Thank you for purchasing The Basic ECU. Ecu is uploaded with the latest Speeduino firmware and basic settings have been done and tested.

This ecu is Speedyloader compatible so any firmware updates use the speedyloader application, Board selection will be v0.4 in Tuner Studio

## Speeduino.ini is on the main directory of the USB stick included in the package.

You will need this for your Tunerstudio project.

\*\*\*Please make sure you use a FUSE inline with the main power input, no more than 10A fuse\*\*\*

Remember IGNITION output are for Smart coils or Ignitor IGBT's, Do not connect normal 2 pin 12V coils to the ECU.

GM LSx Coils work great and the default 5v trigger out of the ECU connects directly to their trigger input.

All outputs are switch to ground, Except ignition outputs.

Wire injectors/Ignition in firing order, ECU fires outputs 1-2-3-4. For a 4 cylinder car with a firing order of 1-3-4-2

ECU channel 1- injector/ignition 1, ECU channel 2 - injector/ignition 3, ECU channel 3 - injector/ignition 4,

and ECU channel 4 - injector/ignition 2

All sensor/trigger inputs are only 5 volt tolerant, DO not connect 12 volts to them.

VSS has a 5v pull up for hall sensor type trigger, you will need a VR conditioner for a VR style speed sensor.

Launch control pin is a going to ground trigger, you will need a 1k external resistor connected to 5 volt and this pin.

This ECU is configured as

Trigger inputs.

For Hall settings:

The 5 volt pull up is not enabled for the HALL sensors, Please check your HALL sensor does not have a 12 Volt internal pull-up (usually only if it has a 12V supply voltage, Some GM HALL sensors have 12v pull up).

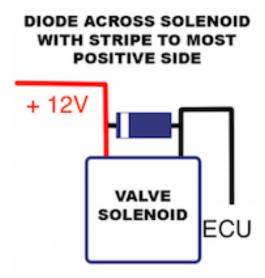
Hall triggers are connected to Crank + and CAM + only, Crank input is the main trigger. If your trigger signals all come from the distributor the main trigger connects to crank input.

For sequential you will need a main trigger (Crank) and a secondary trigger (CAM). Cam trigger will be a single trigger every 720 degrees of crank rotation. The Cam trigger is to reset the count for the ecu to know when to fire cylinder 1 again to start the cycle over.

Tach output can be selected as 5 volt or 12 volt. Default is 5 volt.

Idle1 output is for idle Solenoid. These work best with a Diode across the ECU output and 12v positive wire.

1n4004 - 1n4007 will work. This gives the solenoid faster response times.



If you purchased Bluetooth adapter it will be configured and the sticker on side with Bluetooth name and 4 digit password.

You'll also find the wiring diagrams and jumper settings paper work included in your package.

You should have received ECU, 26 pin male connector, and 26 crimp pins to make your wiring harness.

Any Help email me at : z\_nick\_hay\_z@hotmail.com Speeduino Forum as : NickZ