




Lightbar Guidance System with Wireless Remote Control

- Accurate straight-line and curved guidance.
- Easy to begin guidance—just push the “Enter” button twice.
- Compact lightbar with fully adjustable brightness for day or night operation.
- Convenient wireless remote unit controls lightbar functions—even if the lightbar is mounted on the hood.
- Instant reporting on the lightbar lets you monitor job status.
- Warns you when entering an area that has already been applied.



Effective Guidance

Lightbar Guidance System with Wireless Remote Control

Finally, you can afford a lightbar guidance system for spraying, seeding, and other jobs at a cost that rivals foam markers. CenterLine offers the most features, the best price and wireless convenience in one complete kit. This compact lightbar guidance system is available with a WAAS/EGNOS DGPS receiver/antenna and includes a wireless remote control to set up and operate the system through menus and options displayed on the lightbar.

CenterLine’s attractive design combines a low-impact size with easy-to-see LEDs that are fully adjustable using dedicated buttons on the keypad. It can be dimmed to efficiently run at night and brightened to be easily seen in full sunlight.

Straight or Curved Guidance

CenterLine will guide you in swaths of all kinds with repeatable accuracy. You decide the driving pattern and CenterLine figures out the closest swath on which to guide you. There is no need to decide a field pattern ahead of time, or to commit to it for the whole time you are running swaths. CenterLine knows when it is on a new track, and will keep you informed of which one—not the other way around.

Future Growth

Future upgrades to the system will add support like on-screen mapping, data collection, hazard marking, and full integration with other related TeeJet® products and Fieldware software. Color displays on handheld computers will show maps of areas as they are being applied.

Shows You the Information You Want

A text display reports the application information of your choice automatically. It also warns you when you enter an area of the field that has already been applied. If you do not want to see any reports, it can be turned off. You choose two of these messages to monitor progress in real time:

- Current position error from active swath.
- Current swath number.
- Vehicle speed.
- Area that has been applied.
- Course relative to 360° position.

Easy to Use

Wireless Remote Control Unit

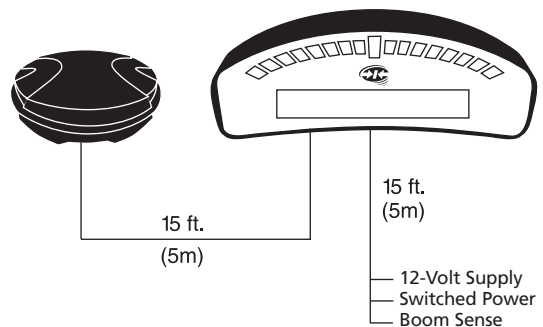
CenterLine’s ergonomic, handheld control is easier to manage than most TV remotes. Seven easy-to-read keys that allow you to scroll through menus displayed on the lightbar. The keypad is backlit for nighttime operation, and one set of ordinary batteries will power the unit for a whole season.

The small, powerful remote permits mounting the weather-resistant lightbar on the hood or in the cab. Wireless communication permits easy operation while the cab stays clean and sealed from dust and contaminants.



Easy to Install, Easy to Use

CenterLine takes just a few minutes to install, so it is easy to move it from one vehicle to another as your needs change with the seasons.



Swath XL

Features

- Straight-line, curved and center pivot guidance modes.
- Begin guidance with as few as two keystrokes.
- Easy-to-see lightbar can be mounted inside or outside .
- Instant reporting on the lightbar.
- Saves time, extremely accurate.
- Records what has been done to a data card.
- See application maps of your field created in real time.

Easy to Use

Each pass is recorded automatically and can be viewed as a map on the Smartpad display. There are five zoom levels on the display, so you can see the smallest details.

GuideLine automatically knows when you have advanced to the next lane and snaps to the next swath without pushing any buttons. Field borders can be driven in any pattern and do not have to be defined in advance.



Smartpad

See Where You Have Missed

Maps are viewed as you make them so skips can be seen and fixed before leaving the field.

Built to Last

Durable casing is designed to withstand the rigors of field work.

Easy Setup

The system can be set up with as few as two keystrokes. Hit "Enter" twice and you are ready to go.

Keep a Permanent Record

Internal PCMCIA drive uses standard data cards and saves all field records that you have created. Download these to your office computer for a permanent record.

Load Previous Years' Records

Field boundaries and hazards from previous years can be set up on the data card in advance to save valuable time in the field.

High-Resolution Display

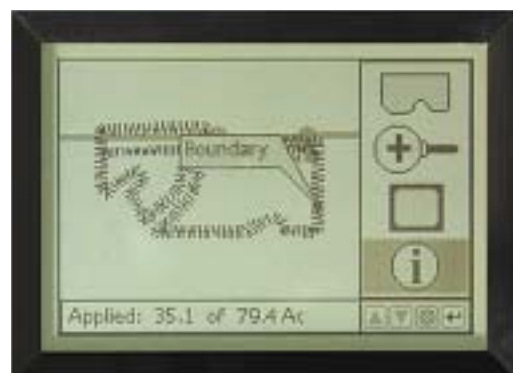
39 x 29 high-resolution backlit display has five zoom levels that provide perfect visibility of work completed.

Instant Information

Icons display menu options. Click on these for more information that can be viewed any time.

Easy Data Entry

Simple six-button keypad permits data entry with ease.



Lightbar



Hazard Warning

Traffic light patterns on each side indicate you are clear to go (green); approaching a hazard (yellow); or you have reached the hazard (red). It automatically alerts you when entering an area that has already been applied.

Built to Last & Weather Resistant

Rugged polycarbonate alloy is nearly impossible to break under normal conditions. The housing resists weather and harsh chemicals, so it can be mounted wherever you choose.

Set the Brightness

Adjust the brightness from high intensity to very dim with the push of a button.

Easy-To-Read Display

Large, bright guidance lights and a clear text read-out are easy to read under all field conditions.

Instant Reports on the Lightbar

The lightbar reports information instantly on the read-out above the guidance lights. You choose up to three items to report from this menu of options:

- **Cross track error** – shows when to steer right or left and the exact distance to center.
- **Swath number** – displays the swath you are working.
- **Heading error** – shows the difference between your current heading and your desired heading.
- **Course on ground** – displays the magnetic course of the vehicle.
- **Ground speed** – shows the exact vehicle speed.
- **Area applied** – reports the area covered in acres or hectares.
- **Off** – Don't want reports? You don't have to have them!

You Set the Drive Sensitivity

The number of feet or meters each light represents is set by you and can be adjusted at any time.



A Versatile, Flexible, Comprehensive System

Regardless of which implement is attached to the tractor, the implement control is available from the same terminal.

The tractor is fitted with an "ISO-BUS terminal" so the operator only needs to learn how to use one terminal. Each implement is fitted with a "job computer" containing the intelligence needed for the particular implement.

When the job computer is connected to the tractor terminal the two units work together in perfect harmony.



The ISO-BUS Compatible Terminal

The LH 6000 CAN/ISO-BUS compatible terminal provides superior hard- and software options when combined with the LH IC24 tractor job computer, which is only needed if the tractor does not already have an ISO-BUS system installed.

Versatility and speed are achieved by utilizing a powerful processor and technology that permits the implement software to reside on the removable ATA-Flash data card. The plan is for the client specific software to be easily upgraded via the data card, which also serves as a media for data storage and transfer.





LH IC24 Job Computer

The LH IC24 job computer is a universal ISO-BUS compatible technology platform for present and future machine performance demands.

This “intelligence” unit is designed to work in conjunction with ISO-BUS compatible terminals. Its robust, modular, compact and comprehensive design characterize the LH IC24, giving machinery manufacturers new opportunities for introducing advanced and price competitive ISO-BUS implement control systems.



	THE LH IC24 JOB COMPUTER	THE LH 6000 TERMINAL
EXTERNAL DIMENSIONS	200 X 60 X180 MM (EXCL. PLUGS)	200 X 112 X 94 MM
Display:	N/A	100 x 75 mm <ul style="list-style-type: none"> ■ 360x240 pixels QVGA. ■ B/W, LED backlit.
Temperature range	-20 °C to 60 °C.	-10 °C to 60 °C
Power:	12 VDC Nominal (9V - 16V) standard. Approx. 2 W without inputs or outputs connected.	12 VDC Nominal (9V - 16V) standard or 24 VDC Nominal (18V - 32V).
Communication:	CAN 2.0b and 1 x RS232.	CAN 2.0b and 2 x RS232.
Inputs/Outputs:	8 standard digital/analog inputs max. 1.5KHz. 8 x 3A outputs each with open drain switches to ground. 4 of which are with fast PWM. 8 extra inputs or outputs (inputs as above, outputs max. 2A each). All outputs are overload protected. 20A Max. total output.	12 Standard digital/analog inputs. 4 ISO specified. 6 x 3A outputs each with open drain switches to ground. 4 of which are with fast PWM. 3A Max. total output.
Data media:	N/A	ATA-Flash data card (32 MB max.)
Other specification:	Complies with ISO 11783 - EMC Approved. Infineon C167 20 MHz processor. 1 MB Ram. 1 MB Flash. 8 of the standard inputs can be used as outputs. Externally programmable via RS232. Customised input specifications possible.	Complies with ISO 11783 - EMC Approved. Infineon C167, 20MHz processor. Removable ATA Flash-data card.



The System In Brief

Using optimized sensors developed with 25 years of grain loss experience, almost any combine harvester can be fitted with a grain loss system.

The sieve sensor measures the amount of grain lost from the sieves thus indicating that adjustments need to be made to the fan speed or the overall throughput of the machine, for example.

The straw walker sensors measure the loss from the straw walkers (the bottleneck of combine throughput) and indicate that the straw walkers can not keep up—so they SLOW DOWN.

Combining the inputs (loss/no loss) from the sensors fitted at the sieves and the straw walkers can be utilized to increase combine harvester performance.

The sensitivity for each sensor can easily be set to allow for different grain sizes.

Ordering information

LH Part Number

990-765 LH 765 Grain loss monitor kit including all sensors and fittings

990-865 LH 865 Combine capacity indicator kit including all sensors and fittings

The Total Solution

Now – the culmination of 25 years of grain loss experience – we present the LH 500C. With its simple user interface the LH 500 combine monitor features:

- Walker grain loss
- Feeder engaged/disengaged
- Chopper engaged/disengaged
- Grain tank full warning
- Harvested area
- Average combine capacity
- Forward speed
- Time functions
- Straw blockage warning
- Thresher drum speed
- Grain elevator speed
- Return elevator speed
- Straw walker speed
- Feeder speed
- Reel speed
- Sieve grain loss
- Fan speed
- Straw chopper speed

Grain Loss

The LH 765 grain loss indicator is a easy to use system indicating grain loss from the sieves and straw walkers on two large easy-to-read indicators.

Capacity Indicator

The LH 865 adds the current ground speed to the equation and gives you a combine capacity indicator.

The capacity of the combine can be increased by up to 5% by simply raising the forward speed – without escalating grain loss.



LH 765



LH 500C



The Intelligent Tramline Controller

The intelligent tramline controller makes advanced tramlining easy. Features possibly the most comprehensive set of tramline rhythms available.

The fully graphic LCD-display can be "customized", within limits, to show the information the operator wants to see.

Operation and programming are as easy using the logical keypad.

Features:

- Advanced tramline control*.
- Screen shows the previous, actual and next round.
- Forward speed.
- Area worked.
- Work time.
- Hopper content *(Kg).
- Hopper low level alarm*.
- Seed rate* (Kg/Ha).
- Distance travelled.
- Fan RPM* (pneumatic drills).
- Job memory facility.

** Depends on the available sensors*

Visible and audible warnings are given in the event of machine performance malfunctions.



Ordering information

PART NUMBER	DESCRIPTION
903-505	LH Intellitram excluding seed drill fitting kit and shut off mechanisms.
910-282	LH Intellitram seed drill fitting kit excluding shut off mechanism.

Optional shut off

903-152	Set of 2 clutches for 17mm hexagonal drill shaft.
906-153	Set of 2 clutches for 20mm round drill shaft.

Optional extras

905-152	Drill shaft sensor (for metering seed rate) 17mm hexagonal drill shaft.
904-151	Hopper level sensor.



Exclusively for DIN/ISO Socket Connection

No peripheral connection possible.

This tractor monitor is dedicated exclusively to tractors fitted with a DIN/ISO 9486-1/11786 socket.

The new easy-to-use monitor that provides the basic and most essential tractor pilot information.

A Real "Multi Meter"

Here are some practical examples of the many useful features:

- Crop-protection work.
- Your disc spinner.
- Your drill machine.
- Slurry application.

Just Plug In and Play.

These features help improve your daily work satisfaction and accuracy.

- Forward speed (Km/h).
- Area measure (area worked).
- Area measure (worked grand total).
- PTO shaft reverse speed.
- Work efficiency (Ha/hour).
- 10 "job memory" (notebook).
- Selectable auto or manual override signal.
- Automatic speed sensor calibration.

And much more. All features available simultaneously.



Ordering information:
Part number 903-499





70 Series Monitor

The 70 range of monitors and controllers will enable a full range of monitoring and control functions. Designed for maximum flexibility, the 70 series can be loaded with their final application program at the point of sale, reducing inventory and ensuring that the right product is always on hand.

The compact enclosure is equipped with four buttons and a clear dot-matrix LCD display. It can be mounted in any position, and is designed to be rugged and dependable.



	71 SINGLE SENSOR MONITOR	72 MULTI-SENSOR MONITOR	73 CONTROLLER
Inputs	1 analog or frequency 1 Digital	2 Analog sensors 2 Frequency 1 On/Off	2 Analog sensors 2 Frequency sensors 1 On/Off
Outputs	Alarm output with buzzer or light On/Off output	Alarm output with buzzer On/Off output	PWM output for regulation Alarm output with buzzer On/Off output
Suggested Applications	Speed/area/distance monitor RPM Pressure Flow rate/accumulated flow Electronic level gauge Bale wrapper counter	Moisture/Temperature Spray Monitor Multi RPM Hydraulic Pressure/Temperature Tramline RPM/Potato Counter Truck fuel/speed Nozzle checker Weather Station	Electric pump spray control Classic/Airblast spray control Granular applicator Spreader De-ice control Constant pressure control Speed regulation



85 Sprayer Control

The 85 Sprayer Control represents a new generation of design from TeeJet® and LH Agro. Designed from the original concept to be flexible and easily customized, the 85 can easily be configured to match the application.

Key 85 Features

- Both CAN and direct-wiring solutions available.
- Based on proven controller technology.
- Easy to read graphical display.
- Ergonomic housing can hinge to fit any location.
- Switch panel designed for easy customization.

Advanced Control Technology

- Fast PWM regulation anticipates new set points for faster regulation.
- Choice between flow-based, pressure-based or automatic selection mode based on flow rate.
- Auto master switches off booms at a programmable minimum speed.
- Cross-checking between flow and pressure readings to monitor system integrity.

Options

- Integrated electronic tank level gauge.
- Multiple boom section control.
- Weather station input.
- External backup memory for fast recovery of user parameters.
- RS232 port for printer or other data communications.





LH 500 Slurry Controller

A brand new speed compensated sludge and slurry application control system for slurry spread and injecting machines.

LH Agro introduced the first slurry control kit in 1993. The 500 console is part of the second generation of these systems. It features.

- Non-contact electro magnetic flow meter to help control your liquid manure application.
- Data is collected from the flow sensor, a speed sensor and shaft speed sensors fitted at the pump and distributor.
- Electric signals from the computer to the tanker's oil-hydraulic valve block controls the setting of the vehicles by-pass output valve on the discharge pipe.
- Even application! Tank level has no unfortunate influence on your precision.
- Easy to learn and use. Warnings are given if any performance irregularities occur.
- The pilot is only requested to enter the desired Tonne/Hectare rate via the computers keypad.
- An increase/decrease percentage key allows the operator to change the rate temporarily.
- GPS-precision farming is compatible with the LH 500 console.

Contact your regional representative for more information.



Inductive Flow Meter

The LH magnetic inductive flow meter is very robust and reliable. A superb range of cost effective magnetic inductive flow meters, developed for precise measurement of high volume liquid flow in various mobile applications. The LH meter works with any electrically-conductive fluid, such as slurry, water, suspensions, etc.

Distinctive characteristics:

- Robust design.
- Non-corrosive material.
- Maintenance free.
- Competitive prices.
- Super performance.
- It can be mounted both vertically and horizontally.
- Available in 4", 5" and 6" versions.

Contact your regional representative for more information.



FLOW METER	DESCRIPTION
904-855 (Excl. Mounting flanges)	LH Flow meter 4" (100 mm)
902-954 (Excl. Mounting flanges)	LH Flow meter 5" (140 mm)
902-956 (Excl. Mounting flanges)	LH Flow meter 6" (160 mm)