

## **Soil Preparation**

## Tillage according to plan

Tillage is a foundational practice in agriculture to prepare soil through mechanical agitation. Due to varying conditions, implements can be inconsistent. That's where precision tillage comes into play, providing an improved seedbed to enable better germination, more precise application of preemergence weed control, and easier management of desired surface residue. Tillage depth control ensures consistent and repeatable execution, preparing soil according to plan.

The Norac Tillage Depth Control (TDC) solution utilizes field-proven non-contact ultrasonic sensor technology to deliver the most durable and precise control on the market. Equipped with tailored-algorithms, the sensors identify and differentiate obstructions to maintain desired depth. Unlike any other solution, it's specifically designed to compensate for varying field conditions – wet, dry or terraced. With TDC, depth is no longer a speculative setting, but rather accurately measured and controlled. Soil conditions, operator preferences and mechanical stops that determine appropriate depth are simple settings through an ISO-UT interface.

Consistent and repeatable tillage depth control

ISO-UT compatibility for display flexibility

Easy to install, setup and use, reducing stress

Improve operational efficiency, reducing input costs





#### **Solution Overview**





#### **Touchscreen Console**

ISO-UT compatible display, including Topcon Pulse, X25, and X35





#### **Implement Controller**

Norac HCM1 controller for proven reliability and clear calibration





#### **Ultrasonic Sensor**

Norac Ultrasonic Sensor for precise and proven sensing\* \*Up to four sensors for increased control





#### Valve Block

Dedicated Valve Block to automatically adjust tillage depth

### **Key Solution Features**

- Automatic depth control ensuring implement maintains desired depth.
- Optional automatic fore/aft control ensuring implement is always parallel to soil (only on tillage implements equipped with capable hydraulics).
- Set point mode/bump allowing quick manual depth adjustments, including single button to lift implement while turning at end of field.



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#### **Easy to Integrate**

Norac Tillage Depth Control is designed to suit virtually any pull-type tillage implement (excluding three-point lift mounted) and any model tractor. Developed under ISOBUS protocol, it's easy to install, setup and operate. Featuring intuitive on-screen control, it utilizes ISO-UT compatible displays – including the Topcon Pulse, X25 and X35, or any existing in-cab ISO-UT display – to keep investment costs at a minimum.

#### **Foundational Benefits**

It's no secret that soil preparation is key to farming productivity; as a foundational practice, it impacts the entire growing cycle. Norac Tillage Depth Control improves pre-emergence weed resistance and soil residue for better germination, enabling other key precision technologies to thrive. For example, an optimized seedbed improves planting precision and crop development, producing more uniform spacing and emergence. With uniformity, comes cleaner crop care applications, increasing optimization of inputs and consequently higher yields. In both seeding and crop care, Tillage Depth Control allows associated technology to interpret fewer variables, make fewer averages, and function as intended. As the basis of productivity, precision soil preparation is relevant for every operation.

#### **Complementary Solutions**



Apollo Seeding/ Planting Controller Seeding and Planting Implement Control



**Guidance**Manual and Auto-steering
Solutions



Data Services
Digital Farm Management
and Telematics



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