



# TAKAI IGNITION SYSTEM 4 CHANNEL MODULE



The IGN84X Ignition Module is available in one to four channel configurations, are 30 amperes per channel, for use with most inductive two pin ignition coils in 12 or 24\* volt environments.

This device does not incorporate dwell control, current limiting or current sensing and should be used in systems in which dwell can be controlled or is known to the user.

⇒ When using the IGN84X, dwell tables for existing ignition modules (for example BOSCH BIM series) are not appropriate. Most modules incorporating current limiting are responsible for ignition firing once current limits are achieved. If dwell tables are not matched to coil data, coil damage, engine damage or both may occur. Contact us for specific dwell mapping.



**CAUTION:** the IGN84X inductive ignition system is a high power device. Improper use can lead to serious damage of the coils or IGN84X unit.

## ▶ FEATURES

- Four independent steady state 30 ampere circuits, operation in 12 or 24 volt environments
- Extremely fast, 7 uS switching time for precise timing control and improved output
- Sealed electronics suitable for all environments

100% MILITARY SPEC ELECTRONIC COMPONENTS

AUTO GRADE COMPONENTS WORK UP TO 125 DEGREES, MISSION SYSTEMS USE

MILITARY SPECIFICATIONS OPERATING AT UP TO 180 DEGREES FOR OPTIMAL RELIABILITY

AND PERFORMANCE.

## ▶ COMPATIBILITY

ALL AFTERMARKET ECU SYSTEMS RUNNING INDUCTIVE IGNITION COILS

- 1.0 - 10.0mH, 0.6 - 5 ohm primary resistance

## ▶ APPLICATIONS

- Coil-on-Plug coils  
All WeaponX, Denso, Visteon, Mitsubishi, Takai, NeXT or other inductive ignition coils
- Coils with primary resistance > 0.6 OHM

## ▶ SPECIFICATIONS

### Electrical

4 identical channels, each with:

- Output current:
  - Continuous at 25 degrees C (case temp) - 30 amperes - pulsed 50 amperes
  - Allows up to 80KV coil output spark
- Switching time - @ 125 degrees C (case temp) - 7uS,
- Input threshold:
 

0.8 volts minimum	Coil Input threshold: 4 volts minimum
6 volts maximum	30 volts maximum
1 - 20 mA	20 ampere
- Input Impedance - 15kilo ohms to ground
- Primary side clamping voltage 400V
- Maximum stored coil energy at peak current 800mJ

### Physical

- Size: 45mm x 21.5mm x 56mm  
(required to support 30amp current per channel on PCB and output wiring)
- Weight: approx 120 grams plus connectors
- Connectors:
  - Input: 12 pin DTM female
  - Output: 12 pin DTM female
- Maximum case temperature 175 degrees C