

Questions? – User’s Manual References

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Questions? Diagnostics, is my unit working?

An efficient method by which to conclude that the PWMC is connected properly and the output is working is to use a typical handheld DMM and measure the voltage across a load (does not have to be your device). A standard DMM will respond very slowly and will provide some “average” value that will change as the duty cycle is varied.

Questions? – Support:

Support for your application is available by contacting Applied Processor and Measurement, Inc. directly. Contact information is provided below. You may also e-mail or FAX us your intended application / connection and questions so that our engineers may best address your installation by inspecting your intended use.

Web: www.appliedprocessor.com
Phone: 716-741-1141
FAX: 716-741-1142

Factory Set-Up

Model Number:	_____ 205 _____
Serial Number:	_____
DOM:	_____
This unit is fused for operation at:	_____
Fuse Installed:	_____

NOTICE !

Read This First Before Proceeding

INSTALLATION GUIDE

**MODEL 205
PULSE WIDTH MODULATION
CONTROLLER**

DOCUMENT NO. 00046-09



Thank you for purchasing the Applied Processor and Measurement, Inc. Model 205 Pulse Width Modulation Controller. We are pleased to provide this high quality, feature rich, and value minded product for use in your laboratory.

The purpose of this guide is to ensure proper usage and installation of your Model 205 Pulse Width Modulation Controller (PWMC 205) for your application.

This guide will:

- describe what you need to control your device with the PWMC 205
- describe how to set the internal fuse in your PWMC unit for safe operation
- illustrate how to connect the PWMC 205 in a low side drive application
- reference the User's Manual for further information

What you will need to set up your application with the PWMC 205:

- your device that is to be driven by the PWMC 205
- a power supply capable of providing the voltage and current necessary to drive your device and power the PWMC 205 unit
- wire – 18 AWG (or greater capacity) preferred (optional: standard banana jacks may be used to connect the power supply and the PWMC 205 where possible)

Fusing:

Before connecting, set the fuse in your PWMC 205 unit! The PWMC 205 contains an internal fuse for protection of your device and for protection of the unit's internal power MOSFET. This fuse is connected in series with your device and is intended to protect BOTH your device as well as the output drive electronics in the PWMC 205.

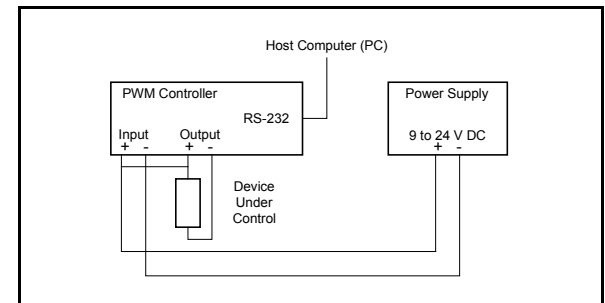
The table below is intended as a guide for fuse values based on the operating voltage of the device to be controlled. Note that this is the MAXIMUM recommended fuse for that operating voltage. In order to protect your device you should LOWER the fuse value as necessary. This selection is VERY IMPORTANT so as to protect your device as well as the PWMC unit. Your unit is fused for a default operating voltage as indicated on the back of this guide.

Operating Voltage	Maximum Fuse Recommended
5V	8A
8V	5A
12V	4A
15V	3A
18V	2.5A
24V	2A

The fuse used in the PWMC 205 is a standard component, and size (3AG), available at any hardware store or electronics supply store. To replace the fuse, simply remove the back cover – the fuse is clipped to the back of the PWMC 205 main circuit board.

Connection:

If you are driving your device using a low side drive configuration with a single power supply, use the figure below. Note that an external connection MUST be made from the positive (+) terminal of the output, and the positive terminal of the input on the PWMC unit.



Refer to the User's Manual for other possible connection configurations (Section 3.0 Installation).

Operation:

The PWMC is equipped with a front panel interface which provides three pushbuttons for control of the PWMC output signal. A 2 line by 16 character LCD displays the current mode of operation, the frequency, and the duty cycle. The three pushbuttons allow for mode selection and variance of the PWMC output signal settings:

- SELECT – selects which field on the display that UP or DOWN will operate on (SELECT moves the cursor)
- UP – will change the value by incrementing
- DOWN – will change the value by decrementing.