



Illustration 1: Remote Programmer

Wiper and Motor Controller Remote Programmer

Features:

- Allows adjustment of non volatile settings without a computer interface
- Powered from motor controller.
- On board switches for Forward reverse and Enable
- On Board analog potentiometer for Analog input Ain
- Connections for breakout to pins
- On board Leds for status and power indication

Connection:

The unit is connected to the wiper motor with the 8pin Ethernet cable. The cable must be a straight through cable, some cables are reversed. No other connections are required.

When connecting to other devices the unit require the 5v line, Ground line, and connection to the motor controllers Rx input. No other connections are required.

This unit is not design to receive commands from the serial port, only transmits.

Operation

Adjust the 9 analog potentiometers. After the adjustments are made press the toggle button at the bottom of the board. The red led will flash when sending data. A small flat screwdriver is needed for turning the potentiometers. For higher values turn potentiometer to right or clockwise. The mode is set by turning the rotary switch in the top left corner.

Top Row:

AUP up acceleration

ADW down acceleration

POR proportional

INT integral

DIF differential

Bottom Row:

AST stop acceleration

MXD maximum duty cycle

CCW counter clockwise stop position

CCS clockwise stop position

STE and INV:

The STE command and INV command can be adjusted. STE is not used on the wiper motor. STE is used on other motor controller products from DeviceCraft.

The STE command and INV is set to zero by setting the mode to 9.

The bits of the STE and INV are set by sending MODE 10 or A. The top row of potentiometers set the STE bits. The bottom row of potentiometers set the INV command. The low bits on on the right and high bits are on the left.

The values set are store in non volatile memory, do not need to be reentered upon restarting the unit. Not setting these values correctly can disable the unit.

FR and En switches:

The FR forward reverse and EN enable switches are connected to the 8 pin 8p8c connector. The switches are spst. Switching the switch back applies 5v to the outputs. Switching the switch forward opens the unit. These switches can be used to test or operate the unit.

Analog output:

The knob potentiometer is connected to the Ain line on the 8p8c connector. Turn the knob clockwise increases the output toward 5v. There are two solder through holes on the board for overriding the analog output if desired. If overriding the potentiometer can be cut off or placed in the middle to avoid interfering with the external signal. Overriding the signal may be necessary for R/C PCM or signals from a computer or external generator.