# No More Overloads On Stage! Ron StageMaster 5000 - Single Wire

Up to 256 (soon 512) load cells on single main wire, for load monitoring and overload prevention

- Exceptionally low headroom loss:
  Examples: 2t (5:1) load cell: 4"/100mm
  2t (10:1) load cell: 4.2"/105mm
- Easy installation: A single main wire connects all load cells
- May be integrated with the Ron StageMaster 7000 Wireless Premium and together monitor on one screen a total of 328 load cells: 72 wireless load cells and 256 load cells on single wire.
- Logical Zoom In and Zoom Out feature
- Can be added to any existing hoist and hoist control system
- Real time monitoring of load-map that can be overlaid on stage-plan layout (AutoCad etc.)
   Reports: Downloadable data log of months of continuous
- measurements
- Power: Up to 60 load cells: From PC's USB com port. More than 60 load cells: Using an external power supply. Optional real time cellular SMS alert on overload occurrence
- Optional customized PDA for on-the-go load monitoring



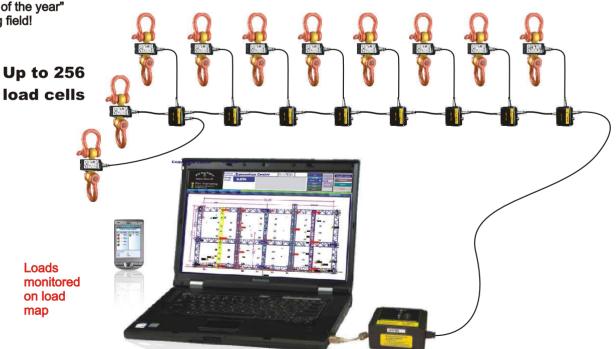


### **Our customers include:**

Universal Studios, Hilton, PRG, Cirque Du Soleil, Orange County Convention Center (Orlando), Kish Rigging, Louis Reyners, Dart, The Creative Reality Group, Outback Rigging, Summit Steel, Gmep-Molpass, Shimizu Octo, Seattle Opera, Esplanada Opera Singapore, Walt Disney, and more

The Ron StageMaster technology was recently deployed at the Grammy Award (Hollywood), McDonald's Global 2008, Celine Dion, Kylie Minogue, Take That, Cirque du Soleil, Holiday on Ice, Mamma Mia and other shows.

Winner of LDI 2007 exhibition's award for "best debuting product of the year" in the stage and rigging field!





aon StageMaste,

Safety Above All

### Ron StageMaster 5000 - Single Wire

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Hanging tons of sound and lighting equipment above spectators and performers is a serious matter, especially in light of the trend of increasing load weight and movement.

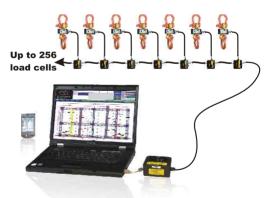
Scientifically, each time there are more than two hoists on a truss, or more than three hoists in a structure, there will occur the state of a "Statically Indeterminate Structure", which results in unpredictable load distribution. In most cases this will cause load imbalance, where some of the hoists may reach overload while others carry only a small part of the load.

Furthermore, it has been shown experimentally, that a visually balanced structure is prone to have imbalanced load distribution, and some of the hoists might end up overloaded - in extreme cases even severely so.

This may be exacerbated by weather effects such as winds or snow build-up on a roof. These conditions might reduce the overload tolerance of the structure which carries the rigging.

Thus, overload situations might happen to the most experienced riggers, even if each hanging point's load is calculated and the calculation falls within the limitations of the nominal hoist and truss capacity. The actual load distribution on the truss is still unpredictable and cannot be calculated, or even estimated.

The solution to the need of ensuring safe installations and shows is real-time load monitoring and overload detection.



Ron StageMaster 5000 Single Wire is a multi load-cell, stage safety device for load control and overload prevention. The system is using a unique technic of a single main wire installation running from one loading point to the next with just one cable. This cutting edge development is based on our 30 years experience in load monitoring and crane scale design and manufacturing.

This laptop based system is a real-time monitor of load-map that can be overlaid on stage-plan layout (e.g AutoCad). The user can assign a name to each predetermined group and easily redefine the group members as required. Using the logical Zoom In and Zoom Out enables the user to simultaneously monitor on one screen 256 individual hanging points, summary of several points (groups) and of the entire structure. It May be integrated with the Ron StageMaster 7000 Wireless Premium and together monitor on one screen a total of up to 328 load cells: 72 wireless load cells and 256 load cells on single wire.

Ron StageMaster enables monitoring all the loads during installation and throughout the entire show, detecting Overload, Zero, Tare, Sum, Max and readout resolution for each load cell or any of the predetermined groups. The downloadable Data Log of weeks of continuous measurements is comprised of Operator Name, Time, Weight, Overload situations and the Total Cumulative Weight for each group. It enables documentation of each show with detailed report and statistical analysis. The Set Points may be used for alarming and/or stopping the hoists in overload and underload situations.

New: Optional real time cellular SMS alert on overload occurrence, and optional customized PDA for on-the-go load monitoring.

Ron StageMaster is user-friendly and easy to operate and configure for each project. The single main wire between load cells and laptop enables fast and easy installation. The load cells' small dimensions provide outstandingly low headroom loss as well as portability.

### **Specifications:**

Communication: RS-485. A single main wire runs from one loading point to the next, using small junction boxes.

Safety Factor: 5:1 Standard. 10:1 and other safety factors are available.

Proof load: 200%.

Accuracy: ± 0.1% of full range.
Capacities: 2t standard capacity with range of capacities from 1t to 5t and higher.
Display: Using a laptop, the operator can simultaneously view the loads of up to 256 load cells on single main wire. Alternatively, up to 3 single R.F. channels, each of 24 wireless load cells, can be added to it for a total maximum of up to 328 load cells.
The following relevant information derived from the load cells is displayed on the screen: Sum, Max, Tare, Zero, Group (LC), Overload detection, Stage-plan layout, Low battery indication etc.

Monitoring all groups and sub-groups is done by zoom in and zoom out from groups to any load point on the structure plan.

Functions: Logical Zoom In and Zoom Out, Sum, Max, Tare, Zero, Group (LC), Overload detection and alert (visual and audible), Reports Data Base, User Calibration, Selectable Units, Group functions (Sum, Max, Zero, Tare, Overload and customized overload detection), Plan/layout archiving.

Units: Selectable units feature with the following measurement readings: Metric Tons, Short Tons (2000 Lbs), Kgs, Lbs, Newtons, Deca Newtons, K. Newtons. Load Cell Material: Made of high-strength, aerospace quality low alloy steel, polyurethane coated.

Power: Up to 60 load cells: From PC's USB com port. More than 60 load cells: Using an external power supply.

Calibration: User calibration. Initial factory calibration is fully traceable to NIST Temperature Range: Load cell: -15°F to

+175°F / -25°C to+80°C

Environmental: Weatherproof, Nema 4, IP 65. Carrying cases included.

Options: Fatigue rated load cells

0D2	
4	) (00) (50) H2 H1
OD1	

Cat no.	Full range	Safety factor	Resolution		Load cell weight		H1(max.)		H2(max.)		B(max.)		ØD1 (max.)		Ø D2 (min.)		Matching anchor shackle size*
	tons		kgs	lbs	kgs	lbs	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	inch
S-01-5	1	5	2	5	1.1	2.5	140	5.5	100	4	19	0.75	38	1.5	21	0.82	5/8, 1/2
S-01-10	1	10	2	5	1.1	2.5	140	5.5	100	4	19	0.75	38	1.5	21	0.82	5/8, 1/2
S-015-5	1.5	5	5	10	1.1	2.5	140	5.5	100	4	19	0.75	38	1.5	21	0.82	5/8, 1/2
S-015-10	1.5	10	5	10	1.1	2.5	140	5.5	100	4	19	0.75	38	1.5	21	0.82	5/8, 1/2
S-02-5	2	5	5	10	1.1	2.5	140	5.5	100	4	19	0.75	38	1.5	21	0.82	5/8, 1/2
S-02-10	2	10	5	10	1.2	2.7	150	5.9	105	4.2	26	1	45	1.75	23	0.9	3/4, 5/8
S-025-5	2.5	5	5	10	1.1	2.5	140	5.5	100	4	19	0.75	38	1.5	21	0.82	5/8, 1/2
S-025-10	2.5	10	5	10	1.2	2.7	150	5.9	105	4.2	26	1	45	1.75	23	0.9	3/4, 5/8
S-03-5	3	5	5	10	1.1	2.5	140	5.5	100	4	19	0.75	38	1.5	21	0.82	5/8, 1/2
S-03-10	3	10	10	20	2	4.5	200	7.9	135	5.3	41	1.6	63	2.5	36	1.4	11/4, 11/8, 1
S-04-5	4	5	5	10	1.2	2.7	150	5.9	105	4.2	26	1	45	1.75	23	0.9	3/4, 5/8
S-04-10	4	10	10	20	2	4.5	200	7.9	135	5.3	41	1.6	63	2.5	36	1.4	11/4, 11/8, 1
S-05-5	5	5	10	20	1.2	2.7	150	5.9	105	4.2	26	1	45	1.75	23	0.9	3/4, 5/8
S-05-10	5	10	10	20	2	4.5	200	7.9	135	5.3	41	1.6	63	2.5	36	1.4	11/4, 11/8, 1