

Powered by Volvo Co-Pilot

# DIG ASSIST

Volvo Construction Equipment

# 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.



## Your guide in the cab

## START

Intended for site levelling and profiling slopes, Start 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 high-precision 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.

You can now select UTM zones, create design templates, and share them with your other machines thanks to In-Field Design Advanced. The cloud-based option also allows you to capture "as-built" GPS data points and export them via the cloud.



## 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 <sup>®</sup> 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 Active Control automatics and get the work done – all controlled using a single lever and supported by clear on-screen settings and notifications.



#### **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 Topcon 3DMC

#### 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.





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

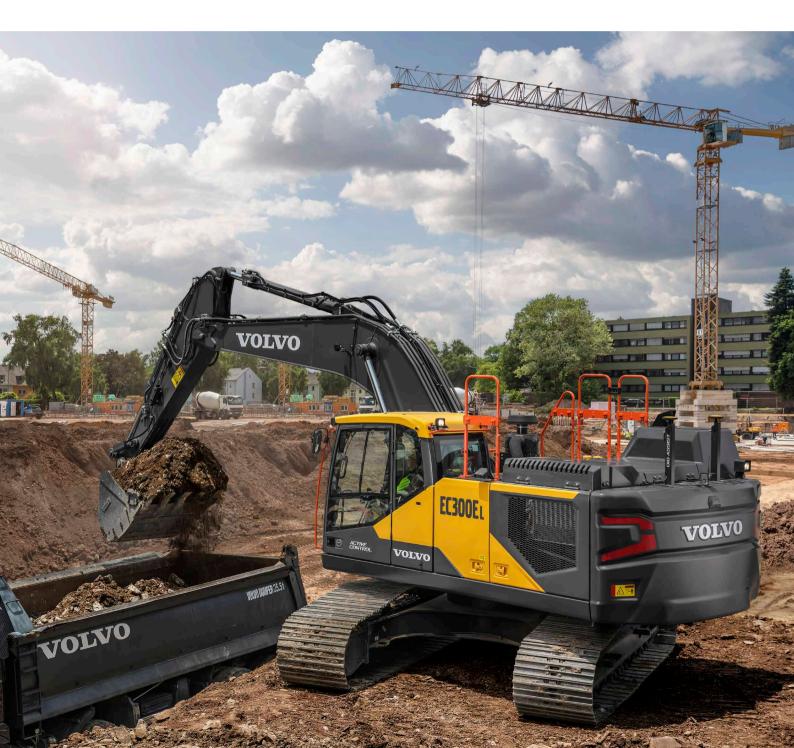
Engineered, manufactured and installed entirely by Volvo.

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.

#### **Printer support**

It is now possible to print and upload truck loading receipts direct from the cab, thanks to the USB port on the Volvo Co-Pilot display.

#### 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.

#### More to offer

On-Board Weighing can be used together with a number of Productivity Services, such as Connected Map, Performance Indicator, Task Manager and Connected Load Out.

Get in touch with your dealer to find out more!



# And there's more

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

#### Cloud back-up

Volvo Co-Pilot can be connected to the internet, meaning you can retrieve information via the cloud at any time.

#### Satellite support

GNSS components support the four major constellations : GPS, GLONASS, BeiDou, Galileo.

#### External radio configuration

You can configure external radios from the Volvo Co-Pilot screen without needing to connect the radio to a computer. The radio can be programmed from the cab, without removing any parts from the machine.

#### Attachment versatility

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



#### 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**

#### 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, including Calculator, Notes & Weather.





#### Site solutions

Dig Assist can be used together with a number of Productivity Services, such as Connected Map, Performance Indicator, Task Manager and Connected Load Out. Get in touch with your dealer to find out more!

## 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.

### **V O L V O**