

Applied Processor and Measurement, Inc.

Model 400 PWM Controller Kit – Start-up Guide

• Summary

Thank you for purchasing the Applied Processor and Measurement, Inc. Model 400 PWM Controller Kit. The kit will help you get started using the PWM Driver / Controller in your applications.

The Model 400 PWM Driver / Controller functions as a signal conditioning module. The unit performs one of two basic functions: analog in to duty cycle out, and, RS-232 command in to duty cycle out. Prior to using the Model 400, it is necessary to configure the unit for operation. Configuration is facilitated using the Model 400's serial port. The Model 400 PWM Controller Kit is designed to supply you with the necessary equipment for a simple set-up to be able to configure the Model 400 from a desktop / benchtop setting with a standard personal computer.

• Kit Contents

The Model 400 PWM Controller Kit contains the following:

- ▶ Model 400 PWM Driver / Controller unit
- ▶ AC/DC adapter / power supply for Model 400 unit, 12V (see back for details on exact unit)
- ▶ in-line plug for power supply for connection to the Model 400 terminals
- ▶ adapter, 6 pin miniDIN to DB-9M
- ▶ PC serial cable, DB-9F to DB-9F
- ▶ Model 400 PWM Driver internal fuses, 4A, quantity 5

• Installation / Set-up

Refer to the figure on the back of this sheet – this set-up will allow for communications with the Model 400 unit, enabling configuration.

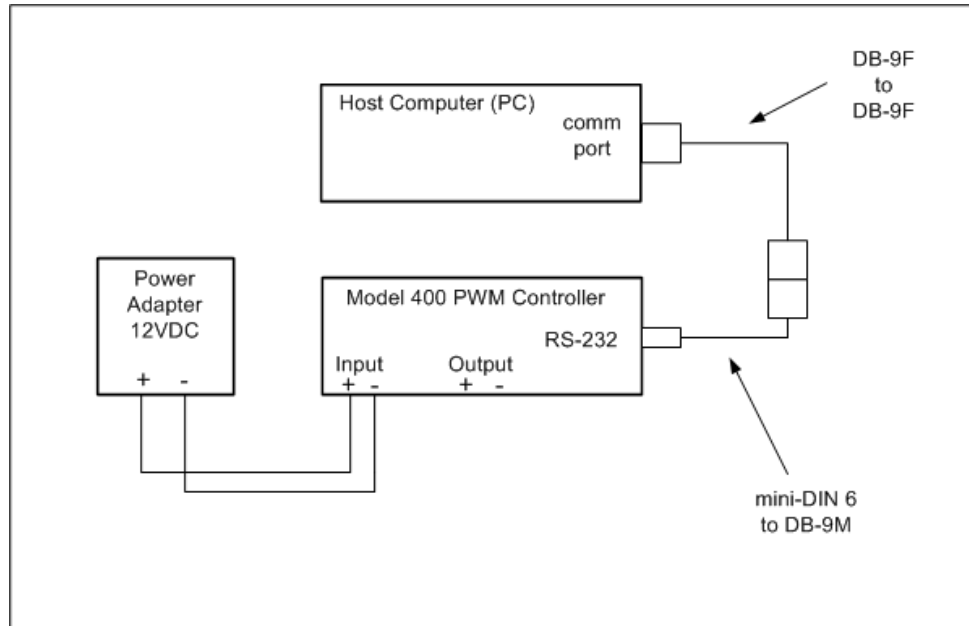
• Configuration and References

All documentation and the PC configuration software for the Model 400 PWM Driver / Controller is available on our website at www.appliedprocessor.com/model-400.html. The User's Manual is downloadable in pdf format. Refer to section 3.1 for instructions on setting up the kit, installing the GUI software, configuring the unit, and installing and testing the unit.

A Visual BASIC Graphical User Interface (GUI) program is available on our website to aid in the configuration of the Model 400 PWM Driver / Controller. The program may be downloaded and installed freely on any PC at your facility. The GUI provides for a simple on-screen, windows based interface for configuration of the Model 400 unit.

It is not required that the GUI program be used. A terminal emulation program such as HyperTerm may be used to configure the unit. The Model 400 PWM Controller communicates at 9600 baud, 8 data bits, 1 stop bit, no parity, and no flow control. Refer to the User's Manual Section 4.6 for information on configuration and Section 4.4 on the RS-232 port command interface.

- Model 400 PWM Driver / Controller Kit set-up



Power Adapter supplied:

- input 110 Vac, 60 Hz, output 12V, 300 or 500 mA unregulated
- input 110 Vac, 60 Hz, output 12V, 500 mA regulated
- input 110/220 Vac with EU plugs, 50/60 Hz, output 12V, 500 mA regulated

Note: The adapter is supplied with the kit for convenient use as a power supply to enable configuration of the PWM Controller at your desk / bench top. It is not intended that this adapter be used for powering your application load. It may, however, be suitable to power your application load. It may also be suitable to use in dual supply configurations and configurations where the Model 400 is used as a signal generator. Consult the Model 400 User's Manual and the power adapter specifications before using this power adapter for your application.

Also note that unregulated power adapter output voltage values will vary with load. The PWM Controller itself has minimal current requirements (30mA), drawing little current from the adapter. Therefore, the voltage at the PWM Controller could actually measure over 17V. This is acceptable for the PWM Controller as it requires a 9 to 24V DC power input.

- Contact Information

For any questions regarding the Model 400 PWM Controller, configuration, installation, applications assistance, and for custom configurations and equipment availability, contact APM, Inc. Product Support.

Applied Processor and Measurement, Inc.
 support e-mail: support@appliedprocessor.com
 phone: 716-741-1141
 FAX: 716-741-1142