

EDIT FIELDS MENU
 Highlighted In Black.
 7 editable fields per page,
 31 possible values²



Battery State



Push left button 1x
EDIT FIELDS
SEL FIELD

- Basic Data**
- Blank
 - DG Heading
 - IAS
 - Altitude
 - Baro Set
 - AoA
 - Vertical Speed
 - G Load, G Min, G Max
 - Bus Volts
 - Set Altitude⁴
- If Temp Probe**
- OAT, TAS, DALT
- If GPS Connected**
- Waypoint ID
 - Distance To
 - Ground Speed
 - Track
 - XTE
 - DTRK
 - Bearing To
 - Nav Mode
 - Climb Rate (ft/nm)
- If AV-HSI Connected**
- OBS
 - Nav Mode
- If Autopilot Connected**
- Autopilot Mode
- If BeaconX connected**
- Squawk
- If AV-Link+Sentry connected**
- CO – Carbon Monoxide
- If Temp Probe + AV-MAG + GPS**
- Wind Vector
 - Wind Components

Select Current Page

Three Customizable Pages 1:3, 2:3, 3:3, AI
 AI - Decluttered Attitude Indicator/Transponder Control
 Push **RIGHT** button to change page
 Hold **RIGHT** button for brightness setting

PUSH-SET Menu:

Push to cycle through options and rotate to change option
 Close by cycling to end, pressing left button, or waiting 30 seconds

Options:

- **SET BARO**
- **DG ADJ**
- **HDG BUG** Hold button down to align with current heading
- **OBS** (with AV-HSI only)
- **SRC SEL** (with AV-HSI only)
- **SET ALT** (with Autopilot or SALT overlay only)
- **SET VS** (with Autopilot only)
- **AUTOPILOT** (with Autopilot only)
- **SQUAWK** (with tailBeaconX only)

Change Modes:

If Function unlocked, long hold button to change to DG mode.

SETUP MENU

- UI Style
- UI Font
- G Max/Min Reset
- Course Deviation
- Glideslope
- Alert Volume
- AoA Alert Enable
- AoA Alert Thresholds¹
- G Alert Enable
- G Alert Thresholds
- Roll Alert Enable
- Roll Alert Thresholds
- Turn Coordinator Mode³
- Min/Max Voltage
- GPS Track Stabilization
- HOURS

¹ AoA limits will be grayed out unless rotary knob is pushed while applying power.

Push left button 2x
SETUP
ROT TO SEL



² Not all values can be placed in every field (IAS, Altitude and Baro Setting only allowed in certain fields). Some values are implemented with graphical indicators, other with textual fields.

³ Standard Rate Bank Angle indicator requires temp probe.

⁴ Double beep and flash when crossing 200ft from set altitude. Solid color change when within 100 ft of set altitude

EDIT FIELDS MENU
 Highlighted In Black.
 7 editable fields per page,
 30 possible values¹



Battery State

Available Pages:
 DG Rose
 GPS Rose
 DG HSI
 GPS HSI
 DG Arc
 GPS Arc



Push left button 1x
EDIT FIELDS
SEL FIELD

Select Current Page

Three Customizable Pages 1:3, 2:3, 3:3, AI
 AI - Decluttered Attitude Indicator/Transponder Control
 Push **RIGHT** button to change page
 Hold **RIGHT** button for brightness setting

PUSH-SET Menu:

Push to cycle through options and rotate to change option
 Close by cycling to end, pressing left button, or waiting 30 seconds

Options:

- **DG ADJ**
- **HDG BUG** Hold button down to align with current heading
- **OBS** (with AV-HSI only)
- **SRC SEL** (with AV-HSI only)
- **SET ALT** (with Autopilot or SALT overlay only)
- **SET VS** (with Autopilot only)
- **AUTOPILOT** (with Autopilot only)
- **SQUAWK** (with tailBeaconX only)

Change Modes:

If Function unlocked, long hold button to change to MFD (if enabled), CDI (if enabled) or AI mode.

- Basic Data**
- Blank
 - DG Heading
 - Altitude
 - Baro Set
 - AoA
 - Vertical Speed
 - G Load, G Min, G Max
 - Bus Volts
 - Set Altitude
- If Temp Probe**
- OAT, TAS, DALT
- If GPS Connected**
- Waypoint ID
 - Distance To
 - Ground Speed
 - Track
 - XTE
 - DTRK
 - Bearing To
 - Nav Mode
 - Climb Rate (ft/nm)
- If AV-HSI Connected**
- OBS
 - Nav Mode
- If Autopilot Connected**
- Autopilot Mode
- If BeaconX connected**
- Squawk
- If AV-Link+Sentry connected**
- CO – Carbon Monoxide
- If Temp Probe + AV-MAG + GPS**
- Wind Vector
 - Wind Components²

SETUP MENU

- UI Style
- UI Font
- G Max/Min Reset
- Course Deviation
- Glideslope
- Min/Max Voltage
- GPS Track Stabilization
- HOURS



Push left button 2x
SETUP
ROT TO SEL

¹ Not all values can be placed in every field (Altitude and Baro Setting only allowed in certain fields). Some values are implemented with graphical indicators, other with textual fields.

² Interpreting wind:
 Up arrow = tailwind
 Arrow pointing left = wind pushing on left of aircraft

AV-30 Quick Reference Card

Transponder Control Display State

Field Values Displayed

SQWK
Squawk code

NIC
NIC encoding is used to indicate the radius of containment around the aircraft. 91.227 requires a minimum NIC of 7.

PALT
Pressure altitude
Flashing green indicates interrogation



N Number
N number will be displayed correctly once the setup of the BeaconX transponder has been completed.

MODE
ALT – altitude
STBY – standby
ON – on

NACp
This indicates the accuracy of the aircraft position being transmitted. 91.227 requires a minimum NACp of 8.

STAT
Status of transponder

TESTING

- Set transponder mode to STBY
- Option 1
 - Go to the tailBeaconX and connect using the tailBeacon app.
 - When app opens, go to the bottom of page and push “GND TEST MODE”
- Option 2
 - Go to the AV-30 Install Menu
 - Select BEACONX GTM then push “ENABLE”
- Now set the AV-30 to ALT.
- tailBeaconX will now respond to all calls from transponder test sets.

IDENT
When identifying, PALT will display IDT

Current Page Selector
Push to return to AI, DG or MFD screen

Squawk Set Mode



VFR/MODE
Press to quick-set SQUAWK to VFR.

Press and hold for transponder mode control followed by press and release to change mode.

Push to enter SQUAWK mode • Rotate to change value • Push to advance and accept

Flight ID Mode



If SQUAWK is displayed, push and hold to enter FLIGHT ID entry mode.

Testing the transponder

AV-30 Quick Reference Card

MFD (Traffic Display)

Traffic Status

- **NO DATA** – AV-Link not connected/not functional
- **NO GPS SRC** – ADS-B In unit not sending GPS data, AV-30 has no configured GPS source, and no ownship traffic target found
- **NO GPS FIX** – No GPS source reports valid coordinates
- **NO ALTITUDE** – No source reports valid altitude
- **NO GPS HDG** – No source reports valid heading



Scale

0.33 TO 40 NM
Rotate center knob to zoom

Traffic Count

- **NO TRAFFIC** – Zero aircraft detected OR ADS-B In unit not reporting traffic
- **X AIRCRAFT** – Number of aircraft detected, including those filtered and those off-screen

Select

1:1 OR AI
For tailBeaconX



Target type

Highlighted tracked target
Direction of Flight, Relative Altitude*, and Ascent Indicator

*Pitot and static must be connected to display proper relative altitude.

FILTER

- **NORMAL** – Filter ownship, traffic above and below 2700 feet relative to ownship.
- **ABOVE** – Filter ownship, traffic above 8700 feet and below 2700 feet relative to ownship.
- **BELOW** – Filter ownship, traffic above 2700 feet and below 8700 feet relative to ownship.
- **ONLY OWN** – Filter only ownship.
- **NONE** – Displays all traffic and ownship.



Flight Plan TRAFFIC – Optional GPS Flight Plan Overlay

OWNSHIP ICAO
Enter ICAO number
Rotate knob to change value, press knob to advance cursor



GPS track
Heading and position will be established by the first available out of the following GPS sources:
Wi-Fi ADS-B In Unit
AV-30 Connected GPS
Ownship Traffic Target

VSI
Optional Vertical Speed Overlay

AV-30 Quick Reference Card

Course Deviation Indicator Mode

EDIT FIELDS MENU
Highlighted In Black.
 6 editable fields per page,
 27 possible values



Available
 Only with
 AV-HSI

Battery
 State



Push left button 1x
EDIT FIELDS
SEL FIELD

Select Current Page

Three Customizable Pages 1:2, 2:2, AI
 AI - Declustered Attitude Indicator/Transponder Control
 Push RIGHT button to change page
 Hold RIGHT button for brightness setting

PUSH-SET Menu:

Push to cycle through options and rotate to change option
 Close by cycling to end, pressing left button, or waiting 30 seconds

Options:

- **OBS** (with AV-HSI only)
- **SRC SEL** (with AV-HSI only)
- **BARO** (when an overlay)
- **SET ALT** (when an overlay)
- **SQUAWK** (with BeaconX)

Change Modes:

Long hold button changes mode to AI.

- Basic Data**
- Blank
 - DG Heading
 - Vertical Speed
 - G Load, G Min, G Max
 - Bus Volts
 - Set Altitude
- If Temp Probe**
- OAT, TAS, DALT
- If GPS Connected**
- Waypoint ID
 - Distance To
 - Ground Speed
 - Track
 - XTE
 - DTRK
 - Bearing To
 - Nav Mode
 - Climb Rate (ft/nm)
- If AV-HSI Connected**
- OBS
 - Nav Mode
- If Autopilot Connected**
- Autopilot Mode
- If BeaconX connected**
- Squawk
- If AV-Link+Sentry connected**
- CO – Carbon Monoxide
- If Temp Probe + AV-MAG + GPS**
- Wind Vector
 - Wind Components

SETUP MENU

- UI Style
- UI Font
- G Min/Max Reset
- Min/Max Voltage
- GPS Track Stabilization
- HOURS



Push left button 2x
SETUP
ROT TO SEL

ALERTS



FLAGS



G LIMIT	G-Load Exceeds Set Limit
G LIMIT	G-Load Exceeds 80% of Set Limit
ANGLE	AoA Exceeds Set Limit
ANGLE	AoA Exceeds 80% of Set Limit
ROLL	Roll Exceeds Set Limit
C MONOXIDE	Carbon Monoxide Exceeds 200ppm *Requires AV-Link + Sentry
CHK ATTITUDE	Attitude Mismatch Between multiple AV-30 * Requires AV-HSI
DEMO	AV-30 is in Demo Mode. Do not Fly

ALIGN	Gyro is aligning, do not move aircraft	NOAPA	AV-30 is configured to use AV-APA, but cannot communicate with AV-APA OR AV-30 is set to use a GPS autopilot mode without GPS data available
NOMAG	AV-30 is configured to use AV-MAG, but cannot communicate with the MAG	MAGCAL	AV-30 is configured and communicating with a magnetometer, but it is not calibrated