

# Four Channel Coil Driver Module P/N 554-112

## **OVERVIEW:**

PN 554-112 is a four channel coil driver module that is used to drive a two wire "dumb" ignition coil. Such coils are typically used on Ford Modular and late model Chrysler HEMI engines. Holley EFI ECUs require this coil driver module when running two wire "dumb" coils. Each module can drive four coils, so two are required for an eight cylinder engine that uses eight coils.

Included is the coil driver module, an input harness with pins that can be connected directly into the HP or Dominator ECU, and an output harness with pigtail ends. The user must connect these to their specific coils.

**NOTE:** This module is not required for "smart coils", as the Holley EFI ECUs can directly drive them (such as GM LSx coils).

### **BASIC OPERATION:**

The coil driver module is placed "in-line" between the ECU EST outputs and the coils themselves. The module is triggered by individual EST outputs from the ECU on the gray 7 pin connector. The module outputs (black connector) are then run to the ignition coils.

#### WIRING:

#### Gray Input Connector:

The following wiring information does not specify which specific engine cylinder goes into which input and output on the module. It is important that the EST Output from the ECU goes to the proper engine cylinder. Make sure that the color of the module wiring (Pink, Blue, Orange, or Yellow) on the ECU EST output for that cylinder goes to the same color wire on the output to coil for that cylinder.

**NOTE:** Ensure that you use heat shrink tubing or weatherproof connections for trouble-free operation.

#### **HOLLEY EFI WIRING CHART:**

ECU Pin	Engine Cylinder
J1-B21	1
J1-B15	2
J1-B22	3
J1-B16	4
J1-B23	5
J1-B17	6
J1-B24	7
J1-B18	8

On a V8 engine, each module is usually installed on one bank of cylinders. On a Chevy type, this would be one module on cylinders 1-3-5-7 and one on 2-4-6-8. Ford engines would have one module for cylinders 1-2-3-4 and one for cylinders 5-6-7-8.

# **Gray Connector:**

The gray connector contains the inputs and should be wired as follows. The #A, #B, etc., are generic. The installer can decide what cylinders they want each to represent. Just make sure the input and output to the module correspond to the proper cylinder.

- A Black (16 ga.) Engine/Cylinder head or ground that is tied directly to engine.
- B Pink (20 ga.) EST Output "#D"
- C Blue (20 ga.) EST Output "#C"
- D Not Populated
- E Black/Yellow (20 ga.) J1-B14
- F Orange (20 ga.) EST Output "#B"
- G Yellow (20 ga.) EST Output "#A"
- H Red (16 ga.) Switched +12v power. Should be installed to a fused (15A for each module) power source. Make sure this source has proper current capability. Do NOT power the coils with any outputs directly from the ECU, specifically the "EST 12V output". That output is a very low current output.

# **Black Output Connector:**

The black connector contains the outputs to the coil and should be wired as follows:

- A Yellow (18 ga.) Coil "#A"
- B Orange (18 ga.) Coil "#B"
- C Blue (18 ga.) Coil "#C"
- D Pink (18 ga.) Coil "#D"
- E, F, G, H Red (18 ga.) A single wire must go to each individual coil. The sequence does not matter. This wire provides +12v power. This power comes from Pin H on the gray connector. Make sure Pin H from the gray connector comes from a switched (not constant battery) power source or the coils will be powered continuously.