Real-Time Depth Excavation Control System

The EZ Dig Pro is a real-time depth control system for excavators and backhoes that can be used by rough grade contractors, fine grade contractors, general contractors and excavating contractors. This one-person system uses no stakes or rod readings. The operator sees information in the cab while working.

EZ Dig Pro provides precise grade control by indicating the position of the bucket in relation to the target depth or slope. Sensors mounted on the excavator are calibrated to the machine and take into account the movement and angle of the bucket, boom, and dipper stick to give continuous depth control indication on the in-cab display. There's no need for the operator to stop digging to place the bucket and dipper stick in the same position each time he/she wants to take an accurate reading. The EZ Dig Pro system has several advantages.

Save time, fuel and money
The EZ Dig Pro provides precise grade control for digging a fixed depth or a slope, without the expense of another person in the excavation to check depth. The machine stays productive.

The calibrated system ensures consistent and accurate grade readings, saving time and money by reducing over-cutting. If operators have been checking grade with a laser or optical instrument and grade rod, using this system will keep the machine and operator fully productive.

If the operator has been using a machine-mounted laser receiver, there’s no need to stop digging to place the bucket and dipper stick in the same vertically plumb position each time an accurate reading is needed. The system pays for itself in just two months or less.

Bucket location is known at all times
The display panel and the LCD screen direct the operator to the desired depth and slope. Depth and slope information is transmitted to the control panel at a frequency of 20 times per second, providing the operator with real-time information to the position of the bucket. There is no lag time with the EZ Dig Pro system.

Quick installation; simple handling
The EZ Dig Pro can be installed and calibrated in 45 minutes or less using its patent-pending software.

- Assembly by any operator
- Sensors are wireless; no cables at the pivot points
- No welding or wrenches needed

Sensor with laser receiver eliminates resetting elevation reference when excavator is moved. Cut-and-cover applications to a fixed depth for water, gas, and cable lines may not require a laser, and a regular sensor can be substituted for the laser receiver sensor. There are no battery costs because the sensor solar panels maintain the charge of the built-in batteries automatically throughout the day. The contractor can:

Attach sensors directly
- Strong rare earth magnets hold securely
- No welding required.

Or use the support plates
- Ideal if using the system on more than one machine.
- Quickly change between different machines or buckets.
- Retains calibration data of up to 5 machines and 9 buckets per machine.
Other features of EZ Dig Pro
- Feet (with 10ths or inches) or metric
- LCD menu: choose English, Spanish, or French
- For any size excavator or backhoe
- Height and depth alarms
- Accuracy: ± 3/8" (1cm)
- Adjustment range inclination: ± 300%
- Sensor: IP68; control box & display: IP64
- Operating: -4° to 158° F (-20° to +70° C)
- Storage: -22° to 176° F (-30° to +80° C)

Applications of EZ Dig Pro
- Footings and foundation depths
- Basements
- Septic lines
- Drainage ditches and trenching
- Cable lines

http://www.agl-lasers.com/products/detail/ezdig_pro