Exporting Data from PilotAware Units to Third Party Units

Introduction

PilotAware software can export location data from the on-board, non-certified GPS used on both PilotAware Classic and Rosetta units. For example, this can be used to provide some modern 1090MHz transponders, equipped with extended squitter, with the ability to provide ADSB-out when connected to a non-certified GPS input. [†]

+ SIL level needs to be set to 0 (zero)

Physical Connection

An interconnecting lead that converts the USB output to an RS232 input is required between the two units. A suitable cable is available from Farnell <u>here</u>. Please note the cable must be an RS232 cable and not an RS232 TTL level cable.

The information available on the RS232 cable is provided on the Orange and Black leads

- 1. Orange Signal.
- 2. Black Ground.

This cable can be connected to <u>any</u> spare USB slot of the Rosetta or Classic unit, with the output of the chosen slot configured accordingly.

The numbering of the USB slots is as follows:

- 1. Top Left
- 2. Bottom Left
- 3. Top Right
- 4. Bottom Left

Configuring the Output

The configurations available on the 'Configuration Page' of the PilotAware Unit are as follows:

- 1. Auto
- 2. GPS
- 3. Transponder Trig
- 4. Transponder Funke
- 5. FLARM-out
- 6. FLARM-in
- 7. GDL90 (TBD)
- 8. MAVLINK (TBD)
- 9. LCD

In addition, the Baud rate can be changed to meet the individual connection requirement.

- 1. 4800
- 2. 9600
- 3. 19200
- 4. 38400
- 5. 57600
- 6. 115200

Transponder Manufacturers and Models

The physical input to, and the configuration of the host transponder will differ between manufacturers. This information will be obtained by consulting the manufacturers installation instructions and operating instructions. On some early model transponders', a software update may be required. Also, not all models will have the required 'extended squitter' functionality. Please consult the manufacturer for model specific information.

Customers of PilotAware have connected to several types of modern transponder such as Trig, Becker and Funke who all provide input information in their manuals. Garmin is unfortunately reluctant to provide the information.

Help and Tips from the Forum

Experience and tips on how individual installations were done are provided by supporters on the PilotAware forum <u>here</u>. For information search on installing your type of transponder. Also provide information on your installation to help others.

For example, <u>here</u> is a thread on installing a GPS feed to a Becker Transponder and the help provided from the forum supporters.

Connecting More than One Device

More than one output can be provided from PilotAware Rosetta. For example, a GPS output for the transponder can be provided and also an output, on a second USB slot can be provided to show traffic on a glass screen such as a Dynon Skyview. Each port will be individually configured.

PilotAware Team.