

# iElectron

## MD-10 PULSE DIVIDER INSTALLATION GUIDE

V1.02 2023/08/28

### 1. Introductions and operations

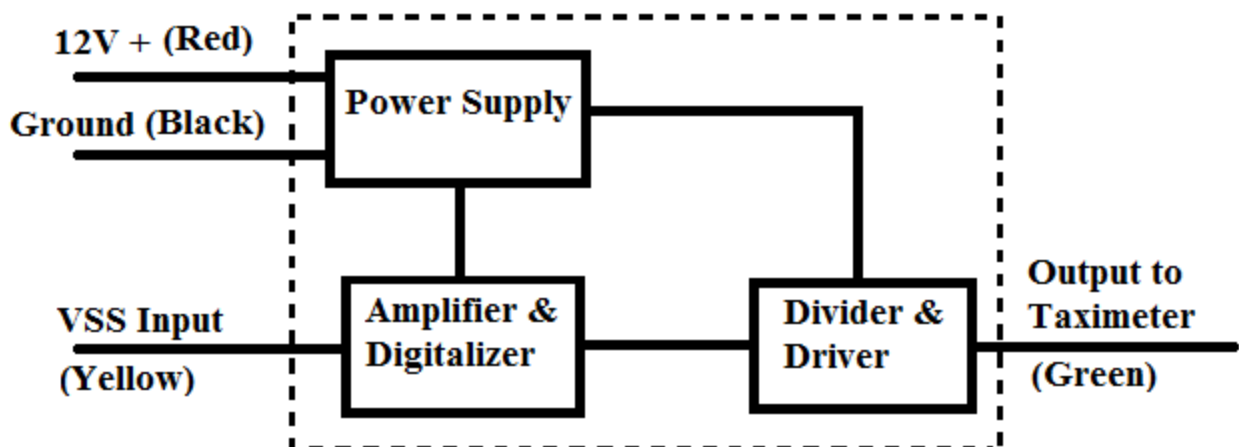
The iElectron Pulse Divider MD-10 was designed to have 3 main functions.

- 1) Amplifying and shaping the VSS input signal, so it can be read by a taximeter.
- 2) Reduces the impact on vehicle VSS wire.
- 3) Reduces the vehicle's pulse value.

The MD-10's extremely low signal load means the impact to the vehicle circuit is limited to the minimum.

By setting the jumper to the proper position, the input pulse value will be reduced up to 32 times before it is fed to the taximeter.

The special circuit design allows our pulse dividers to process any type of VSS signal. This ensures the taximeter is working properly at any speed.



### Specifications

Power input: 9-16V DC

Operating temperature: -30 °C to 70 °C (-22 °F to 158 °F)

Storage temperature: -30 °C to 80 °C (-22 °F to 176 °F)

Input cut-off frequency: 3KHz

## 2. Wiring and Installation

### a) Mounting and Wiring:

The pulse divider should be installed under the steering wheel; in such a way with no vibrations, no potential hazard and away from vent and airbag. Open the panel and run the wire. The wire must not be cut, squeezed or drawn with force, and must be away from any sharp edges and moving parts. All the connections must be soldered and properly sealed with electric tape or heat-shrink tube.

### b) Connecting:

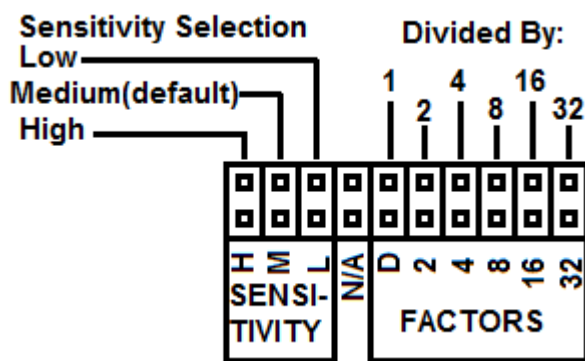
**Red wire (Power):** connected to the vehicle battery via a 2 amp fuse. Provides primary power to the taximeter.

**Black wire (Ground):** connected to the vehicle chassis ground at or close to the vehicle battery ground connection

**Yellow wire (Input):** connected to the Vehicle Speed Sensor (VSS) wire.

**Green wire (Output):** connected to the VSS input wire of Taximeter.

## 3. Jumper Setting



### a) Sensitivity Selection:

The default setting is on "Medium" which gives 0.5Vp-p sensitivity. This setting should be fine for most modern vehicles. If the taximeter doesn't work at low vehicle speed, the pulse divider may need higher sensitivity, you can put the jumper on "High". If the taximeter receives false pulses when the vehicle is stopped, the pulse divider may need lower sensitivity, you can put the jumper on "Low".

### b) Dividing factors selection:

Set the proper factor to let your taximeter have the best performance. The divider will reduce the vehicle pulse value by dividing it by the number of setting. For example, with the jumper on position 8, the taximeter will only receive 5,000 pulses per KM on a vehicle with 40,000 pulses per KM. The "D" position stands for "Direct", which means not divide. The pulse divider will act only as an amplifier and filter.

Note: N/A position should be left empty; the pulse divider may not be functioning normal if you put a jumper on this position.