

Intellislope™ Plow Control System

unequaled productivity and ease-of-use

Our goal from the beginning was a system farmers can use to install their own drainage tile. No confusing or error-prone grade calculations are required, no laser tripod needs to be moved or adjusted, no moving parts to wear out, and tile locations are automatically recorded.

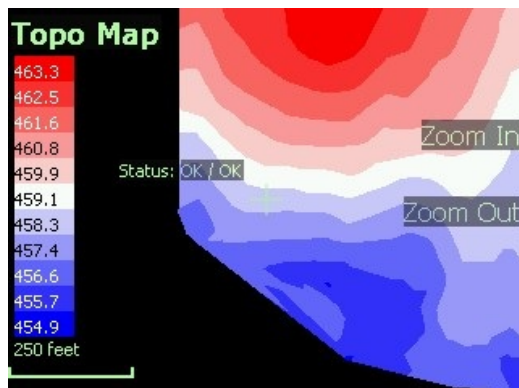
AutoTile™ Makes Tiling Simple

1. Survey by driving the path of each tile to be installed.
2. Choose the survey and start installing.

It's that easy. AutoTile designs a profile that follows the ground, while conforming to the minimum grade and depth constraints you specify.

Topo Mapping

Survey a field and generate a topographic map, color-coded by elevation to help make design decisions. The topo map can be used in the background when surveying to easily drive to the lowest areas for the tile main. Topo maps can also be created on the desktop using the Map and Export Utility.



Create and view topo maps in the cab, or in the office with the map utility.

Selectable Tile Depth

Tile works best when not too deep, and not too shallow. AutoTile follows the ground's profile to maintain a constant depth (subject to grade constraints). By allowing you to select an installation depth, AutoTile permits more consistent placement of tile in your soil's "sweet spot" above impermeable clay layers.

Pitch Sensor: Proactive and Reactive

The patent-pending control system incorporates both GPS and pitch sensors together. Intellislope uses the pitch sensor in a nested feedback strategy that pitches the plow to point ahead at the desired elevation.

Positive Feedback

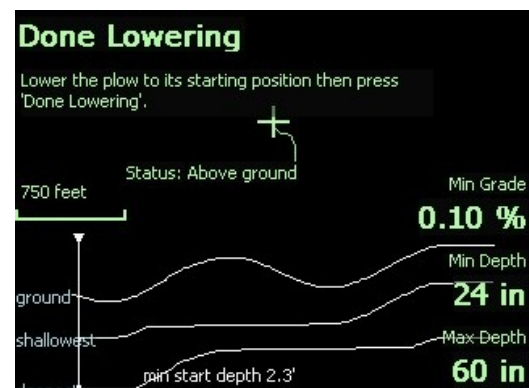
Intellislope's on-grade indicator provides positive feedback about the accuracy of tile installation. Installation screens display an on-grade indication showing how far the current installation elevation indicated by GPS is from the computed target profile. AutoTile installation also shows the actual profile as installation progresses.

Backup Plan

Intellislope also offers a back up plan if GPS is hindered by environmental obstacles such as trees, buildings, and lack of satellites. Pitch-control mode is a tile installation option that allows the user to control the plow shank pitch.

Rock Recovery

You may hit rocks in the course of installation. Sometimes big ones, big enough to lift the plow up substantially. To recover, just exit the install, restart, and Intellislope will schedule a new target profile starting at the plow's new, higher position.



The target profile follows the ground's contours while conforming to your depth and min grade constraints.

Grader Boxes

Intellislope can be configured for control of non-pitch plow earth mover equipment such as graders, scrapers and trenchers. Presently these are supported via the Grade Control screen. We are always developing new features and future plans include AutoTile-like functionality for use with surface forming equipment.

Flexibility

Intellislope's AutoTile feature can schedule tile profile for you automatically. Or if you prefer, you can install tile by manually controlling grade and grade-break. Intellislope works with arbitrarily curving paths so there's no need to stop, relocate and reorient a tripod when going around curves.

Surveying

You may choose to survey your field and use Intellislope's topo map feature to design the tile pattern. You can also survey the individual tile lines ahead of time, for later selection at time of installation. To this end, Intellislope will mount to any ATV, utility tractor, or pickup to give the capability to survey in advance. Kits are available with shorter cables to ensure easy sharing of hardware.

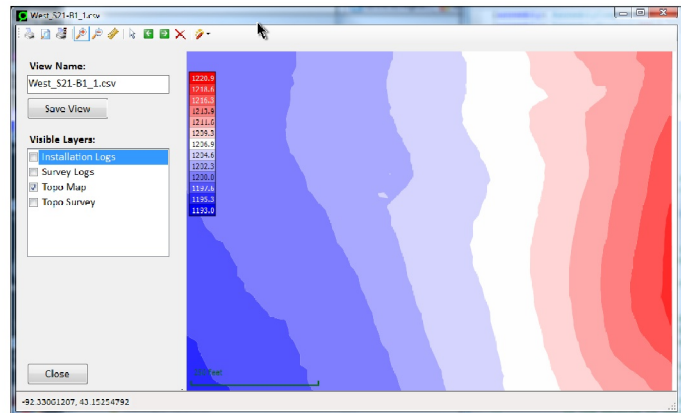


Pitch Control at the Start

On pitch plows, Intellislope automatically levels the boot of the plow. No extra hassle. The geometry of pitch plows tends to push them downward as they begin to bite the ground as they leave the digout. Intellislope's Start Compensation feature allows operator-editable compensation for this effect.

Documentation of Tile Lines

Intellislope comes with a Map and Export Utility that provides simple mapping of tile installations and export to shape and KML files for use with other mapping software such as Google Earth. It also allows creation and viewing of topo maps from whole-field surveys, or from imported topo survey data.



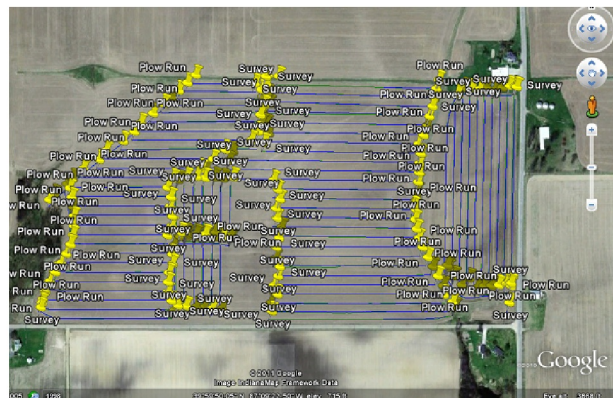
Map installed tiles and create topo maps on your office computer with the Map and Export Utility.

Tech Support and Updates

We offer free tech support, and software updates are available for download. Our friendly tech support agents are versed in tiling and have used the system in the field. Parts shipments are made daily for any need you may have.

Take Action

For more info or to order, visit us at www.intellislope.com or call 888-764-5629.



Export to KML for display in mapping software such as Google Earth.

Gradient Inc.
3260 Red Barn Road
Terre Haute, Indiana 47805

<http://www.intellislope.com>
phone 888-764-5629



Intellislope™ and AutoTile™ are trademarks of Gradient Inc.
© 2008 Gradient Inc. All Rights Reserved.
Patent Pending