

W&WTrig TT21 or TT22 transponder installation instructions

READ ALL INSTRUCTIONS BEFORE INSTALLING THIS HARNESS.

- 1) Install the 25 pin connector marked 'TT 22' to the transponder and tighten the two mounting screws.
- 2) Install the 9 socket connector marked 'TC 20' to the control head and tighten the two mounting screws.
- 3) Route the twisted pair of wires marked 'TT22 GROUND' to an avionics ground point. The ground connection may be made by soldering or by installing a ring terminal and securing it to a ground stud.
- 4) Route the wire marked 'TT22 POWER' to a 3 Amp circuit breaker or fuse and secure as required.
- 5) *Optional* If pressure altitude information is needed for another unit (i.e. a GPS), serial altitude data is available from the wire marked 'SERIAL ALTITUDE OUT' at the 9 socket connector, at the control panel. Connect the data 'In' wire from your unit to the #1 pin of the 2 pin connector. Connect the data 'Ground' from your unit to the #2 pin.
- 6) *Optional* The following functions, if desired, are connected through the 4 socket connector located at the 25 pin connector marked 'TT 22'. Use the 4 pin connector in your harness kit.
 - a) If connecting traffic information system to another unit, connect the TIS input wire to the #1 pin. Connect the TIS input ground to the #3 pin.
 - b) If an external standby switch is to be used, connect a customer provided switch to the #2 pin. When the switch connects to ground, the transponder will be placed in the 'Standby' mode.
 - c) If an external ident switch is to be used, connect a customer provided, momentary, switch to the #4 pin. When the switch connects to ground, the transponder will transmit the identification code.
- 7) *Optional* If RS232, GPS data in is desired, use the 3 pin connector on the 25 pin connector marked 'TT 22'. Connect the RS232 TX line from the GPS to the #1 pin. Connect RS232 signal ground to the #3 pin. Note that the #2 pin is not used on this installation.
- 8) *Optional* If a squat switch input is to be used to automatically switch from ground mode to air mode, or to control the flight timer, connect the wire marked 'TT22 SQUAT SWITCH' to a customer provided switch. Program to activate on low, or high, as needed.

9) Install antenna coax lead from transponder to antenna.

10) Program unit as desired, as per manufacturer's operation instructions.

Special notes:

This harness will work for either the Trig TT 21 or TT 22 transponder system with the TC 20 control panel.

These instructions deal only with the installation of the wire harness. See the manufacturer's installation and operation instructions for all other aspects of this installation, such as mechanical mounting, antenna installation, antenna coax fabrication, and programming.

Do not turn on the system without the antenna connected as damage to the transponder may result.

Steps marked *Optional* are not required. Any of these items may be connected as desired. Power, ground, and antenna connections are required for minimum operation.

Before flight, the operational signals should be verified by a qualified avionics or instrument shop.

Fly and enjoy!