



MEET A NEW BREED
OF **COMPACT CLASS**
AVIONICS SYSTEMS.

ADS-B | COM | TRAFFIC | WEATHER

For Those Who *Fly to Feel Alive*



Out here—miles from pavement, **deep in the backcountry**—the stars shine brighter, the air smells like **pine** and **freedom**, and the only hum you hear is from the **engine** that brought you here.

This is where our **hearts live**. Not in boardrooms or spreadsheets, but in the wild places where **bush wheels** touch gravel bars and **campfire smoke** curls into the dusk.

Built for the Wild, Designed for Trust

At **AIR Avionics**, we're not just building avionics—we're building trust. Every knob, every line of code, every screen is designed by pilots who know what it means to fly with **one eye on the horizon** and the other on a short, rough strip. **We know panel space is tight.**

We know your focus needs to be **outside**, not inside. That's why we build systems that are simple, reliable, and intuitive—tools that feel like old friends.

Your Cockpit. Our Commitment.

Because out here, in places you can only reach with wings and a little nerve, your gear has to work. No second chances. **No room for confusion.** Just you, your machine, and the mountains.

We make **avionics** for those who fly for the love of it. For those who chase sunsets, not schedules.

And when the fire crackles and the stories flow, we're proud to be part of your cockpit, part of your journey, part of the reason **you got here safely**—and get home again.



AIR Control Display
& AIR Transponder
& AIR COM
(ACD-57&AC-1&AX-1)

Redefining the compact class of radios and transponders.

We have created a **new breed** of compact-class avionics systems. AIR Com, AIR Transponder, and AIR Control Display are the smallest and lightest **fully certified** systems on the market. But it does not stop there: Each of the three products delivers **unique new functions** that help flight crews fly better and safer.

Our systems are **modular** by design. You can use multiple AIR Control Displays. Radio and transponder units can be **easily** connected. You can always **extend** the installation if you need new functions, redundancy, or even better ergonomics.

AIR Control Display

Altimeter, COM and XPDR controller

AIR Control Display (ACD-57) is a **multi-function** display. It controls aircraft radios, is a **fully certified altimeter**, and **controls** transponders.

It is **effortless** to use and **perfectly readable**. It features fantastic position-based and database-driven functions, like the "NEAREST" station list.

Already today, ACD works with a **broad range of radios** and transponders, also from third parties, for example, uAvionics®, TRIG®, and many more.

If your panel space is limited, you can use an ACD to control COM, XPDR, or both and use it as an altimeter. This saves two instruments' worth of panel space and offers better **readability** and **reliability** than most mechanical altimeter systems.



AIR Control Display
(ACD-57)



AIR COM
(AC-1)

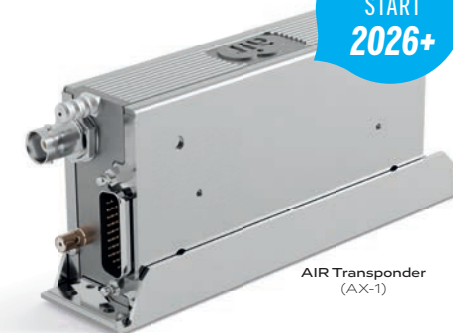
AIR Com

8.33kHz Aircraft Radio

AIR COM (AC-1) is our **next-generation** radio module. It offers **impressive** sound and **advanced** functions in a small, lightweight form factor. In fact, AIR COM is the world's **lightest** and most **compact**, fully TSO-certified radio.

It sports modern functions like the **incredible** "Say Again" replay function and separate volumes for the DUAL/MON and the primary channel.

AIR COM can be installed **directly** on an AIR Control Display (ACD-57) or remotely with a cable and mount. Compatible Flight Deck systems like GARMIN® G3X Touch® or Dynon® SkyView® can control it—even without an ACD-57 if desired.



AIR Transponder
(AX-1)

AIR Transponder

Mode-S/ADS-B transponder with integrated positioning

AIR Transponder (AX-1) is our future Mode-S / ADS-B transponder module with an **integrated** GPS position source.

It will come in an **ultra-low size** and weight package. Integrating the GPS position source **eliminates** the installation complexity of most compact class ADS-B transponders. We plan to start offering AX-1 in the American market by 2026.

The world's smallest and lightest radio: *The most advanced functions.*



AIR COM
(AC-1)

Our AIR Com (AC-1) features best-in-class sound. Its all-digital audio system allows unprecedented functions like the "Say Again" replay function.

Say Again

The function everyone loves

With a button push, AIR Com replays the **last incoming** transmissions. This unique function is an excellent **safety** function. It **reduces** channel congestion and **helps everyone** to understand and listen carefully.

Dual Watch Function

Listen to two channels at once

The dual watch function (the monitor function) allows you to **listen** to **both** the active and the standby channels. Special care has been taken to design the dual watch function with the best possible sound.

Unique with AIR Com: The volumes of **both channels** can be **adjusted** independently, making it easy to differentiate incoming transmissions.

Intercom

Robust and feature-rich intercom

Its integrated intercom function can serve up to **four seats** with clear audio. If desired, the intercom allows the flight crew to be **isolated** from the passengers' chatter.



AIR COM
(AC-1)

Better Sound

AIR Com's best feature

Our AIR Com (AC-1) features an all-new audio design that delivers **crystal-clear sound**. Its all-digital audio system allows unprecedented functions, like the **"Say Again"** replay function.

Its flexible audio setup allows **two independent** audio configurations. This is handy in all aircraft where the microphone setup is often changed and in **open-cockpit aircraft**.

Integrates seamlessly

Loaded with audio I/O, switches, and interfaces.

AIR COM features **three fully** customizable microphone inputs that also support dynamic microphones. It has two headset audio outputs (up to four headsets) and a speaker output.

Four **discrete inputs** allow the connection of buttons and switches. Push-to-talk and many other functions, such as channel flipflop, audio configuration changes, intercom activation, and the "Say Again" function, can be triggered.

In addition to an ACD-57 or even without an ACD-57, AIR COM can be remote-controlled. It **works seamlessly** with many third-party systems, such as GARMIN® G3X touch® or Dynon® SkyView® Flightdeck systems.

Easy to install

Easy mounting, robust connectors, small size

AIR Com can be **installed directly** with the AIR Control Display in the panel. If desired, it can be mounted remotely in the aircraft **with** cables.



AIR Control Display
& AIR COM
(ACD-57 & AC-1)



You *have control*: AIR Control Display



AIR Control Display
(ACD-57)

AIR Control Display, or ACD-57, marks the heart of a radio, altimeter, or transponder installation. It features the industry's largest display area in a 2.25" control head.

ACD-57 can be connected to an aircraft radio like the AIR COM, a transponder like the AIR Transponder, the TRIG TT21*, and the uAvionix Tailbeacon X*, or both radio and transponder **simultaneously**. Moreover, it is a fully certified altimeter. The user interface, the display content, and the use of controls automatically adapt to the installation environment for optimum clarity and ease of use. Data on the display is kept as **large as possible**, controls are simple, intuitive, and consistent throughout the system.

Installation Options: AIR COM, AIR Transponder, and AIR Control Display

AIR Com (AC-1) and AIR Transponder (AX-1) can be connected to an AIR Control Display (ACD-57) as a single, compact unit. As an option, they can be **installed remotely** with cables and mounts.

Any number of additional AIR Control Displays can be added, for example, in **tandem seaters** or if the panel space allows for more controls.

Both units can also be used without an AIR Control Display, provided that **compatible systems** like GARMIN® or Dynon® flight decks control the units.



AIR Control Display
& AIR COM
(ACD-57 & AC-1)



Com Control

Huge font and super-simple operation via large control elements.



NEAREST Function

Select frequencies of nearby stations directly from a list without manual tuning.



Altimeter

Fully approved, perfectly readable with a vivid, intuitive display.



Radio & Altimeter

Both functions combined. Saves panel space for one instrument. Still easy-to-use.



Volume Control

Independent control for both frequencies (primary and dual watch/Mon).



Transponder Operation

Gigantic font and extremely easy operation via large control elements.



Radio & Transponder

Both functions combined for easy operation. Saves panel space for one instrument.



Radio, Transponder & Altimeter

Perfect operation despite high integration density. Saves space for two instruments.

Overview and Specifications:



AIR COM Radio

RADIO TECHNOLOGY



- 6W Transmit Power
- Dual Watch
- 8.33kHz channel spacing



AUDIO



- Three independent microphone inputs with adjustable GAIN values (also supporting dynamic microphones)
- Amplified speaker output
- Two headphone outputs (up to four headphones)
- Intercom (up to four places)
- Two audio configurations, switchable in flight

QUALITY



- All-metal enclosure
- DO-160 qualified for environmental conditions
- Made in Germany
- Produced in PART21 environment

COMPATIBILITY



- AIR Control Display (multiple) via CANaerospace data bus
- RS-232: GARMIN® GTR225

SUPPORT



- Backed by AIR Avionics' reknown customer support via eMail and telephone
- Minimal downtime quick replacement program in America
- Two year warranty

UNIQUE FUNCTIONS



- Say Again function for replay of incoming transmissions
- Independent volume for dual watch

DIMENSIONS AND CONNECTORS



- 4.8" x 2.42" x 1.21", ca. 0.35 lbs
- Connectors: D-SUB 26HD (Rear), D-SUB 15HD (Front), BNC (ANT)
- Can be directly combined with AIR Control Display 57

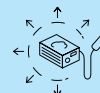
AIR Control Display

QUALITY



- All-metal enclosure
- DO-160 qualified for environmental conditions
- Made in Germany
- Produced in PART21 environment

DIMENSIONS AND CONNECTORS



- Small panel cutout (2.25").
- 2.42" x 2.42" x 1.5", ca. 1/3 lbs
- Connectors: 2x D-SUB 15HD
- Controls: 4 pushbuttons, one concentric dual rotary knob with pushbutton



SUPPORT



- Backed by AIR Avionics' reknown customer support via eMail and telephone
- Minimal downtime quick replacement program in America
- Two year warranty

FUNCTIONS



- COM Control
- XPDR (Mode-S) Control
- Altimeter*
- Encoding Altimeter

DISPLAY



- Perfectly readable in sunlight, with an extreme viewing angle
- Usable at night

QUALITY



- All-metal enclosure
- DO-160 qualified for environmental conditions
- Made in Germany
- Produced in PART21 environment

COMPATIBILITY



- Radios: AIR Com (AC-1), TRIG TY-2x Series*, BECKER 62 Series*, TQ KRT Series*, FUNKE ATR833 Series*
- Transponders: AIR Transponder (AX-1), TRIG TT-2x Series*, uAvionix Tailbeacon X*
- External Control: GARMIN® G3X® Touch®, Dynon® SkyView® and many other EFIS.



*separate software add-on required, subject to charge.



The market's most comprehensive traffic detection: **AIR Traffic (AT-2).**



AIR Traffic (AT-2)

AIR Traffic (AT-2) is our ADS-B and Mode-S based system for hidden/remote installation providing traffic and weather data to cockpit systems, EFIS, apps, headphones, and traffic displays.

Receives More Traffic

Dual-Link ADS-B, FIS-B Weather and Mode-S

We have leveraged our experience with over **20,000 traffic systems** produced to provide the safest and most comprehensive traffic detection.

The AIR Traffic (AT-2) receives **more targets** than most other systems. For example, it receives ADS-B targets with no position integrity (SIL=0) or signals from aircraft **without** ADS-B (Mode-S): AIR Traffic shows the **exact 3D position** of ADS-B Traffic and the distance and relative altitude of Mode-S transponders.

Easy to install

Easy mounting, robust connectors, small size

We have sold **thousands** of traffic systems and have listened closely to installers. AIR traffic features robust connectors, a compact design, and easy mounting options. It can even be combined with an AIR Traffic Display into a single panel-mount unit.

Voice Warnings

Advanced Audio Interface

AT-2 can be installed **without** any display if the panel is full. Traffic is announced directly in the aircraft's audio system in clearly understandable, natural voice. Voice warnings help to reduce head-down time and increase situational awareness by actively announcing threat traffic.

Simple configuration

Wirelessly with any smartphone, tablet, or PC

Configuring AIR Traffic is as simple as using the Internet—with any smartphone, tablet, or PC. Simply connect to the WiFi® network AIR Traffic **provides** and open a website. Additionally, it features **advanced diagnostic functions** that help test and verify its correct function.

FIS-B and TIS-B

Installable into many aircraft types

For even more situational awareness, AT-2 receives **subscription-free FIS-B weather** data and traffic data transmitted by ground stations. **Integrates Seamlessly:** Wi-Fi® and Bluetooth®

Integrates seamlessly

RS232, ARINC429, and WiFi® Interfaces

AIR Traffic's flexible interface concept **allows** for direct integration into existing cockpits. It works with any traffic indicator on the market, many navigation systems (including IFR-certified panel-mount systems such as GARMIN® GTN®), and even with apps like ForeFlight® or SkyDemon® over its integrated WiFi® interface.



AIR Traffic (AT-2)



AIR Traffic Display & AIR Traffic (ATD-80 & AT-2)



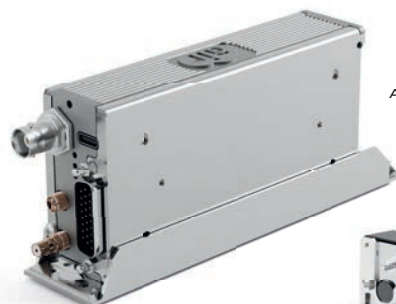
AIR Traffic Display
(ATD-11)

Installation Options: AIR Traffic and AIR Traffic Displays

AIR Traffic (AT-2) can be installed **remotely**. It can be installed without any display, just using its natural voice audio output. An optional **mount** helps with the fixation in the aircraft.

Additionally, it can be **easily integrated** into existing cockpits. It can be connected to traffic displays, navigation systems, and wirelessly send traffic data to apps (many interfaces can work in parallel).

As an option, it can be installed **together** with our AIR Traffic Displays (2.25" und 3.125") as a single, compact unit.



AIR Traffic
(AT-2)



AIR Traffic Display
& AIR Traffic
(ATD-57 & AT-2)



AIR Traffic Display
& AIR Traffic
(ATD-80 & AT-2)

Many functions of the AIR Traffic Displays have been developed as a **result of current research projects** at leading research facilities such as the Institute of Flight Systems and Automatic Control at the Technical University of Darmstadt in Germany.

We have added a range of unique functions to increase safety. The symbology helps to differentiate different types of aircraft, e.g. helicopters from jets. A unique alert view helps to avoid misinterpretations in conflicting traffic situations. Traffic is also monitored after a signal loss with a tracking of its probable position.



Traffic Indication

Traffic is indicated in a "radar-style" screen. The range can be adjusted by using a rotary knob from .5nm to 32nm radius (units are configurable). The own aircraft (magenta) and other received traffic are shown with aircraft symbols.



Alert View

The alert screen has been designed as a result of current research. It helps reduce the potential for misconceptions, especially in situations with high bank angles of the aircraft. The screen is easy to interpret, even for crews who are unfamiliar with flying with traffic warning systems.



Head-On Alert View

Conflicting head-on traffic is displayed using a unique "horizon-style" indication that allows for quick and easy situation conception. The new indication has been developed in cooperation with research facilities, with the help of expert interviews and the help of surveys of several hundreds of pilots. It can help to reduce reaction time in conflicting situations.



Signal Loss

After losing the signal of a selected target, the target's last known position is continuously monitored and displayed with increasing vagueness. This helps keeping an eye on out-of-range-targets and estimating their probable position.



White Mode

The user interface can be switched to a white mode. Some users prefer the white user interface in daytime. Especially if other white displays are used in the same panel, AIR Traffic Display shows a familiar face.



Data Fields

Optionally, little info fields (we call them "Nav Boxes") can be shown on the right side of the radar screen. Pilots can actively select a target to review detailed target information such as vertical separation or distance. Targets of special interest can be marked in different colors for easier recognition.



Symbology

Different types of traffic (powered aircraft, gliders, circling aircraft) are shown with different symbols. Very high or very low targets are smaller than targets in the same altitude as the own aircraft. Differential altitude is directly indicated on the symbol – helping to easily interpret the traffic situation.



Weather

An easy-to-interpret choice of ADS-B weather layers can be shown on the screen. Enjoy FIS-B weather information in a robust and easy-to-use screen directly in your panel. Additionally, long range METAR and TAF data can be reviewed in a weather menu, sorted by airport identifier.

**A stunning way
to display traffic and weather:
*AIR Traffic Displays.***



Overview and Technical data:



AIR Traffic Display
(ATD-11)



AIR Traffic Display
(ATD-57)



AIR Traffic Display
(ATD-80)

AIR Traffic Displays

FUNCTIONS



- Displays traffic and weather data from connected systems.
- Alerts the crew of conflicting traffic from connected systems.
- Shows in-flight FIS-B weather data from connected receivers.
- Shows Carbon Monoxide and health parameters from connected sensors.*

DIMENSIONS



- ATD-57: Small panel cutout. 2.42" x 2.42" x 1.04", ca. 1/3 lbs
- ATD-80: Large panel cutout. 3.27" x 3.27" x 1.02", ca. 1/2 lbs
- ATD-11: External version. 3.96" x 1.99" x 0.87", ca. 1/4 lbs
- Connectors: 2x D-SUB 15HD
- Controls: 4 pushbuttons, one concentric dual rotary knob with pushbutton

COMPATIBILITY



- Directly connects to the AIR Traffic (AT-2) system
- Works with all TIS/GDL-90 compatible systems via RS-232

DISPLAY



- DO-254, Do-160 and ETSO-C113 qualified hardware
- Perfectly readable in sunlight, extreme viewing angle
- Usable at night

QUALITY



- All-metal enclosure
- DO-160 qualified for environmental conditions
- Made in Germany
- Produced in PART21 environment

*separate software add-on required, subject to charge.

AIR Traffic



AIR Traffic
(AT-2)

TRAFFIC TECHNOLOGY



- Dual Link ADS-B In
- Receives ADS-B, ADS-R, TIS-B and FIS-B data
- Detects any kind of ADS-B traffic (also SIL=0 „no integrity“ signals)
- Detects Mode-S Transponder signals from non-ADS-B traffic

CREW ALERTING FUNCTIONS



- Detects threats and gives warnings of conflicting traffic
- Trajectory-based warning engine for minimum nuisance alerts
- Audio out for synthetic voice warnings on the intercom
- Relay output to trigger external systems (like ACL)

GNSS



- High-precision GNSS receiver
- Software configurable supply voltage for GPS antennas. Works with 3V, 5V active GPS antennas, and splitters (OV)

DIAGNOSIS AND ANALYSIS FUNCTIONS



- Logs flight tracks for later analysis
- Three status LED and comprehensive self tests
- Antenna health monitoring and recognition (GPS)

SUPPORT



- Backed by AIR Avionics' reknown customer support via eMail and telephone
- Minimal downtime quick replacement program in America
- Two year warranty

COMPATIBILITY



- Works with all systems capable of displaying traffic, including flight decks, navigators apps, and dedicated displays
- Eight independently configurable wireless and wirebound interfaces: RS-232, ARINC429, Wi-Fi®, Bluetooth®, Discrete I/O and Audio.

QUALITY



- All-metal enclosure
- DO-160 qualified for environmental conditions
- Made in Germany
- Produced in PART21 environment

DIMENSIONS AND CONNECTORS



- 4.80" x 2.42" x 1.21", ca. 1/3 lbs
- Weight: 180g
- Connectors: D-SUB 26HD (Rear), D-SUB 15HD (Front), BNC (ADS-B IN), rpSMA (Wi-Fi®/Bluetooth®), QMA (GPS), USB
- Static port pressure connector (optional)
- Can be directly combined with AIR Traffic Display 57/80

WIRELESS FUNCTIONS

- Transmits traffic and GPS data to aviation apps like ForeFlight®
- System configuration via webbrowser



We make **every flight** better:
Our products enable safe
and fun flights.

AIR Avionics is a German manufacturer of advanced avionics systems designed to make flying safer, more efficient, and user-friendly. We have been developing and producing avionics systems for over two decades. We strongly focus on communication systems, transponders, and traffic awareness solutions for general aviation. Until now, we have been solely marketing our products in Europe. In 2025, we will proudly start to serve the American GA market, the greatest aviation market in the world.

One of our flagship products is the AIR Traffic collision avoidance system, which helps pilots detect and avoid potentially dangerous aircraft early on. In addition, we offer compact, fully certified communication and transponder systems known for their compact size, low weight, and ease of use. All of our systems include exclusive features tailored to meet the needs of general aviation crews.

In Europe, we have thousands of aircraft equipped with our systems. They are easy to install, very reliable, and offer cost-effective ways to improve your flight safety.

With the entire management team being pilots, we focus on usability, safety, and customer service. We strive daily to build meaningful relationships and trust with our customers.



MADE IN GERMANY
PROUDLY SERVING
THE USA

Technology

We develop **avionics systems** for aircraft and ground applications in the fields of communications, air traffic control, and traffic detection. Our team **develops** all aspects of our products in-house. Our competencies range from mechanics, electronics, and **radio frequency engineering** to **software** for safety-critical systems.

Markets

Our market focus is on general aviation in Europe. However, we are active worldwide, also for commercial aviation and non-civil applications. In addition to standard products, we also develop special solutions.

Locations

Our company maintains two locations in southern Germany. We operate exclusively in Germany and are fully equity-financed. The entire value chain, from development to production to sales, takes place within the company. Thus, we are commercially and technologically independent.



Alaska Adventure Fly 2 Fly

Paul Guschlbauer's Fly2Fly is a bold adventure in Alaska's remote wilderness. Our AirAvionics Team Pilot landed a bush plane on the isolated Augustine Volcano, climbed to the summit, and paraglided from the top. The project celebrates simplicity, self-reliance, and pure exploration.

See Paul's
adventurous
flights:





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Design and Concept:
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Pictures: Robin Issartel
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Not all functions shown are included with the delivery of the respective units. Some functions require add-on functions to be purchased and installed. Database functions require a valid database. All of which may lead to additional costs. AX-1 is not available today. AIR Avionics does not provide a market entry date yet. AX-1 specifications are preliminary and may change.

AIR Traffic is only capable of receiving Mode-S traffic in horizontal and vertical range. The direction of Mode-S targets is not detectable.

Flying is inherently dangerous. Never use AIR Avionics systems if flight safety is degraded through their use. Traffic systems can never provide an absolute protection from collisions or dangerous approximations.

US-dealer list: www.air-avionics.com/us-dealers