

No More Overloads On Stage!

Ron StageMaster 6000 - Wireless

Completely wireless multi load cell system with up to 24 wireless load cells, 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
- Up to 1500 hours battery life
- R.F transmission range: Up to 450' / 150 meters
- Easy installation: No messy cables
- 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
- 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

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!

Loads
monitored
on Load
Map



Wireless



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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 6000 Wireless is a multi load-cell, wireless stage safety device for load control and overload prevention. 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. Doing so enables the user to simultaneously monitor on one screen 24 individual hanging points, summary of several points (groups) and of the entire structure. The system allows up to 24 load cells per system and more than one system per site.

Ron StageMaster enables monitoring all the loads during installation and throughout the entire show, detecting Overload, Zero, Tare, Sum, Max 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 wireless communication between load cells and receiver enables fast, easy and neat installation. The load cells' small dimensions provide outstandingly low headroom loss as well as portability. The battery life of up to 1500 hours on common disposable batteries provides plug-and-forget advantage.

Specifications:

- R.F.:** Single frequency.
- R.F. transmission Range:** Up to 450' /150m in normal operation conditions.
- 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 view the loads of up to 24 load cells simultaneously, having on one single screen all the relevant information derived from the load cells: Sum, Max, Tare, Zero, Group (LC), Overload detection, Stage-plan layout, Low battery indication etc.
- Functions:** Sum, Max, Tare, Zero, Group (LC), Overload detection and alert (visual and audible), Low battery indication, Reports Data Base, User Calibration, Group functions (Sum, Max, Zero, Tare, Overload and customized overload detection), Plan/layout archiving.
- Units:** Available in the following choice of 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:** 4 x AA ("finger") 1.5 Volt Alkaline disposable batteries rated 3AH for each load cell. Batteries will function up to 1500 hours. Optional 110/220 VAC operation
- 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



Cat no.	Full range	Safety factor	Resolution		Load cell weight		H1(max.)		H2(max.)		B(max.)		L(max.)		Ø D1 (max.)	Ø D2 (min.)	Matching anchor shackle size*		
			kgs	lbs	kgs	lbs	mm	inch	mm	inch	mm	inch	mm	inch					
S-01-5	1	5	2	5	1.1	2.5	140	5.5	100	4	19	0.75	110	4.4	38	1.5	21	0.82	5/8, ½
S-01-10	1	10	2	5	1.1	2.5	140	5.5	100	4	19	0.75	110	4.4	38	1.5	21	0.82	5/8, ½
S-015-5	1.5	5	5	10	1.1	2.5	140	5.5	100	4	19	0.75	110	4.4	38	1.5	21	0.82	5/8, ½
S-015-10	1.5	10	5	10	1.1	2.5	140	5.5	100	4	19	0.75	110	4.4	38	1.5	21	0.82	5/8, ½
S-02-5	2	5	5	10	1.1	2.5	140	5.5	100	4	19	0.75	110	4.4	38	1.5	21	0.82	5/8, ½
S-02-10	2	10	5	10	1.2	2.7	150	5.9	105	4.2	26	1	115	4.7	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	110	4.4	38	1.5	21	0.82	5/8, ½
S-025-10	2.5	10	5	10	1.2	2.7	150	5.9	105	4.2	26	1	115	4.7	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	110	4.4	38	1.5	21	0.82	5/8, ½
S-03-10	3	10	10	20	2	4.5	200	7.9	135	5.3	41	1.6	120	4.8	63	2.5	36	1.4	1 1/4, 1 1/8, 1
S-04-5	4	5	5	10	1.2	2.7	150	5.9	105	4.2	26	1	115	4.7	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	120	4.8	63	2.5	36	1.4	1 1/4, 1 1/8, 1
S-05-5	5	5	10	20	1.2	2.7	150	5.9	105	4.2	26	1	115	4.7	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	120	4.8	63	2.5	36	1.4	1 1/4, 1 1/8, 1