

*Work smarter,
not harder*

HOMBURG
holland

SmartSOLUTIONS[®]

SmartSTEER • SmartLEVEL • SmartSTOPnGO • SmartPLOUGH • SmartCONTROL • SmartBULB



SmartSTEER

RTK IMPLEMENT STEERING

*Precision combined
with big benefits
on the headland*

SmartSTEER RTK implement steering is the most universal and advanced implement steering on the market.

UNIVERSAL

- Supports both straight and curved AB lines
- Works with Ag Leader displays and optionally with AGCO (MF, Fendt, Valtra), Topcon (AgroSky) or CNH (New Holland, Case)
- Compatible with all implements behind tractor: wheel, hitch, drawbar, side shift and coulter steering
- Connects to tractor via ISOBUS socket

ADVANCED

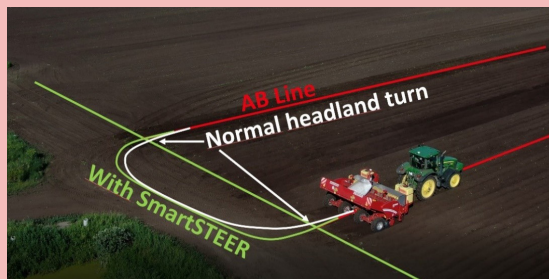
Unique are the steering options during turning on the headland and auto resume after the headland turn:

- Stop steering or auto center on headland turns
 - Sprayer like headland steering for pulled planters. This very sophisticated function mostly eliminates the need for reversing on headland and boosts capacity. Additionally, it limits damage to soil and ridges made already.
- Headland steering is a fully automatic function to steer straight out of current pass and straight into next pass again!

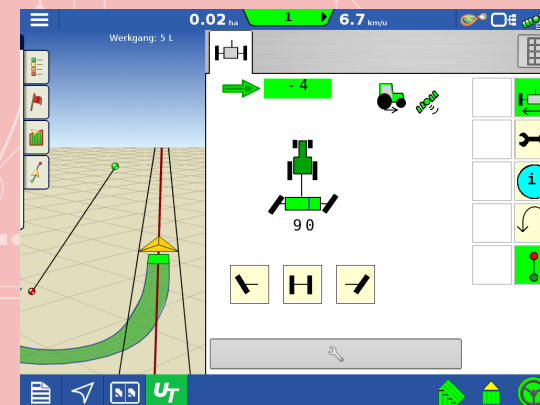
SIMPLE

SmartSTEER has a simple easy to understand user interface running in ISOBUS UT/VT. With the headland automation there is no need to manually pause and resume on the headland. SmartSTEER will do the job for you: hit the start button, go and be surprised!

1. Automated headland assistance:



2. Easy and intuitive user interface



ADDITIONAL INFO:

- ✓ Speed range from 500 m/h and up to 20 km/h
- ✓ Bundle contents: module and wiring harness
- ✓ Optional NTRIP harnesses to share RTK signal from tractor antenna available
- ✓ Supports PWM hydraulic valves
- ✓ Supports 0-5V Wheel angle sensors

COMPATIBLE WITH*:

Ag Leader®
ISOBUS

*Ask you dealer about supported displays

SmartLEVEL

3D RTK LEVELING

*Easy leveling system
using existing hardware*

SmartLEVEL leveling/grading for (Ag Leader) ISOBUS RTK systems moves soil all over the world. SmartLEVEL functionality is comparable with laser leveling but grade/slope can be set in up to 3 directions creating double roof model shape. There are unlike laser, no limits in elevation range.

UNIVERSAL

- Compatible with almost every ISOBUS display and NMEA RTK antenna
- Toggle buttons for quickly adjusting desired elevation (to work with multiple levels/planes)
- Connects to tractor via ISOBUS socket

ADVANCED

- Automatic NMEA configuration of antenna's for Novatel & Topcon
- Support for ISOBUS aux devices (joysticks)
- Switch input on ECU to prevent wheels lifting in the air
- For Ag Leader displays: cut and fill maps which show actual difference between current and target elevation

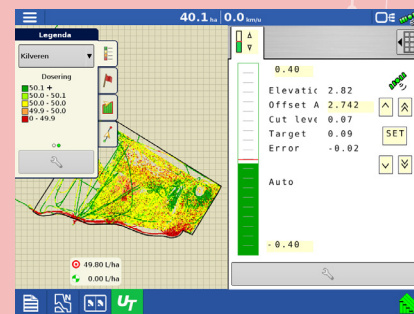
ADDITIONAL INFO

- Kit contains module and harness
- Optional NTRIP harnesses to share RTK signals from tractor antenna available
- Additional foreign languages foreseen
- Supports PWM hydraulic valves

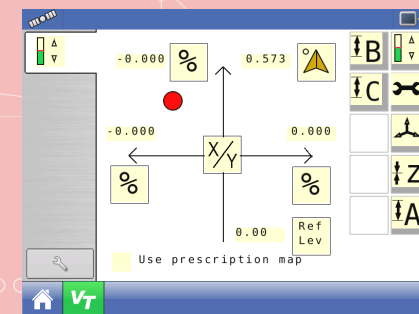
1. Proportional joystick included



2. Run page with lightbar



3. SmartLEVEL setup page



THREE SIMPLE OPERATING MODES USING INCLUDED SMARTSTEER JOYSTICK ONLY

- ✓ Manual Up & Down (proportional control)
- ✓ Fully automatic elevation for finalizing
- ✓ Semi-automatic: Manual control while limiting downwards movement by actual set slope/grade

COMPATIBLE WITH*:

Ag Leader®
ISOBUS

*Ask you dealer about supported displays

*Brought gridplanting to
existing ISOBUS display*

SmartSTOPnGO

ISOBUS GRID/RASTER MODULE

SmartSTOPnGO is a grid/raster module providing a 12V signal at set intervals (distances) to i.e. stop tractor, engage an external function or sound an alarm.

USING SmartSTOPnGO

Set heading and distance between stops. Then SmartSTOPnGO continuously shows next stop number and the distance until the next stop. At every stop SmartSTOPnGO gives a 12volt signal. Depending on the application, there can be given one or two signals with timers. To compensate for offsets, the system has look ahead settings for both directions. This makes it possible and easier to have signals on exactly the correct spot.

When the tractor is stopped, the system will continue by either pressing an external resume switch or via the button on the display.

UNIVERSAL

SmartSTOPnGO is compatible with most ISOBUS displays which support GPS positions via J1939 standard. SmartSTOPnGO connects to tractor via ISOBUS socket or ISOBUS CPC aux in cab connector.

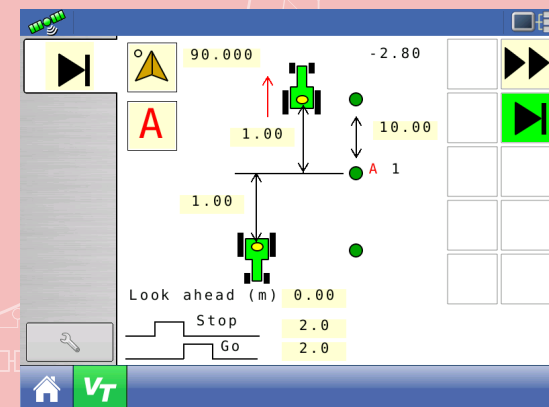
HARDWARE

The SmartSTOPnGO bundle exist out of a smart module and a harness which connects to ISOBUS and application. The compact and waterproof module can, as desired, be placed on the tractor or implement. SmartSTOPnGO has two (timed) outputs. An external resume input is also prewired.

1. SmartSTOPnGO module



2. SmartSTOPnGO user Interface



MORE INFO

Do you have questions or special requirements?
Contact your Ag Leader dealer or Homburg Holland.

COMPATIBLE WITH*:

Ag Leader®
ISOBUS

*Ask you dealer about
supported displays

SmartPLOUGH

RTK PLOUGHING SYSTEM

*Straight in furrow
ploughing without stress*

Since planters tendency is to follow the plough furrow while planting, straight ploughing is almost a must for straight planting. Ploughing using SmartPLOUGH with your RTK guidance lines together assures more accurate planting and perfect straight plowing. Straight ploughing using SmartPLOUGH also assures more even working depth and a more even field with less risk of wet spots caused by ploughing.

After setup, SmartPLOUGH automatically adjusts the width of your vario plough, assures optimum soil preparation for your crop and is field proven!

FUNCTION MODES

SmartPLOUGH can do straight and curved ploughing and assists in transition from one to the other line or curve. SmartPLOUGH can plough both towards straight and curved field boundaries. With latest firmware, SmartPLOUGH has added the option for fan rows.

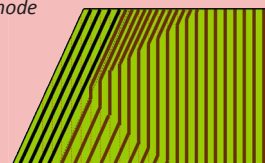
COMPATIBILTIV

SmartPLOUGH runs on Ag Leader displays which have the VT/UT option and can be fitted to almost all vario-ploughs. SmartPLOUGH comes as a complete kit with module, wiring, reversing sensor and valve. System is foreseen to use tractors hitch-up ISO signal, optionally, a hitch lifted sensor is available.

1. Straight & Curved ploughing



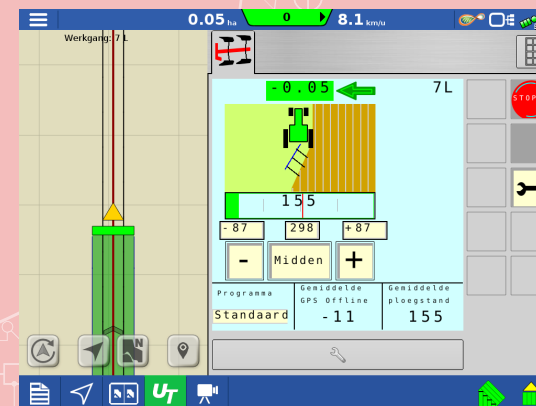
2. Advanced mode



3. Fan mode



4. User Interface



ADVANTAGES OF SmartPLOUGH ARE

- ✓ Better and more consistent ploughing without manual interaction (=comfort)
- ✓ Less skilled drivers are assisted by SmartPLOUGH
- ✓ More consistent performance by day and night (width and depth)
- ✓ Increases capacity and saves fuel (more even load on tractor)!

COMPATIBLE WITH*:

Ag Leader®

*Ask your dealer about supported displays

SmartCONTROL

SECTION & RATE CONTROL

*Bridges between ISOBUS display
and my existing implement*

SmartCONTROL is an interface module that bridges between ISOBUS (tractor) displays and non ISOBUS implements which use other CAN or serial protocols. SmartCONTROL handles both variable rate and section control for up to 255 sections! SmartCONTROL is intended for manufacturers/OEM who to make their non-ISO implements ISOBUS compatible without making (major) hardware changes.

HOW IT WORKS

Using the ISOBUS VT interface the necessary protocol can be chosen in SmartCONTROL to communicate with the selected implement. Depending on implement/protocol sections and working width are automatically detected or can be configured manually.

PRESCRIPTIONS

SmartCONTROL allows VRA applications by prescriptions and/or crop sensors like Ag Leader OptRx. Also the As Applied Rate can be logged onto the map.

COMPATIBILITY

SmartCONTROL is compatible with all ISOBUS displays which support Task Control (TC).

HARDWARE

SmartCONTROL itself is implemented in a robust Cinch housing. The system has a single connector, a LED for diagnosis and a mini USB connector for upgrading firmware. Harnesses are available from Homburg Holland or can be designed, made locally.

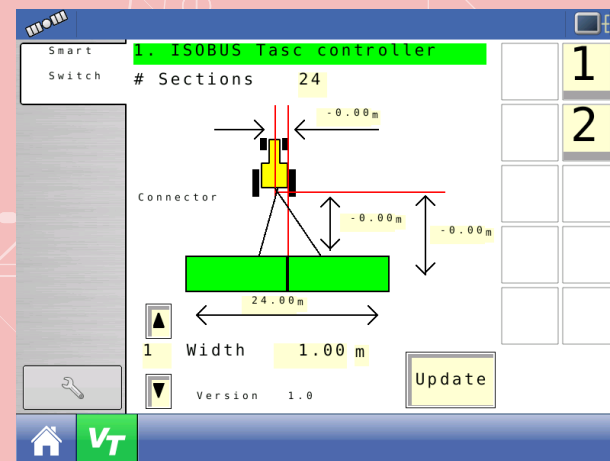
1. Compatible with i.e. Quantron



2. SmartCONTROL module



3. SmartCONTROL user interface



PROTOCOLS

SmartCONTROL is provided with multiple protocols for several different applications:

- ✓ CANopen, HC5500 via CAN
- ✓ Agrifac (Condor 2014+ and Milan)
- ✓ ASD for i.e., some Mueller protocols)
- ✓ NEW Rauch/Kuhn Quantron A & E (GPS Control)
- ✓ Additional protocols possible
- ✓ On/Off via relay (2 sections)

COMPATIBLE WITH*:

Ag Leader®
ISOBUS

*Ask you dealer about supported displays

No more guesswork,
facts count

SmartBULB

LOGGING AND AUTOSWATH

SmartBULB is a module to log and control (tulip) Flower Bulb planters. SmartBULB is compatible with Cremer Tel-O-Scope and almost all ISOBUS displays which have TaskController ability.

HOW IT WORKS

The Cremer Tel-O-Scope CAN data is converted to ISOBUS TaskController format by which allows logging of counted numbers. Additionally, SmartBULB can turn the planter (or other implements) on and off at headlands using ISOBUS section control. The SmartBULB hardware is implemented in a single control unit which can be mounted anywhere on the planter. SmartBULB connects plug and play to the Tel-O-Scope counting unit.

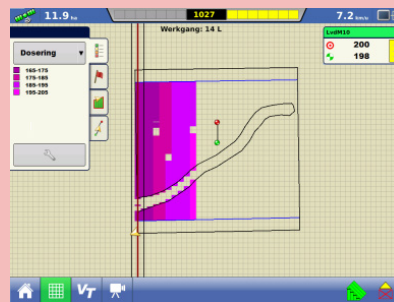
FUNCTIONALITIES OF SmartBULB

- Logging the counted number of bulbs per meter in the tractors ISOBUS/GPS display.
- Export planted numbers and totals to Management software and/or review in your GPS display (depends on GPS display)
- Use the auto section control of your GPS display to automatically turn the planter on and off on headlands
- Set the desired rate in the Cremer sensor (manually or by prescription map) to use it as target rate. Compatible planters will use the rate to control the planting rate.

COMPATIBILITY

SmartBULB is compatible with ISOBUS displays using TaskController (i.e. Ag Leader, John Deere, Fendt, Trimble, CNH, Topcon etc.). SmartBULB can be combined with SmartSTEER implement steering.

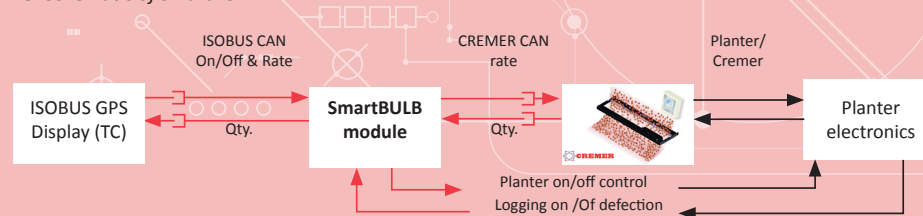
1. Mapping of quantities



2. Planting with SmartBULB & SmartSTEER



3. Schematic of SmartBULB



WIRING AND CONNECTIONS

SmartBULB connects to:

- ✓ ISOBUS socket of tractor to communicate with GPS display
- ✓ Cremer using plug and play proprietary CAN connector to read and log rate
- ✓ 12V relay output to control (engage/disengage the planter)
- ✓ An (implement switch) input to detect if planter is in working mode or not

COMPATIBLE WITH*:

Ag Leader®
ISOBUS

*Ask you dealer about supported displays

HOMBURG HOLLAND

Our world population is increasing at a great rate and it is a huge challenge for agriculture to continue to provide it with healthy food! Homburg Holland is eager to do its bit and wants to continue to grow as a leading player in the field of sustainable precision agriculture.

The employees of Homburg are characterized by their specialist knowledge. The principles that drive our service to the crop farming and horticulture sectors are expressed through our premium quality high-tech machines for seedbed preparation, sowing, planting and the healthy growth of crops.

We interpret our slogan 'See you in the field' quite literally. Always at the forefront, and with its feet firmly on the ground, Homburg keeps abreast of the developments in crop farming and horticulture. Its aim is to enable its customers to achieve the highest possible yield per hectare, efficiently and sustainably, through precision agriculture.

Precision agriculture are in our blood; measuring, recording, analysing and knowledge ensure that crop farmers can achieve optimal profits. That is what we stand for. 'Profit through knowledge'; the sharing of knowledge leads to top results. This is at the heart of what Homburg does. This is the blood that pumps through our veins, and that's what we are proud of!

Efficient and sustainable agriculture starts with optimal soil conditions. We therefore designed the Homburg Drain Cleaner and produce and export this useful machine worldwide. Our support for non-return tillage and high-speed sowing and planting techniques comes in the form of the top quality Swedish Väderstad's tillage and seed drills, for which we are the importers and agents. We also demonstrate our commitment to sustainable, resource-saving and no-drift crop protection by importing Garford hoeing technology and Hardi Twin Force sprayer.

*Get in contact
with a dealer or one
of our specialists*



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