

Alarm Functions

PR signal

This alarm is incorporated into each base power unit. The PR terminal is set high when input voltage into the main body of the base power unit is lowered below specification and/or the internal fan is stopped.

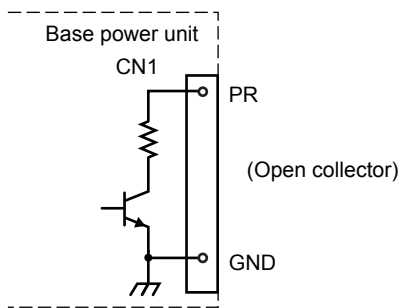
LV-Alarm signal

This alarm is incorporated into each DC module. The LV-Alarm+ terminal is set high when the output of the DC module is lowered below specification and/or is stopped.

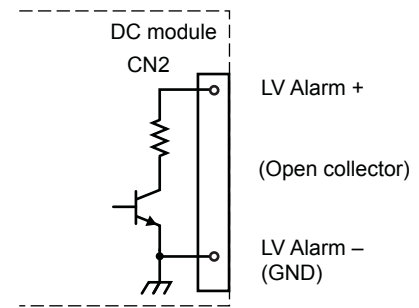
Alarm Specifications

Alarm Signal	Operating Condition	Alarm Signal State
PR	Good	Set low ($\leq 0.8 \text{ V}$ and $\leq 8 \text{ mA}$)
	Bad	Set high (2 to 35 V, or open)
LV	Good	Set low ($\leq 0.8 \text{ V}$ and $\leq 20 \text{ mA}$)
	Bad	Set high (2 to 35 V, or open)

PR terminal internal circuit



LV-Alarm terminal internal circuit



Output voltage adjustable range and remote sensing

Output voltage adjustable range

Each DC module has either one or two output voltage adjusters. Rotate the adjuster clockwise to increase the output voltage and counterclockwise to decrease the output voltage. When adjusting the output voltage, be sure not to exceed either the rated output power of the system, or the rated output current of the module. The output voltage adjustable range varies for each DC module. Please ascertain the specification of each DC module before using.

Remote sensing

Some DC modules incorporate remote sensing function. Remote sensing functions allow the system to compensate for voltage reduction due to output wiring. The range of voltage compensation available varies according to DC module, as shown in the table at right.

When using remote sensing, be sure to conduct a thorough evaluation and adjustment of the application system, based on the remote sensing connection example shown.

Be sure to pay attention to following notes when using the remote sensing function:

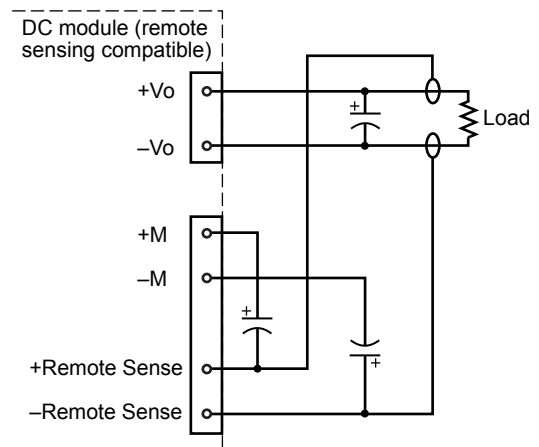
- Be sure to use thick wire, with a sufficient current capacity margin above the maximum output current for wiring from power supply to the load. Set the line drop to the compensated voltage or below.
- Oscillating waveforms and/or fluctuations of output voltage could arise due to wiring and load impedance. Be sure to apply a thorough evaluation before using the products.

Remote Sensing Voltage Compensation

DC Module Type	Voltage Compensation Range
C150S03, C150S05, C150S12, C150S15	0.15 V and below
C150S24	0.30 V and below

NOTE: Any DC module not listed in this table is not compatible with remote sensing.

Remote sensing connection example




CAUTION: When a bad connection (for example, caused by a loose screw) of a load wire arises, the load current flows into the remote sensing wire and it could cause damage to the power supply due to overheating. Be sure to pay attention when connecting wires.


Remote on/off control

Each DC module has a remote on/off capability incorporated. This function allows the output voltage to be switched on and off by an external signal input to the DC module corresponding Remote On/Off terminal.

By applying a voltage in the range of 10 to 27 V to the Remote On/Off + terminal, the output of the corresponding DC module is stopped. Please note that the fan inside of the main body of the base power unit does not stop as a direct result of the output of a DC module being stopped by the Remote On/Off function.


	CAUTION: If a voltage out of specification is applied, it could cause malfunction and/or damage to the power supply. Be sure to apply specified voltage.
---	---

A remote on/off signal effects each DC module individually and cannot be used to shut all output off via the corresponding base power unit. All or some of the GND common slots in a DC module can be stopped and started simultaneously by connecting each remote on/off circuit in parallel.

	NOTE: The GND common slots (and the isolated slot on the C650) should not be used to stop the base power unit.
---	---

The AUX signal output terminals (in base power unit connector CN1) can be used for remote on/off control.

Model C650 has two such terminals, AUX1 and AUX2. Use AUX1 for DC module on/off control by connecting it to the GND common slots (slots 1 to 4) and use AUX2 for DC module on/off control by connecting it to the isolated slot (slot 5).

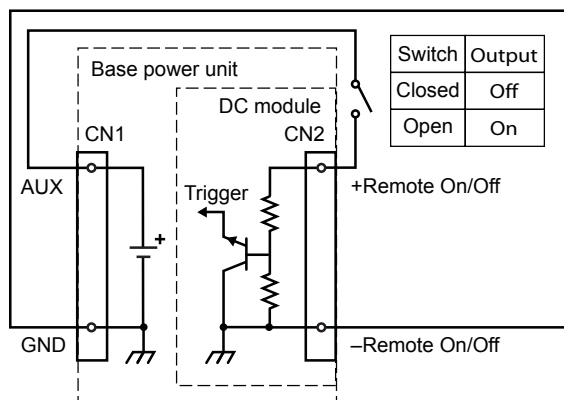
	CAUTION: If a combination of connections is used that is different from the combination specified above, it could cause malfunction and/or damage to the products.
---	---

The specification for operation of the remote on/off function is shown in the table at right, when using the connection examples shown.

Remote On/Off Signal Specification

Remote On/Off Terminal Input Signal	DC Module Output State
Low (0 to 0.5 V) or open	Output on
High (10 to 27 V)	Output off

Remote On/Off connection example using switch



Remote On/Off connection example using transistor

