

FENDT

Fendt Variotronic

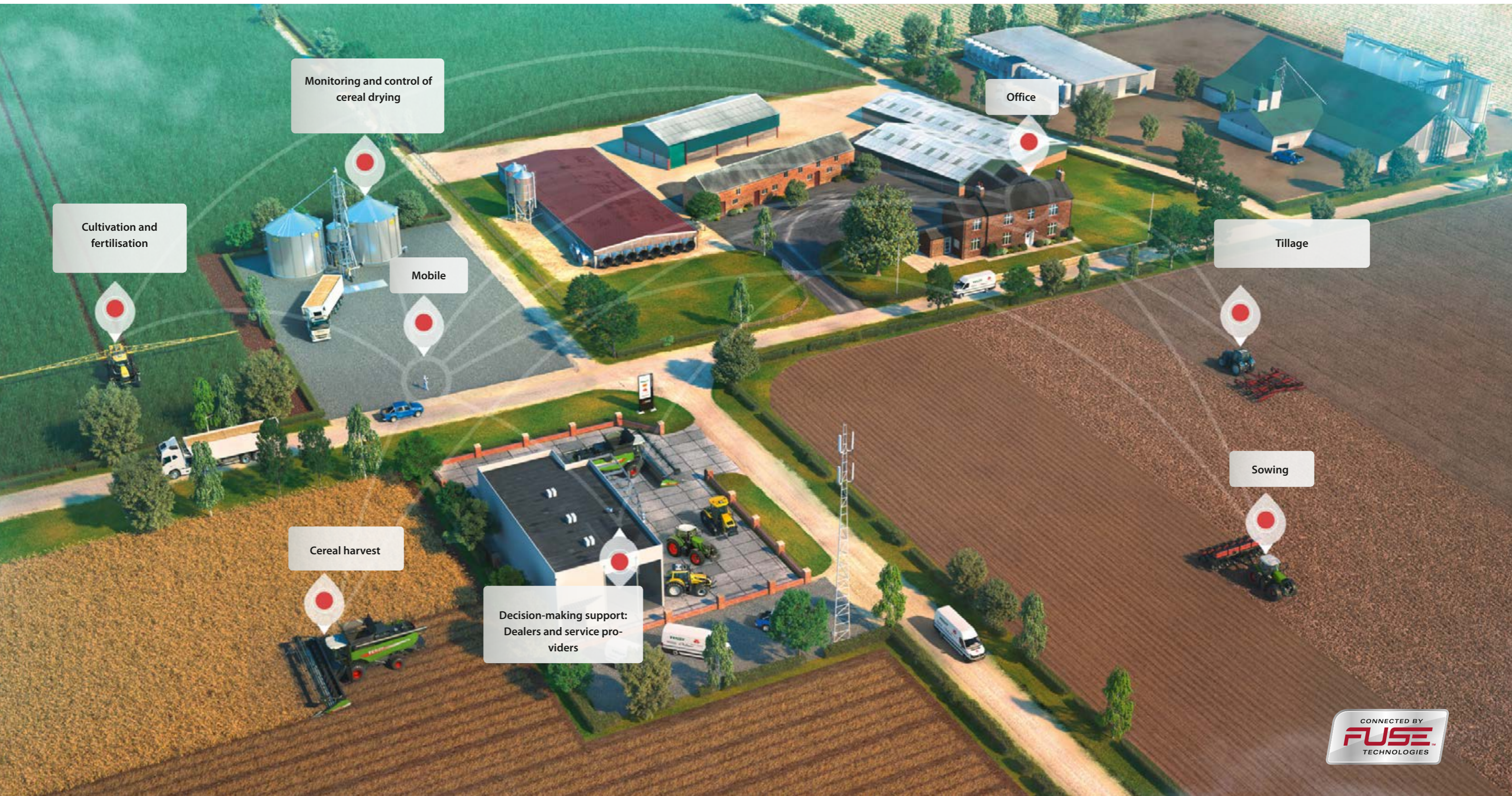




For further information on Variotronic
please visit:
www.fendt.com/Variotronic

A single operating concept for all Fendt machines.

Demands on farmers have been growing together with our population – these days, all farming operations need to be done accurately, quickly and efficiently. But there is a choice in how to do this: either conventionally or using Fendt Variotronic. This not only makes your work easier, but also opens up new potential for your farm. The following pages outline the potentials that Variotronic opens up for your business and how these can be utilised. Discover and benefit from the unique Fendt Variotronic operating concept – in each and every Fendt machine.



For additional information on Fuse® Technologies please visit: www.agcottechnologies.com

Fuse® Technologies – perfect harmony far beyond mere collaboration.

An operating philosophy. Seamless connectivity. Full integration. In Fendt machines featuring Variotronic, Fuse® Technologies ensure that these are not just visions, but daily practice. Fuse® is AGCO's holistic electronics strategy, which helps reduce operating costs while increasing efficiency and profitability. Whether sowing, cultivating or harvesting – the seamless integration of all machines used creates an unbeatable team. Experience this new dimension of precision farming. And make your fleet more efficient than ever before.

Commitment to progress is our tradition.

Fendt has always been one step ahead in agricultural technology: In the past, when the Fendt Dieselross tractor revolutionised farming. And in the future, with innovative, leading technologies to support farmers all over the world. Benefit from the Fendt advantage. Start reaping the Fendt Variotronic benefits today.



**We are not only talking about Farming 4.0.
We take it straight to your fields.**

Fendt is often mentioned in the very same breath as precision farming. Admittedly, the term Farming 4.0 was still unknown when the Fendt Variotronic was launched in 1998, but the underlying concept of taking strain off people and improving results through the intelligent use of machines held true even then. This is the goal we have always worked towards. And this is what we deliver successfully to your fields.

Nature never stands still.
Keep up with Variotronic.



For additional information on VarioGuide please visit: www.fendt.com/VarioGuide

FENDT VARIOTRONIC FUNCTIONS AND BENEFITS

VarioGuide track guidance. Because rule of thumb calculations don't pay off.

Precision to the centimetre

The more precisely you work, the more it pays off. This is what the Fendt VarioGuide automated guidance system already delivered in over 12,000 machines. Using highly accurate satellite technology, your tractor or harvester is able to work to a precision of +/-2 cm, even at night or in poor visibility. The result: Your fleet is optimally utilised, while gaps and overlaps are virtually eliminated and area coverage is increased. This in turn achieves a more economical and therefore efficient utilisation of expensive farm inputs. VarioGuide allows savings of up to ten per cent.

Economy with ease

Fendt VarioGuide therefore means cash savings for farmers and contractors. Precise metering, fewer passes and reduced use of fertilisers and pesticides mean not only lower costs, but also better environmental outcomes. At the same time, operators work under considerably less strain in the field, and results are optimised. As tractors automatically follow the optimal track at all times, operators are able to focus fully on other important matters such as monitoring their implements.

Always on the ball

The new version of the Fendt VarioGuide gives you a choice of two different receiver systems: NovAtel® or Trimble®. Existing Trimble® RTK infrastructures on farms such as NTRIP can continue to be used. The systems support a number of correction signals, depending on the respective receiver, including EGNOS/WAAS, RangePoint™RTX™, CenterPoint RTX™ and NTRIP. If you lose your signal due to terrain issues, VarioGuide uses Trimble®-xFill™ technology to continue work reliably up to 20 minutes without a correction signal available.

NovAtel or Trimble

Fendt VarioGuide always offers you free choice. Use the inexpensive, effective NovAtel receiver or the Trimble receiver with even more options. You decide which terminal you prefer to use. Both the Varioterminal 7" and Varioterminal 10.4" deliver excellent performance with all available receivers and signals.

Installation of the GNSS receiver under the roof hatch:
Optimal protection against theft, weather and damage!



Retrofitting the new Fendt VarioGuide track guidance system:
Older ProfiPlus-type tractors can also be retrofitted with the new VarioGuide system.



PowerPlus tractors also allow the VarioGuide steering system to be used with the Varioterminal 7" at all levels of precision!



Whether you work with tractors, forage harvesters or combines – VarioGuide is available for all Fendt machines.





For additional information on VarioDoc please visit: www.fendt.com/VarioDoc

FENDT VARIOTRONIC FUNCTIONS AND BENEFITS

Flooded with data? Not to worry. Let VarioDoc and VarioDoc Pro take care of it.

Effortless precision

Use your valuable time for what you enjoy doing. Let Fendt Variotronic do the rest. Even if it involves large amounts of data, for example for precise documentation. The VarioDoc and VarioDoc Pro documentation systems ensure that all relevant data is collected fully automatically on the field and documented in your field database. Conversely, new jobs can be created easily on your PC or on your Varioterminal right in the field before starting work. Done!

Document by all means, but do it right

Documentation is not only an obligation for farming enterprises. If one looks at the extensive opportunities that exist in terms of data evaluation and optimisation, documentation also makes absolute financial sense. VarioDoc not only supports you in complying with ever-expanding statutory documentation obligations quickly and easily. It also enables you to plan your job management effectively with low effort and, above all, helps you lower your operating costs substantially. VarioDoc and VarioDoc Pro are 100% ISOBUS-compatible and support the ISOBUS standards TC-BAS and TC-GEO (only VarioDoc Pro). This facilitates the collection and processing of data even further.

Free choice of field databases

You have free choice of using whichever field database you prefer. Fendt VarioDoc works with systems from a wide range of manufacturers and can therefore be put to immediate, universal use. As with all Fendt Variotronic components, the well thought-out system is intuitive to use. Simply transfer data to Fendt VarioDoc or VarioDoc Pro, and you have your most important parameters at hand.

Much more than mere documentation

The new VarioDoc and VarioDoc Pro allow you to utilise the full performance capacity of your field database. Using jobs in your work was already an option in the past. Now you can, for the first time, also transfer your application maps and record actual application rates. Thanks to VarioDoc and VarioDoc Pro, you can have the same field boundaries and tracks that you already use at your fingertips on any Fendt tractor.

Using the Varioterminal 10.4" and VarioDoc Pro, you are able to transfer your data to your field database via GPRS at any time, regardless of where you are, to make it available for immediate further processing.



Another advantage are the 10 integrated on-board calculators, which allow you to record data on areas worked, time and fuel consumption, among others, via the Varioterminal 7" (even without VarioDoc) or the Varioterminal 10.4".



VarioDoc and VarioDoc Pro are compatible with field databases from a wide range of suppliers: AGROCOM, BASF, Helm, Farmfacts, Gatekeeper, FarmWorks, iXMAP, Atland & Agreo (SMAG).

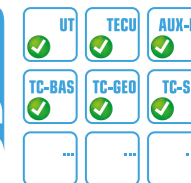


For additional information on ISOBUS please visit:
www.fendt.com/ISOBUS

AEF Certified

ISOBUS

www.aef-isobus-database.org



Fendt tractors are generally compatible with all implements that support the ISO 11783 standard or parts of it (e.g. SectionControl [TC-SC] or VariableRateControl [TC-GEO]).

FENDT VARIOTRONIC FUNCTIONS AND BENEFITS

Variotronic with ISOBUS – where expensive add-on technology becomes a thing of the past.

100% integration for ease of use

Gain the unique ability to use, monitor and control any ISO 11783-compatible implement without needing to install additional software or hardware – only with the fully ISOBUS-capable Variotronic. This means that expensive additional terminals or joysticks, complex software upgrades and flawed communication between tractor and implements, among others, are now a thing of the past. Benefit instead of a terminal and multi-function joystick with a consistent operating concept throughout.

More ISOBUS than ever

ISOBUS is not always ISOBUS. Whether UT, TECU, AUX-O or AUX-N, TC-BAS, TC-GEO or TC-SC – you can always rely on Fendt Variotronic. After all, Fendt already combines all of these ISOBUS functionalities in a single terminal even today. The Fendt Varioterminal 10.4", for example, communicates with all ISOBUS standards without any problem.

Unique operating concept

Set, adjust, control and monitor everything simply: thanks to the clear layout of implement functions on the generously dimensioned Varioterminal, everything you need is always at your fingertips. Any settings can additionally be changed at any time directly from the cab, even while driving. Frequently used implement functions can be easily assigned to the buttons on the multi-function joystick (if this is supported by the ISOBUS implement). This ensures that operators are able to work with optimal operating ergonomics for any type of work.



ISOBUS control makes handling even complex implements a breeze.



The Varioterminal provides you with an excellent overview from your familiar controls. This is your adjustment, control and monitoring centre.



Use the ability to assign key functionalities to joystick buttons to have these at your fingertips according to your individual preferences.



For additional information on Section Control please visit: www.fendt.com/SectionControl

FENDT VARIOTRONIC FUNCTIONS AND BENEFITS

Part width control, precision, profitability: Fendt Variotronic with SectionControl.

Precision right on the mark

Automatic SectionControl is indispensable for anybody wanting to work as efficiently as possible. Whether field sprayers, fertiliser spreaders, planters or seed drills – never apply valuable farm inputs twice but rather work without overlaps or gaps. This applies equally to large areas and to smaller, irregularly shaped fields. Simply couple the ISOBUS implement you wish to use, and all parameters are transmitted to the Varioterminal fully automatically.

Intensive savings

SectionControl is perfectly integrated with Variotronic operation to make your work easier by using GNSS positioning (a global satellite navigation system), whether in the day or at night. Thanks to up to 36 individually controllable width sections, fields are cultivated as intensively as necessary and as ecologically as possible, even in poor visibility. This allows savings of up to 17 per cent to be achieved. The main job that is left for you to do is to enjoy your cost savings!

SectionControl ensures that you work with superior precision to save not only fertiliser and seeds, but also avoid residue. This simplifies your logistics.



The Varioterminal 10.4" clearly displays the status of the various sections, a map of the worked area and the current VarioGuide status in three panels.





For additional information on VariableRateControl please visit: www.fendt.com/VRC

FENDT VARIOTRONIC FUNCTIONS AND BENEFITS

A solid partner in achieving sustainable efficiency: Fendt VariableRateControl (VRC)



Easy operating concept: Transfer the application map from your PC to the tractor, switch on VarioDoc and your field sprayer, and you are ready to go!

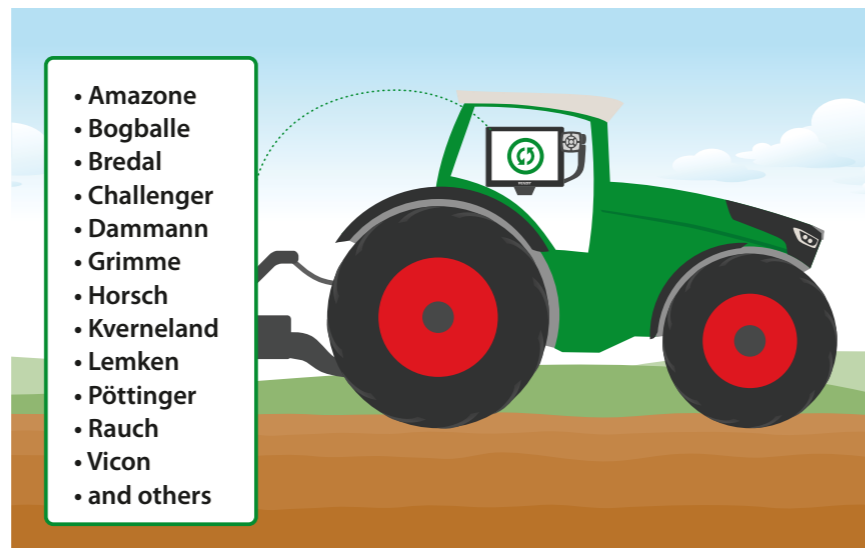
Perfectly measured efficiency

The more variable the conditions are within a field, the more efficiently Fendt VariableRateControl (VRC) works for you. Section-specific farming furthermore ensures that precisely the quantity of fertiliser or pesticides that is actually needed for each field section is applied. This means that plants with a poor supply of nutrients will be fertilised more intensively, while partial overfertilisation and resulting environmental burden is avoided only a few metres further on. Use yield potential maps to define the maximum product application rates.

Increased comfort, decreased costs

Maximise your acreage yields and save fertiliser, seeds and pesticides. VRC is integrated with the Fendt VarioDoc Pro documentation software to ensure that you are always able to apply precisely the correct product rates to precisely the areas you want. Simply use a compatible field database to plan farm inputs with superior precision in the application map and then transfer the data via the ISOBUS standard TC-GEO. As for the rest – while it might seem like magic, it is simply the most efficient solution conceivable for your farm.

Maintain flexibility and comfortably control a wide range of implements via the Varioterminal. Thanks to ISOBUS, this is quickly and easily done with implements from many manufacturers.



VariableRateControl (VRC) allows you to process up to 5 application maps simultaneously. An as-applied map of the actually applied quantities is additionally created for later verification.



Outstanding integration: while VariableRateControl monitors and controls application rates, SectionControl activates and deactivates width sections as required (e.g. along field boundaries or next to areas already worked).



Use VarioDoc to transfer application maps easily from compatible field databases.



FENDT VARIOTRONIC FUNCTIONS AND BENEFITS

Headland management²: Variotronic^{TI} and Variotronic^{TI} automatic.

Unparalleled turning manoeuvres

Say good-bye to operating errors and cumbersome repositioning of hands when manoeuvring at the headland. This is what the innovative Fendt Variotronic^{TI} headland management delivers. This system allows you to define, store and reuse recurring steps, from raising your implement at the headland through to lowering it again. This generates a sequence of steps that you are then able to access manually at the push of a button for any subsequent turning manoeuvres. Unparalleled safety, reliability, precision and comfort at your fingertips.

Variotronic^{TI} and Variotronic^{TI} automatic

Select from two options, depending on the level of comfort required: Variotronic^{TI} allows you to store up to four sequences, which can then be retrieved at the push of a button on the multi-function joystick. Sequences can be programmed both from the stationary vehicle (offline editing) and while driving. Stored sequences can additionally be optimised from the stationary vehicle at any time. Variotronic^{TI} automatic delivers even greater precision and comfort. The system automatically detects the headland line from a GPS signal and executes the stored sequence fully automatically.

Up to 74 sequential steps

Without Fendt Variotronic^{TI} operators need to perform many steps manually at the headland. Depending on the implement used, this can cause substantial stress and be a source of any number of errors. These tasks are better performed by your Variotronic^{TI}. The system is able to launch up to 74 sequential steps, which can be activated via five different triggers. The sequential steps are defined by you in keeping with your individual needs and preferences. Choose from 71 possible settings for engine and transmission control, hydraulic valves, front and rear linkages, front and rear PTOs, VarioGrip, the reversible fan and automatic track guidance with their respective individual functions.

Customisable joystick buttons:

Store all of the operating sequences you need comfortably in the Varioterminal and launch up to four sequences directly from the multi-function joystick. This allows you to start each new track fully automatically with superior comfort.



Offline editing for stress-free programming:

Optimised sequences of steps can be created individually from the stationary vehicle in your own time. If necessary, operators are also able to adjust sequences while working for further optimisation.



Variotronic^{TI} automatic:

The Variotronic^{TI} automatic headland management triggers operating sequences automatically at the headland. Use the terminal to define which sequences to use when starting and completing each turn. This process is supported by an intuitive graphic interface.

FENDT VARIOTRONIC FUNCTIONS AND BENEFITS

Free software updates to keep your machine as current as on the day of purchase.



The diagnostics page on the Varioterminal displays the current software version as well as current vehicle data.

From update to upgrade

Fendt Variotronic keeps you up to date with the latest technology even after many years of use. How is this possible? Through unique software updates with new auxiliary functions, which Fendt makes available to customers at no charge up to twice per year. The easiest option is for you to have your Variotronic updated by your dealer as part of regular maintenance (note that labour will be charged). This not only ensures that your Fendt machine retains both its technological edge and its value, but also keeps your investment as up to date as on the day of purchase.

Lifelong benefits

Fendt customers are always at the leading edge of technology. This starts when you buy your Variotronic machine and simply continues throughout your machine's service life, as we make newly developed functions available to existing machines of current and older model years (provided their hardware is compatible) rather than restrict them to future models. We also maintain reliability of use, efficacy and operating comfort at consistently high levels.

Upgrades and retrofits

When you bought your machine, did you perhaps decide against functions that you now really would like to have? Lucky that you went for a Fendt with Variotronic! Whether VariableRateControl, SectionControl, Variotronic^{TI} automatic headland management or VarioDoc Pro – retrofitting the functions that were available for your machine at the time of purchase is easily done at any later time. If certain technical requirements are met, you can even extend your Fendt machine with functions that were only introduced in later series. Ask your dealer!



Examples of exclusive software updates

2012	The advantages	The benefits
Variotronic ^{TI}	• Option to transfer from just 6 instead of 10 sensors to ISOBUS	Easier to use
VarioGuide	• Field boundary with headland alert • New map view	Better ease-of-use and performance
Varioterminal	• Camera image shows automatically when reversing • Additional trigger for onboard computer • 25 places for device settings • Light sensor controls illuminated parts of the cab • Night mode so you can work in comfort, without glare	Better overview and performance
Variotronic ^{TI} automatic	• Headland sequences triggered automatically	Better ease-of-use and performance
2013		
VarioGuide	• Marked obstacle and area obstacle	Better safety
SectionControl	• Part width adjustment with up to 24 part widths	Better ease-of-use and performance
Coming Home light	• Headlights give an afterglow when you leave the cab	Better ease-of-use and performance
Varioterminal	• Enhanced AdBlue consumption display • Maintenance page: 2 service counters, for driver and customer service	Better safety, ease-of-use and performance
Automatic load limit control 2.0	• Engine rate automatically adjusts for a more dynamic driving experience	Better ease-of-use and performance
Brake light control when decelerating	• Brake lights controlled faster and automatically	Better safety
Optimised deceleration in driving pedal mode	• Increased driving stability with smart deceleration adjustment	Better safety and ease-of-use
Acoustic warning message	• If handbrake not engaged	Better safety
2014		
VarioGuide / VarioDoc	• Transfer field settings and implement settings	Better ease-of-use and performance
VarioDoc	• Automatic optimum speed selection	Better ease-of-use and performance
VarioGrip	• Tyre details	Better ease-of-use and performance
Fendt Cargo front loader	• Automatic front loader detection	Better ease-of-use and safety
SectionControl	• New trigger settings • Enhanced settings: Driving direction, external section tolerance	Better ease-of-use and performance
2015		
VarioGuide	• New wayline types: AB coordinates and A coordinates + angle • Combined display of accuracy, mobile signal strength in map view, 3G mobile network modem	Better ease-of-use and performance
VarioGuide	• New generation VarioGuide	Better performance
VarioDoc	• VariableRateControl	Better ease-of-use and performance
SectionControl	• Increased to 36 sections	Better performance
Quick Jump	• Quick access to up to 8 submenu functions	Better ease-of-use and performance
2016		
VarioGuide / VarioDoc Pro	• Automatic field detection	Better ease-of-use and performance
VarioDoc / VarioDoc Pro	• Field data exchange with field database	Better ease-of-use and performance
VarioGuide	• Tramline marking • Map view with addition quick jump keys • New offset functions; store offset waylines	Better ease-of-use and performance
Variotronic ^{TI}	• Now includes VarioGrip and reversible fan	Better ease-of-use and performance
SectionControl	• Option to work outside of the field boundary and eliminate area obstacles	Better performance

FENDT VARIOTRONIC JOYSTICKS & TERMINALS

Whether tractors, forage harvesters or combines: with Variotronic, you're set.



No need for change, ever

The first-generation Fendt Variotronic revolutionised the operation of modern agricultural machinery as early as in 1997. It was the first system ever to combine all functions within a single hardware unit comprising a Varioterminal, multi-function joystick and armrest, making any additional joysticks and monitors superfluous. It has been so successful that Fendt Variotronic has become a core element across all key Fendt machines. Whether tractors, forage harvesters or combines: with Variotronic, you'll never need or want to change.

Familiar environment

The Varioterminal makes sure that you always keep a clear and full overview of all of your work, from tractor and implement controls through to camera functions, documentation and track guidance. This includes any time you move from your Fendt Vario tractor to your Fendt combine – both concept and controls remain the

same: well thought-out, clearly organised and easy to use. The clarity of the layout remains outstanding, regardless of the individual equipment options used. You have a choice of the Varioterminal 7" or the Varioterminal 10.4", depending on your needs. The joystick and armrest are optimally designed for the functions of the respective key machine. The Varioterminal makes sure that you always keep a clear and full overview of all of your work, from tractor and implement controls through to camera functions, documentation and track guidance. This includes any time you move from your Fendt Vario tractor to your Fendt combine – both concept and controls remain the same: well thought-out, clearly organised and easy to use. The clarity of the layout remains outstanding, regardless of the individual equipment options used. You have a choice of the Varioterminal 7" or the Varioterminal 10.4", depending on your needs. The joystick and armrest are optimally designed for the functions of the respective key machine.



With both the 7" and the 10.4" Varioterminal, operators have the option of using either the touchscreen or navigation keys and a rotary control. The allocation of three of the four sections in the Varioterminal 10.4" can be customised.



All models from the 500 Vario and above feature a Variotronic armrest with outstanding full comfort and a consistent operating concept even in the entry-level Power variant. The Power variant comprises the Varioterminal 7". (The image shows the 500 Vario and 700 Vario Power variants.)



The Varioterminal 10.4" is equipped with two camera connections at the rear of the armrest as standard. Camera images can be displayed individually or simultaneously. Alternatively, they can also be displayed in full-screen mode, just like other menus.



The Variotronic armrest in Fendt combines has the same core structure as that in the 300 Vario to 1000 Vario tractor series. The joystick and other control elements are optimally adapted to the relevant requirements from an ergonomic perspective. Fendt combines are equipped with the 7" terminal, which implements the same operating concept as Vario tractors.



Both terminals feature a night mode. In this mode, the display colours are adjusted to ensure that operators do not suffer any glare from the terminal. This creates greater safety in road transport and much better operator comfort.



The Profi variant features all hydraulics controls and the Varioterminal 7" as standard. The Varioterminal 10.4" is available for the Profi variant as an option and forms part of the standard equipment in ProfiPlus models.



One camera image can be configured for the reversing camera. If this is done, the camera image automatically switches to full-screen mode as soon as the tractor reverses.



In the Fendt Katana, both armrest and joystick are the same as in Fendt combines, but control functions are specifically optimised. The Varioterminal 10.4" in the Fendt Katana and in Fendt Vario tractors follows the same operating concept.

Track guidance for all who prefer to stick to their precise targets.



The VarioGuide full-screen mode has been expanded by valuable controls. The most important VarioGuide functions can, for example, be controlled without changing screens. The QuickJump function continues to be available for switching directly and quickly to other operating interfaces.

Fendt VarioGuide receiver	NovAtel	Trimble	Topcon
GPS compatible	■	■	■
GLONASS compatible	■	■	■
GALILEO ready	■	■	■
EGNOS (free)	■	■	■
WAAS (free)	■	■	■
Autonomous (without correction signal)	■	■	■
Trimble® Rangepoint® RTX (fee-based)		□	
Trimble® Centerpoint® RTX (fee-based)		□	
NovAtel TerraStar-C (fee-based)	□		
NovAtel TerraStar-L (fee-based)	□		
OmniSTAR VBS (fee-based)			□
OmniSTAR XP/HP/G2 (fee-based)			□
Mobile RTK station ²⁾	□	□	□
RTK network (fee-based) ³⁾	□	□	□

²⁾ Not available in all countries. Please contact your dealer for further information.
³⁾ Country-specific, without SIM card, without licence subscription

Always a positive signal

Regardless of your country or your location, whether near a major city or far from the nearest mobile network tower: Fendt Variotronic with VarioGuide track guidance converts available GNSS signals into precision to the centimetre. To achieve this, the system uses the satellite systems GPS, GLONASS and GALILEO (as soon as available) and enhances their data with a range of correction services. Should the RTK signal fail due to an obstacle, VarioGuide with Trimble®-xFill™ technology keeps you reliably on track for up to 20 minutes.

Open for precision

VarioGuide works with a wide range of signals. It works just as well with satellite-based EGNOS and WAAS signals as with ground-based RTK signals delivered via radio or mobile networks (NTRIP). VarioGuide supports open formats such as RTCM. Additionally, any settings made or field properties entered can be easily transferred via USB stick at any time to make sure that you maintain the same superior precision with all of your key Fendt machines. As a result, all of your Fendt machines will have access to the same information on field boundaries, obstacles and guidance tracks without any need for duplicate entry.

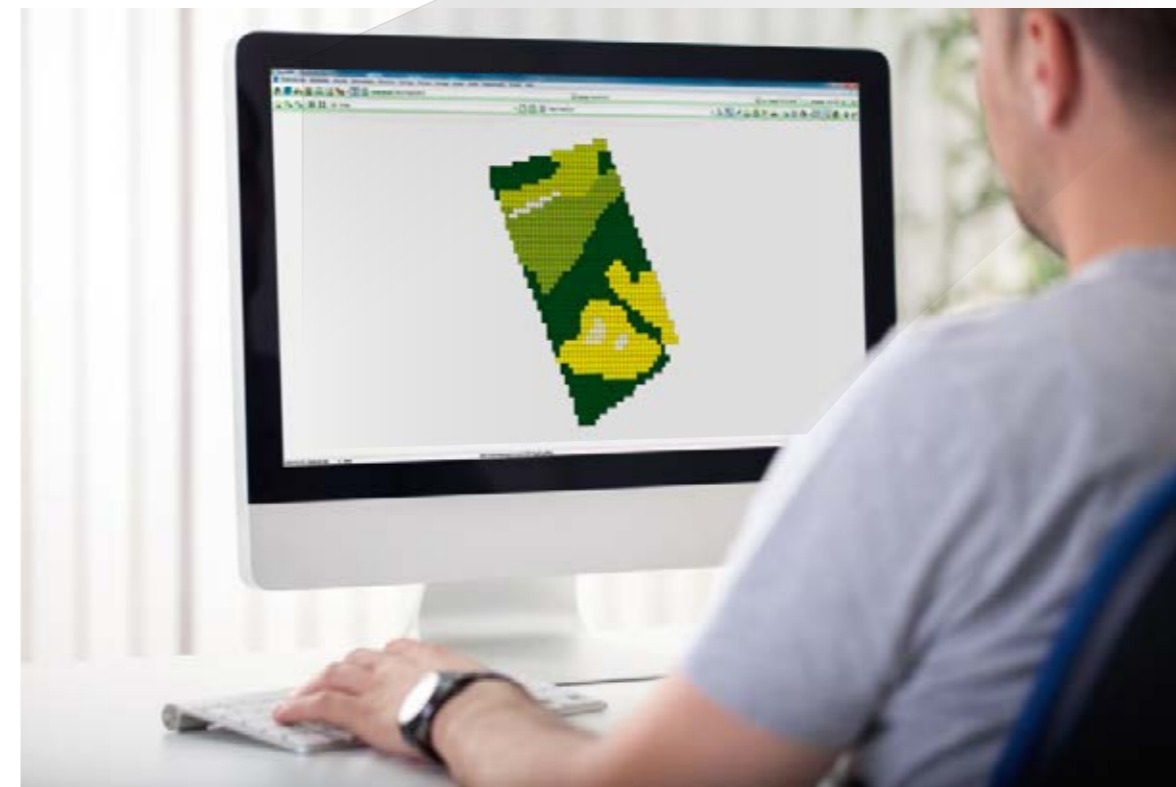
NovAtel and Trimble GNSS receivers

Which correction service is best? Easy – the one that matches your needs best. Fendt VarioGuide gives you free choice from a range of precision levels: the GNSS receivers NovAtel Standard and Trimble Standard support the satellite-based EGNOS/WAAS correction signals as well as RangePoint RTX, if combined with a Trimble AG-382 receiver. An upgrade to NovAtel RTK additionally gives you access to more precise RTK signals via radio and mobile networks, while an upgrade to the Trimble RTK receiver delivers even greater precision of up to +/- 2 cm repeatable accuracy.

Retrofitting the new VarioGuide receiver

If you already have a ProfiPlus tractor of the 500 to 900 Vario series and wish to use the new VarioGuide receivers, that's easily done. Not a problem! Retrofit kits are available for all ProfiPlus tractors to ensure that your existing tractor always remains up to date. Previously used (Topcon) VarioGuide receivers continue to be compatible with the new ProfiPlus tractors.

The VarioGuide full-screen mode has been expanded by valuable controls.



Basic documentation in perfection

If you decide on a Fendt Variotronic with the Varioterminal 10.4", the VarioDoc documentation system is included as standard. This delivers an enormous advantage, as all data relevant for documentation can be transferred directly, with minimal effort, to your ISO XML-compatible field database via Bluetooth, and important parameters such as "worked area" and "time needed" are immediately available for evaluation.

"Professional" comes from VarioDoc Pro

Optional documentation with Fendt VarioDoc Pro offers even wider options. Thanks to GPS-based records and the transfer of certain parameters via a mobile network, the most important data is documented immediately, without any extra input. All you need is a single SIM card (NTRIP or VarioDoc Pro). VarioDoc Pro users additionally benefit from VariableRateControl (VRC) and the collection of additional parameters such as fuel consumption and engine speeds.

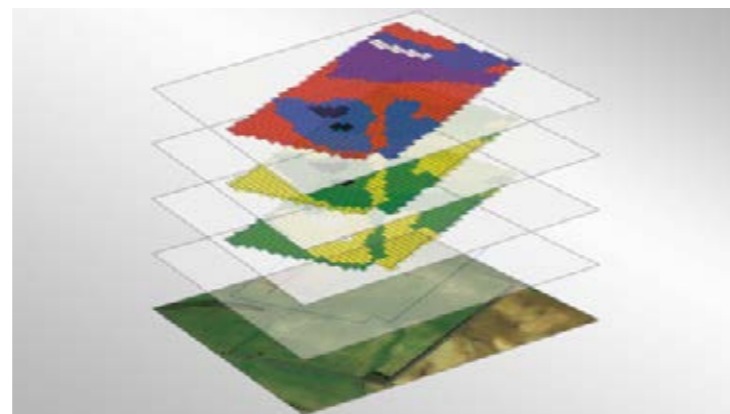
Guidance line transfer

VarioDoc and VarioDoc Pro also offer the option of not only transferring documentation data, but also exchanging data with your VarioGuide system, even if you use third-party automated guidance systems! This allows guidance lines, field boundaries and application maps (only with the VariableRateControl option) to be easily transferred via a field database, either from your VarioGuide system to the third-party system via a compatible database or vice versa.

Compatible field database	VarioDoc	Vario Doc Pro
BASF	■	■
Helm	■	■
AGROCOM	■	■
FarmFacts	■	■
Farm Works	■	■
Farmplan - GateKeeper	■	■
SMAG - Agreo, Atland	■	■

FENDT VARIOTRONIC SECTIONCONTROL & VARIABLERATECONTROL

The precisely right quantities of farm inputs at precisely the right places.



Geo-specific evaluation maps of yields, soil samples, plant nutrient availability etc. can be used to create application maps that reflect actual needs in the field database. These maps then form the basis for section-specific application rates.

Field boundaries in particular offer great savings potentials. The system additionally reduces operator strain, as section control is handled automatically. Savings potentials are even greater if there are no tramlines, for example with pre-emergence methods of farming or on grassland.

- A Worked area from the first tramline
- B Currently worked area from the second tramline
- C Overlap of worked areas without SectionControl = savings potential



VariableRateControl (VRC) metering

VariableRateControl (VRC) in the Fendt ProfiPlus tractor variant really shows off its strengths when applying up to five different farm inputs simultaneously, each as precisely metered as the next. This is easily done by transferring the relevant application maps to the tractor via VarioDoc Pro. The precise application rates are then transferred to the application implement via an ISOBUS interface, and the VarioGuide steering system ensures that they are executed with superior accuracy.



Up to 5 farm inputs

VariableRateControl allows up to 5 farm inputs to be applied at the same time. With single-seed drills, for example, the application rates of seeds, fertiliser and micro-granular can be metered independently of each other.



SectionControl saves time and money

With full ISOBUS compatibility and the ability to precisely control 36 or even more width sections, automatic SectionControl saves you time and money. The system is closely integrated with VarioGuide track guidance and applies seeds, fertiliser and pesticides economically and without overlaps even on irregularly shaped fields. SectionControl is available in the ProfiPlus versions of the Fendt 500 Vario to 1000 Vario series.



SectionControl Assistant

Your field sprayer uses SectionControl, but keeps activating too soon or too late? Not a problem! The SectionControl Assistant guides you through all necessary settings step by step to achieve optimal results in no time. Settings are saved automatically to ensure that perfect results are achieved consistently whenever the implement is coupled again.

FENDT VARIOTRONIC ISOBUS

Fendt Variotronic speaks your language. And that of all ISOBUS implements on the market.

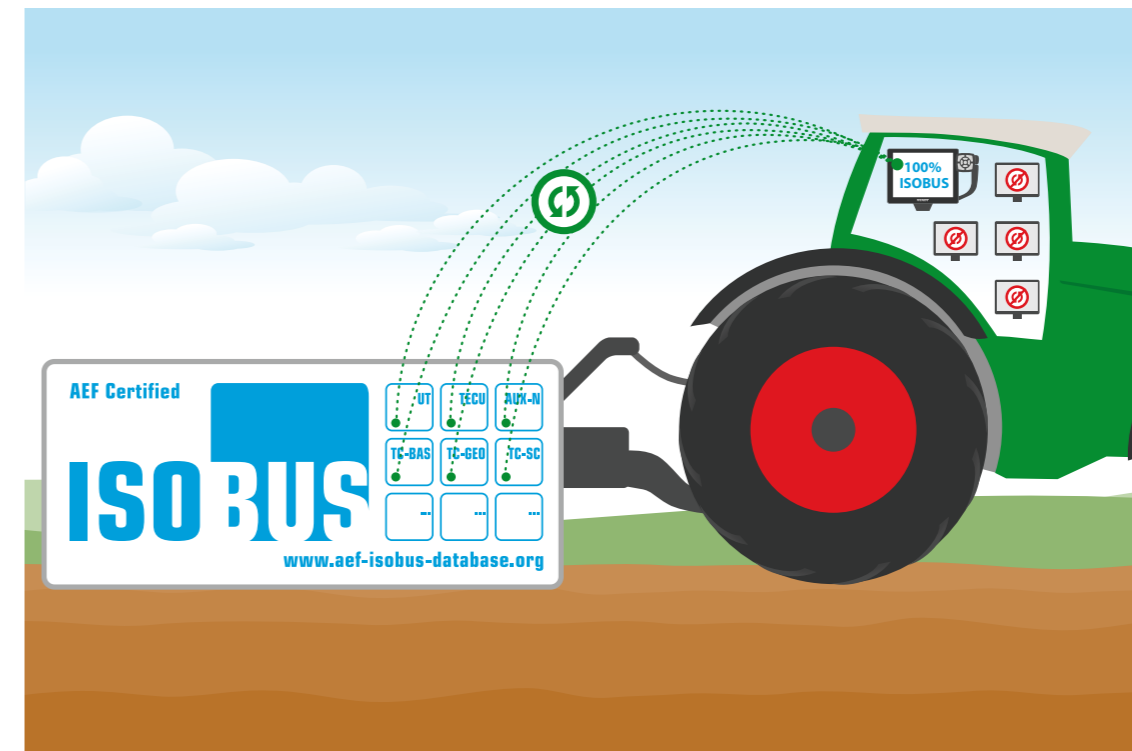


ISOBUS INCAB interface

Would you like to connect an external third-party terminal in your Fendt tractor? Or an external joystick? Not a problem! The standardised ISOBUS INCAB interface makes this a breeze: simply connect the external device, and you're ready to go! Defining which terminal or joystick is to be used for controlling what, and which display is to show what is just as easy.



ISOBUS also on the Varioterminal 7"
The Varioterminal 7" also offers you the optional ability to use the ISOBUS functions UT, AUX-N, AUX-O and TECU.



An open approach

UT (Universal Terminal) controls the display on the terminal.
ECU (job computer) on the tractor for transferring data between the tractor and implement.
AUX-N and AUX-O for joystick controls.
TC_BAS for recording totals data of jobs.
TC-GEO for the option of logging local data and planning jobs, for example using application maps.
TC-SC for automatic switching of 36 or even more sections with SectionControl.

Maximum compatibility

Flexible, manufacturer-independent and 100 per cent ISO 11783-compatible: Variotronic implement control allows you to use any ISOBUS implement on the market. The relevant settings can be made clearly and quickly via the Varioterminal.

One joystick for full control

Whether joystick control, customised button assignment for frequently accessed functions or the ability to call up pre-programmed settings – the Variotronic multi-function joystick gives you more intuitive and ergonomic control of your ISOBUS implements than ever

before. Up to ten functions can be individually assigned by simply clicking a button on the Varioterminal.

Clear transfer

ISOBUS transfers the implement operating interface directly to the Varioterminal 10.4" or Varioterminal 7" to support optimal operation and a clear representation. The Varioterminal 10.4" allows you to select your preferred display option: whether full-screen with both menu bars on the right or one on either side, half-screen in landscape or portrait mode – the single-terminal principle ensures that you always have an ideal overview.



(UT) terminal display

The operating interface of your ISOBUS implement can be easily displayed on the Varioterminal 7" or Varioterminal 10.4". On the Varioterminal 10.4", you can select landscape or portrait mode in half-screen or full-screen display.



Joystick control (AUX-O or AUX-N)

Use your Fendt joystick to control your ISOBUS implement and assign up to 10 functions to the joystick. Fendt supports the two leading ISOBUS standards AUX-N and AUX-O to ensure that your ISOBUS implement is always under your optimal control.



TI reservation

You would like to use joystick controls, but also want to continue working with the tractor's TI system? Not a problem! Active TI reservation preserves your TI buttons and makes up to six buttons available for your ISOBUS implement.

Variotronic makes even complex headland sequences a breeze.



Superior headland management

The unique Fendt Variotronic^{TI} headland management system offers superior comfort for your work. Variotronic^{TI} headland management system offers superior comfort for your work. Record headland sequences once and save them for up to 25 machines. Then simply press a button, and the pre-defined sequences start automatically. Noch einfacher ist Variotronic^{TI} automatic is even easier. When combined with VarioGuide, the system recognises its position via GNSS and automatically initiates all pre-defined steps at the headland.

Perfect support

The options provided by Variotronic^{TI} are as wide-ranging as your jobs. At the headland, each implement requires the operator to perform a more or less complex operating sequence. Easily record the sequence of your choice for your job from up to 74 functions (e.g. raising/lowering, cruise control on/off etc.), and your Fendt will execute it either at the push of a button or automatically. A sequence comprises up to 39 individual steps that can be launched via five different triggers. This allows even highly complex implements to be reliably controlled.

Variotronic ^{TI} headland management	
Functions that can be integrated into the operating sequence	Rear power lift Lift, lower, slip control system on, STOP, forced lowering
	Front power lift Lift, lower, adjust, STOP, forced lowering, da on
	Rear PTO ON, OFF
	Front PTO ON, OFF
	EHS valves Lift, lower, stop, float
	4WD Automatic, 100%, OFF
	Differential locks Automatic, 100%, OFF
	Suspension ON, OFF
	Vario transmission Cruise control ON, cruise control OFF
	Electronic engine control Recall MIN engine speed, recall MAX engine speed, end function
	TMS TMS ON, TMS OFF
	Driving pedal Pedal mode ON, pedal mode OFF
	VarioGuide Automatic steering ON/OFF
	VarioGrip Road pressure, field pressure
	Reversible fan ON, OFF
Headland management trigger	Distance driven ■
	Time elapsed ■
	Front power lift height ■
	Rear power lift height ■
	Joystick key press ■



4 sequences, 25 implements

Store four operating sequences to be performed automatically for 25 implements. Four different sequences can be stored per implement to be executed at the headland or along farm tracks across which you work. Four sequences can be launched directly via the joystick to make sure you always have full control.



The most important functions at a glance

The TI function in the Info+ menu always shows the TI sequence currently being executed, the currently active step and any triggers associated with this step.



Offline editing for easy programming

Optimised sequences of steps can be created individually from the stationary vehicle in your own time. If necessary, operators are also able to adjust sequences while working for further optimisation.



Variotronic^{TI} automatic

Variotronic^{TI} automatic does away with the need to trigger TI sequences manually at the headland. The tractor does this for you fully automatically, based on a GPS signal for even and consistent results at the headland.

VARIOTRONIC

Equipment and functions

Terminal functions			7	10.4
Fendt Varioterminal				
Vehicle operation			■	■
Rotary control and keys			■	■
Touch control			■	■
Languages			26	26
Integrated help function			■	■
Bluetooth				■
VarioDoc (documentation)				■
VarioDoc Pro (documentation)				□
VarioGuide (auto-steering)			□	□
SectionControl				□
VariableRateControl				□
2 camera inputs				■
VariotronicTI automatic				□
Screen diagonal	cm		17.7	26.3
Display area	cm ²		138	334
USB port			■	■
Quick Jump			■	■
Service page with information up to the next inspection			■	■
VarioActive superimposed steering system				
Functionalities			7	10.4
Variotronic implement control ISOBUS				
Universal terminal (UT)			□	□
Implement control via joystick (AUX-O, AUX-N)			□	□
Job management sum-based (TC-BAS)				□
Job management geo-based (TC-GEO)				□
Automatic section control (TC-SC)				□
General			VarioDoc	VarioDoc Pro
Fendt VarioDoc				
Bluetooth data transfer			■	■
Mobile network data transfer				■
Semi-automatic documentation triggered either manually or through e.g. front/rear linkage, control units, PTO actuation, external pulse generator			■	■
Fully automatic documentation (if supported by FMIS software)				■
GPS position data (every 5 m) e.g. fuel consumption, engine speed, ground speed, etc.				■
Job data				
Working width	m		■	■
Worked area	ha		■	■
Distance in working position	km		■	■
Distance not in working position	km		■	■
Time in working position	hrs		■	■
Time not in working position	hrs		■	■
Fuel consumption	l		■	■
GNSS data points position data				
Position				■
Date				■
Fuel consumption/time	l/hr			■
Fuel consumption/area	l/ha			■
Engine speed	1/min			■
PTO speed front	1/min			■
PTO speed rear	1/min			■
Linkage position front	%			■
Linkage position rear	%			■
Traction requirement	N			■
Speed with slip	km/h			■
Real speed	km/h			■
Outside temperature	°C			■
Operating hours	hrs			■
ISOBUS implement data				■

VARIOTRONIC

VarioGuide track guidance functions

Functions			Tractor	Forage harvester	Combine
Fendt VarioGuide					
Receiver			NovAtel, Trimble	NovAtel	Topcon
Standard version			□	□	□
Pass-to-pass accuracy (dynamic) ¹⁾	cm		+/- 20 cm	+/- 20 cm	+/- 20 cm
Repeatability (static) ¹⁾	cm		+/- 80 cm	+/- 80 cm	+/- 80 cm
Precision version					□
Pass-to-pass accuracy (dynamic) ¹⁾	cm				+/- 5 cm
Repeatability (static) ¹⁾	cm				+/- 10 cm
RTK version			□		□
Pass-to-pass accuracy (dynamic) ¹⁾	cm		+/- 2 cm		+/- 2 cm
Repeatability (static) ¹⁾	cm		+/- 2 cm		+/- 2 cm
Wayline mode "A-B line"			■	■	■
Wayline mode "Contour"			■	■	■
Wayline mode "Circle"			■	■	■
Wayline mode "A+ angle line"			■	■	■
Integration in headland management VariotronicTI					
VariotronicTI automatic			□		
Wayline memory			■	■	■
Field memory			■	■	■
Worked swaths are marked			■	■	■
Record obstacle point			■	■	■
Free designation of obstacles			■	■	■
Recording of obstacle area			■	■	■
2D view			■	■	■
3D view			■	■	■
Manual wayline offset			■	■	■
Automatic wayline offset			■	■	■
Adjustable line acquisition			■	■	■
Adjustable steering response			■	■	■
Implement settings			■		
Integration in vehicle terminal			■		■
NMEA data output			■	■	■
Tilt angle compensation			■	■	■
Minimum speed	km/h		0.1	3.0	0.1
Maximum speed	km/h		25.0	20.0	12.0
Signals			NovAtel	Trimble	Topcon
Fendt VarioGuide receiver					
GPS compatible			■	■	■
GLONASS compatible			■	■	■
GALILEO ready			■	■	■
EGNOS (free)			■	■	■
WAAS (free)			■	■	■
Autonomous (without correction signal)			■	■	■
Trimble® RangePoint® RTX (fee-based)				□	
Trimble® Centerpoint® RTX (fee-based)				□	
NovAtel TerraStar-C (fee-based)			□		
NovAtel TerraStar-L (fee-based)			□		
OmniSTAR VBS (fee-based)					□
OmniSTAR XP/HP/G2 (fee-based)					□
Mobile RTK station ²⁾			□	□	□
RTK network (fee-based) ³⁾			□	□	□

1) Notes on accuracy specifications: The static accuracy indicates how accurate the measured position of a stationary tractor is over a longer period of time (usually 24 hours). The dynamic accuracy specifies the repeatable pass-to-pass accuracy that is attainable to 95 percent within a 15-minute time frame. The specified values correspond to the maximum attainable system accuracy under optimum conditions on the receiver. The accuracy that can actually be attained in practice depends on various factors. AGCO is not responsible for its availability or for reduced accuracy caused by operational degradation, ionospheric or tropospheric conditions or satellite geometry. AGCO is not liable for the performance data of the positioning systems (e.g. GPS, Glonass, Galileo) or the secondary systems (e.g. EGNOS, WAAS, OmniSTAR, etc.).
 2) Not available in all countries. Please contact your dealer for further information.
 3) Country-specific, without SIM card, without licence subscription

FENDT

Leaders drive Fendt.



www.fendt.com

AGCO GmbH - Fendt-Marketing
87616 Marktobendorf, Germany

 **AGCO**
Your Agriculture Company

Fendt is a worldwide brand of AGCO.
All data regarding scope of delivery, appearance, performance, dimensions and weights, fuel consumption and running costs of vehicles reflect the latest information available at the time of print. These may change by the time of purchase. Your Fendt dealer will be happy to inform you about any changes. The vehicles shown do not feature country-specific equipment.