

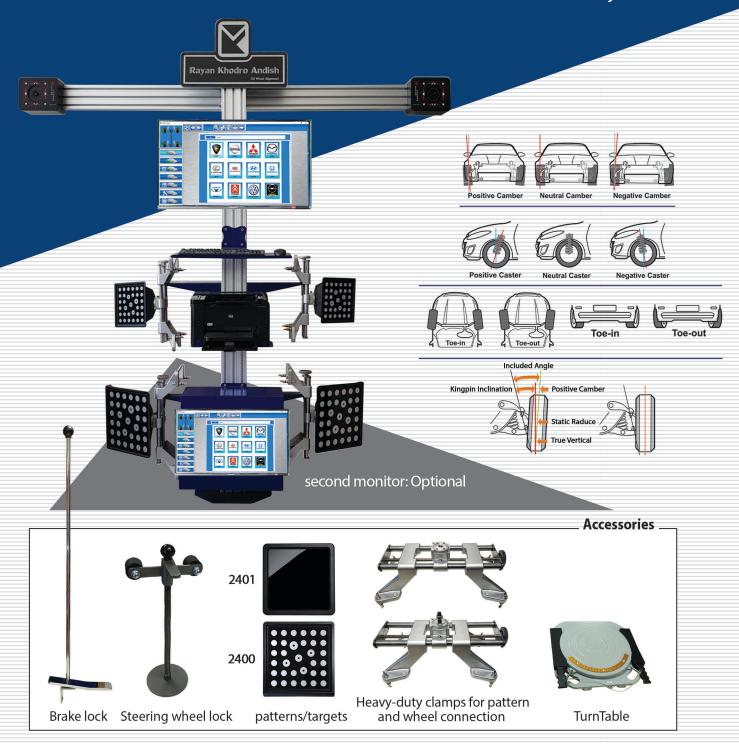
Automatic 3D Alignment MWA 2400/2401 A
Smart 3D Alignment MWA 2400/2401 S



Only Pionears are Creators

3D Wheel Alignment

MWA 2400 / MWA 2401 Camera arm with manual adjustment







3D Wheel Alignment





Utilizing the latest image processing technology and machine vision, this comprehensive device measures and displays the angles of the car tires with the highest possible accuracy and precision.

- Simultaneous angle measurement in the alignment process
- Real-Time measurement system which operates without any delay or interruption
- Measuring all the required angles and scales related to the physical aspects of the car: the spacing between tires/axles, each wheel diameter and the amount of deflection of the axles
- Compatible with 4 post lifts, Scissors lifts, and repair shop ditch
 Fixing the wheels' deflections using automatic and reliable software (Runout)
- Detecting the slightest amount of size mismatch between tires using precise rim measurement (Measuring the wheels' radius with the precision of 1mm)
- No need for any recalibration
- Not affected by the ambient light
- Capable of displaying the result on T.V. or with video projector devices
- Easy to install, low maintenance and no need for any special training
- Capable of being installed on a fixed post
- Capable of being installed on a post with a movable camera arm
 A: Indicates the camera arm movement by the operator command using the computer
 S: Indicates the camera arm movement in sync with escalating the lift
- Installable on a mobile structure which is excellent for automobile production lines

Clamps and Patterns

±2.5mm

110-115/210-240V ac 50/60 Hz 400W

110-115/210-240V ac 50/60 Hz 550W

0°-50° C

±1.5mm

- Equipped with lightweight and resistant wheel clamps and patterns (targets)
- Uniquely designed heavy-duty steel clamps for all kinds of aluminum and iron rims without any damage to the rim
- Ability to adjust the clamps for up to 24" rims
- Patterns/Targets equipped with an infrared filter for increasing the image quality in MWA 2401 models

Tire Radius

Power Supply

Power Supply

(Auto Boom)

Operating temperature

Vision System

- The infrared camera with a high distinction ability (2400:1.3Mpix)(2401:5Mpix)
- Equipped with top of the line infrared filters and emitters
- LED indicators for easy operation





Software Specification

Extensive database with more than 20000 vehicles from all around the world (American, European, Asian and Iranian cars)

The ability to add and edit any new vehicle to the database by conducting a new test or just connecting to the Rayan Khodro server

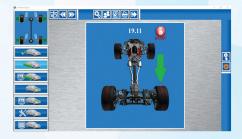


TOE and CAMBER angle measurement with static & dynamic methods

- Dynamic:
- Requires moving the vehicle
- High accuracy operation
- Ability to check and correct the bent rims
- Static:
- Fast tests without the need to move the vehicle
- Suitable for cars with straight rims and Quick Service conditions
- Ideal for vehicle production lines

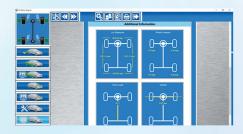


Virtually and graphically display of the measured angles with a proper zoom





Simultaneously displaying the measured angles for each of the 4 wheels and proper zoom in the adjustment process



Chassis size and wheels' radius measurement



Graphical presentation of angles

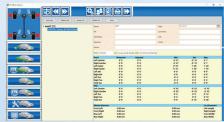


Caster and SAI measurement



• Printing the operation detailed report

• saving the customers data for future use



Adding the customers' data to the database and in the output print



Displaying parameters according to the selected unit