



Relay Control Card RELAYIO600

Quick Reference Guide

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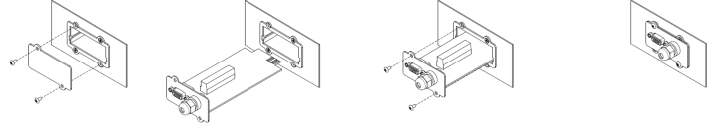
K01-0000427-00

Overview

The CyberPower Relay Control Card (RELAYIO600) offers users a solution for UPS status monitoring and local device control via 5 output relays. In addition, the RELAYIO600 provides 1 input contact to perform UPS shutdown in battery mode. This card is compatible with CyberPower Online UPS systems with an expansion port.

Installation Guide

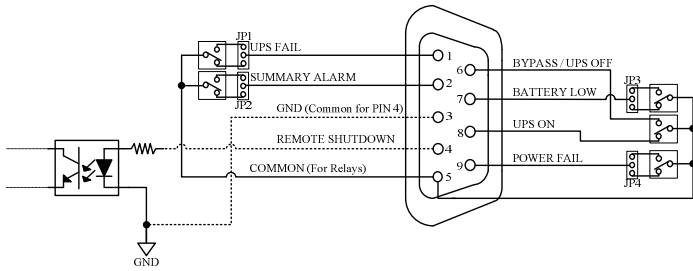
- Notice: The UPS can remain on when installing the RELAYIO600 card.
1. Remove the two retaining screws of the expansion port cover then remove the cover.
 2. Install the CyberPower RELAYIO600 card into the expansion port.
 3. Re-install and tighten the retaining screws.



Technical Specifications

RELAYIO600	
Electrical	
External S/D Voltage	7.5 - 12V
Power Dissipation	1.35W Max (Default 12V input)
Physical	
Dimensions (HxWxD)	43 x 67 x 155.7 mm 1.7 x 2.64 x 6.13 in
Weight	88.6 g / 3.13 oz
Environmental	
Operating Temperature	0 - 40°C 32 - 104°F
Operating Humidity	0 to 95%

Internal Circuit-DB9



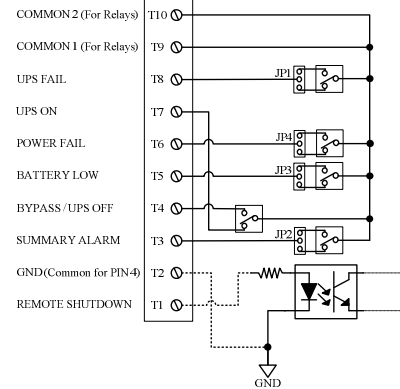
I/O Pinout Definition-DB9

PIN Assignment	Function	I/O	Jumper
PIN 1	UPS FAIL	O/P	JP1
PIN 2	SUMMARY ALARM	O/P	JP2
PIN 3	GND (Common for PIN 4)	Power GND	N/A
PIN 4	REMOTE SHUTDOWN	Power + Vcc	N/A
PIN 5	COMMON (For Relays)	O/P	N/A
PIN 6	BYPASS / UPS OFF	O/P	N/A
PIN 7	BATTERY LOW	O/P	JP3
PIN 8	UPS ON	O/P	N/A
PIN 9	POWER FAIL	O/P	JP4

Note1: Relay contact PIN 1/2/7/9 can be configured as Normally Open (NO) or Normally Closed (NC).

Note2: Please see the Function Description section for details on jumper position settings.

Internal Circuit-Terminal Block



I/O Pinout Definition-Terminal Block

Terminal Assignment	Function	I/O	Jumper
T1	REMOTE SHUTDOWN	Power + Vcc	N/A
T2	GND (Common for PIN 4)	Power GND	N/A
T3	SUMMARY ALARM	O/P	JP2
T4	BYPASS / UPS OFF	O/P	N/A
T5	BATTERY LOW	O/P	JP3
T6	POWER FAIL	O/P	JP4
T7	UPS ON	O/P	N/A
T8	UPS FAIL	O/P	JP1
T9	COMMON (For Relays)	O/P	N/A
T10	COMMON (For Relays)	O/P	N/A

Note1: Relay contact T3/5/6/8 can be configured as Normally Open (NO) or Normally Closed (NC).

Note2: Please see the Function Description section for details on jumper position settings.

Output Relay Rating

Max	Voltage	Current
	30VDC/125VAC	3A (per relay)

Function Description

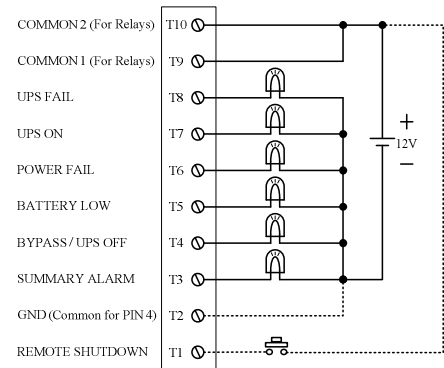
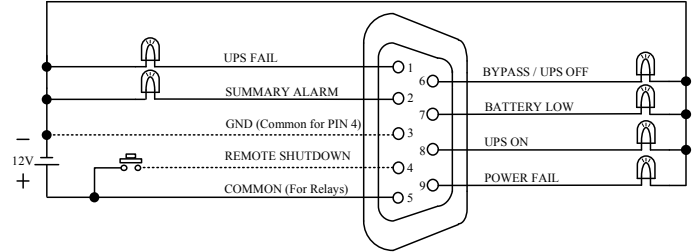
NO/NC Jumper Position	Status	Condition
JP1→NO	PIN 1 short to PIN 5 T8 short to T9/T10	Activated on UPS Fault
JP1→NC	PIN 1 open to PIN 5 T8 open to T9/T10	(Inverter Fault / DC Bus Fault / Over Temperature / Bat Test Fail / Bat Over Charge / Fan Error)
JP2→NO	PIN 2 short to PIN 5 T3 short to T9/T10	Activated on Summary alarm
JP2→NC	PIN 2 open to PIN 5 T3 open to T9/T10	(Inverter Fault / Output Short / DC Bus Fault / Over Temperature / Over Load / Bat Over Charge / Battery Low / Bat Test Fail / Wiring Fault / Load Over Setting Level / Fan Error)
N/A	PIN 6 short to PIN 5 T4 short to T9/T10	Activated when UPS is OFF or in Bypass Mode
JP3→NO	PIN 7 short to PIN 5 T5 short to T9/T10	Activated when Battery Low
JP3→NC	PIN 7 open to PIN 5 T5 open to T9/T10	
N/A	PIN 8 short to PIN 5 T7 short to T9/T10	UPS is on
JP4→NO	PIN 9 short to PIN 5 T6 short to T9/T10	Activated when Utility Power Fails
JP4→NC	PIN 9 open to PIN 5 T5 open to T9/T10	

Example Application

Provide 12VDC from **COMMON**(PIN 5/T9/T10) to **GND**(PIN 3/T2).

- Remote Monitor : Install alerting mechanism from DB-9 port/ Terminal(PIN 1/T8, PIN 2/T3, PIN 6/T4, PIN 7/T5, PIN 8/T7, PIN 9/T6) to **GND**(PIN 3/T2).
- Remote Shutdown : Install a push button from **COMMON** (PIN 5/T9/T10) to **REMOTE SHUTDOWN**(PIN 4/T1). Press the button for at least 5 seconds to shut off the UPS remotely.

Note: When the UPS is in battery mode, the shutdown pins (PIN 4 & PIN 3) require a minimum of 5 seconds of high level signal (connection to +12VDC) to perform the UPS shutdown where output is turned off after 120 seconds.



Conformance Approvals

FCC Warning

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does not cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

Canadian Compliance Statement

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicable aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

CAN ICES-3 (B)/NMB-3(B)

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Hours of Operation:

Monday – Friday, 7:00am – 6:00pm (CST)

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