

Amazone AmaTron 4 ISObus terminal:

Swipe, tap and save

We used the AmaTron 4 terminal when we tested Amazone's UX4201 Super trailed sprayer in the June issue of profi. Introduced in May 2018, the ISObus-compatible unit with tablet-like swiping capabilities was presented at Agritechnica along with a raft of new features and a software update

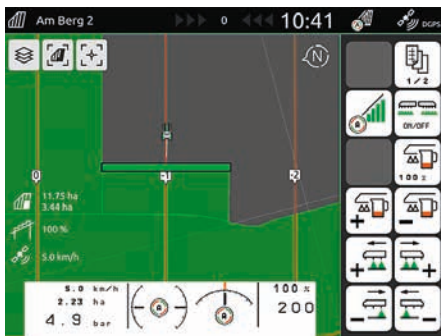
New features include automatic, GPS-based field detection, creating job reports in PDF format, help windows and multi-layer application maps for variable-rate spraying of various products. Also the GPS-Track feature was improved so operators can now nudge waylines that have shifted due to GPS drift by pressing a single button – just as they could on the AmaTron 3. The latter wasn't possible on the early AmaTron 4 we operated in the UX 4201 Super.



The user selects a feature from the app carousel. It's easy and fast.

10 hours) to test all of the features for free. Once the terminal is switched on, you select an application from the app carousel on the main screen – a familiar feature on Android and Apple devices. Our testers were full of praise for this intuitive user interface. At the bottom of the screen you can swipe and open a MiniView, which shows all of the major machine data.

If the machine is a trailed sprayer (i.e. our UX4201 Super), you can see the area sprayed, the amount of liquid left in the tank and how



In GPS view, the machine data is indicated in the MiniView.



The reference lines are numbered. Disabled boom sections are marked in orange.



GPS-Track records bouts, boundaries (blue) and any obstacles.

The new terminal not only operates ISObus-compatible machines, but it also offers a number of Amazone-specific applications: GPS-Track (£1,015), 'GPS-Switch basic' section control (£1,015) and 'GPS-Switch Pro' (£750), 'GPS-Maps and Doc' field and geo-referenced documentation software is free, whilst the automatic 'AmaCam' reverse-drive system costs £225.

The unit itself costs £2,280 and comes with all of these software packages, including the fee-based ones, installed and ready to be fully unlocked. To whet your appetite, there is a window of 50 hours (AmaCam for only

KEY POINTS

- ▶ AmaTron 4 is the successor to AmaTron 3.
- ▶ Menus and views are opened by swiping.
- ▶ The terminal is used for operating the machine and looking at GPS applications.
- ▶ GPS Switch Pro automatically detects an already stored field.

far this will cover, as well as spray pressure, boom tilt, angle of the steered axle, application rate and the spray rate, which is shown as a percentage relative to the target rate. The user can choose what information is shown in the MiniView screen ... and in which order.

Another useful detail is that you can swipe the screen to have all of the major sprayer function keys displayed on the GPS page and vice versa, avoiding the need to flick between views. These 12 soft keys on the screen are duplicated with physical push buttons along

the right of the terminal, and this was our preferred way of using the AmaTron 4 when working in the field.

If you find the map view too small you can enable an auto feature. This hides the menu and restores it as soon as your hand moves towards the screen – a nice feature that some may find unnecessary and prefer to disable in the settings.

You can also assign all of the sprayer functions to a joystick. On the UX4201 Super, we used the joystick for sprayer on/off, to manually open/shut sections and to start/stop various functions. One thing that can be frustrating is having to confirm the customised joystick assignments every time that the terminal is booted up. As annoying as our test team

deals with up to 16 sections. An extra feature on GPS-Switch Pro is that the sprayer's boom is automatically lowered back to its working height as the switch point is approached, ready for when spraying resumes. The necessary field boundary data is either imported or recorded beforehand.

Once GPS recording has started, the map turns green when the area is sprayed. The boom sections are shown as either green or orange, depending on their current on/off status. When using the GPS view on our test machine it did not show which sections were on and those that were off when stationary, although this has now been sorted. This is particularly useful when you want to spray a wedge or enable section control manually. It

The AmaTron 4 and joystick are a good combination, but all operators must confirm the key functions each time the unit is started.



found it, this is an important step if the machine is going to be operated by a number of different drivers.

We used GPS-Track and GPS-Switch Pro section control from the list of optional apps. This 'Pro' version can control up to 128 x 50cm wide sections, while the basic version

DATA SHEET

AmaTron 4

Screen

8-inch multi-touch colour display

Buttons

On/off, ISObus shortcut, three hot keys, 12 machine controls

Ports

GPS, CANbus, tractor ECU, ethernet x 2, USB 2.0, speakers, video input (analogue)

Functionality

Universal terminal for ISObus-compatible machines (UT), task controller (TC) for documentation, application maps and section control, auxiliary control (Aux-N) for joystick-based machine operation

Manufacturer information

is not necessary to switch between the GPS view and machine view.

For parallel guidance you can choose between line and curve mode after setting an A and B point for the reference line. In curve mode, GPS-Track smoothes the waylines the farther the machine moves away from the initial A-B line. Unfortunately, AmaTron 4 cannot record a contour line without setting an A-B line.

The Amazone system also records and stores boundaries and obstacles. Recorded bouts, boundaries and obstacles can be deleted at any time. To delete a boundary but retain the area covered, briefly tap on the boundary line in map view. This deletes the boundary. This is especially useful if you can't record a boundary properly due to wet patches in the field or if the treatment has to be halted and resumed at a later date.

In GPS view, GPS-Track indicates the reference

lines and also numbers them. The combination's current deviation from the target line is shown on the status line on the lightbar. Unfortunately, the heading function, which was a feature on the AmaTron 3, is not available on AmaTron 4.

In the 'Fields' menu, the most recent version of the 'GPS-Maps and Doc' module shows a list of all sorted fields within a 10km radius from the current GPS position. When the tractor arrives in an already stored field, this is detected automatically provided GPS-Switch Pro is enabled. A window pops up and asks the operator whether they want to configure and enable this field, meaning whether they want to start spraying and documenting – very useful. You can also spray without documenting the treatment and still view bouts covered during work. At the end you are given the choice of saving this job, which is retained until you discard it the next time you start spraying. This will also delete the boundary that was recorded together with the job.

We didn't use the Task Controller to carry out previously planned jobs that were transferred to the terminal as application maps. These geo-fenced application maps permit the UX4201 Super to automatically adjust the application rate to the needs of specific patches in the field.

The new 'Multi-Layer' application map feature allows you to apply several different products simultaneously using variable rates, provided the sprayer has the capability and supports this type of GPS-controlled application.

AmaTron 4 allows operators to configure the key functions on the joystick



Further details

- Those users who prefer having parallel guidance or section control centre displayed on an extra screen can run an IOS or Android tablet with the AmaTron Twin app. This app communicates with the AmaTron 4 via a Wi-Fi hotspot to source relevant map views and interfaces. The tablet-based app also records

boundaries, bouts and obstacles as well as enabling/disabling section control.

- The task controller on the AmaTron 4 can read job data in ISOXML format, which up to now had to be imported via a USB stick. Amazone is also developing a wireless solution that will be able to transmit data to a cloud-based farm management system using the Agrirouter platform.
- You can pinch-to-zoom the GPS view just as you do on your smartphone or tablet. The view zooms automatically when the combination is approaching the headland or an obstacle and when your forward speed drops below 3.0km/hr.

Summary: AmaTron 4 is the latest ISOBus-compatible terminal from Amazone for controlling ISOBus implements. We trialed the unit during our UX4201 Super practical test that was featured in last month's issue. Since then, Amazone has added a number of software features including generating PDF reports and automatically detecting stored fields.

The user interface offers an intuitive swiping function that many smartphone and tablet users will already be familiar with. The price of the unit including a mounting bracket, connectors, protective storage case and a test period licence for all applications is £2,280.

Anja Böhrnsen



The AmaTron Twin app turns a tablet into the control unit.