VolairSim

AVIONICS PANEL G1000

P/N: VS-AP1-G1000

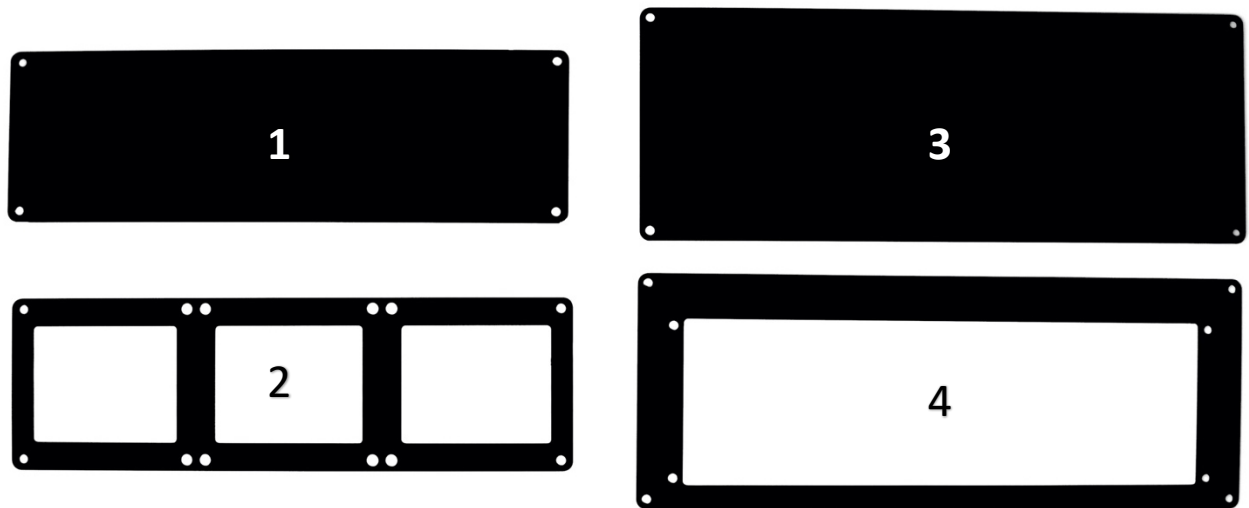# ASSEMBLY INSTRUCTIONS

Rev. 1.0

Thank you for purchasing the Avionics Panel **G1000** for the Volair Sim™ chassis! We hope that it will further increase the sense of realism and immersion during flight simulation. Although we have designed the Avionics Panel with ease of assembly in-mind, please read these instructions carefully first.

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NOTE: SOME OF THE PARTS MAY VARY FROM THOSE SHOWN IN THE PHOTOS BELOW AS WE CONTINUOUSLY IMPROVE OUR PRODUCTS. PLEASE ALSO VISIT OUR YOUTUBE CHANNEL FOR ADDITIONAL INSTRUCTIONS AND TIPS.

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The Volair Sim Avionics Panel G1000 is compatible with the following accessories:

- Volair Sim chassis (all versions)

- RealSimGear G1000 Suite (PDF, MFD, GMA audio panel)

- Yokes:
    - Honeycomb Alpha Yoke
    - Logitech (Saitek) Pro Flight Yoke
    - Brunner Yoke
    - Yoko Yoke

- Honeycomb Bravo Throttle Quadrant

- Up to two (2) Logitech (Saitek) Pro Flight (rectangular) instruments. One instrument can be mounted to the left of Yoke. Second instrument can be mounted in the space reserved for the Honeycomb Bravo Throttle Quadrant using the provided adapter plate.

- Up to three (3) Logitech (Saitek) Flight Instrument Panels (e.g. Airspeed Indicator, Attitude Indicator, and Altimeter as back-up instruments) that can be mounted using the provided adapter plate.

- AMPS STANDARD (38mmx30mm) ball mount drill pattern and space for attaching a tablet (e.g. iPad or iPad mini). Note: Ball mount is not provided.
    - Example: RAM Mounts Ball Adapter with AMPS Plate RAM-B-347U with B Size 1" Ball

Volair Sim Avionics Panel G1000 ships with the following adapter plates:

1. Blanking Plate for Logitech Pro Flight Accessory (Left of Yoke)
2. Adapter Plate for attaching Additional Logitech Flight Instrument Panels
3. Blanking Plate for Honeycomb Bravo Throttle (Right of Yoke)
4. Adapter Plate for Additional Logitech Pro Flight Accessory (Right of Yoke in-place of Bravo Throttle)

Volair Sim Avionics Panel G1000 ships with the seat riser kit (P/N: VS-SRK) which allows the Volair Sim Chassis users to increase seat height by 3" to improve monitor visibility over the panel glare-shield.

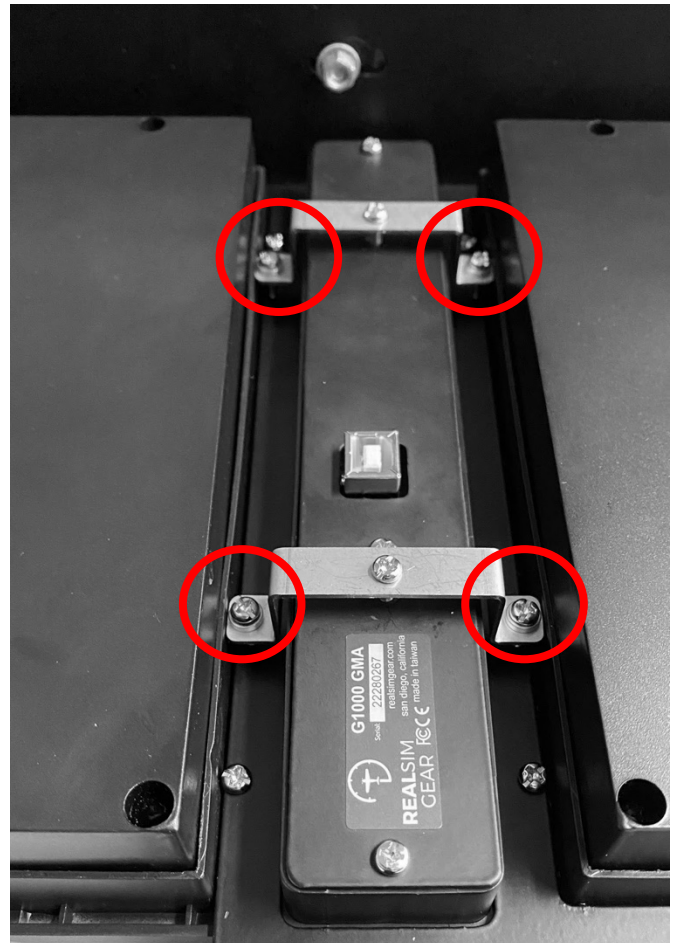To install this kit, see **Appendix C** for instructions.

STEP 1: Unpack the Volair Sim G1000 Avionics Panel and lay it front-down on a soft surface in order to protect the panel and the RealSimGear (RSG) components. Next, test-fit the RealSimGear PFD and MFD displays to ensure that the four (4) mounting holes in the Avionics Panel align with the respective holes in the PFD and MFD. **Due to very close tolerancing and placing of the RSG mounting holes, this step is very important.**

NOTE: IN CASE THE MOUNTING HOLE ALIGNMENT OF THE MFD IS NOT SQUARE WITH THE EDGE OF THE PANEL, REMOVE THE MFD AND GENTLY BEND THE END OF THE AVIONICS PANEL AND TEST FIT AGAIN.

DO NOT ATTEMPT TO FORCE THE INSTALL OF THE PFD AND MFD UNLESS YOU VERIFY THE MOUNTING HOLE ALIGNMENT AS DAMAGE TO THE PFD/MFD MAY OCCUR!

The PFD and MFD are mounted using M3 machine screws inserted from the rear of the Avionics Panel which are included with the RealSimGear G1000 suite.

Once you install the PFD and MFD, you can install the RSG GMA audio panel as shown on the photo on the right using the brackets hardware provided with the RSG GMA Audio Panel. Use the four (4) machine screws (circled in RED) to gently tension the audio panel against the Avionics Panel face.
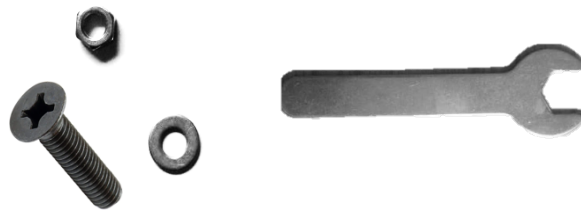
WARNING: DO NOT OVERTIGHTEN AND DO NOT SUBSTITUTE LONGER SCREWS THAN PROVIDED BY REAL SIM GEAR OR THE SCREWS MAY PENETRATE THROUGH THE FACE OF THE G1000 HOUSING!
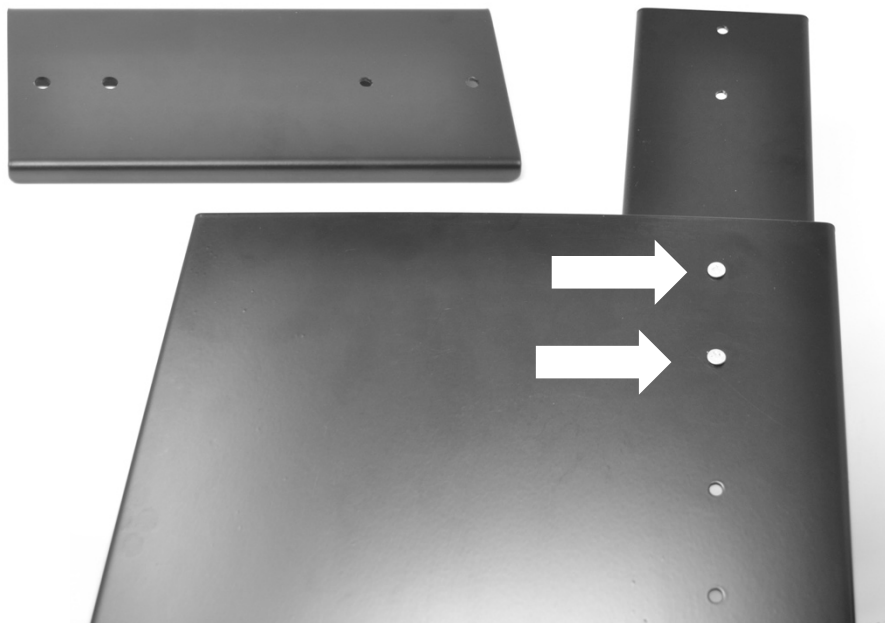
STEP 2: Detach all avionics/accessories from the Volair Sim avionics table except for the yoke (if installed). If you do not have the yoke installed, test-fit it now. Volair Sim Avionics Panel G1000 is compatible with the following flight yokes: Logitech (Saitek), Honeycomb Alpha, Yoko, and Brunner.

If installing the Honeycomb Alpha yoke and/or Honeycomb Bravo throttle, please see the **Appendices A and B** respectively for installation details.
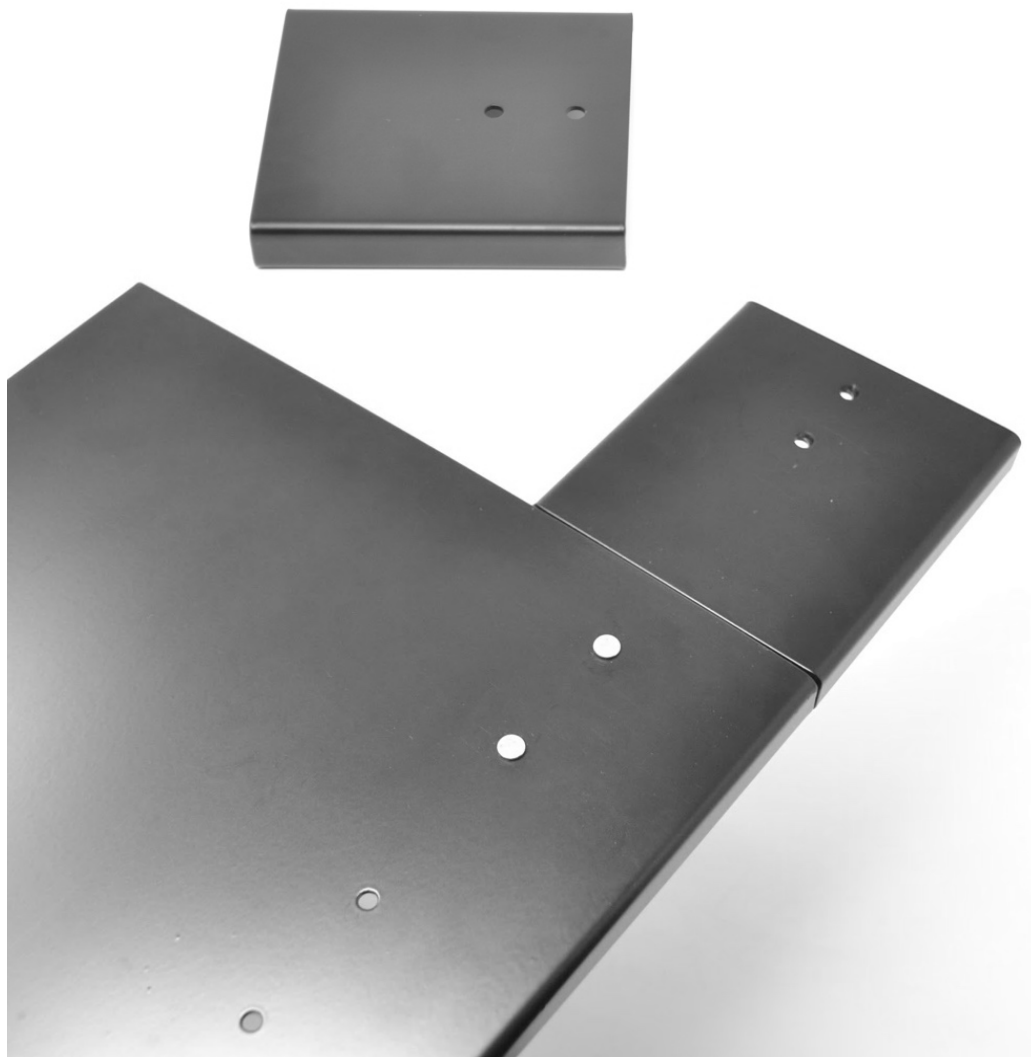
Open the Bag Labeled "Avionics Table Attachment Hardware." Inside, you will find a set of eight (8) M4x12mm flat head Phillips machine screws, nuts, and washers and a universal wrench as shown below:
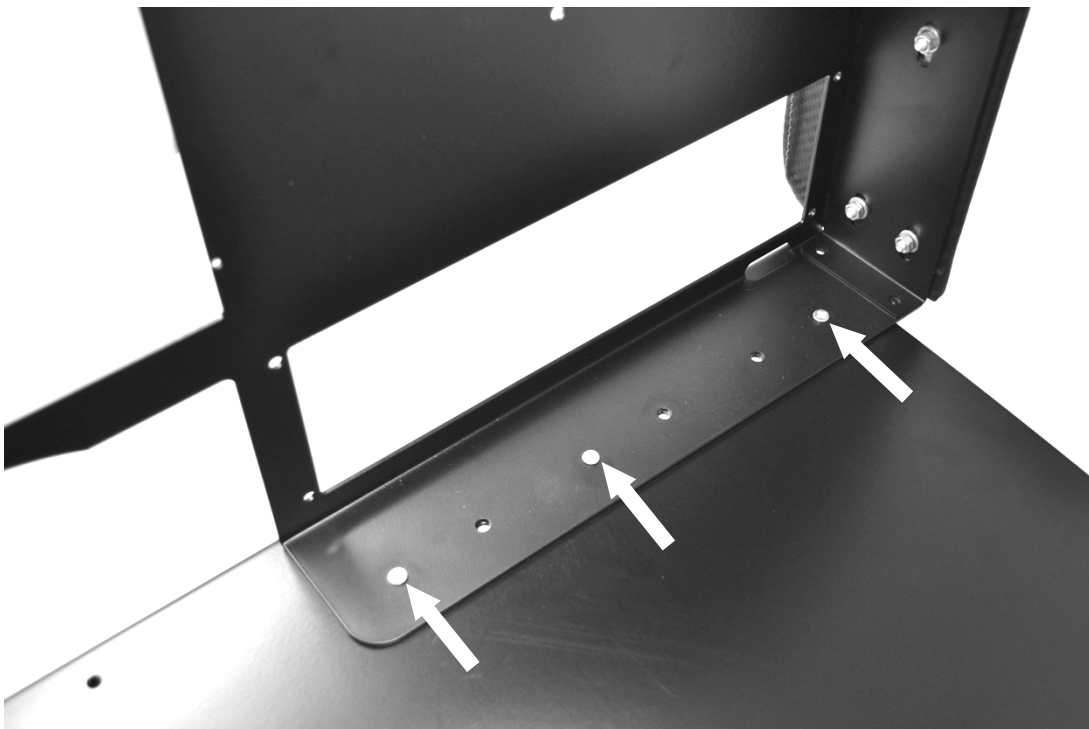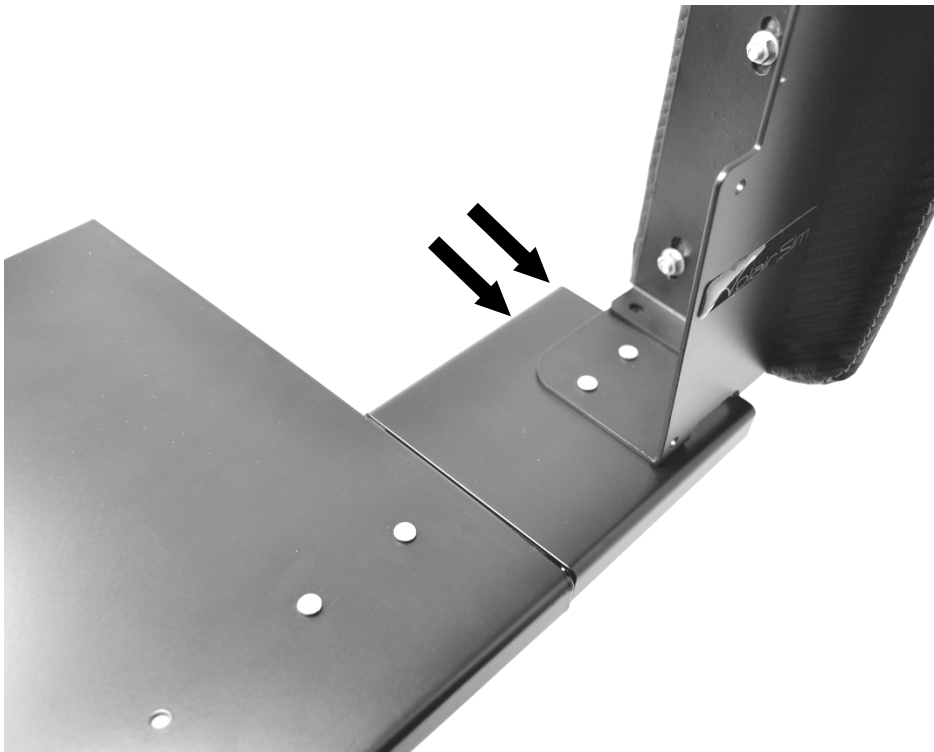

STEP 2A: Begin by attaching the longer extender bracket to the RIGHT side of the Volair Sim Avionics Table using two M4x12mm flat head Phillips machine screws, nuts, and washers as shown below. Use the universal wrench to prevent the nuts from turning while tightening.
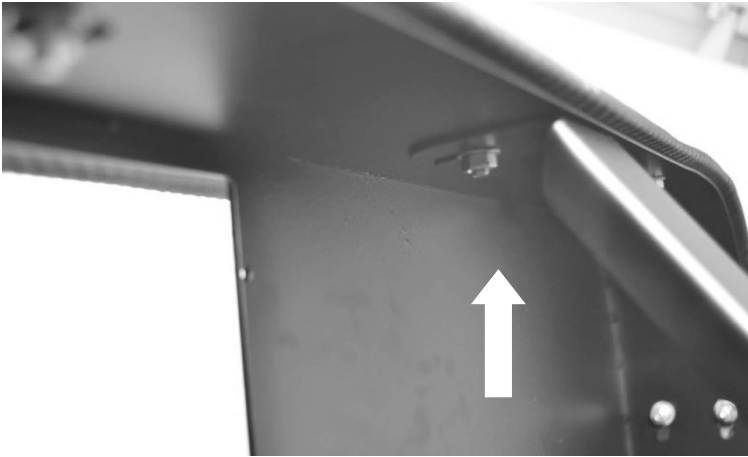
STEP 2B: Next, place the smaller extender bracket on top of the longer extender bracket and verify that the two open holes line-up properly and that the front lip of the avionics table is uniform with the bracket as shown:

STEP 3: Use the rightmost two holes on the extender bracket to line up with the two rightmost holes in the G1000 Avionics Panel as shown below and use the remaining M4x12mm screws, washers, and nuts to secure the avionics panel to the avionics table uniformly along the front lip. Use the universal wrench to prevent the nuts from turning while tightening.

STEP 4: Attach the two (2) rear support brackets as shown below by loosening two (2) nuts underneath the Avionics Panel glare-shield. Ensure that the position of the brackets will not interfere with the Yoke/Throttle panel installation. Gently push the front of the Avionics Panel towards the back to slightly pre-load the support brackets. When satisfied with the position, tighten the nuts under the glare shield.

OPTIONAL: Attach the Logitech/Saitek Pro Flight instruments into the cutouts provided in the Avionics Panel using provided M4x30mm screws and the included M4 nuts.

Mounting a tablet (e.g. iPad) can be done using dual-sided 3M tape or couple strips of Velcro while routing iPad's charging table behind it or using AMPS STANDARD (38mmx30mm) ball mount drill pattern and space for attaching a tablet (e.g. iPad or iPad mini). Note: Ball mount is not provided. Example of suitable ball mount include *RAM-B-347U RAM Mounts Ball Adapter with AMPS Plate with B Size 1" Ball.*

See **Appendix A and B** for tips on attaching Honeycomb Alpha yoke and Bravo throttle. Use the provided rectangular blanking plates to cover-up unused openings.

See **Appendix C** for instructions on installing Seat Riser Kit to raise Volair Sim Chassis seat height.

There are two options for installing the Honeycomb Alpha Flight Yoke:

OPTION – 1 (PREFERRED)

Remove the decorative trim from the yoke as shown in **STEP 1** below. Next, Attach the Alpha yoke to the Avionics Table using strips of dual-sided 3M tape (e.g. 3" wide). The tape strips should be mostly positioned on the bottom back and sides of the yoke and/or throttle as the front of the yoke/throttle will be held by the front of the avionics panel. Once the yoke/throttle is affixed to the avionics table, the avionics panel can be installed from the front with no interference between the avionics panel and the yoke/throttle face.

Note: The yoke face will follow the outline of the face of the Avionics Panel and the distance from the edge of the end of the avionics table will be approx. 2".
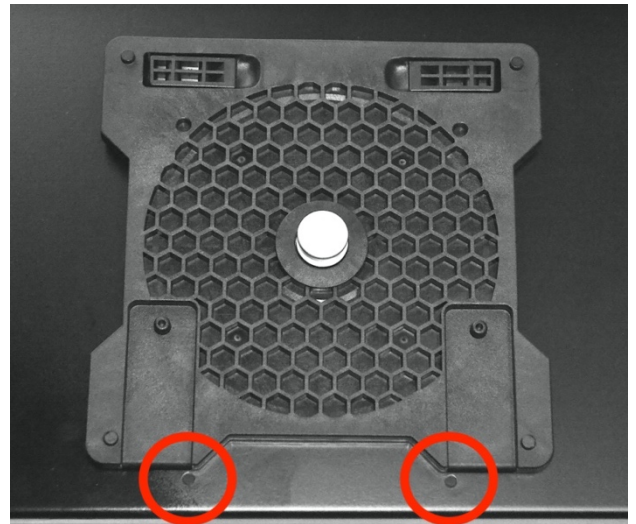
OPTION 2

If desired, the Honeycomb yoke and/or throttle can also be installed with the Honeycomb micro-suction mounting plate using the following steps:

STEP 1 – Remove the yoke decorative trim from the top of the Honeycomb yoke by unscrewing four (4) hex screws as shown:

STEP 2 – Install the Honeycomb micro suction mounting plate on the Volair Sim avionics table. The front of the plate must be positioned behind the two holes drilled on the front of the avionics table as circled in red.

STEP 3 – Attach the Honeycomb yoke on top of the mounting plate and slide the Avionics Panel from the front. Lastly, attach the panel to the avionics table with provided hardware.

NOTE: WHEN USING THE MICRO-SUCTION METHOD, THE YOKE FACE WILL BE POSITIONED BEHIND THE FACE OF THE AVIONICS PANEL.
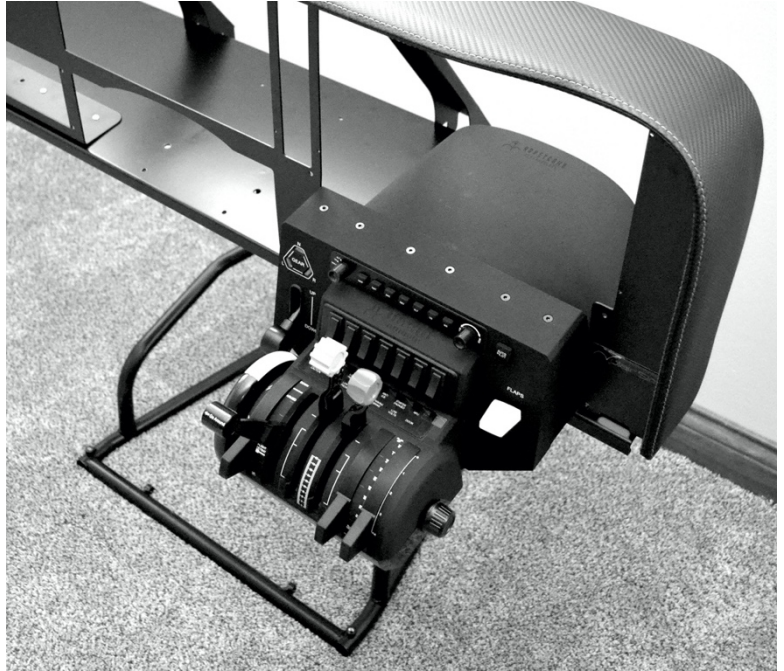
The Honeycomb Bravo can be mounted in the cut-out on the right of the Avionics Panel as shown above OR on the right-hand mount of the Volair Sim chassis.

The Honeycomb Bravo does not have tapped/drilled holes on bottom that would facilitate screw-down installation. Therefore, mounting using strips of 3M dual-sided tape (included) is recommended. It will allow the Bravo throttle to be positioned so that the front of its bezel will be positioned against the bezel of the Real Sim Gear MFD.

After installing the Avionics Panel with the RealSimGear G1000 onto the avionics table, test-fit the throttle quadrant by sliding it through the opening to the right of the Yoke and note the depth.

Apply two strips of 3M dual-sided tape to the bottom of the throttle quadrant and re-install.

NOTE: IT MAY BE HELPFUL TO TEMPORARILY REMOVE THE MFD OR LOOSEN THE MOUNTING SCREWS OF THE AVIONICS PANEL DURING THE INSTALLATION.

ALSO, YOU MAY WANT TO RELOCATE THE KEYBOARD TRAY FROM RIGHT TO LEFT USING THE OPTIONAL LEFT-HAND KEYBOARD MOUNT (AVAILABLE FOR PURCHASE FROM VOLAIR SIM).

STEP 1: Remove the left, center, and right-hand mounts from the chassis. Next, remove the seat with seat sliders from the seat cross-bars. Lastly, remove the cross-bars from the seat risers.

STEP 2: Install the seat riser kit as shown below by running the long bolts through the outer holes of the cross-bars and then secure with the included nuts.

STEP 3: Re-install the seat and seat sliders onto the cross-bars.

Re-install the left, center, and right mounts onto the chassis.