



CK Industrial Engineers :

## Control system for laser alignment fixture

As a leading supplier of specialist jigs and fixtures to some of the world's leading automotive manufacturers, CK Industrial turned to PTP to design and implement a control and measurement system with data logging and interfacing software for their laser alignment fixture.

**CK Industrial Engineers Ltd**



The Company

CK Industrial Engineers' core business is the design and manufacture of jigs and fixtures to the Automotive industry. The supply of this specialist equipment has been carried out on a global basis and even today we are expanding our global supply network to meet our customer requirements.

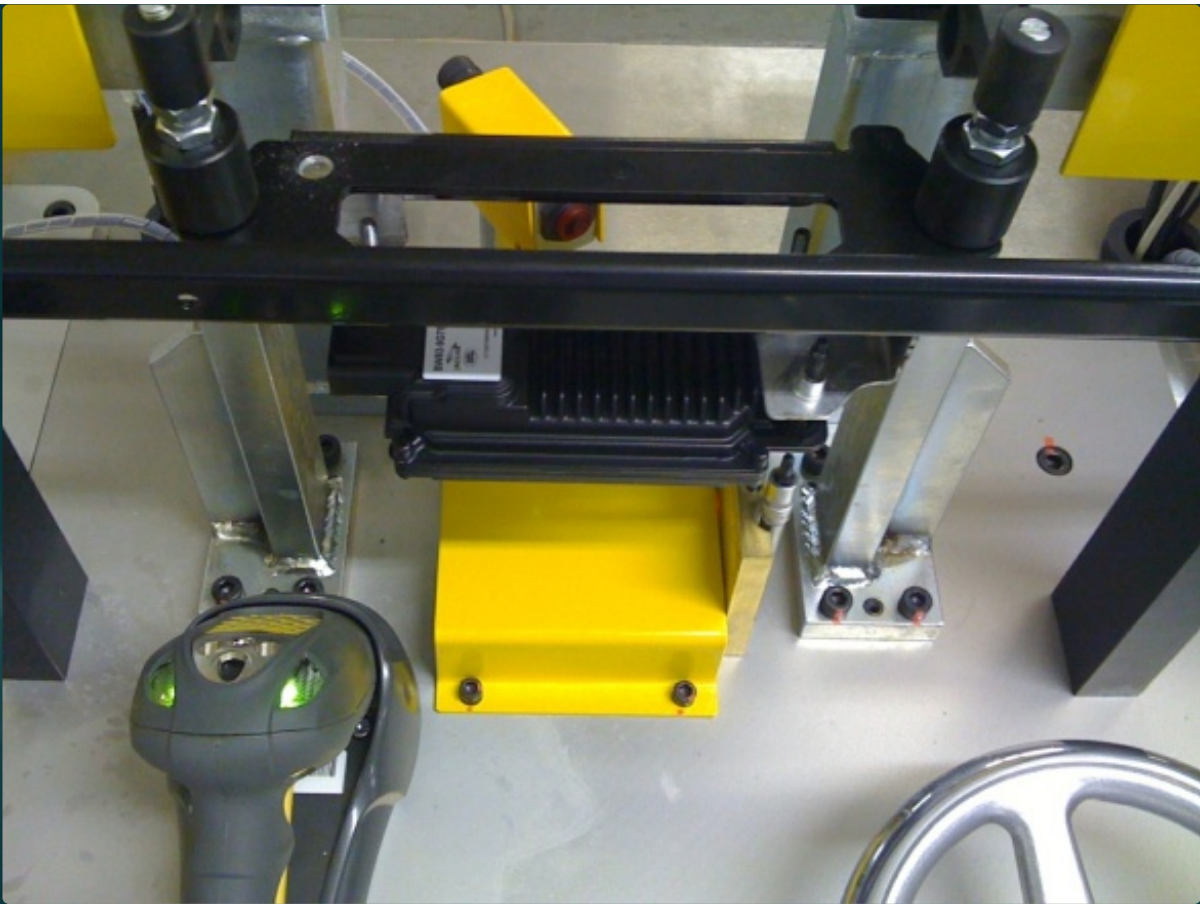
Through a procedure of precision measurement and adjustment within the fixture, the laser radar modules designed for adaptive cruise control systems can be accurately aligned to ensure proper operation when fitted to the front of the vehicle.



PTP developed a National Instruments hardware and software solution that provided:

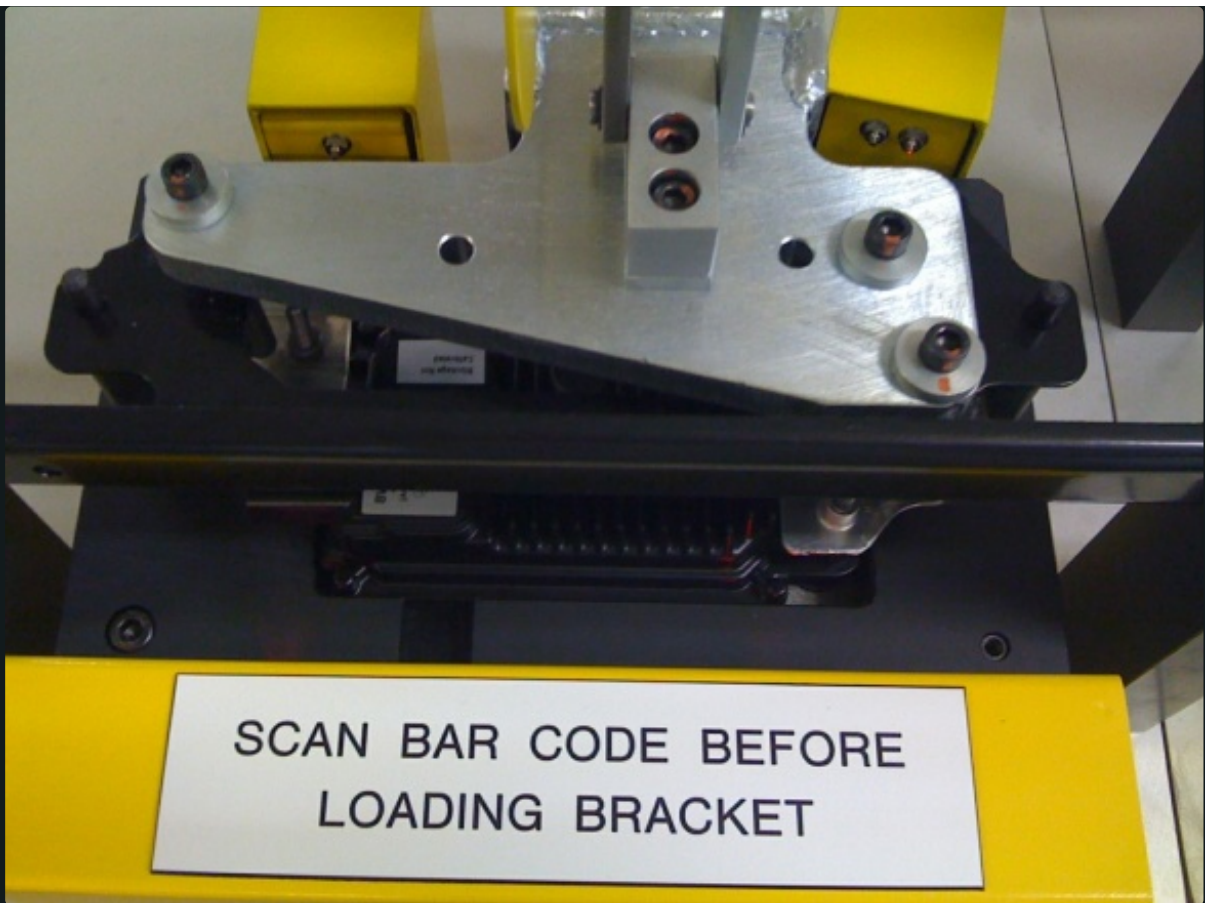


- › Digital I/O for control and monitoring of the fixture equipment
- › RS-232 communications to Keyence transducers for micron-precision displacement measurements
- › A bespoke software solution with a fluid and intuitive interface for operation of the fixture
- › Automatic and secure operator and system performance logging
- › The ability to retrieve information on all previously calibrated radar modules through a simple search facility
- › High configurability to adapt to changing system requirements



**IP66**  
STANDARD





By implementing a USB CompactDAQ solution with combined digital I/O and an RS232 communications module, PTP were able to design an inexpensive yet durable industrial control and monitoring solution for the laser alignment fixture.

Coupled with bespoke software that intuitively guides an operator through the procedures to assemble and align each radar module, and effectively logs each radar module with associated control data, CK Industrial were able to exceed their customer's requirements and deliver a fully working laser alignment fixture in good time and under budget.

## T E S T I M O N I A L

As a supplier to the world's leading automotive companies, CK Industrial maintains the highest standards in the supply of specialist jigs and fixtures. PTP have consistently proven their ability to exceed our expectations, providing a robust control and system monitoring solution to our laser radar alignment fixture and a software implementation that is both solid and reliable, with plenty of flexibility to accommodate the various specification changes we required over the years.

— Senior Project Manager,  
CK Industrial Engineers Ltd

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