Diagram for using a Dinosaur Electronics TDR in a Duo Therm® 900, 9000, 66000 & 66100 series (direct spark ignition) furnaces

IMPORTANT! READ THIS DOCUMENT COMPLETELY BEFORE ATTEMPTING ANY MODIFICATIONS.

The diagrams shown in this document represent before and after modification of Duo Therm® or any other brand furnace that use a standard direct spark ignition board where the thermostat "controls the furnace" internally in the ground circuitry. The modification will be necessary if you wish to use a Dinosaur Electronics “TDR” (Time Delay Relay) in these furnaces. This document is provided as a courtesy and is to be used AT YOUR OWN RISK! Dinosaur Electronics accepts no liability and provides no warranty whatsoever for the contents or use of this document. This modification should only be attempted by trained professional service technicians. Propane is an explosive gas! Failure to observe proper safety precautions or modifying the furnace incorrectly can result in serious injury or death. You assume full responsibility for any modifications made to the furnace using the information in this document.

Typical Duo Therm wiring before modification

Duo Therm schematic with TDR shown after modification

Note: Dashed lines indicate the thermostat control wiring