

GEOTAB®

PTO - Power Take Off

This document explains what a PTO is as well as the best practices for using or not using a PTO as telemetry.

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INTRODUCTION

PTO is the acronym for **P**ower **T**ake **O**ff, and it's a device which transfers mechanical power from an engine to another piece of equipment that does not have its own motor.

In the majority of cases, the PTO is used to operate a hydraulic pump. This provides the hydraulic system the power to provide mechanical force to operate a ram (hydraulic piston), or a motor (as used on a salt spreader).

The term PTO can involve a wide variety of equipment and applications, and can even deviate from the traditional understanding of what a PTO is, and how it functions. For instance, a PTO can be fully mechanical as in a farm tractor, or electric, where power to a hydraulic pump is required intermittently, as on a boom truck.

Most importantly, the PTO being engaged, is in itself not an indication that work or the attached equipment is being used. The PTO being engaged only means that the attached equipment "could" be used. For this reason, the PTO is not an accurate or reliable source of "working status" telemetry.

— PTO - Power Take Off



- PTO Primer
- Provides general information of PTO control types, signals used for telemetry, and installation expectations.



- Testing for PTO on/off telemetry signals.
- Warning - Ensure your signal can be detected. Bleed voltages when the PTO is off can interfere with accurate telemetry.
- Only use a DMM to test your signals and voltages.



- An example of when signals can interfere with correct status
- A positive signal that switches to ground when active requires the IOX-AUXM to be placed into "manual learning" Ground = On.
- Failing to configure the IOX-AUXM for the signal will result in erroneous telemetry.