Siyah	A	Sarı	U
Siyah/Kırmızı	\bar{A}	Sarı/Kırmızı	\bar{U}
Beyaz	B	Yeşil	V
Beyaz/Kırmızı	\bar{B}	Yeşil/Kırmızı	\bar{V}
Turuncu	Z	Pembe	W
Turuncu/Kırmızı	\bar{Z}	Pembe/ Kırmızı	\bar{W}
Kahve	DC +5V	Mavi	0V

■ CS7 Serisi

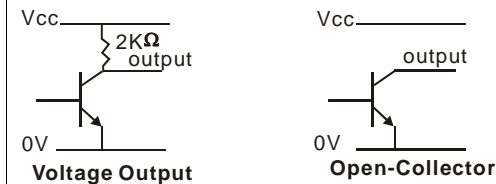
Pin No.	Fonksiyon	Pin No.	Fonksiyon
H	Vcc	K	0V
A	A	N	\bar{A}
C	B	R	\bar{B}
B	Z	P	\bar{Z}
T	Shielding	-	-

2. Çıkış Devresi

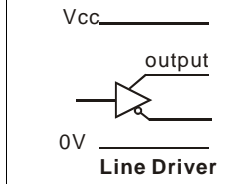
■ ES/EH/ET Serisi



■ AS/AH Serisi (AXX-XXCXXXXX, AXX-XXVXXXXX)



■ MH4/MT4/CS7 Serisi



(繁體版)

輸出訊號之電路

將編碼器連接至接收端前，請先根據下表確認輸出訊號種類。

1. 線路連接表

■ ES/EH/ET 系列 將屏蔽線(裸線)連接到應用設備之接地端，以使其有更高品質的輸出訊號。

線材顏色	棕	藍	黑	黑/紅	白	白/紅	橘	橘/紅
功能	Vcc	0V	A	\bar{A}	B	\bar{B}	Z	\bar{Z}
電壓輸出	○	○	○	-	○	-	○	-
開集極	○	○	○	-	○	-	○	-
差動	○	○	○	○	○	○	○	○
推挽	○	○	○	-	○	-	○	-

NOTE

- Vcc：依型式而定
(EXX-XXXXX5XX: 5V 或
EXX-XXXXX8XX: 5~12V 或
EXX-XXXXX9XX: 7~24V)
- 電壓輸出：內含 2KΩ 負載電阻。
- 差動：與 26LS32 差動接收器相容。

■ AS/AH 系列 (AXX-XXCXXXXX, AXX-XXVXXXXX)

線材顏色	功能	線材顏色	功能
紅	Vcc	藍	2 ⁴
黑	0V	紫	2 ⁵
棕	2 ⁰	灰	2 ⁶
橘	2 ¹	白	2 ⁷
黃	2 ²	粉紅	2 ⁸
綠	2 ³	淡藍	2 ⁹

■ MH4/MT4 系列

線材顏色	功能	線材顏色	功能
黑	A	黃	U
黑/紅	\bar{A}	黃/紅	\bar{U}
白	B	綠	V
白/紅	\bar{B}	綠/紅	\bar{V}
橘	Z	粉紅	W
橘/紅	\bar{Z}	粉紅/紅	\bar{W}
棕	DC +5V	藍	0V

■ CS7 系列

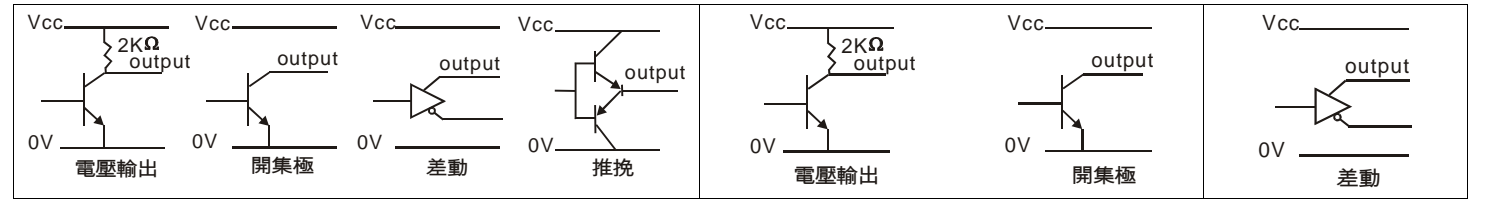
腳位定義	功能	腳位定義	功能
H	Vcc	K	0V
A	A	N	\bar{A}
C	B	R	\bar{B}
B	Z	P	\bar{Z}
T	屏蔽	-	-

2. 輸出型式

■ ES/EH/ET 系列

■ AS/AH 系列 (AXX-XXCXXXXX, AXX-XXVXXXXX)

■ MH4/MT4/CS7 系列



(簡體版)

輸出信号之电路

将编码器连接至接收端前，请先根据下表确认输出信号种类。

1. 线路连接表

■ ES/EH/ET 系列 将屏蔽线(裸线)连接到应用设备之接地端，以使其有更高品质的输出信号。

线材颜色	棕	蓝	黑	黑/红	白	白/红	橘	橘/红
功能	Vcc	0V	A	\bar{A}	B	\bar{B}	Z	\bar{Z}
电压输出	○	○	○	-	○	-	○	-
开集极	○	○	○	-	○	-	○	-
差动	○	○	○	○	○	○	○	○
推挽	○	○	○	-	○	-	○	-

NOTE

- Vcc：依型式而定
(EXX-XXXXX5XX: 5V 或
EXX-XXXXX8XX: 5~12V 或
EXX-XXXXX9XX: 7~24V)
- 电压输出：內含 2KΩ 負載電阻。
- 差动：与 26LS32 差动接收器相容。

■ AS/AH 系列 (AXX-XXCXXXXX, AXX-XXVXXXXX)

线材颜色	功能	线材颜色	功能
红	Vcc	蓝	2 ⁴
黑	0V	紫	2 ⁵
棕	2 ⁰	灰	2 ⁶
橘	2 ¹	白	2 ⁷
黄	2 ²	粉紅	2 ⁸
绿	2 ³	淡藍	2 ⁹

■ MH4/MT4 系列

线材颜色	功能	线材颜色	功能
黑	A	黄	U
黑/红	\bar{A}	黄/红	\bar{U}
白	B	绿	V
白/红	\bar{B}	绿/红	\bar{V}
橘	Z	粉紅	W
橘/红	\bar{Z}	粉紅/紅	\bar{W}
棕	DC +5V	藍	0V

■ CS7 系列

脚位定义	功能	脚位定义	功能
H	Vcc	K	0V
A	A	N	\bar{A}
C	B	R	\bar{B}
B	Z	P	\bar{Z}

T	屏蔽	-	-
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2. 输出型式

