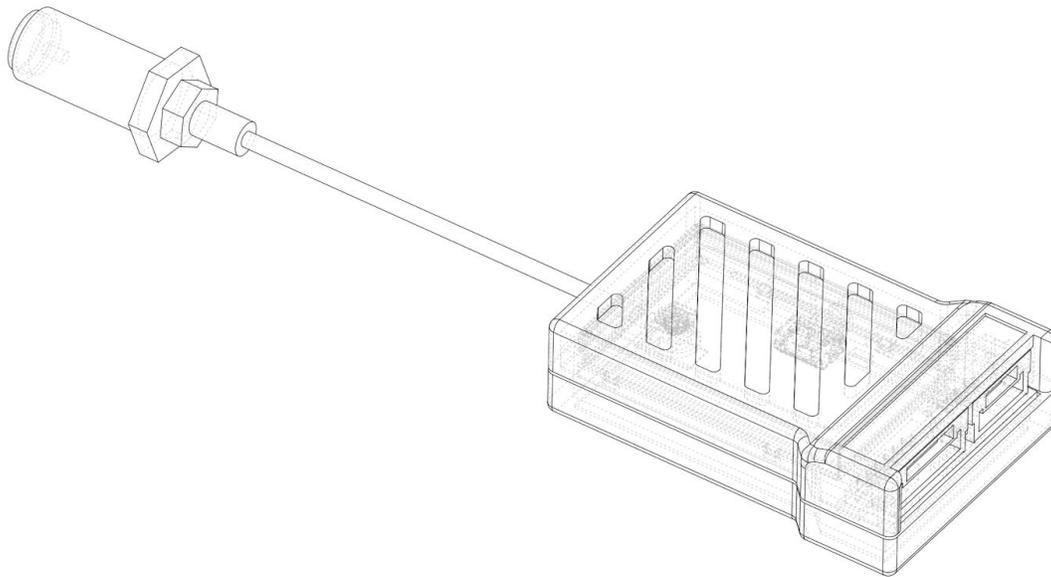


ImmersionRC Tramp-HV 5.8GHz Video Transmitter

Intro for the ERSAs Euro Cup



Introduction

At this event we will be using a new video transmitter technology, which is designed purely to facilitate FPV racing events.

This technology was successfully used at FPVAirShow 2016 in France, where over 170 pilots raced for 3 days with very low inter-heat down-time.

Since you are a pilot racing at this event, there are several things that you need to know about the new transmitter. **Please read this document carefully**, there is stuff in here which you will not have seen before!

Some things that are a little different about this transmitter... (ok.. A lot different!)

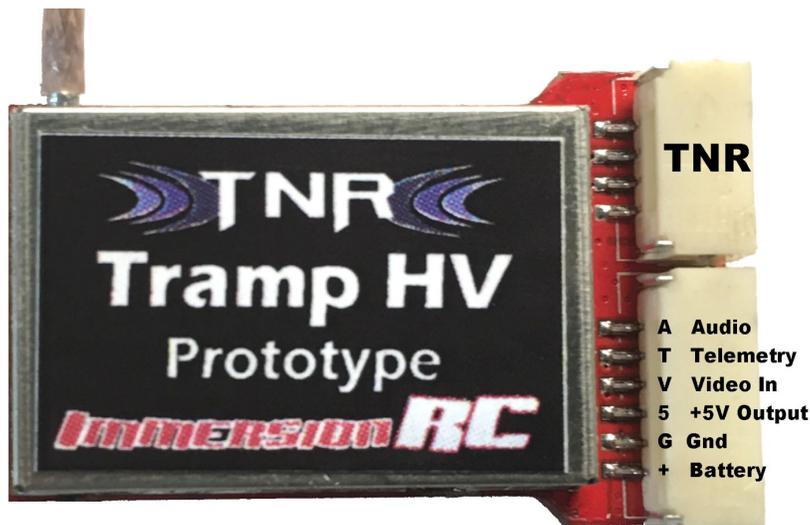
- When powered up at the event, it will be in 'safe' mode, transmitting on a 'private' channel, with extremely low power (a few hundred nano-Watts), to allow for testing.
- The race organizer can define its band, channel, and power level without touching your quad, and without powering it up (we call this **TNR**, or '**Touch 'n' Race**')
- When you power down your quad after a race, the transmitter will return to 'safe' mode..
- The private channel may be received on a test receiver that we will supply, and will be available during technical inspection.
- It never 'glitches' other transmitters when powered up.
- It uses a new locking micro-connector, for which we will supply cables.
- It is tiny... really tiny, for a vTx that includes a switching regulator for direct LiPo connection, and can supply up to 1A at 5V to power your camera.

Hooking it up

There are two connectors on the Tramp HV one is the link to the TNR board.

The second connector has the pinout shown below. This is a locking JST-GH connector which has been supplied in the kit. A cable which terminates in bare-ends is supplied.

The Audio, and Telemetry wires may be ignored in most installs. Remove the pins from the connector for a clean install.



Note that if you currently use a 5V-only transmitter, like the TBS Unify Pro, you may power the tramp through the +5V camera output, and bypass the regulator.

Another Note: This photo shows the coaxial cable exiting through the side of the transmitter. On the final design, which will be used in NY, the cable exits from the end of the transmitter opposite the white connectors.

Mounting the Transmitter

The Tramp-HV's antenna connector should be rigidly mounted to the frame, so that crashes which knock the Tx antenna do not destroy the transmitter.

The transmitter will be supplied without a case, but with protective heat-shrink, and may be installed in the frame using double-sided tape.

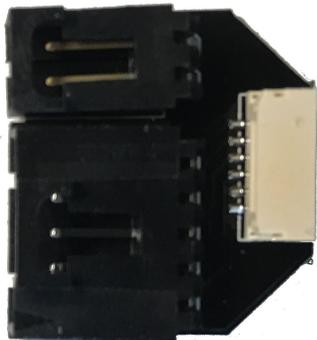
Mounting the TNR board

The TNR board must be placed on your quad so that it is accessible to the race marshal. If you have a flat carbon fibre top plate (which is the case for 99% of the quads out there), you may stick it onto that plate with some thick double-sided tape (thin tape should not be used).



What if I have IRC/FatShark connectors and I hate soldering?

We will be supplying an adapter board to anyone who asks, with interface cable, to handle this situation.



What about the Vortex?

Don't worry, we haven't forgotten the Vortex, but due to the integrated transmitter it is going to be a bit more work to install.

The Vortex will also use the new Tramp HV transmitter, with a supplied cable, which connects the 5-pin picoblade connector on the Vortex PDB to the Tramp.

The Tramp may be installed either inside the Vortex chassis, or outside. Inside is obviously preferred to protect the transmitter. For the Vortex 250, the MMCX -> SMA cable may be removed, and the Tramp HV's SMA mounted in the same hole.

When installing the Tramp HV, the Vortex Tx module should be removed, no Vortex using the internal RF module should be powered up at the event.

Last note: it is not necessary to access the button on the Tramp during the event, so no problem to hide the transmitter inside the frame.

TNR Sensor Sticker

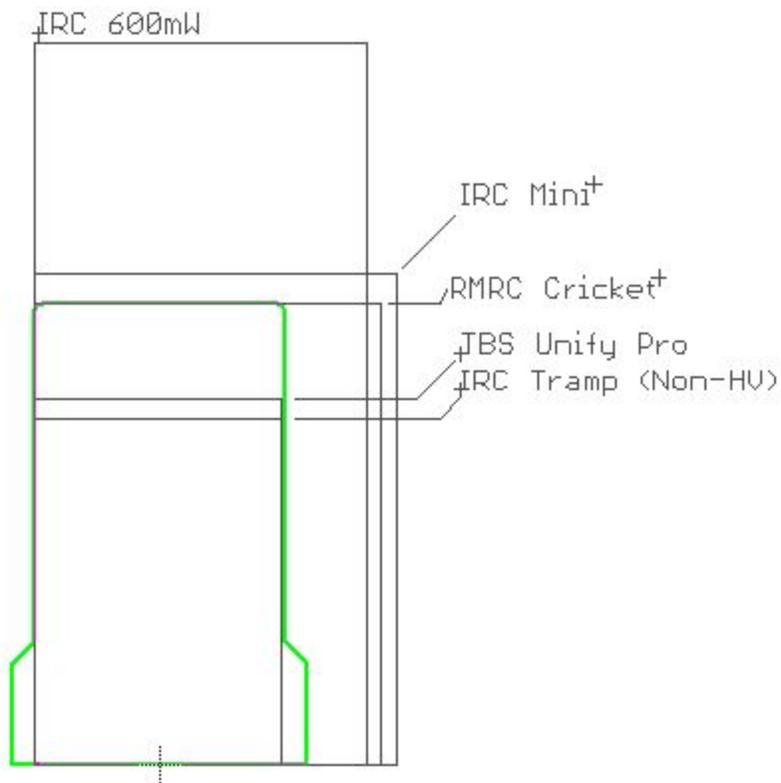
Last Note, in order to help the race marshal to quickly locate your TNR sensor quickly, please attach one of the supplied stickers near the sensor:



How does the Tramp-HV size compare with other vTx's?

The Tramp-HV PCB is 32mm x 14mm x 5mm thick.

Weight is approx. 7.3g



How do I drive the vTx without the Wand?

The vTx may be driven using the single button/LED UI using a simple 'morse code' style interface.

