# Graphical user interface, application Description automatically generated

# INSTALL

To install the app, copy the Turbine Dashboard (Tur-dash.lc) fine and the complete Dashboard folder to the Apps folder on your transmitter.

Disconnect the USB cable.

Navigate to Applications -> User Applications.

Use the + symbol to select the Tur-dash app.

Graphical user interface, application

Description automatically generated

After the app is installed, you need to add the LUA app to your Dashboard.

Navigate to Timers / Sensors -> Displayed Telemetry.

Graphical user interface, text, application

Description automatically generated

Add -> Lua -> Turbine Dashboard.

Graphical user interface

Description automatically generated with medium confidence

The Dashboard should now show up and is ready to be configured.

# Configuration:

Navigate to Applications -> Turbine Dashboard.

Graphical user interface, application

Description automatically generated

Graphical user interface, application

Description automatically generated

|  |  |  |
| --- | --- | --- |
| **Turbine Dashboard Config** | | |
| Engine Model | Swiwin / Kingtech | Choose Turbine Manufacturer. Swiwin is created to understand telemetry natively from Swiwin ECU. Kingtech requires Vspeak telemetry adapter. |
| Max RPM | In thousands. | Select Max RPM, to set scale for gauge + pump factor for Swiwin. |

# SWIWIN CONFIGURATION

Swiwin telemetry port need to be connected from the telemetry port on the ECU, and to the telemetry port on your receiver using a servo male to male cable.

Graphical user interface, text

Description automatically generated

|  |  |  |
| --- | --- | --- |
| **Swiwin Telemetry Sensors** | | |
| Turbine Status | SW-Status | The telemetry value from Swiwin for engine status. |
| Turbine RPM | SW-RPM | Turbine RPM |
| Turbine-EGT | SW-EGT | Temperature in Celsius |
| ECU Battery | SW-PwrVol | Configured for 3S LiPo |
| ECU-Pump | SW-PumpVol | Voltage for Swiwin brushless pump |

Timeline

Description automatically generated with medium confidence

|  |  |  |
| --- | --- | --- |
| **Swiwin Fuel Settings** | | |
| Fuel tank Size | 100 ml – 9999ml | Type in the total of consumable fuel in your model (Exclusive UAT) |
| Pump Factor | 50 – 150 (Default 100) | All pumps are different. Also, fuel flow / resistance is different from model to model.  The Fuel consumption algorithm is based on calculated / measured consumption from a selection of Swiwin engines. To calibrate the fuel consumption, fly a flight based on the flight time you are comfortable with. After landing measure the total fuel consumption, you have used based on measurements on your tanks / weight.  EXAMPLE:  If you have used 2000ml, and the Dashboard is showing that consumption have consumed 1800ml, that means you need to add 11% more consumption to the algorithm. Change the pump factor to 111 and try again.  During the fuel calibration process, the Debug mode might be helpful. |
| Disconnect TaxiTank | Select a switch for Taxi tank | While on the ground with Taxi tank connected, you don’t want the Fuel consumption calculator to start calculating. Enable the selected switch, and the App will be in “Taxi mode” and showing fuel tank full. As soon as you disable Taxi mode, the fuel consumption will start counting down fuel level. |

# KINGTECH CONFIG

Text, timeline

Description automatically generated

Kingtech Turbines don’t have telemetry builtin to the ECU, and require an external telemetry adapter. I Chose to integrate with VSpeak instead of Kingtech adapter, and the app will NOT work with Kingtech adapter.

|  |  |  |
| --- | --- | --- |
| **Kingtech Telemetry Sensors** | | |
| Turbine Status | VSECU-Status | The telemetry value from VSpeak for engine status. |
| Turbine EGT | VSECU-EGT | Temperature in Celsius |
| Turbine-RPM | VSECU-RPM | RPM need to be configured x1 from Vspeak |
| ECU Fuel level | VSECU-FUEL | Tank size and fuel consumption as reported from VSpeak |
| ECU Battery | VSECU-BATT | ECU Battery. Voltage as reported from Kingtech ECU. Calibrated for Li-Fe batteries. |
| PROP RPM | VSECU-RPM2 | RPM2 reported for propeller RPM when using Kingtech TP turbines. PROP RPM will show in lower right corner of the Dashboard. This is only supported in Modern UI. |

# COMMON CONFIG

Text, timeline

Description automatically generated with medium confidence

|  |  |
| --- | --- |
| **Swiwin Fuel Settings** | |
| Fuel Voice warnings | If enabled, the app will play notifications for the listed fuel levels.   * 50% * 40% * 30% * 20% * 10% * EMPTY |
| ECU Voice Status | All pumps are different. Also, fuel flow / resistance is different from model to model.  The Fuel consumption algorithm is based on calculated / measured consumption from a selection of Swiwin engines. To calibrate the fuel consumption, fly a flight based on the flight time you are comfortable with. After landing measure, the total fuel consumption, you have used based on measurements on your tanks / weight. If you have used 2000ml, and the Dashboard is showing that consumption have consumed 1800ml, that means you need to add 11% more consumption to the algorithm. Change the pump factor to 111 and try again.  During the fuel calibration process, the Debug mode might be helpful. |
| App UI Design | Choose between the default Modern Design, and the Classic design. |
| App Debug mode | Enable Debug mode fuel detailed fuel visibility. Debug mode get reset on every restart. Debug mode is only available on Modern Design. |