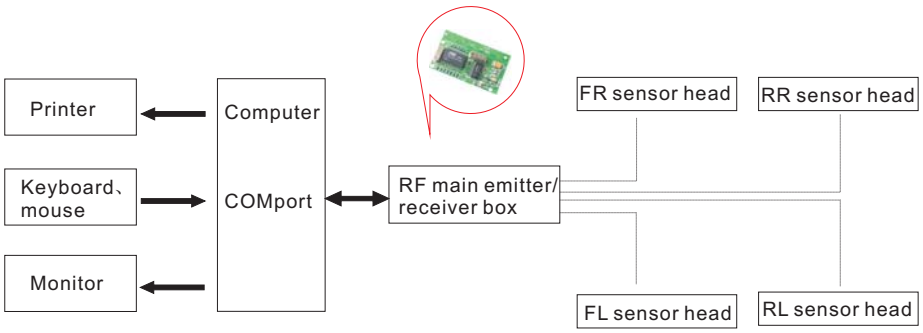
SHENZHEN HAC TELECOM TECHNOLOGY CO.,LTD.

HAC RF MODULE SOLUTION: Wheel Aligner

Wheel Aligner

Working framework

The whole system of wheel Aligner is composed of data sampling system and data processing system. The data sampling system consists 4 sensor heads. There are two CCD sensors in each sensor head. One is in the end, the other is in the center. Also, there is a twin-axle obliquity sensor to test the inclination angle of front, rear, left and right. The CCD sensor transfers the captured images and measured data, pre-processed by PIC, to computer system via RF transmitter for advanced processing. The captured data from the sensor reflects the relationship between the sensor and the relevant infrared emitter, while sensor heads are attached on the wheel rims via wheel clamps, therefore the geometrical relationships among 4 wheel rims can be calculated according to the data from the 8 CCD sensors, and the wheel alignment parameters are determined. The 8 sensors form a closed right-angle quadrilateral and realize the measurement of all wheel alignment.
In the actual application, the lenses on the 8 sensors are equipped with filters to avoid visible light's interference to the infrared LED.



The working framework of Wheel Aigner

Functions and Features

1. Measures the toe, camber, caster, SAI, setback, thrust angle, wheelbase difference, track difference etc...
2. Complete vehicle coverage-ectensible database of alignment data and measuring procedures for over 20,000 models of makes.
3. State-of-the-art CCD technology with eight IR enclosed measurement.
4. Cordless data communication with interference-proof data transfer.
5. Electronic leveling which can test the sensor head level automatically.
6. Real wheel alignment with Thrust Line as the measuring benchmark.
7. Front wheel alignment is available. User can flexibly select any two sensor heads to do front wheel alignment when certain sensor head is not working.
8. Parameter testing with the cars in lifted up position.
9. Three models of testing (quick alignment, standard alignment and front wheel alignment) to greatly improve your working efficiency.
10. Self-checking of sensor head inaccuracy-improve the reliability of testing accuracy.
11. Remote display for easy and convenient operation during the car testing.
12. Sensor head is easily installed for convenience and changed individually without re-calibration.
13. Windows XP operating system with graphical user interface.
14. Self-help menu for real time assistance.
15. Voice prompts during testingr.

PARTER:

AUTOBOSS Tech. Inc.