- Remote ON/OFF circuit for multiple PBA units -

■ Circuit

PBA300F ~ 1500F and 1500T, how to remote ON/OFF for multiple PBA units is shown below.
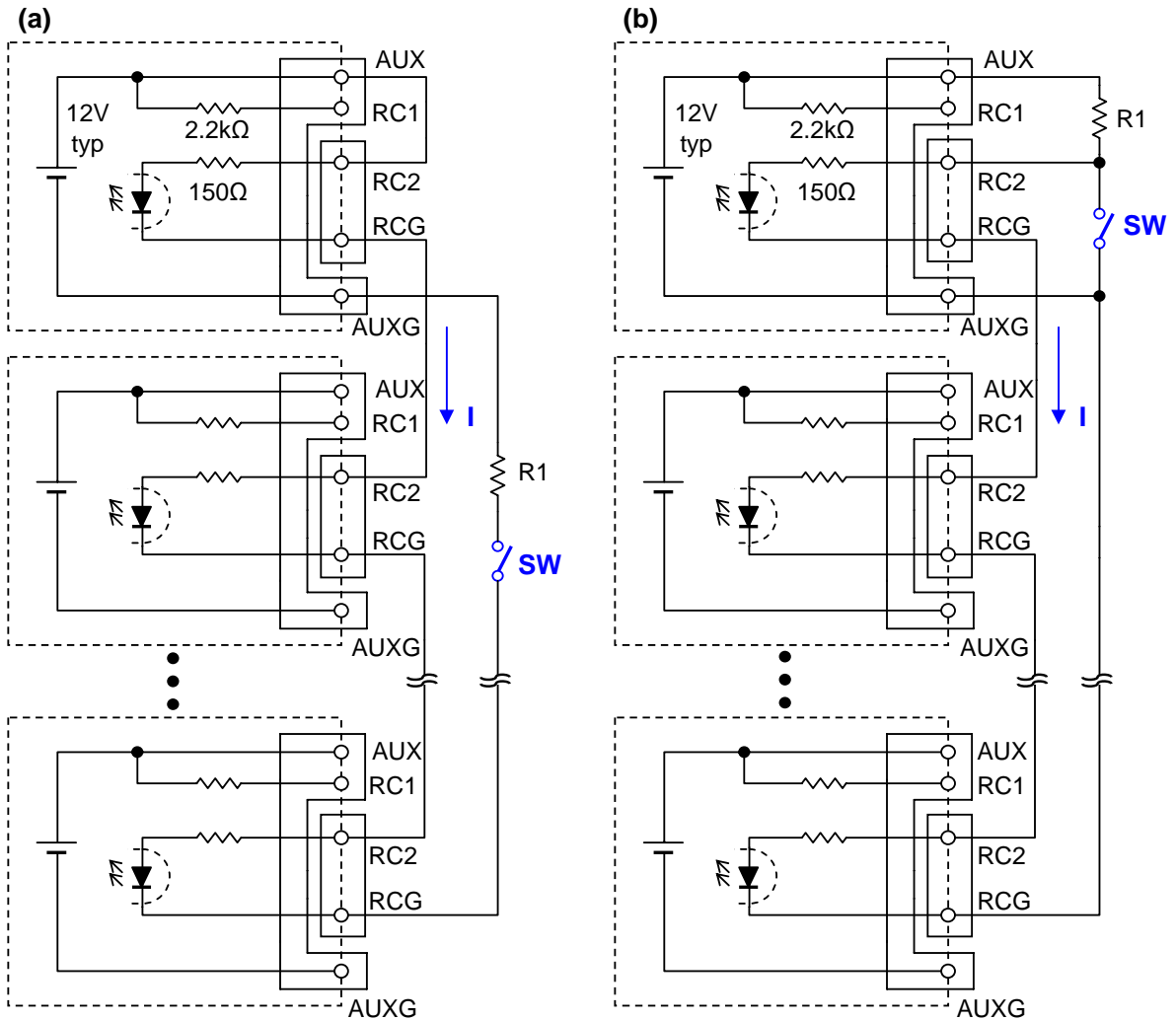
[PBA300F ~ 1500F and 1500T]

Fig1. Remote ON/OFF circuit for multiple PBA units

Table1. Specifications of remote ON/OFF

Method	(a)	(b)	Output
State of SW	SW open (I=0.1mA max)	SW close (I=0.1mA max)	ON
	SW close (I=3mA min)	SW open (I=3mA min)	OFF

*I : current from RC2 to RCG

■ Explanation of Operation

The output state is controlled by the current that flows through internal photocoupler. If the current flows, the output is turned OFF, or if the current is zero, the output is turned ON. Therefore, positive/negative logic is available depending on external wiring. Please see Table1 for specs and Fig1 for wiring. Remote ON/OFF circuit (RC2 and RCG) are isolated from input, output, FG and AUX.

■ Note

Please set the current that flows into RC2 as 5mA typ (12mAmax).

If the output voltage is turned off by the remote ON/OFF circuit, the built-in fan stops. However, in PBA300F, the fan speed slows down and keeps rotation.

If the output voltage is turned off by the remote ON/OFF circuit, PG signals turn to "High".

If the voltage/current that is not listed in Table1 is applied between RC2 and RCG, the remote ON/OFF function may not work correctly.

■ Characteristic

The example how to calculate R1, in case of three power supplies is shown below.

1. Case of **(a)**
   (1)SW open
   $I = 0mA$

   (2)SW close
   $I = (12V-1.4V \times 3) / (150\Omega \times 3 + R1) = 5mA$
   $\rightarrow \underline{R1 = 1.2 \ k\Omega}$

2. Case of **(b)**
   (1)SW open
   $I = (12V-1.4V \times 3) / (150\Omega \times 3 + R1) = 5mA$
   $\rightarrow \underline{R1 = 1.2 \ k\Omega}$

   (2)SW close
   $I = 0mA$