Disclaimer: The purpose of this document is not to promote the use of dongles to connect a transmitter to game consoles. This is merely a summary of information that is already publicly available from other sources. LuGus Studios and astragon Entertainment do not endorse these methods and shall not be held responsible for any negative outcomes of connecting third party input hardware to game consoles.

Can I use Transmitters on my game console?

Transmitter support is not considered a standard behaviour on any console. As a result Liftoff: Drone Racing does not support any transmitters out of the box. Even though internally the game is perfectly capable of reading input from a wide variety of devices, consoles do not support this.

Liftoff: Drone Racing is designed to be a genuine console experience. Having a great experience with a game controller has been a key goal since the start of development. A series of clever improvements and "Assisted Flight" features make the use of game controllers considerably more viable and natural.

However, the Liftoff team is looking for a possible implementation in future updates. Though no promises can be made at this point, they are exploring all options. Additionally, a few dongles are available on the market that make it possible to connect a limited selection of transmitters to consoles in a roundabout way. These are by no means plug-and-play experiences and require some setup work.

The following dongles have been tested in combination with a Taranis transmitter:

- Titan Two (acceptable result)
- Titan One (not advised!)

Using Titan Two with Taranis for Liftoff: Drone Racing

Below are instructions to load a script on the Titan Two to allow using a Taranis remote on consoles.

Loading the script

Loading a script on the Titan Two will allow an input remapping to be stored on the device. This step only has to be done once.

- 1. Download GTuner IV https://www.consoletuner.com/titan-two-downloads/
- 2. Connect the Titan Two to the computer via USB on the PROG USB port.
- 3. Run GTuner IV and select the "Online Resources" tab on the center panel.
- 4. Search for "liftoff". You should find "Liftoff Console Taranis" by LuGus.
- 5. Drag from the "DRAG DROP" button to one of the memory slots (remember the number).

Optional: The script is downloadable and documented, so feel free to make any changes to customize it.

Setting up the Taranis

Since we're remapping inputs, it's important that the taranis is set up in a specific way:

TARANIS QX7 Axes order (* = required)

CH1 -> Thr * CH2 -> Ail * CH3 -> Ele * CH4 -> Rud * CH5 -> S1 CH6 -> S2 CH7 -> SA * CH8 -> SB CH9 -> SC CH10 -> SD CH11 -> SF * CH12 -> SH

Additionally, you can disable the internal radio to extend battery life.

Connecting and running the Titan Two

- 1. (Skip this step on PS4) Remove batteries from Xbox controller to prevent wireless connection having priority.
- 2. Connect your controller via USB to port B on the Titan Two.
- 3. Connect Titan Two to the USB port of your console.
- 4. Start the game.
- 5. Use the cycle buttons to navigate to the correct memory slot number.
- 6. Plug the Taranis into port A on the Titan Two. Keep throttle centered, it might interfere with navigation even with remapping off. (Make sure you turn the Taranis on before connecting to USB, as it won't turn on otherwise.)
- 7. Have switch SA up (leftmost switch at the front). This will disable the axis remapping, and allow you to navigate menus with the game controller.
- 8. When ready for flying, flip switch SA down. This will activate the remapping. You can now fly. Use the SF (left-back) stick for resetting.
- 9. Flip SA up again to navigate menus. Keep throttle centered

Using Titan One with Taranis for Liftoff: Drone Racing

First of, we highly advise against using this dongle. It is a poor fit for Liftoff in many aspects:

- It has reduced input resolution
- It has no support for floating number maths, which means it retains a small circular deadband and jumps in input.
- The build quality is poor. While testing we had one short circuit and had to order a new one.
- **It does not work properly on PS4**. Every few minutes it will ask for controller authentication, requiring to manually disconnect the Taranis and plug the PS4 controller into the dongle for a second.
- Switching between menu navigation and flight is tedious.

In conclusion: you are welcome to try the Titan One if you happen to own it already, but we recommend against purchasing it for this purpose.

Instructions for getting the controller remapping onto the Titan one:

- 1. Install GTunerPro https://www.consoletuner.com/titan-one-downloads/
- 2. Plug the dongle into the console, and connect the programming USB port to a computer.
- 3. In GTunerPro search for "liftoff" in the Online Library tab (at the bottom)
- 4. Download and save the file "Liftoff: Drone Racing Taranis"
- 5. Go to the Programmer tab, and drag the saved file to a memory slot on the Titan One (remember the slot number).
- 6. Click "Program device" at the bottom.

Using the Titan One on Xbox

- 1. Plug the Titan One into the console.
- 2. Select program slot 0 on the dongle (no overrides).
- 3. Remove batteries from Xbox controller and connect to the dongle.
- 4. Start game and start a race.
- 5. Unplug the Xbox controller.
- 6. Select the correct program slot on the Titan One.
- 7. Plug in Taranis.
- 8. Arm and fly. You can use SF to reset.
- 9. Unplug the Taranis, go back to slot one, and reconnect the Xbox controller to navigate menus.