



# IC-100 CD Ignition System

- User Programmable
- RS-232 and CAN Communications
- Manually Programmable Energy Allows Adaptability to Varying Gas Quality
- High Energy System
- Overspeed Protection

## DESCRIPTION

The IC-100 is a microprocessor controlled, spark capacitive discharge ignition system capable of supplying ignition energy for a wide range of gas engines with 1 to 8 cylinders.

The number of cylinders and the corresponding firing pattern as well as the trigger disc configuration are programmed individually.

Integral to the IC-100 is the capability for three dimensional timing mapping:

- Potentiometer Curve (38° Programmable Span)
- 0-5 V Analog Signal
- Cylinder/Cylinder Timing Adjustment

The IC-100 is capable of firing up to 8 cylinders with either one or two spark plugs per cylinder. In case of two spark plugs per cylinder, the corresponding ignition coils must be wired in series.

One pick-up senses impulses from a trigger disk mounted on the camshaft (single-firing) or crankshaft (double-firing). This information is sent to a microprocessor which controls the ignition system.

## Operational Features

The IC-100 has several functional features to ensure proper operation:

- Trigger Signal Check
- Input Signal Fault Recognition
- Shutdown
- Manual Ignition Energy Adjustment
- Hour Meter

### Safety Features:

- Overspeed Shutdown
- Permissive Start Output
- Pick-up Fault Detection
- Internal Error check
- Errors Are Displayed Via LED Flash Codes

### Permissive Start:

A 24 VDC transistor input switches 24 V to ground when the ignition system is in operation. The switching current is 100 mA. This output can be used to power an external relay, which, e.g. opens the fuel valve.

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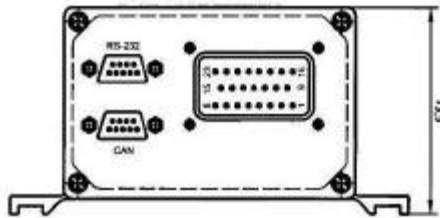
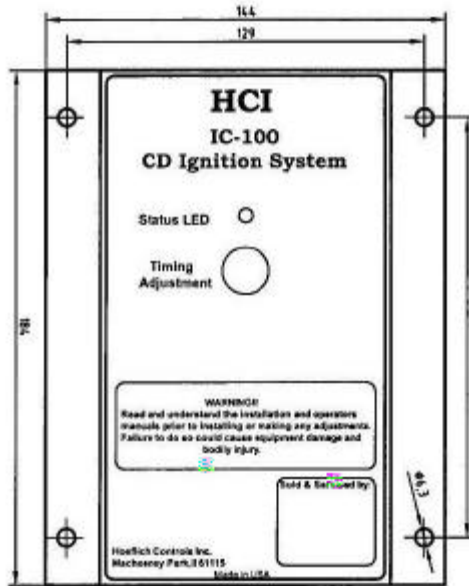
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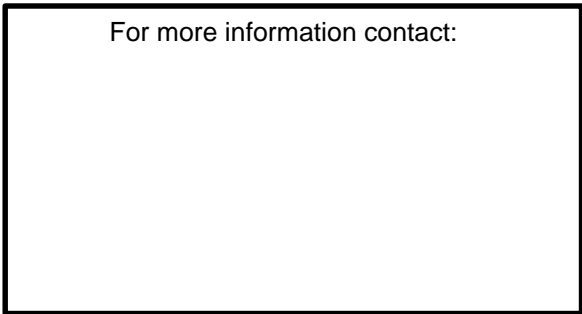
## Specifications

- 8 ignition outlets for engines with 1 – 8 cylinders for single firing and 2 – 16 cylinders for double firing
- suitable for 2- and 4-stroke engines
- 10 V to 30 VDC supply voltage
- 20 A peak current
- 5 A average current consumption
- 100 – 300 V primary voltage
- 50 KV secondary voltage
- max. 600 µsec spark duration at 20 KV
- negative engine ground
- temperature range:
  - control module: - 40° C to 70° C  
- 40° F to 158° F
  - ignition coils: - 40° C to 100° C  
- 40° F to 212° F



### IC-100 Ignition System

For more information contact:



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