



**Brand: COSENG**

**Model: C311D**

**Description: 4<sup>th</sup> GENERATION DIGITAL WHEEL BALANCER**

The Coseng C311D wheel balancer is a highly accurate and dependable no-frills balancer that features our proprietary fourth generation balancing system technology for critical reliability and repeatability. From one-bay shops to high-volume tire stores, the C311D is built with a gritty toughness that puts out perfectly balanced wheels day after day, around the clock. Like all of our 300 series wheel balancers, it's a zero tolerance performer that features our proven technology ensuring wheels are balanced vibration-free.

The C311D automatically calculates the exact weight needed to achieve an optimal balance for almost any tire and wheel configuration on large brightly displayed LED's that mark the exact amount and location in a very short time. A full-menu of time saving features that includes dynamic, static, and performance alloy settings allow you to balance OEM wheel configurations and performance wheels with minimal effort and speed.



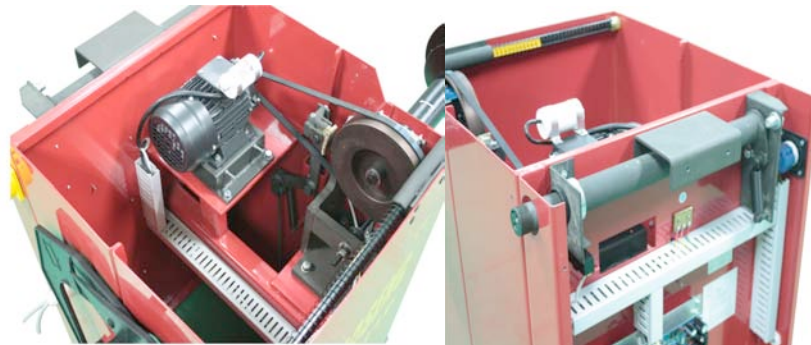
#### **Fourth Generation Balancing System Technology**



Our highly accurate balancing technology features digital signal processor and single-chip technology that increases productivity and offers unprecedented speed and accuracy - especially when using sophisticated balance and weight placement techniques required for newer high-tech OEM and aftermarket wheels. Single-chip advanced circuit board design provides an inherent performance and reliability advantage compared to multi-chip designs found in many wheel balancers. In addition to overall error and delay reductions, the chip design significantly boosts data throughput. A very fast communications process allows data transfers to and from the microprocessor at a fast rate. This solution offers unmatched integration of features and functionality and results in lower power consumption and dissipated heat across all components.

#### **Multi-Directional Quartz Piezoelectric Load Sensors**

The C311D incorporates a highly precise spin mechanism with dual-component piezoelectric quartz load sensors combined with a single digital rotation encoder that measures both longitudinal, transversal, and shear effects for multi-directional force unbalance detection. The piezoelectric force sensors used on the C311D are very sensitive and offer long-term stability and freedom from fatigue for a service life that is virtually unlimited. The high rigidity quartz crystal sensors result in very high frequency detection in all three directions of measurement.





## C311D OPERATING HIGHLIGHTS

### Quick, Fast and Easy Start-UP Set-Up

Designed to be up and running in under 15 minutes with an easy installation process. Does not require customer wire connections to be completed. Lift display panel and fasten down and then add the hood and fasten.

### Mounting Cone Package

The C311D tooling package not only includes our standard car and light truck cones, but a heavy-duty truck cone and spacer ring as well. This well equipped package includes three automotive and light truck cones; 1.75" - 2.75", 2.75" - 3.50", and 3.50" - 4.25", and one truck cone 4.50" - 5.00".

### Weight Optimization

The C311D automatically calculates the minimum amount of weight needed to achieve an optimal balance for any tire and wheel configuration so you use less weight which adds up to real savings and increases your bottom line.

### Wheel Graphic Interface

A digital touch-pad display panel features tire and wheel assembly graphics to help simplify speed entry of wheel data and helps guide technicians through balancing procedures. Operator function keys are labeled with simple, easy-to-read icons helping operators identify and command all balancing functions.

### LED Rolling Wheel Weight Displays

Bright LED weight placement indicators show weight positions as the wheel is gently rolled to exact top-dead-center. Operator can move efficiently between Static, Dynamic, Alu1, Alu2 and Alu3 placements without an additional wheel spin. Tiered weight placement indicators help identify out-of-sight weight. The LED placement systems aids with clip-on, and tape weight placement at precise locations for zero-on balancing every time.

## VALUABLE TIME SAVINGS OPTIONAL PRODUCTS

### Motorcycle Balancing with Easy To Use Kits

Coseng's optional Universal Wheel Clamp Kit (WB-MC and/or WB-XLT) comes with a shaft and adapters to accommodate Harley Davidson, Japanese, and European Motorcycles with hub assemblies up to 9-1/2" inches wide. It quickly installs on all Coseng computer wheel balancers with a 36mm shaft.

### Universal Adapter Flange Kit

Essential for the more precise balancing, this adjustable multi-position flange plate kit includes centering pin adapters to fit most import and domestic car and light truck lug-bolt patterns. The specially designed lug-bolt adaptors balance wheels far more accurately than a cone can do by itself, resulting in a smooth, vibration free drive. Includes flange plate kit and measuring caliper.





## FEATURES

- ❖ Dynamic, static, motorcycle and ATV plus performance alloy settings
- ❖ Presets kept in memory to increase productivity
- ❖ An ergonomic control board and easy-to-read large LED digital display with vibrant visual cues and keypad improves efficiency and the correct balancing techniques for fast cycle times.
- ❖ Automatic one spin retrieval of static, dynamic and alloy data, identifies weight placement configurations for a variety of wheel styles and designs with the simple push of a button.
- ❖ Automatic rolling wheel parameter setting feature saves valuable time and minimizes errors
- ❖ Under 200 RPM balancing speed and fast cycle times
- ❖ Button operated gram/ounce selection and millimeter/inch selection
- ❖ Automatic round-off with top-dead-center weight position indicator
- ❖ User selectable manual or automatic start when hood is lowered
- ❖ User assisted automatic self-calibration function
- ❖ High-volume top weight tray and side shelf storage pegs gives you room to inventory a wide variety of wheel weights and balancing tools
- ❖ Precision-machined, hardened-steel 36-mm or 40-mm shafts available
- ❖ Quick-release Haweka® quick nut for dramatically reduced set-up times and long shaft life
- ❖ Foot brake to hold wheels at precisely 12-o'clock for accurate weight placement
- ❖ Open-side hood design allows for a broader coverage of tire shapes and sizes
- ❖ Easy rear access to electronic components for quick troubleshooting and repair
- ❖ Ships with specific country electrical plug in requirements

## SPECIFICATIONS

C311D	highly accurate electronic wheel balancer - manual data entry - available with 40mm or 36 mm spin shaft
Electrics	available in 100V-120V * 220V-240V * 380/400V
Product Application	wheel balancing of most passenger car and light truck wheels and motorcycle or ATV wheels with optional adapter kits
Maximum Tire Diameter Capacity	31.5" (800 mm) – with closed hood
Maximum Tire Width Capacity	20" (508 mm)
Rim Diameter Capacity	10" to 24" increases to 30"+ without hood
Min / Max Rim Width Capacity	1.5" to 20"
Maximum Wheel Weight Capacity	143 LBS / 65 KGS
Balancing Speed	less than 200 RPM
Tire / Rim Balancing Modes	dynamic, static (motorcycle), ALU1, ALU2 and ALU3
Cycle Time	6 to 15 seconds - wheel weight dependent
Data Entry	easy to use and read digital touch keypad with large and bright LED display indicators
Calibration	semi-automatic with user assisted data input (required on initial start-up or as required during normal operation)



Automatic Start	factory set to start upon wheel guard close (feature is user defined)
Brake Type	resistor operated with manual foot brake
Foot Brake	standard, mechanical to hold wheel in position
Weight / Size Selections	user defined touch key on display panel (ounce or gram / inch or millimeter)
Balancing Accuracy	less than .035 ounce / 1 gram
Resolution	0.01 ounce / 1 degree
Shipping Weight	143 kilograms
Shipping Box Dimensions	97 x 77 x 115 centimeters heavy duty carton on processed wood pallet