



**Brand: Ranger**  
**Model: DST2420**  
**Description: DIGITAL WHEEL BALANCER**

The Ranger DST2420 wheel balancer is a highly accurate and dependable no-frills balancer that features our proprietary Digital Sensor Technology for critical reliability and repeatability. From one-bay shops to high-volume tire stores, the DST2420 is built with a gritty toughness that puts out perfectly balanced wheels day after day, around the clock. Like all of our DST Series wheel balancers, it's a zero tolerance performer that features our proven Direct-Axis drive system, accurate to within hundredths of an ounce ensuring wheels are balanced vibration-free.

The DST2420 automatically calculates the exact weight needed to achieve an optimal balance for almost every tire and wheel configuration on the planet and brightly displayed LED's mark the exact amount and location in just six seconds. 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.



### Digital Sensor Technology

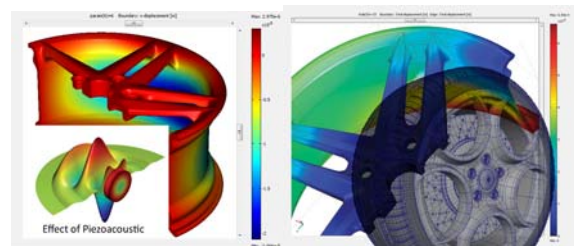
Our highly accurate Digital Sensor Technology features a 16-digit digital signal processor and single-chip technology that increases productivity and offers unprecedented speed and accuracy - especially when using sophisticated balance and weight placement techniques required for newer high-tech OEM and aftermarket wheels.



Single-chip circuit board architecture provides an inherent performance and reliability advantage compared to multi-chip implementations of the same functionality. In addition to overall latency reductions, the single-chip architecture significantly boosts device throughput. An extremely fast dedicated hyper transport protocol allows data to communicate with the micro-processor at much faster speeds. This solution offers unmatched integration of features and functionality and results in lower power consumption and dissipated heat.

### Multi-Directional Quartz Piezoelectric Load Sensors

The DST2420 uses highly precise dual-component piezoelectric quartz load sensors combined with a single digital rotation encoder that measure both longitudinal, transversal, and shear effects for multi-directional force unbalance detection. The piezoelectric force sensors used on the DST2420 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.



## FEATURES

### Quick and Precise Set-Up

Multi-size center cones and a full rubber perimeter no-mar "Quick-Nut" bell adapter makes mounting wheels fast and easy and minimizes the risk of costly wheel damage.

### Mounting Cone Package

The DST2420 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

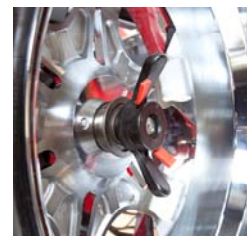
The DST242000 automatically calculates the minimum amount of weight needed to achieve an optimal balance for the tire and wheel configuration so you use less weight which adds up to real savings and increases your bottom line.

### Wheel Graphic Interface

A 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. Tiered weight placement indicators help identify out-of-sight weight placement such as split-weight or hidden "behind-the-spoke" techniques. Aids with clip-on, and tape weight placement at precise locations for zero-on balancing every time.



## VALUABLE TIME-SAVING OPTIONS

### No More Heavy Lifting

Our optional RWL-350 wheel lift makes light work out of heavy lifting by servicing large, oversize truck and custom wheels that usually require extra effort on part of the technician. The optional RWL-350 pneumatic wheel lift helps technicians mount wheels effortlessly on the balancer, preventing potential injuries and fatigue from manually lifting heavy wheels. The lever-controlled wheel lift quickly raises the wheel and a bearing mounted slider positions them for easy mounting. One handed operation means the technician's free hand remains able to control the wheel assembly once it is lifted into the mounting position. The portable wheel lift handles wheels up to 350 pounds and takes up minimal space around the balancer.



### Motorcycle Capable

This optional Universal Wheel Clamp Kit 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 Ranger computer wheel balancers with a 36mm shaft. The adapter kit is designed to balance wheels with a center-hole diameter from 5/8" to 1-1/4". Kit Includes: (1) Universal Wheel Clamp, (1) Shaft, (4) Centering Cones, (1) Short Spacer, (1) Long Spacer, and (1) Spin-On Nut.



### Flange Plate 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.



Optional Lug-Nut Flange Kit

**FEATURES:**

- Dynamic, Static, Motorcycle-ATV, and Performance Alloy settings.
- A multi-user save function holds presets to increase productivity.
- An ergonomic control board and easy-to-read LED display has vibrant visual cues and keypad to improve efficiency and proper balancing techniques for faster floor-to-floor times.
- A simultaneous retrieval of static, dynamic and ALU1\ALU2\ALU3 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.
- Low RPM balancing speed and rapid six-second cycle time.
- Automatic braking.
- Gram/ounce selection and millimeter/inch selection.
- Automatic round-off with top-dead-center weight position indicator.
- Tiered weight placement indicators help identify out-of-sight position weight placement such as split-weight or hidden “behind-the-spoke” techniques.
- Manual or automatic start when hood is lowered.
- Self calibration function.
- High-volume top weight tray and side shelf storage gives you room to inventory a wide variety of wheel weights and tools.
- Precision-machined, hardened-steel 36-mm shaft.
- Quick-release hub nut for dramatically reduced set-up times.
- Side-position brake hold wheels at precisely 12-o’clock for proper weight placement.
- Side cone storage pegs keeps accessories readily available.
- New “open-side” hood design allows for a broader coverage of tire shapes and sizes.

SPECIFICATIONS	
Motor	3/4 HP / 110/220V 50/60HZ 1Ph.
Working Temperature	-5C / 27F to 50C / 82F
Drive System	Belt Drive
Cycle time	6-9 seconds (avg.)
Balancing Modes	Dynamic / Static / 3-Alloy
Top Positioning Weight Locator	Standard
Inside & Outside Measuring	Standard
Millimeter / Inches Selection	Standard
Ounce / Gram Selection	Standard
Wheel Offset Distance Setting	Manual
Self Calibration Function	Standard
Auto Start When Hood is Lowered	Standard
Wheel Spin Braking	Automatic / Electronic
Wheel Holding	Manual Brake Pedal Standard
Centering Cones Included	3 Standard / 1 Truck
Truck Cone / Spacer Ring Adapter Set	Included Standard
Wheel Calipers	Standard
Rear Cone Mount Spring	Standard
No-Mar Rear Cone Mount Pressure Cup	Standard
Quick-Release & Mount Hub Nut	Standard
Maximum Tire Diameter	47" / 1194 mm
Max Tire Weight	145 pounds (65 Kg)
Max. Wheel Diameter	10" - 24" / 254 mm - 610 mm
Wheel Width Capacity	2" - 18" / 51 mm - 457 mm
Balancing Increments	0.25 or 0.01 ounce
Balancing Speed	180 RPM
Accuracy	+ - 1 Gram / .035 Oz.
Resolution (Round Off Mode)	0.01 ounce, 1.4°
Shipping Weight	398 pounds (181 Kg)