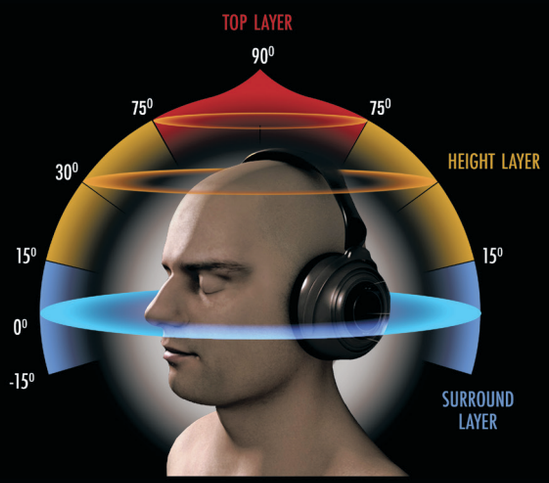
# PS ENGINEERING® INCORPORATED

## PAC45

# MultiTalker is the single biggest communications advancement in the last decade.

- **MultiTalker – True Dimensional Sound**
- **IntelliVox® Automatic VOX for High-Noise Environment with 7-Station Intercom**
- **Built-in Bluetooth® Capability**
- ***flightmate®* Field Recordable Audio Alerts**




**Call 800-427-2376 or visit www.ps-engineering.com**

*Flying Never Sounded So Good®*

This product is an advanced audio controller that employs PS Engineering's patented Multi-Talker software to provide spatial separation of the multiple radio sources that are present in special mission aircraft. Stereo Headsets Required.

The hub of the PAC45 can be mounted directly to the control head or mounted anywhere in the aircraft. All radio wires and intercom stations are wired directly to the hub. Connection to the control head(s) is by a single shielded cable sending the necessary protocols to the hub.

- Six (6) communication radio interfaces, with **Multi-Talker** True Dimensional spatial processing
- Radio transmission capability on all six radios is available from any control head
- One Satellite Radio interface for hardwired full duplex telephone
- Seven (7) – Place IntelliVox® stereo intercom. **IntelliVox®** (autosquelch), or **P**ush-**T**o-**T**alk intercom.
- **flightmate®** – field recordable audio alert system. Alerts like chip detect, over-speed or any spoken announcement can be recorded using the pilot's headset. There are a total of 3 discrete trigger inputs
- Six (6) switched inputs (Nav 1, Nav 2, MKR and AUX (AUX controls 3 paralleled inputs)
- Four (4) unswitched inputs with individual volume controls. Input #1 is failsafed
- Bluetooth® interface for wireless telephone calls or streaming audio
- Individual radio volume controls with pop-out switches for selection and volume
- Headphone audio output not less than 100mW per headset (150 ohms)
- Public Address
- Night Vision compatibility to ANVIS III is standard
- The form-factor is Dzus mount, 1.88" High. The system is backward compatible with the NAT AMS-series, with additional connectors for functions and interfaces not present in legacy audio systems
- Custom legends are quick and easy to order to provide a professional custom tailored look

| TSO COMPLIANCE | |
|---|---|
| Audio Selector/Intercom | FAA TSO C139a |
| Applicable Documents | RTCA/DO-214A, RTCA/DO-160G<br>RTCA/DO-178C, DO-254 |
| **ENVIRONMENTAL QUALIFICATIONS** | |
| Operating Temperature Range: Hub<br>Control head | -55º C to +70ºC<br>-20º C to +55ºC |
| Altitude | Up to 50,000 feet in an non-pressurized area |
| Dimensions | Height: 1.88 in. (3.3 cm) Width: 5.75. in. (15.9 cm)<br>Depth behind panel: 5.5 in. (18.16 cm) |
| Weight | 2.0 lb. (kg) |
| **POWER REQUIREMENTS (Including Internal Lighting)** | |
| Voltage | 27.5 VDC Systems |
| Maximum Current | 0.5 Amp (Externally protected by a 1A pull-type breaker) |
| **AUDIO SELECTOR SPECIFICATIONS** | |
| Audio selector panel input impedance | 510 Ω |
| Input Isolation | -60 dB (min.) |
| Switched Receiver Inputs | 13 (COM 1 – COM 6, TEL, NAV 1, NAV 2, Marker, AUX (Can be relabled as desired) |
| Unswitched Inputs | 4 |
| Transmitter Selections | 7 (COM 1, COM 2, COM 3, COM 4, COM 5, COM 6 plus Telephone) (Can be relabled as desired) |
| Headphone Impedance | 150 – 600 Ω |
| Headphone Output | 100 mW into 150Ω each side (left and right) headset, no clipping<br><.5% THD typical |
| Microphone Impedance | 150 - 600 Ω |
| Bluetooth Radio | Class 3, FCC ID QOQWT32AE |
| **INTERCOM SPECIFICATIONS** | |
| Intercom Positions | 7 places (with individual IntelliVox® circuits) |
| Music Inputs | 1 (Stereo) plus Bluetooth |
| Music Muting | >-30 dB "Soft Mute" when Com or intercom active. |
| Distortion | <1% THD @ 100 mW into 150Ω |
| Mic Freq. Response, 3 dB | 300 Hz – 6000 Hz |
| Music Freq. Response, 3 dB | 10 Hz – 16 kHz |