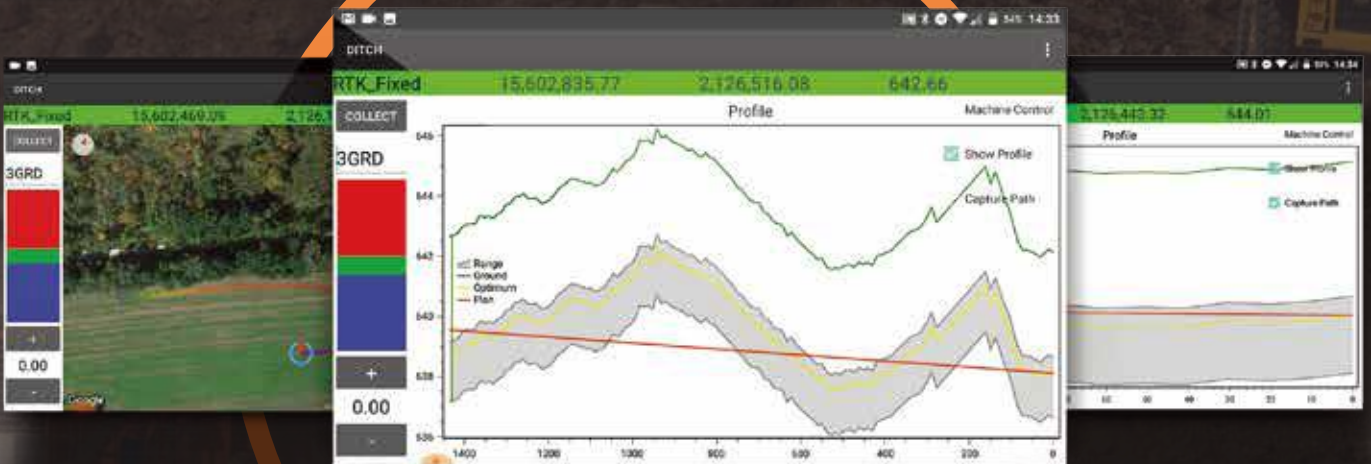


# cloud

# PIPE

## AUTOMATED TILE PLOW CONTROL SOLUTION



## MACHINE CONTROL & CONSTRUCTION

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## **AUTOMATED** **SIMPLIFIED UPDATED** **PROFESSIONAL**

PIPE is a turnkey RTK GPS based Tile Plow control solution that automatically calculates tile depth and slope, then controls installation. PIPE Solution is based on over a decade of supplying tiling and utility professionals with software solutions for tile plows. Now, on our new Android computer platform and surveyor grade RTK, operation has been simplified and updated and includes all hardware needed to get operational in no time.

PIPE also provides for topographical map creation by driving the terrain, and or layering a geo-referenced yield map, Google map, satellite image, aerial photo or other user defined maps to identify water ponding areas and drainage strategies, for pipe tile planning.

### **Easy To Use And Flexible**

Mark the line for a new ditch from field analysis and gathered topo data. Analyze existing ditches for depth, flow and discharge points. Use DITCH to auto control a scraper or ditcher to cut and fill to design. Accurate to +/- 0.6 inches or better.

### **In Field GNSS Ditching In 3 Easy Steps**

Drive a path high to low point; Press a button. Set ditch parameters to design ditch. Start Ditching!

### **Vertical Curve Technology**

DITCH uses Vertical Curve Technology to design drainage solutions. Once the preferred parameters are set, VCT designs a drainage solution that controls grade changes in the smallest increments possible through the drainage path, minimizing needed depth and soil movement. This technology allows acceptable drainage in unfavorable landscapes.

### **WATER COURSE**

WATERCOURSE is an optional Windows PC software tool for designing a precise water management system with grading, ditches and tiling options. It compiles layers of map data to interpret and improve upon the natural watershed. DITCH can import an exact layout design from WATERCOURSE for professional results.

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 **HIGH  
PERFORMANCE**



# AUTOMATED TILE PLOW CONTROL SOLUTION

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# SPECIFICATIONS

## Software

- Compatible with all GPS brands, calibrated with CHC i70
- Interfaces with Tractors, Remote Valves and CANBUS
- Works with all Plow configurations
- Shows plan and profile views
- Utilizes Profile Optimizing Technology
- Designed specifically for tile plow control

## Guidance

- Uses background drawing layer for map and line work
- Uses .bmp for background image

## Tile Placement

- Displays grade and direction (point to slope)
- Shows scaled plan view
- Creates LAY from SVY using auto depth parameters
- Uses 2/1 Local Point
- Uses State Plane Coordinates
- Uses UTM Coordinates

## Data Collection

- Creates as-built maps (.shp & .dxf)
- Labels sizes of mains and laterals
- Reports length of mains and laterals
- Labels data points while plowing

## Logic Instrument K101 Tablet

- 10.1" Touch Screen
- 4:4 Android 5.1
- 1.92 Ghz Processor
- 5 Mega pixel camera
- IP65/MIL-STD-810G Environmental
- 10000 mAh Li-ion battery

## CHCNAV P3DT RTK Rover

- 220 channel Trimble GNSS RTK engine
- L-Band, GPS, SBAS, GLONASS, BDS, GALILEO dual frequency
- Heading accuracy 0.08 degree with 2m antenna spacing
- Horizontal Accuracy: 8mm + 1ppm RMS
- Elevation Accuracy: 15mm + 1ppm RMS
- CE/FCC certified
- RJ-45, Bluetooth, Cellular & UHF coms equipped
- CHCNAV A220GR Geodetic antenna

## CHCNAV i70 Surveyor RTK Base

- 220 channel Trimble GNSS RTK engine
- GPS, SBAS, GLONASS, BDS, GALILEO dual frequency
- Dual hot swappable batteries for up to 12 hrs operation
- Bluetooth, WiFi, Cellular & UHF coms equipped
- LCD Screen
- CE/FCC certified
- Horizontal Accuracy: 8mm + 1ppm RMS
- Elevation Accuracy: 15mm + 1ppm RMS

## DANFOSS Plus+1 CANBUS Controller

- Auto detects vehicle type. Used to send commands to hydraulic systems

## Operating System Compatibility

- Android 5.1 or higher

## Included Accessories with PIPE

- i70 Hard Carrying Case with accessories, UHF antenna, 2 x lithium ion batteries
- Vehicle magnetic mount for i70
- Tablet power adapter, pouch, stylus and USB cable
- PIPE Quick Start Guide
- RAM Mount Kit
- All interconnect cables

\*Specifications are subject to change without notice.

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