

- Reverse Polarity Circuit Example -

■ Circuit

Reverse polarity circuit example for output voltage is shown below.

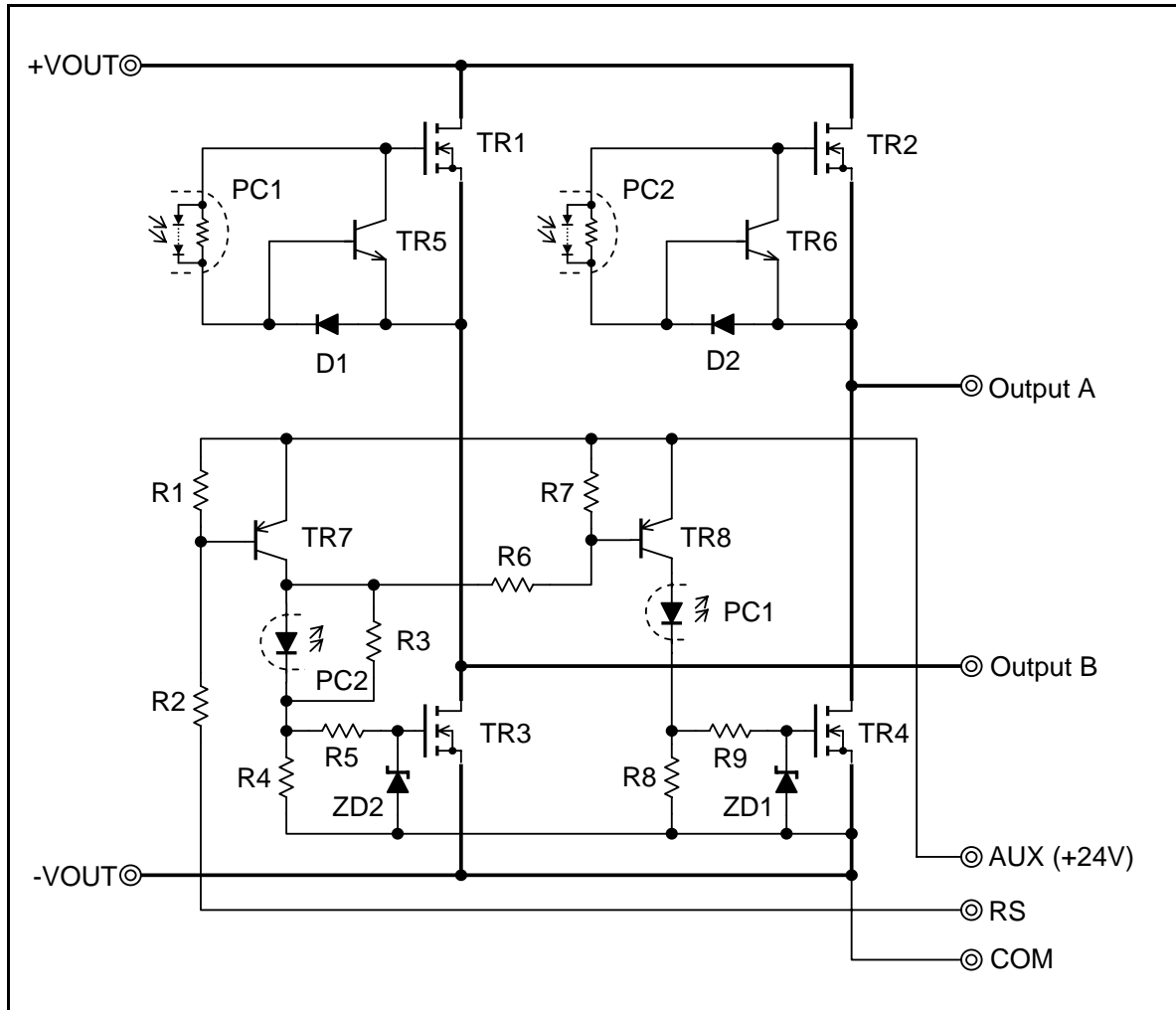


Fig 1 Reverse Polarity Circuit Example

■ Explanation of Operation

The polarity can be reversed by applying signal voltage.

When the RS terminal is connected to AUX terminal, the output polarity is positive.

Conversely, if RS terminal is connected to COM terminal, the output polarity is negative.

Table 1 Timing chart

Reverse signal	TR1	TR2	TR3	TR4	Output A - Output B
Low	OFF	ON	ON	OFF	Positive Out
High	ON	OFF	OFF	ON	Negative Out

Reverse polarity signal is designed as 24V (High).

■ Note

Table 2 Component list

Symbol	Component name	Mfg.
TR1	2SK3135	Renesas
TR2	2SK3135	Renesas
TR3	2SK3135	Renesas
TR4	2SK3135	Renesas
TR5	2SC1815	Toshiba
TR6	2SC1815	Toshiba
TR7	2SA1015	Toshiba
TR8	2SA1015	Toshiba
ZD1	HZS24NB2	Renesas
ZD2	HZS24NB2	Renesas
D1	1SS120	Renesas
D2	1SS120	Renesas
PC1	TLP591B	Toshiba
PC2	TLP591B	Toshiba

Table 3 Component value

Symbol	Value
R1	1.5k Ω 1/4W
R2	47k Ω 1/4W
R3	1.5k Ω 1/4W
R4	1.5k Ω 1/4W
R5	47 Ω 1/4W
R6	45k Ω 1/4W
R7	1.5k Ω 1/4W
R8	1.5k Ω 1/4W
R9	47 Ω 1/4W

TR1 to TR4 should be selected depending on power that system required.