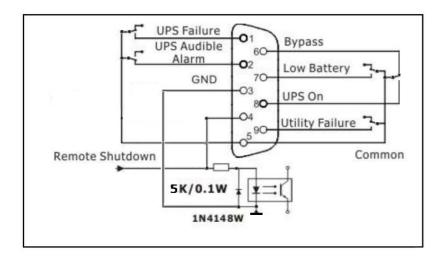
## A. Internal circuit of DB-9 port



Shutdown input: Pin 3 --- GND Pin 4 --- +12Vdc

Common:
Pin 5 --- common
terminal for all relays

**B. Electric Parameter of DB-9 port** 

Parameter		Symbol	Max.	Min.	Unit
Resistor*	DC Current	$\mathbf{I}_{R}$	6	1	mA
Diode	Reverse Voltage	VR	6	6 <del></del> 88	V
	Forward Current	IF	50	5 <b>-</b>	mA
	Peak Forward Current	IF (Peak)	1	5 <b>-</b> 8	Α
Relay	DC Voltage	VDC	24	-	V
	DC Current	IDC	1.0	-	Α

**Note:** It's required to retain the DC current lower than 6mA. Otherwise, it's necessary to add one resistor within DC current limitation in the serial loop of Remote Shutdown. (e.g. 2K resistor with at least 0.1W rating power). Refer to diagrams in **Application**.

C. Pin Assignment

Pin Assignment	Function	I/O
Pin 1	UPS Failure	O/P
Pin 2	UPS Audible Alarm	O/P
Pin 3	GND (Common for Pin 4)	Power Ground
Pin 4	On/Off	I/P
Pin 5	Common for Relays	Power Supply
Pin 6	Bypass Active	O/P
Pin 7	Low Battery	O/P
Pin 8	UPS On	O/P
Pin 9	Utility Failure	O/P

**P.S.** The ON/OFF function pin (pin4 & pin3) accepts more than 2s high level signal to perform UPS on and off actions.

**D. Function Description** 

AC Status	AO Status	Reason	
Pin 1 & Pin 5 connected	Pin 1 & Pin 5 disconnected	UPS failure	
Pin 2 & Pin 5 connected	Pin 2 & Pin 5 disconnected	UPS failure, utility failure, low battery, bypass active	
Pin 6 & Pin 5 connected	Pin 6 & Pin 5 disconnected	Bypass active	
Pin 7 & Pin 5 connected	Pin 7 & Pin 5 disconnected	Battery voltage is low	
Pin 8 & Pin 5 connected	Pin 8 & Pin 5 disconnected	UPS is in inverter mode	
Pin 9 & Pin 5 connected	Pin 9 & Pin 5 disconnected	Utility failure	