Quick Start Guide: VoltPAQ-X1 Linear Power Amplifier

STEP 1 Check Components and Details

Make sure your VoltPAQ-X1 Amplifier includes the following components:

1. VoltPAQ-X1 Linear Power Amplifier
2. 4-pin DIN to 6-pin DIN motor cable
3. RCA to RCA cable
4. 5-pin-DIN to 4xRCA cable
5. Main power cord
6. Two sets of Slow blow fuses -3A, 250 V, 3AG
7. Quanser Workstations Resources DVD* (includes digital versions of User Manual and Quick Start Guide)

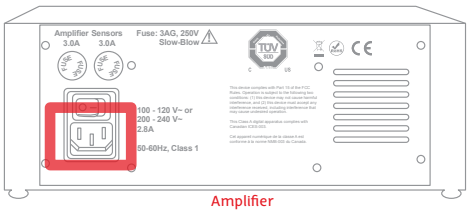
*DVD supplied with the QUARC Real-time RapidControl Prototyping software,

STEP 2 Set Up the Hardware

A

- If you are using the VoltPAQ-X1 to drive a Quanser experiment, please refer to the particular experment's Quick Start Guide for connection instructions.
- If you intend to use the VoltPAQ-X1 to drive a third party experiment, please refer to the VoltPAQ-X1 Userm Manual for connector pinouts and specifications.

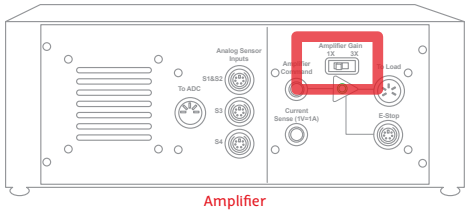
B



Amplifier

Plug the supplied power cord into the back of the amplifier.

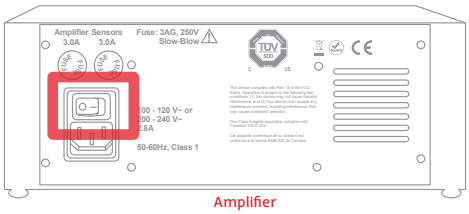
C



Amplifier

Set the GAIN switch on the VoltPAQ-X1 to 1X.
This is the default setting used for most devices.

D



Amplifier

Make sure you turn ON the VoltPAQ-X1 before running the experiment.

TROUBLESHOOTING

Please review the following recommendations before contacting Quanser's technical support engineers.

Amplifier does not power up.

A. Make sure the power cable is firmly connected to the power connector on the back of the amplifier.

B. Verify that the fuses are not burnt. If a fuse is burnt, see the VoltPAQ-X1 User Manual for fuse rating and replacement information.

Motor/actuator is not being driven.

A. Verify that the fuses are not burnt. If a fuse is burnt, see the VoltPAQ-X1 User Manual for fuse rating and replacement information.

B. If the VoltPAQ-X1 is being used with a Quanser system, verify that all the connections illustrated in the User Manual for that Quanser product have been made correctly (found on the Resources CD).

C. If the Emergency stop switch (optionally purchased through Quanser) is connected to the amplifier, make sure the red button is in the upper position to enable the amplifier. The amplifier cannot be enabled when the button is in the lower position. Twist the button to ensure it is in the enabled position.

LED does not light up.

A. Verify that the fuses are not burnt. If a fuse is burnt, see the VoltPAQ-X1 User Manual for fuse rating and replacement information.

B. If the Emergency stop switch is used, make sure that this is released (upper position).

C. The amplifier might be overheated. Power down the amplifier and let it rest for 5 minutes.

No analog readings from the amplifier.

A. Ensure the 5-pin-DIN to 4xRCA cable is firmly connected from the "To ADC" socket on the VoltPAQ-X1 to analog input channels on the data acquisition (DAQ) device.

B. If the VoltPAQ-X1 is being used with a Quanser system, verify that all the connections illustrated in the User Manual for that Quanser product have been made correctly (found on the Resources CD).

C. Make sure the analog input channel you are attempting to read matches how the connections are made. For example, if your sensor is connected to the "S3" socket on the VoltPAQ-X1, then the signal is available on the red RCA cable. Verify that the red RCA is connected to the analog input channel you are attempting to read.

D. Verify that the fuses are not burnt. If a fuse is burnt, see the VoltPAQ-X1 User Manual for fuse rating and replacement information.

E. Ensure the analog input channels on your data acquisition (DAQ) device are working. Refer to your DAQ User Manual for information on how to test it.

F. If the sensor is working, then the Analog Sensor Input connector "S1 and S2", " S3" or "S4" socket may be defective. Try using a different Analog Sensor Input.

STILL NEED HELP?

For further assistance from a Quanser engineer, contact us at tech@quanser.com or call +1-905-940-3575.

Full range of power amplifiers from Quanser

VoltPAQ-X2

VoltPAQ-X4

AMPAQ-L2

AMPAQ-L4

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