



DIG ASSIST

Powered by Volvo Co-Pilot



A NEW LEVEL IN PRODUCTIVITY

Excavator applications have never been easier, faster and safer thanks to Dig Assist – powered by the Volvo Co-Pilot tablet – whether you are levelling sites, digging trenches, grading slopes or creating site profiles.

Dig Assist is a suite of tools designed to deliver excavation accuracy in a fraction of the time compared to conventional methods, eliminating the need to manually mark out a site and check depths and grades.

"After just a few minutes I easily figured out how to set a grade and utilize the system."

Operator from USA

"The system is very good and I honestly couldn't go a day without it."

Operator from Sweden



"After my employer bought the machine with Dig Assist on it, my first thought was: 'oh great, yet more new technology which I need to learn' – which at my age, isn't that easy! But now, I think it is the best thing my employer ever did!"

Operator from Germany



[Watch our Dig Assist video](#)

Your guide in the cab

2D

*"It's simple and effective. I think we will now upgrade to 3D."
Operator from Sweden*

Intended for site levelling and profiling slopes, 2D uses real time data to clearly show operators when target depth or slope levels have been achieved. With just a few touches of the screen, a target depth is set and excavation can begin within minutes. Combine depth and slopes as required and use the machine to set your height reference. A laser catcher is included, located on the excavator arm, making the machine ready to operate existing and commonly used tools.



IN-FIELD DESIGN

In-Field Design makes easy work of time-consuming jobs, using GNSS and RTK navigation technology to offer centimeter-level accuracy across a wide range of tasks, such as trenching, driveway/pool preparation and foundations. Go from a paper drawing to a digital excavation model in minutes, using the simple on-screen instructions to design your digital shape before using the machine to replicate it in real-life. The Volvo Co-Pilot can also save projects in case the excavator needs to leave the jobsite and return to finish the work later.



3D

The ideal choice for complex and larger infrastructure projects. Offering full three-dimensional functionality, Topcon 3D-MC and Trimble® Earthworks for Dig Assist allow designs to be uploaded directly into the Volvo Co-Pilot. Simply import a project file and get to work.



Trimble® is a registered trademark from Trimble Inc.

Precision digging, every time

VOLVO ACTIVE CONTROL

Your workday just got easier with Volvo Active Control – designed to enhance the comfort and productivity of all operators. Automated boom and bucket movements make the excavation process more efficient and with less effort. Simply set the grade, engage the automatic Active Control and get the work done – all controlled using a single lever and supported by clear on-screen settings and notifications.



[See Volvo Active Control in action](#)

Double your productivity

Up to 45% faster than traditional grading

Consistent results

Complete the same task day after day and achieve the same uniform results.



Brings out the best in every operator

"I can dig a perfect grade, with zero complications. The task is made so much easier."

A helping hand for the experts

"I can complete the job with more speed and precision, time and again. I'm less tired and able to focus on completing the task at hand safely and correctly."

AUTOMATED GRADING

With single-lever grading, the arm speed is manually adjusted by the operator while the machine automatically adjusts boom and bucket movements to maintain an even grade and create the desired shape.

NEW! Works with 3D - Topcon

Swing control

Automatically stops the swing motion at a set angle to assist in digging and truck loading. Can be overridden with the joystick.

Bucket angle control with return to dig

Automated bucket adjustments maintain a constant cutting angle. Return to set angle with the press of a button.

Tilt bucket control

Tilt bucket angle is automatically adjusted to match the surface design.



BOUNDARY LIMITS

Depth limit

Prevents the bucket tip going beneath a pre-set depth, to avoid contact with underground hazards, such as pipes and cables.

Height limit

Prevents the boom and bucket from going above a pre-set elevation, to avoid overhead obstacles such as power lines.

Swing fence

Prevents the swing exceeding pre-set limits, to avoid contact with side obstacles. Cannot be overridden with the joystick.



HOW IT WORKS

Volvo Active Control is a steer-by-wire solution, combined with Volvo's new electro-hydraulic control system, as well as Dig Assist software platform.



Volvo reliability

Engineered, manufactured and installed entirely by Volvo.

Faster servicing, more uptime

No hydraulic pilot lines.

Take control of your productivity

ON-BOARD WEIGHING

When it comes to loading the optimum amount of material, intuition can only get you so far. What if you're not moving enough material, or moving too much? Get the answers you need with On-Board Weighing. The dynamic load weighing system provides real-time insight into the bucket's load, to help you hit your target every time.



LOADING MADE EASY

Get a clear indication of the loading progress through the simple yet powerful interface.

Load optimization

Prevent overloading and underloading, ensuring each truck is road legal and filled to its full capacity.

Accuracy every time

Achieve optimum accuracy with functions including load tare, unlock of current load and disregarding of the last bucket load added.

Hit your targets

Calculate the weight of each bucket load and set targets including a trip counter load target or desired target load for a truck.

In the zone

The load area selector lets operators specify the position of the loading area, helping to prevent missed or incorrectly added bucket loads.

ON-BOARD WEIGHING ADVANCED

COMING SOON

Take On-Board Weighing to the next level with On-Board Weighing Advanced. The enhanced solution comes with additional functions perfect for truck loading applications. Truck Mode allows the operator to pre-define work orders, materials and trucks to make the loading process more efficient.

Keep order

Create a work order based on a customer, project or task and easily select between work orders from a sorted list.

Manage materials

Create a list of different materials according to material type, contamination classification or other user preferences.

Set your targets

Set pre-defined targets for commonly used trucks and trailers, helping you keep track of multiple jobs, all day long.



Handy essentials

Just as you would expect from your smartphone or tablet, Volvo Co-Pilot comes pre-installed with apps designed to make the operator's life easier.

Calculator

Completes basic calculations and can also be used as a unit converter.



Notes

There's no need for pen and paper when you have a digital notepad at your fingertips.



Weather

Weather informs you of current and upcoming weather conditions – helping you to plan the work ahead.



And there's more

Dig Assist is compatible with a wide range of intelligent tools to help you get even more from your excavator.

Volvo Smart View

Thanks to multiple cameras, Volvo Smart View gives a 360° all-round view from a bird's eye perspective. The image can be shown on the Volvo Co-Pilot tablet or on the machine display.



"I loved the 360 view that the display was able to provide. In close quarters I was able to keep an eye on my surroundings quickly."
Operator from USA



Attachment versatility

Multiple attachments – including tiltrotators, tiltable buckets and tilt quick couplers – can easily be incorporated into the Dig Assist tools.



Support you can count on

As a fully integrated and factory-fitted Volvo system, all the components, hardware and software of Dig Assist are fully supported by your Volvo dealer. Whether remote, on-site or in the workshop, your Volvo dealer is here to give you the support you need to keep your operation moving.



Remote support

Get remote support when you need it thanks to the connectivity of your machine combined with Volvo Co-Pilot, enabling you to contact your dealer from the convenience of the machine.



Easy updates and upgrades

Just as you would expect from your mobile phone, Dig Assist stays fully up-to-date with the latest software version, thanks to over the air updates. As you continue to grow and evolve how you use Dig Assist, your Volvo dealer is also available to provide functionality upgrades as required – either in person or remotely.

VOLVO

Volvo Construction Equipment

volvoce.com