# Laser and GPS Machine Control Systems


**MEI** *Martronic Engineering, Inc.*

LASER-TECH



## EAGL-3 SERIES
## Machine Control Systems
## Laser Transmitters

Features:
From super-steep slopes to long range level-only we offer a line of rugged, easy-to-use laser transmitters. Each features:

• Electronic self-leveling for consistent accuracy and performance in high ground vibration and windy environments.

• Long range laser beam for maximum utilization from a single setup.

• Ruggedly designed and manufactured to withstand harsh jobsite conditions.

• Multiple power sources including on-board, rechargeable batteries.

## Laser-Tech Mod 180 Receiver


Mod 180 Features:
Laser-Tech's Mod 180 Excavator Sensor magnetically mounts to any excavator or backhoe in seconds. Using two 100+ lbs. 4" diameter magnets, you simply remove it from the case and attach to the dipper arm. Battery operation provides "stand alone" capabilities. An optional 12 volt power cord allows the Mod 180 to be wired to the machine. Waterproof and shock resistant.
Advanced features and versatility provide value and productivity. Has 180 degree capture.

## Laser-Tech Mod 304 Machine Control System

The Laser-Tech Mod 304 Machine Control System is a new, state of the art product that displays survey station and field average elevations, and feeds the data directly into your lap-top computer. Whether your crop is rain fed or irrigated, a leveled field ensures the even infiltration of water and prevents standing water. The key to reducing expenses is to minimize the volume of soil moved. This is best accomplished using the Mod 304 Machine Control System to accurately survey the fields. The 304 System will feed the data into the Gradeplane Land Design Software to analyze and optimize the movement of soil. The result is a "cut and fill" map for the operators, and parameters to set up the laser transmitter ensuring a level field. It leaves a permanent record in your computer.

The 304's "AutoMast" feature is especially valuable for building ditch banks, roads or housing pads. At the touch of a button, the mast will move the sensor from the field grade elevation to an offset elevation. It can be returned to the field grade elevation by touching the button again. When a telescoping mast is needed, the optional Mod 413 is the perfect choice.

It's possible we can plug the 304 System right into your tractor hydraulic system, saving the cost of an interface hydraulic package. New to the system is the Mod 513 Proportional Hydraulic Valve. Enjoy incredibly fast, smooth corrections near grade and full flow, high speed responses for large corrections. You will cover more acres per day with greater accuracy.

When the 304 system is joined by the Eagl-3 Visible Diode Transmitter, you have the finest land leveling machine control system available, with a range of 4000 feet.

## Laser-Tech Mod 305 Machine Control System

is unique because it is completely electronic. There are no moving parts! The electronic mast, the most vulnerable mechanical part of any Machine Control System has been eliminated.

The 305 system sensor is mounted to a simple pipe column. During the initial setup, the laser reference signal is found, the sensor is centered and clamped in place. The operator can now readjust the blade elevation by electronically relocating the "Center" band anywhere on the sensor from the Control Panel in the cab.

An additional benefit is the proportional error output which allows standard ON/OFF or proportional hydraulic valves to precisely control the blade movement.

• A complete machine control system with no moving parts.

• Linear output allows electronic, rather than mechanical, center setting.

• Linear output allows hydraulic flow rates proportional to the actual error signal, rather than just high or low.

• 15 separate, ultra-bright led channel displays on the sensor

• Elevation displayed in feet, inches, or meters

• Survey and automatic mast movement capabilities

## Laser-Tech Mod 306 Slope Control

The MEI 306 is an electronic device which keeps the blade either level or at a predetermined slope. Any slope to plus or minus 50 percent can be set from the control panel. The slope can be reversed at the touch of a button when you change direction. Coupled with the MEI Laser Grade Control System, you have the ideal system for building pad finishing, and best of all - it's affordable!

- Adjustable slope settings; +/- 9 percent, 20 percent or 50 percent depending on model.
- Proportional control for open or closed center tractor hydraulic systems.
- The slope is displayed in tenths of a percent grade.
- "One button" - precise, automatic slope changes. (A handy feature for building pads or ditch banks!)
- Only one 3-conductor cable between the blade and the control panel.
- An override switch allows rapid blade angle repositioning. During and after prepositioning, the "Automatic" function is disabled until reset.

## Laser-Tech Mod 308 GPS Machine Control System With Proportional Valve Drivers

The Laser-Tech Mod 308-GPS Machine Control System is a new, state of the art product which was designed for GPS Machine control.
The system interfaces GPS software for complete hydraulic control.

## Laser-Tech Mod 308L GPS Controller

MOD 308-L GPS is the light version of the 308 and has no LED numeric display. Primarily used for tiling GPS hydraulic control

## Laser-Tech Mod 312 Machine Control System

Fully automatic or manual blade control for precision grading. Functional equivalent to Mod 304, but without the survey mode.

## Laser-Tech Mod 367SB Machine Control Receiver

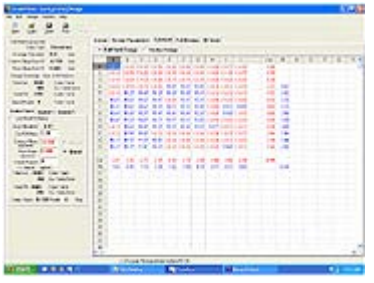

Like the Laser-Tech Mod 367, the Mod 367SB "Super Bright" Machine Control Sensor can be mounted on a variety of equipment. The advantage of the 367SB is the High Intensity Display. It's wide angle display is visible in the highest ambient light levels. Battery operation provides a "stand alone" solution or it can be wired to the machine. Versatility is increased by the optional remote display. Waterproof and shock resistant construction keeps you on the job. Advanced features and versatility provide value and productivity.

## Laser-Tech Mod 322


Our manual system. Excellent for heavy equipment and rough grading. Indicates "on grade" and within a tenth of a foot of grade, high or low. Includes Martronic trade-up program!

## Laser-Tech Mod 752 System Simulator

For trouble shooting Laser-Tech Machine Control Systems in the field.



## Gradeplane Land Grading Design Software

Gradeplane is designed for Land Levelers and farmers and provides an easy way to design and output cut/fill maps for grading land to specified slopes. The survey data can be recorded manually, or for increased efficiency you can record directly to Gradeplane using the MEI 304 panel and a Lap Top. The data is calculated in Gradeplane and the field drawn automatically. All the field data and Grading setup are displayed together on screen and the map is updated automatically as you alter your data

# Laser Receiver Masts

**Model 410**
**Tracking Mast**

(Standard)

**Model 413**
**Telescoping Mast**

(optional)

**Model 417**
**Tracking Mast with Internal Sensor**
Survey Machine Control mast. 6 foot travel.

# GPS Roadwork Applications

MEI products and systems provide GPS and Laser Leveling Machine Control for Agriculture, Construction, Pipe Laying, Mining, Road Building and other applications. Visit our website at http://www.meilaser.com.

Dealer info:

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