

Flight Simulator Add-on Kit

Configuration #2 Combat Simulation

Side By Side Throttle and Stick, HOTAS

Assembly Manual

And

Optional Accessories



Assembly instruction manuals available at:

V6.2 102924

<http://bit.ly/ow-manuals>

by **SimFab**.com

If your item is damaged, defective or missing parts, please contact us first directly at Email: info@SimFab.com or Toll Free: 1-888-299-2746

As the manufacturer, our knowledge of your new product ensures that we will be able to assist you promptly and accurately.

For invoices and other price information, please refer to your market place account for more details. Alternatively, you can always email us at info@SimFab.com

WARNINGS:



Proceed with caution and extra attention when warning signs are present during installation instructions manual.



**WARNING**

Choking hazard, small parts. Not for children under 5 years old.



**WARNING**

Keep hands and fingers clear of pinching points, and hinging metal parts.



Table of Contents

SimFab Modular Flight Simulation Concept And Design.....5

Flight sim add-ons, modular design introduction.....11

Transition and hot swap between sim racing, and flight sim.....26

Parts list.....28

Parts images.....29

Flight sim add-on kit, Configuration #2 compatibility30

Universal side brackets installation..... 31

Plates installation.....33

Plates mounting pattern.....34

VirPil controls installation.....36

Flight controls installation and mount pattern.....39

Upper to lower stick plates installation.....48

Specifications, Warranty, Terms and Conditions.....49

⚠ Using seat lift kit in flight sim setup is highly recommended for optimum flight cockpit seating position.



Explore the Ultimate in Simulation with SimFab: Where Innovation Meets Immersion

At SimFab, we're redefining the world of simulation with our cutting-edge Modular Racing and Flight Sim Concepts and Designs. Dive into an unparalleled realm of fidelity, realism, and immersion with our bespoke cockpits, meticulously crafted to mirror the intricate layouts of real aircraft and race cars.

We prioritize your comfort, offering modular, fully compatible setups that adapt seamlessly to all major brands and control makers. Starting with affordable yet uncompromised quality base models, our products cater to both novice pilots eager to explore flight simulation and seasoned racers seeking upgradeable, interchangeable designs for a tailored experience.

Join us on a journey where every detail is designed with precision, ensuring a simulation experience that's as thrilling as it is authentic.



SimFab introduces several base models as follows:

Combat sim modular flight cockpit, **DCS World edition**

General aviation modular flight cockpit, **Trainer edition**

Civil aviation modular cockpit, **MSFS edition**

Civil, combat and space sim modular cockpit, **Hybrid edition**

Civil or combat sim modular cockpit, **Rotor-craft edition**

The SimFab modular flight sim trainer station is a state-of-the-art training system designed to optimize cognitive memory and provide full compatibility with high-end flight simulation controls. It offers precise user adjustment options and the ability to hot swap between panels and controls for a customizable and efficient training experience.



DCS edition



Trainer edition

Base package combines several flight sim add-on modules. For compatibility refer to flight sim add-on kit configurations #2, #4, #6



MSFS edition

Base package combines several flight sim add-on modules. For compatibility refer to flight sim add-on kit configurations #4, #5



Hybrid edition

Base package combines several flight sim add-on modules. For compatibility refer to flight sim add-on kit configuration #1



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<https://bit.ly/simfabddckit>

DD sim racing conversion kit

Convert your flight sim pit to sim racing setup and hot swap between each setup in seconds

Requires Gen3 base chassis.

Modular flight pit add-ons Introduction

⚠ Please read introduction carefully in order to understand modular design concept and learn about available flight sim options (configurations).

We have incorporated simplicity, dynamic adjustment and rigidity, making your conversion effortless between different flight sim setups or sim racing, and vice versa. All controls are hard-mounted for maximum strength, handling the most aggressive pilot there is.

Our flight sim mounting brackets are compatible with all brands such as Thrustmaster, Saitek, CH Products, Logitech, VKB, WinWing, MFG, VirPil, Turtle Beach, Honeycomb, Slaw and others. We constantly update our designs, mounting patterns and hardware along with all newly introduced flight sim controls. For controls not mentioned within the list, please reach out to us for additional instructions or custom solutions.

We offer several flight sim add-on options based on commonly used and most desired setups, so called **"configurations"**. Order of configuration numbers is based on the time of which each was developed, where some options can be used independently such as configurations #1, #2, #5, #8 and rest configurations compliment the flight setup depending on controls being used.

All configurations are offered as "Add-on" kits as they require base model cockpit. Dedicated flight pits include group of said configuration as specified.



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Flight sim Add-on **configuration #1**, combat or commercial aviation flight sim HOTAS style, side by side mounted throttle and stick.

Brackets and adapter plates are compatible with the following brands and models flight sim controls:

1. Logitech/Saitek X52, X52 Pro, X56
2. Thrustmaster T16000M stick and throttle
3. Thrustmaster HOTAS T.Flight stick and throttle
4. Thrustmaster TCA AirBus
5. Hori stick and throttle
6. CH Products stick and throttle
7. VKB Gladiator Stick
8. Turtle Beach Velocity One Stick

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<https://bit.ly/simfabhybrid>



Flight Sim add-on **configuration #2**, combat aviation flight sim HOTAS style, side by side mounted throttle and stick.

Brackets and adapter plates are compatible with the following brands and models flight sim controls:

1. Thrustmaster Warthog stick and throttle
2. VirPil Sticks, throttles, control panels
3. WinWing stick bases and Orion throttle
4. VKB Gunfighter stick

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<https://bit.ly/simfabhotas>



Flight Sim add-on **configuration #3**, centered stick standard mount bracket. Requires either **configuration #1** or **Configuration #2**.

Centered stick standard mount bracket provides quick and convenient conversion from racing wheel to flight stick by sharing same steering post. While config. #3 can be used in combination with either config. #1 or #3 we recommend it for #1 where stick base height adjustment is not necessary below knee level.

<https://bit.ly/simfabhotascenterstick>



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Configuration #1 + #3
Thrustmaster T.Flight



Configuration #3



Configuration #2 + #3
Thrustmaster Warthog

Flight Sim add-on **configuration #4**, rudder pedals plate.

Configuration #4 consists of dedicated rudder pedal plate and shaft connected to seat frame. Rudder pedals are optional for lower end flight sticks within configuration #1 family, with built in yaw movement by twisting flight stick grip. Rudder pedal plate is required with higher end flight controls within configuration #2 family where rudder pedals are used for yaw movement and ground braking. Rudder pedal plate is pre-drilled to accept all rudder pedals hard mounted. Included in the package is various mounting hardware compatible with the following rudder pedals:

1. VKB
2. MFG Crosswind
3. VirPil Ace Flight/Torq/WarBrd
4. Thrustmaster TPR/TFPR
4. Logitech Pro Flight
5. CH Products
6. Slaw device
7. WinWing Skywalker

<https://bit.ly/simfabrudderplate>



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Flight Sim add-on **configuration #5**, civil and commercial aviation simulation package.

Configuration #5 consists of rudder pedal plate (config. #4), mounting brackets and adapter plates for various yokes and throttle quadrants. Our proprietary design of how controls are being mounted unifies adapter plates for all leading brands yokes and throttle quadrants with maximum rigidity and leg clearance.

Configuration #5 is compatible with the following yokes and throttle quadrants:

1. Honeycomb Alpha yoke and Bravo throttle quadrant
2. Turtle Beach Velocity One yoke and throttle quadrant
3. Logitech/Saitek yoke and single/dual throttle quadrant with optional Flight Velocity Trim Wheel
4. CH Products yoke and throttle quadrant

⚠ Thrustmaster TCA yoke and single/dual quadrant Boeing edition requires separate kit.

<https://bit.ly/simfabcommers>



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Flight Sim add-on **configuration #6**, centered flight stick lower mount bracket.

Configuration #6 is a specially designed bracket for flight sticks with need of precise and long range of height adjustment. Lower mount bracket provides lowest height level of adjustment of stick base to accommodate flight sticks typically within configuration #2 with removable grips, where grip extension is added between standard grip and stick base. Major benefits are precise height placement of stick grip in accordance with various grip extensions for better stick control or when grip is used as helicopter simulation cyclic. Lower mount bracket can be used whether stick grip is used with extension or without.

⚠ Kit does not include adapter plates. Adapter plates are included in Configurations #1 and #2

Typically used (not limited to) with following flight sticks:

1. Thrustmaster Warthog stick
2. VirPil Sticks
3. VKB Gunfighter stick
4. WinWing Super Libra Stick



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<https://bit.ly/simfablowerstick>



Flight Sim add-on **configuration #7**, flight stick grip extension kit.

Proprietary design grip extension kit offering full range of grip extension from 2.75" (70mm) short to 7.5" (190mm) long. Package includes adapters, extensions, extension cables and all hardware, ready to use right out the box. All anodized and machined billet aluminum for light, and yet strongest material.

Grip extension is compatible with the following stick grips:

1. All Thrustmaster Warthog based grips
2. VirPil stick grips
3. WinWing stick grips



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<https://bit.ly/simfabgripext>



70mm to 110mm
(2³/₄ - 4³/₈ in.)
extension



105mm to 145mm
(4¹/₈ - 5³/₄ in.)
extension



150mm to 190mm
(5⁷/₈ - 7¹/₂ in.)
extension



**Total of 70mm to 190mm (2³/₄ - 7¹/₂ in.) grip extension
all in one kit**

Flight Sim add-on **configuration #8**

Complete package for GA aviation, Thrustmaster TCA Boeing
Edition: yoke, throttle quadarant, rudder pedals
configuration #9
Thrustmaster TCA Boeing yoke bracket only



Complete package

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<https://bit.ly/simfabboeingcompl>

Yoke bracket only

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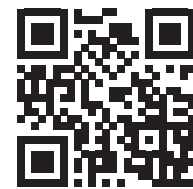
<https://bit.ly/simfabboeingbronly>

Flight Sim add-on **configuration #10**

Advanced Modular Side Mount "AMSM"
Compatible with WinWing Super Taurus throttle, take of / combat
panels, VirPil control panels.



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<https://bit.ly/simfabamsm>

Flight Sim add-on **configuration #10A**

Vertical panel left/right side with single control

Compatible with update list from 10a plate



Flight Sim add-on **configuration #10B**



Flight Sim add-on **configuration #11**

Helicopter Collective Universal Mount Bracket

Compatible with WinWing, VirPil and Komodo helicopter collectives



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<https://bit.ly/hellicollective>

Flight Sim add-on **configuration #12**

Main Instrument Panel: MFD/UFC/ICP/HUD Holder

Compatible with WinWing MIP F18, Thrustmaster Cougar MFDs,
SimGears ICP



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<https://bit.ly/maininstpanel>

Flight Sim add-on **configuration #13**

Advanced Modular Side Mount



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<https://bit.ly/amsm>

Flight Sim add-on **configuration #14**

Extended upper L bracket for dual side control mount



Included in the kit
is adapter plate
of choice with
appropriate controls
mounting hardware

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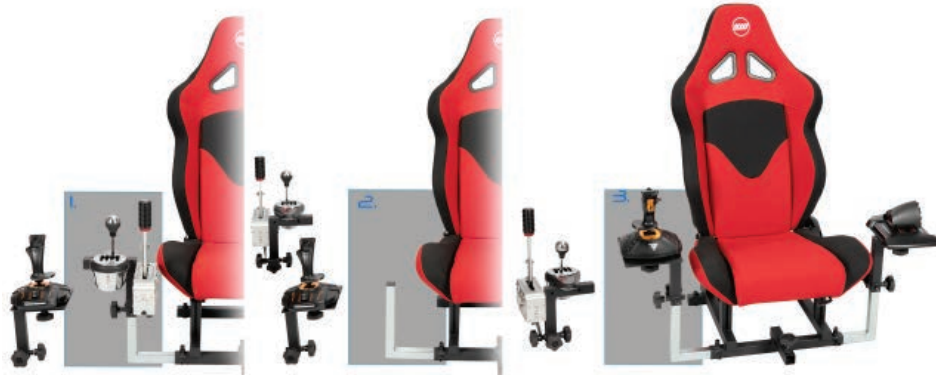


<https://bit.ly/UpperL>



Transition and hot swap between sim racing controls and flight sim controls.

Hot swap side controls when using flight sim configurations #1 by releasing quick connect knobs holding upper L bracket with each control permanently mounted on its designated upper L bracket.



Hot swap entire front chassis between sim racing and flight sim when using center mounted stick and rudder pedals plate



Parts list

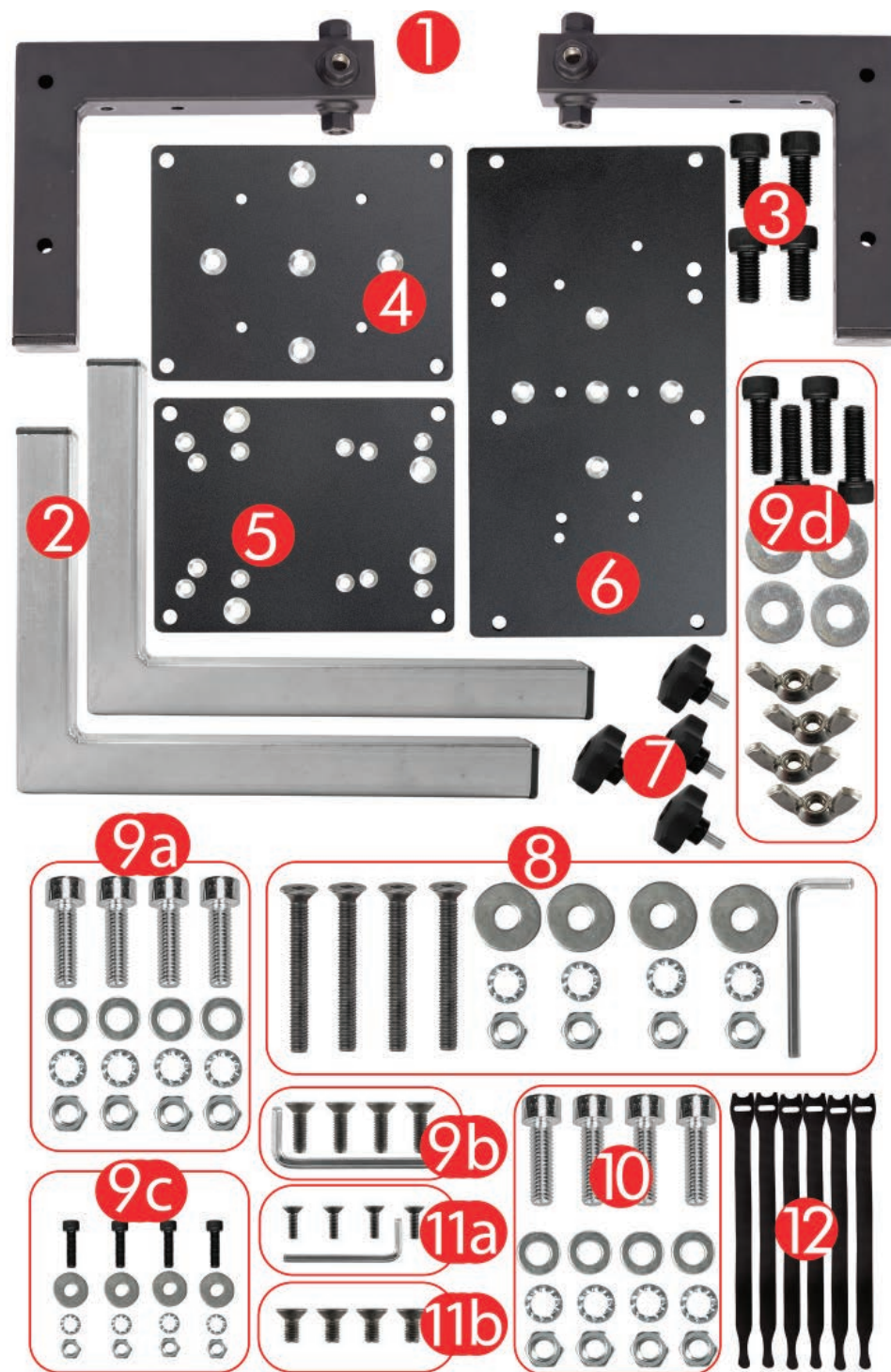
1. Upper L bracket (2)
2. Lower L bracket (1 + 1 optional)
3. Lower L bracket mounting hardware (2)

⚠ Use 2nd lower L bracket from base package: Gen3 sim racing cockpit. In case you are missing 2nd lower L bracket, please reach out to us for replacement.

4. Flight controls stick lower plate
5. Flight controls stick upper (stick base cover) plate
6. Flight controls throttle plate
7. Upper L brackets quick disconnect knobs (4)
8. Stick lower plate and throttle plate to upper L bracket hardware: bolts (4); washers (4); lock washers (4); nuts (4); 4mm Hex key
9. Throttle control to plate mounting hardware:
 - a) Thrustmaster Warthog, WinWing Orion throttle: bolts (4); washers (4); lock washers (4); nuts (4)
 - b) VirPil throttle mounting hardware: bolts (4), 3mm hex key
 - c) WinWing Orion throttle mounting hardware: bolts (4), lock washers (4) washers (4)
 - d) VKB STECS series controls mounting hardware: bolts (4), washers (4), Wing nuts (4)
10. Stick upper plate (stick base cover) to lower plate hardware: bolts (4); washers (4); lock washers (4); nuts (4)
11. Stick mounting hardware:
 - a) Thrustmaster Warthog, VirPil, VKB, WinWing Orion2 sticks mounting hardware: bolts (4); 2.5mm hex key
 - b) WinWing Super Taurus stick mounting hardware: bolts (4)
12. Velcro ties for cable management (6)

⚠ Use wrenches included in sim racing or flight sim base package:

- * 5mm Hex Key
- * 8mm Hex key
- * 10mm combo flat wrench



Compatibility

Flight sim add-on kit configuration #2 is compatible with the following brands and models:

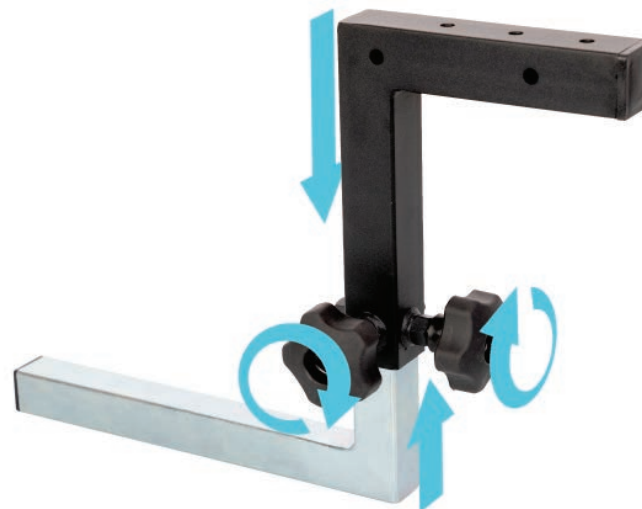
1. Thrustmaster Warthog stick and throttle, Viper TQS throttle
2. VirPil Sticks, throttle and control panels
3. WinWing sticks and Orion throttle
3. VKB Gunfighter stick, VKB STECS controls



Installation

Universal side brackets installation

1. Insert lower "L" bracket to upper "L" bracket. Use either long or short arm of lower "L" bracket depending on height position adjustment. Mount pair of handle knobs as shown below.



2. Use flathead screwdriver to wedge out plastic cap from front/side frame tube.



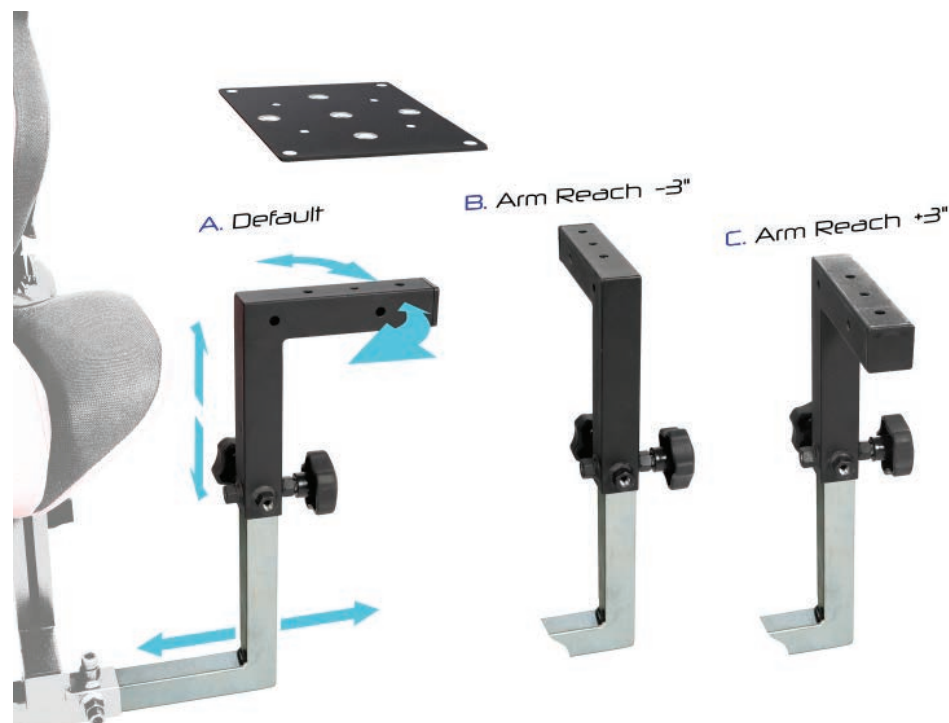
3. Insert lower "L" bracket to front/side tube of the seat frame. Install pair of bolts into welded nuts of the frame.

⚠ Depending on setup and preference, switch to either long or short Lower L bracket arm.

Repeat above steps for left hand side bracket set.



⚠ Optional turn upper L bracket pointing forward, turn plates 90 degrees for extra 3" arm reach.



Stick lower plate and throttle plate installation

4. Mount stick lower plate and throttle plate to upper support brackets by using pair of countersink bolts, washers, tooth washers and nuts per plate.



5. Remove Thrustmaster Warthog stick base factory plate and hardware holding it, and replace it with SimFab cover (stick base cover) plate.

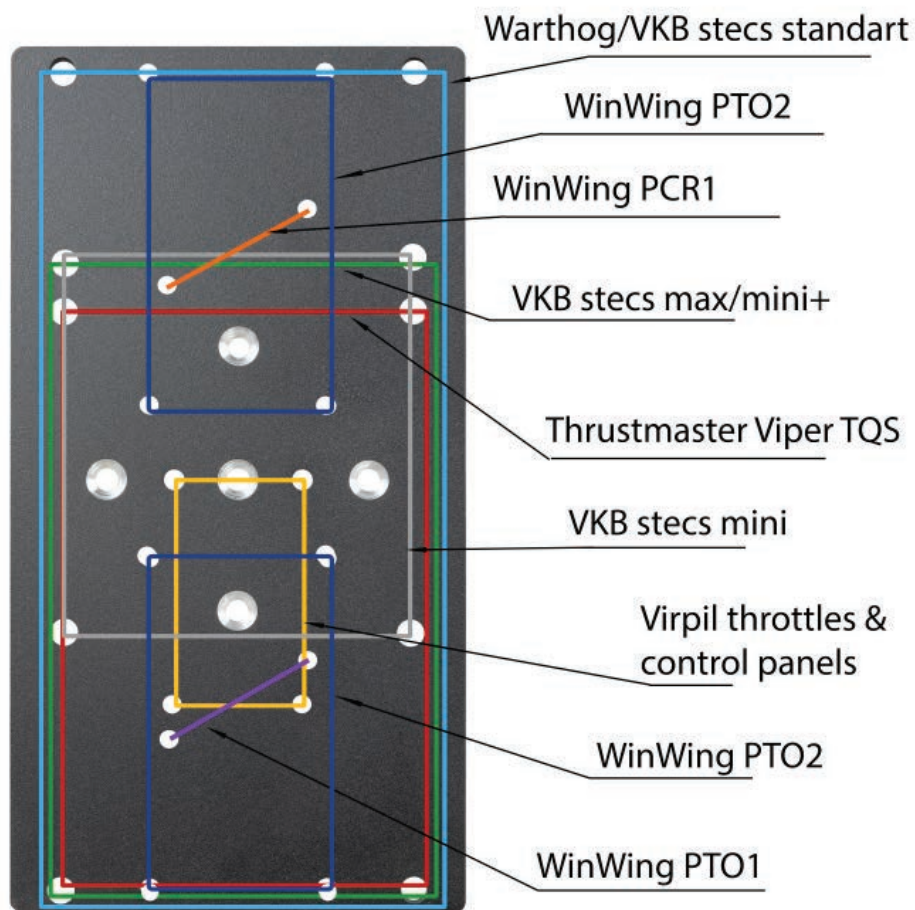
⚠ WinWing Super Libra does not require base plate removal.

VirPil later generation stick bases only require removal of factory hardware. Install SimFab plate over it, using SimFab selected hardware.

6. Depending on brand and model controls use included mounting hardware to hard mount stick and throttle to each plate.

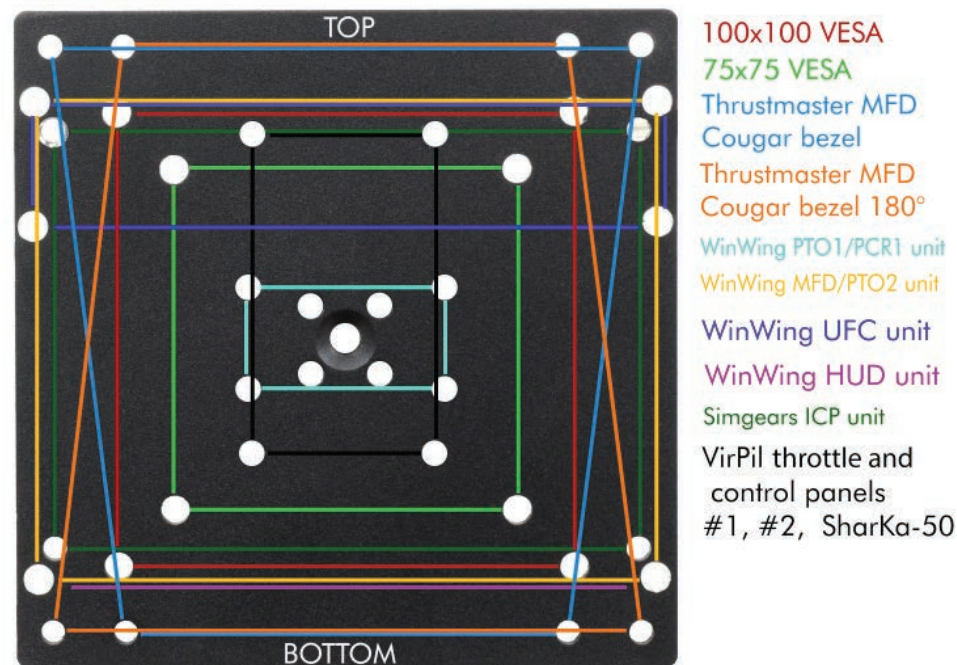
Universal medium (throttle) plate

⚠ Included in default DCS cockpit package or flight sim #2 add-on kit



Universal compact medium (MFD/throttle) plate

⚠ Optional compact plate does not overlap VirPil controls, allowing closer alignment of multiple panels.



⚠ Install VirPil control panels or throttles in the following order:

a) Pick appropriate pair of countersunk holes and run bolts (hardware #8) through plate holes.



b) Install VirPil control to plate (hardware #9B).

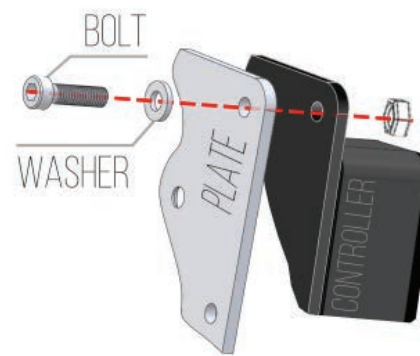


c) Install plate to upper L bracket by aligning bolts to upper L bracket desired pair of holes. Install washers, tooth washers, nuts to bolts (hardware #8).

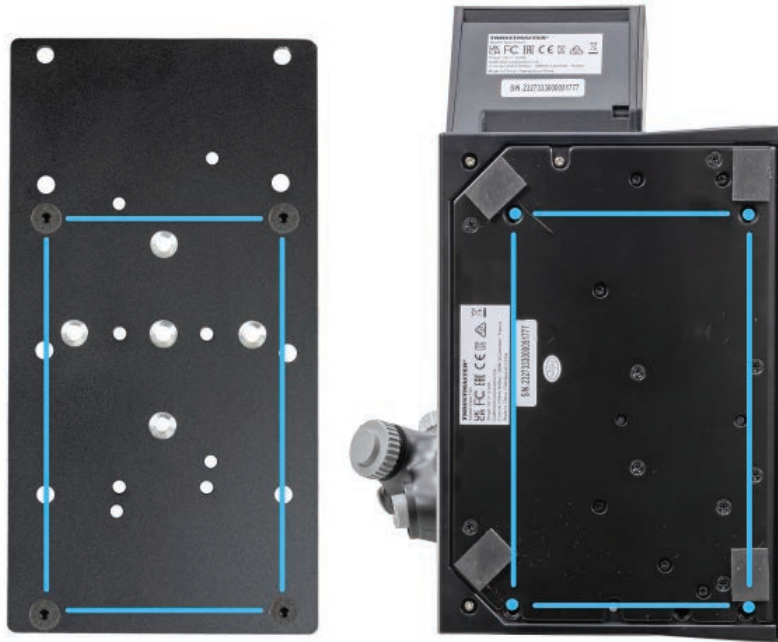


Controls mount pattern:

Thrustmaster Warthog throttle

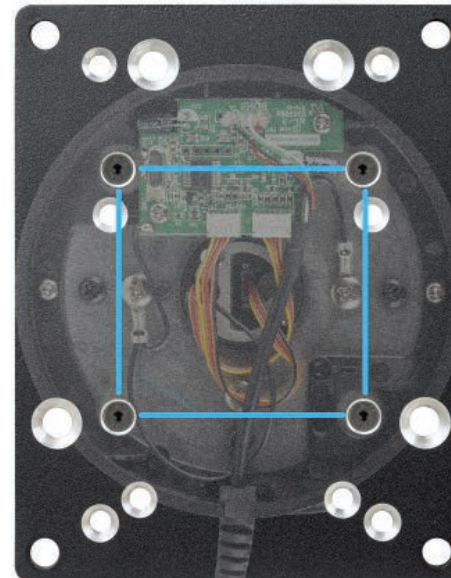
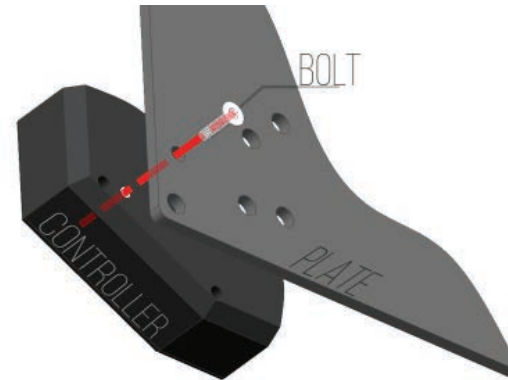


Thrustmaster Viper TQS throttle



Thrustmaster Warthog and WinWing Orion stick

⚠ Thrustmaster Warthog stick shown below, WinWing Orion stick has same mounting pattern.



VirPil Throttles and Control Panels



VirPil stick



WinWing Orion Throttle

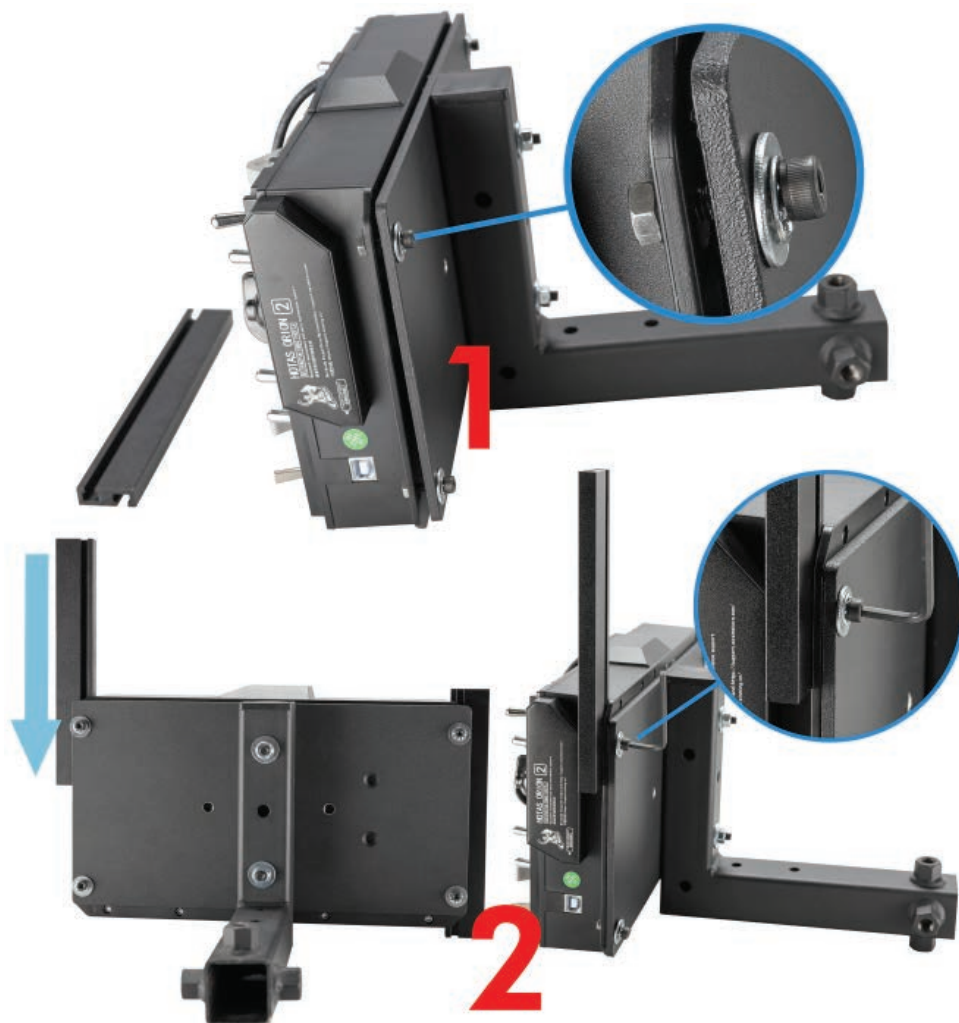
⚠ Use included throttle mount hardware in Bag 9c.

Install hardware through plate and throttle base on each corner hole as shown, with following order. Plate bottom side: bolt head, tooth washer, washer. Throttle top side: nut.

Leave hardware loose. Slide WinWing mounting rails channel on nuts side.

Adjust rails and tighten bolts by using 3mm Allen key.

⚠ Do not over tighten bolts to avoid damage or stripping hardware.

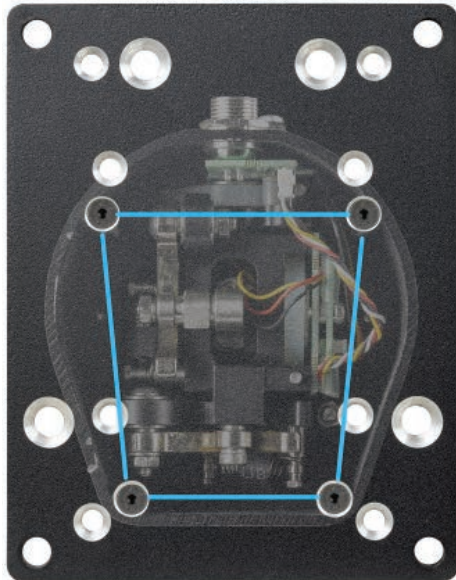
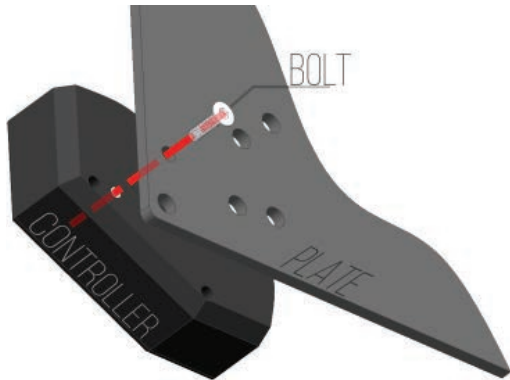


WinWing Super Libra stick

⚠ WinWing flight stick does not require factory plate removal.

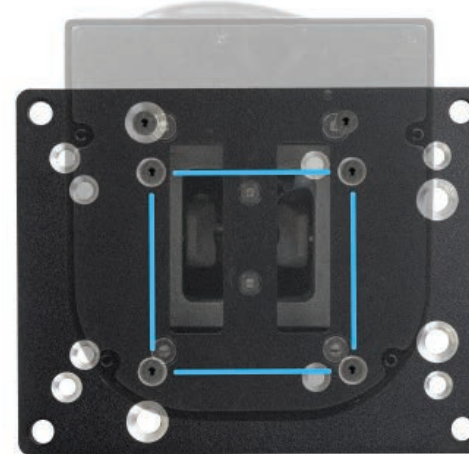
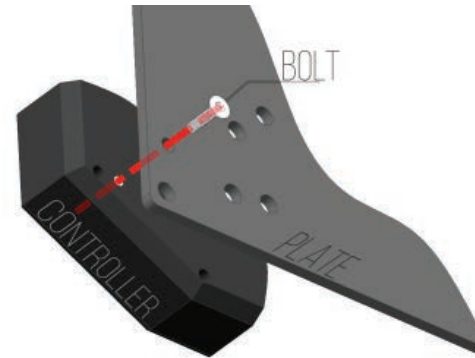


VKB Gunfighter Stick



WinWing Orion Stick bases

⚠ Turn cover (upper) plate at 90 degrees and find matching holes. Use Thrustmaster Warthog and alike bases mounting hardware: M4x12mm countersink bolts.



Flight Stick upper (base cover) plate to lower plate installation

7. Mount upper to lower stick plate by using included mounting hardware.



Specifications:

Recliner: max: 170 degrees

Construction: tubular steel frame with elastic strap supports

Seat Materials: high-density cold cure foam filling; Fabric, Steel chassis

Instructions during use and care:

Move simulator around with caution to avoid collision.

Keep out of direct sunlight and outdoor use.

Watch fingers when adjusting recliner.

Placing heavy or sharp objects on the seat may damage the surface material.

Do not use abrasive or chemically aggressive materials on the seat.

Use dry cloth or soft brush to clean the chair.

Dimensions:



Warranty Information

Return Policy

Terms And Conditions

<http://homeracer.com/ow-termsandconditions.html>

