## General Aviation Audio Control Panel Capability List

<table>
<thead>
<tr>
<th>Function</th>
<th>PMA4000</th>
<th>PMA6000B</th>
<th>PMA7000M</th>
<th>PMA7000B</th>
<th>PMA7000BT</th>
<th>PMA7000H</th>
<th>PMA7000H-BT</th>
<th>PMA8000B</th>
<th>PMA8000BT</th>
<th>PMA8000C</th>
<th>PMA8000G</th>
<th>PMA450B</th>
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<tr>
<td>Number of Intercom Stations</td>
<td>4</td>
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<td>6</td>
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<td>Number of Coms</td>
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<td>Number of Switched Inputs</td>
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<td>5</td>
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<tr>
<td>Number of Unswitched Inputs</td>
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<td>Automatic VOX</td>
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<td>Music mute modes</td>
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<td>ALL/OFF</td>
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<td>Mono mix</td>
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<td>Music distribution</td>
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<td>Passenger music muting selection</td>
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<tr>
<td>Alternate intercom function</td>
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<td>✓</td>
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<tr>
<td>Bluetooth® modules</td>
<td>✓ - One</td>
<td>✓ - One</td>
<td>✓ - One</td>
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<tr>
<td>Stream-out to Digital video camera</td>
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<td>Front panel phone control</td>
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<td>Comm monitor function</td>
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<td>Digital playback recorder</td>
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<td>Pilot music while in ISO mode</td>
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<td>IntelliAudio® dimensional sound</td>
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<tr>
<td>Flightmate® aural alerts</td>
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<td>Music ON/OFF switch for pilot</td>
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<td>Countdown/up timer</td>
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<tr>
<td>Configure copilot as passenger</td>
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<tr>
<td>Plug &amp; Play w/GMA340</td>
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<td>Pin compatible w/KMA 24</td>
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<td>Warranty (years)</td>
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<td>2</td>
</tr>
</tbody>
</table>
While we may not have many floors in our buildings, we have one great story. Audio control has been our only business since 1985—we are single-minded in the pursuit of audio control perfection.

It’s no wonder why PS Engineering has brought more audio control innovations to GA than any other company....period.

PS Engineering’s team is dedicated to design, build, and support their world acclaimed audio selector panels and intercoms. As a result, PS Engineering was recognized by the Aircraft Electronics Association (AEA) for the second time, as their Associate Member of the Year. Awarded in 1997 and most recently in 2014.

In 1985, two electrical engineers, one a pilot the other a circuit designer, found themselves wondering when the revolution would come to the field of audio control. At the time, aircraft intercoms and audio panels had seen virtually no improvements in over a decade. With new digital circuitry and technologies, they believed it was time for the revolution to begin.

If these two guys hadn’t founded PS Engineering, the community of pilots would probably still be waiting for the revolution to begin.

- First to provide individually adjustable VOX circuits
- First to introduce an FAA approved stereo audio panel with intercom and marker beacons, all in the same unit
- First to completely integrate music with Soft Mute technology, allowing flexible music control
- Patent no. 4,941,187
- First to provide Swap capability, Patent no. 5,903,227; 6,160,496
- First to provide true hands-free VOX system, the IntelliVox® Patent no. 6,493,450
- First to provide an integrated aural warning system into an audio panel
- First to use digital signal processing to record aircraft radio, allowing playback of aircraft radio receptions
- First to introduce AMP™ (Active Microphone Processor) a system that removes noise from the microphone
- First to provide Bluetooth® integration, allowing phone calls and music to seamlessly connect to audio panel
- First and only company to commercially implement USAF patented technology for True Dimensional Sound Patent no. 7,391,877

When you see innovation in audio, chances are, it is from PS Engineering.

Flying Never Sounded So Good®

Why so many audio panels?
The reason we designed all these audio panels wasn’t to confuse our customers; but rather to provide solutions to match our customers’ needs. We recognized early on that one size does not fit all.

Certified
PAR200A – World’s first audio selector panel that functions as a hi-fi stereo intercom with Bluetooth® and controls a remote mounted Com radio.
PMA450B – A slide-in replacement for the GARMIN® GMA340 and the PMA8000 Series. This Digital Audio Selector Panel provides IntelliAudio® Dimensional Sound, Graphics Display Control User Interface, 6-place IntelliVox® and hi-fi stereo with Bluetooth® interface.
PMA4000 – A small form-factor was the design goal for this little jewel. Capable of being panel mounted like an intercom or in a 2¼” round instrument hole, the PMA4000 also provides a four-place mono intercom with IntelliVox® and speaker amplifier.
PMA6000B – Low cost solution. This is the only audio panel we know that includes an intercom and a marker beacon receiver selling for less than $1095.
PMA7000 Series – Pin-compatible to the KMA24, these audio panels incorporate IntelliVox® and enhanced capabilities such as full duplex wireless telephone, and audiophile stereo music inputs. Three systems to choose from.
PMA8000 Series – Designed as Plug ‘N Play with the GARMIN® GMA340, these audio panels include a complete feature set with IntelliVox® digital recorder, front panel configuration control, monitor mode, with optional Bluetooth® and IntelliAudio®.
PAC24 – This specialty audio panel is suitable for mission use, such as police/rescue/ fire patrol, and includes provisions for observer position. Single and dual systems available.
PAC45 – This all digital audio controller is well suited for the demanding cockpits where many radios may be heard simultaneously. MultiTalker™ allows the pilot to place these Coms in unique positions within the stereo headset. Add Bluetooth®, audio alerts, and AMS pin compatibility, the PAC45 bring an unprecedented amount of capability at a very low cost.

Experimental
PDA360EX – The fundamental advantage of the PDA360EX over conventional audio panels for the homebuilt aircraft is that it uses the same technology as its big brother, the PMA450B.

IntelliVox®
PS Engineering’s revolutionary IntelliVox® intercom squelch protocol harnesses the computational power of microprocessors, and eliminates complicated squelch adjustments. In addition, by using independent, automatic microphone squelch circuits, extraneous cabin noise is minimized. IntelliVox® means that the system will always be optimized, tailoring itself for different microphones, as well as variations in voice and sound levels in the cockpit. With IntelliVox® you’ll have seamless and clear communications.

IntelliAudio®
Using patented technology licensed from the Air Force Research Laboratory at Wright Patterson AFB, IntelliAudio® places multiple audio sources in positions within stereo headsets. These dimensional sound locations allow the Pilot to more easily focus on a particular radio conversation of interest.

ProSupport™
All of our audio panels include PS Engineering’s ProSupport Warranty. Depending upon the audio panel installed, the unit will come with either a 1, 2, or 3 year guarantee that if the unit was installed by an authorized PS Engineering Dealer or a custom wire harness was purchased from PS Engineering, a warranty exchange unit will be shipped the same day of the issuance of an RMA.
The PAR200A is an FAA Approved system that combines an audio control panel, 4-place stereo IntelliVox® intercom with Bluetooth®, and a remote mounted, 760/2280-channel VHF aviation communications transceiver. This system saves cockpit space, weight, and money over stand-alone independent systems while providing the most sought after functionality.

The PAR200A is attractive for the aircraft that is used primarily for VFR missions or as an audio panel/back-up to com and advanced systems. The elimination of one panel mounted radio saves valuable panel space. Seamless integration between the audio panel and the radio was the goal for the best user experience possible, while keeping the system costs to a minimum. The right half of the PAR200A is dedicated to the communication radio, with an easy to read LCD display that shows the frequencies, which are controlled through a concentric knob. This radio has active and standby frequencies, and a standby frequency monitor mode that permits listening to both active and standby frequencies. The Pilot can store up to 5 frequencies in non-volatile memory so he can easily tune to his frequently used channels. The radio also has autosquelch, so you will always have optimal radio sensitivity.

The left half controls the audio panel for radio select, intercom and music volume, intercom modes, and multiple music mute mode control. The PAR200A has 2 independent music inputs. Independent power supplies assure operation in failsafe on the audio panel; the VHF radio can still be used.

The PAR200A can be configured as stand alone, as COM 1, or as COM 2. This provides flexibility to allow the aircraft owner to decide if a second radio will be used and in what position. The PAR200A includes a cockpit speaker amplifier for additional flexibility. An integrated Bluetooth® system allows the PAR200A to interface with cellular telephones, giving the aircraft occupants access ready to their telephones. In addition, the Bluetooth® will stream music from compatible devices like iPads, and a remote mounted, 6-place IntelliVox® module, gives the pilot the capability to pay attention to the radio that is important to their flight at any instant in time. Consider the Com 1 coming from the 10 o’clock position while Com 2 is coming from the 2 o’clock position. Just like being at a cocktail party, you are able to pay attention to the person who is telling you something important, while ignoring the other conversations around you.

Another leap forward is the multiple Bluetooth® modules built into the PAR450B. Now the pilot can connect to a Bluetooth® enabled headphone, and their Bluetooth® enabled tablet, giving the pilot the ability to hear alerts, music, and phone calls, at the same time. And with the easy to use user interface, setting priorities has never been easier. Now hear alerts from Forefront® audio while hearing your entertainment or checklists and still being connected to your phone.

Deep capability does not mean having a difficult audio panel to use. In fact, with our OLED technology and soft key approach, the PMA450B is our easiest to use audio panel that we sell today. The large display not only makes it possible to view the display from any angle, it makes for a great way to display caller ID, display what radio message is being played back, or use as a count-down/keep-time with audio alerts.

The new USB-C standard also brings more power to the pilot. This USB is for powering devices up to 15 Watts, 33% more powerful than the original USB standard. And more and more devices are demanding more power for computational demands.

In addition to the dual Bluetooth® modules, the pilot has the ability to connect the Bluetooth 2.0 from a streamer for listening to music to an output device for use with Bluetooth® digital video recorders or Bluetooth® enabled other dongles. Recording your audio flight experience has never been easier.

This audio panel is Plug ‘N Play with GARMIN’s GMA340, so making the upgrade, simple is as simple as removing and replacing. A simple log book entry is all that is required.

The PAR450B is the third-generation, digitally based, top tier audio panel that uses the same patented technology that the United States Air Force has implemented in their fighter jets. Not only does the PAR450B significantly enhance radio communications, it provides an unprecedented amount of intra-cockpit communication flexibility as well. The true dimensional sound, called IntelliAudio®, gives the pilot the capability to pay attention to the radio that is important to their flight at any instant in time. Consider the Com 1 coming from the 10 o’clock position while Com 2 is coming from the 2 o’clock position. Just like being at a cocktail party, you are able to pay attention to the person who is telling you something important, while ignoring the other conversations around you.

The PMA450B encourages disconnecting the audio panel when the aircraft is not in use and simply removing and replacing. A simple log book entry is all that is required.

The PMA450B Audio Panel is Plug ‘N Play with GARMIN’s GMA340, so making the upgrade, simple is as simple as removing and replacing. A simple log book entry is all that is required.
The PMA4000 is an audio panel that provides switching of two Coms and two Navs. It has a 4-place mono IntelliVox intercom, and can be configured for PTT intercom. Four unswitched inputs are available. Includes a built-in speaker amplifier. Hear aircraft radio audio through the headphones or over the cabin speaker by a press of a pushbutton.

The PMA4000 has PS Engineering’s revolutionary IntelliVox intercom squelch protocol. A mode switch allows the Pilot to select either ISO or all Intercom modes.

Independent intercom volume controls for the Pilot and the Copilot. Because this system was designed with the tandem cockpit in mind, the Copilot volume can be mounted in another location. The volume controls only the intercom, the radio volume is adjusted by the radio controls.

The PMA4000 provides a monaural entertainment input. With our SoftMute™, the music mutes, allowing undistracted communications.

### TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Approval Basis</th>
<th>PMA-TSO C50b, C55b, FAA-ETSO C126, C128</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certification Documents</td>
<td>RTCA DO-160B, DO-178B, DO-143</td>
</tr>
<tr>
<td>Intercoms</td>
<td>4-line Mono</td>
</tr>
<tr>
<td>Receivers</td>
<td>2 (Com 1, Com 2)</td>
</tr>
<tr>
<td>Receiver Inputs</td>
<td>5 (two Com, 1 XFR, 1 XFR, 1 DME, AUX, NAV)</td>
</tr>
<tr>
<td>Marker Beacon</td>
<td>Internal (optional)</td>
</tr>
<tr>
<td>Unswitched Inputs</td>
<td>4</td>
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<tr>
<td>Power Required</td>
<td>11.5 VDC, 1.5 A</td>
</tr>
<tr>
<td>Power consumption</td>
<td>Speaker ON: 600mA OFF: 350 mA</td>
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<tr>
<td>Power consumption</td>
<td>3 W into 4Ω</td>
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<tr>
<td>Audio Frequency Response</td>
<td>±3dB, 300Hz-6,000Hz</td>
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<tr>
<td>Entertainment Frequency Response</td>
<td>+3dB, 206Hz-15,000 Hz</td>
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<tr>
<td>Weight</td>
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<tr>
<td>Dimensions</td>
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<tr>
<td>Environmental Conditions</td>
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</table>

### APPROVAL BULLET POINTS

- FAA TSO # C50b, C55b, FAA-ETSO C126, C128
- RTCA DO-160B, DO-178B, DO-143
- 4-line Mono
- 2 (Com 1, Com 2)
- 5 (two Com, 1 XFR, 1 XFR, 1 DME, AUX, NAV)
- Internal (optional)
- 4
- 11.5 VDC, 1.5 A
- Speaker ON: 600mA OFF: 350 mA
- 3 W into 4Ω
- ±3dB, 300Hz-6,000Hz
- +3dB, 206Hz-15,000 Hz
- 5.5 lb.
- 6.25" W x 1.3" H x 7.15"
- DO-148B

### ORDERING INFORMATION

PMA4000B Audio Selector w/ 4-place Intercom and Marker Beacon...

### ORDERING INFORMATION

| PART NO. | PMA4000B No Marker Beacon...
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
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<tbody>
<tr>
<td>050-604-0300</td>
<td>Warranty: 1-Year Pro Support Exchange Program, when installed by an authorized PS Engineering Dealer</td>
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</tbody>
</table>

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The PMA7000 series lends itself to many types of aircraft installations as well as providing an inexpensive path to upgrading from either one of our legacy audio panels or the Bendix/King KMA24.

The PMA7000B and PMA7000BT are Plug ‘N Play with our legacy PMA7000M-S as well as with the Apollo SL-15 and the Bendix/King KMA24B. It is as simple as 1-2-3 to install.

For owners of the Bendix/King KMA24A audio panels, PMA7000 series is less expensive to install when compared to other audio panels. The PMA7000 series re-uses the KMA24A connector, thus making the installation process considerably easier.

And with the various models, you can pick and choose the PMA7000 that best meets your specific flight mission.

### TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Approval Basis</th>
<th>PMA-TSO C50b, C55b, FAA-ETSO C126, C128</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certification Documents</td>
<td>RTCA DD-160C, DD-178B, DD-143, DD-214</td>
</tr>
<tr>
<td>Intercoms</td>
<td>6-place Stereo</td>
</tr>
<tr>
<td>Transceivers</td>
<td>2 (Com 1, Com 2)</td>
</tr>
<tr>
<td>Unswitched Inputs</td>
<td>4</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>Speaker On: 300mA, AUX, NAV</td>
</tr>
<tr>
<td>Marker Beacon</td>
<td>Internal</td>
</tr>
<tr>
<td>Volume</td>
<td>0-50,000 feet, unpressurized</td>
</tr>
<tr>
<td>Weight</td>
<td>1.5 lb.</td>
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<tr>
<td>Dimensions</td>
<td>6.25&quot; W x 1.3&quot; H x 6.8&quot; deep (installed instrument panel)</td>
</tr>
<tr>
<td>Environmental Conditions</td>
<td>DO-148C</td>
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</table>

### APPROVAL BULLET POINTS

- FAA TSO # C50b, C55b, FAA-ETSO C126, C128
- RTCA DD-160C, DD-178B, DD-143, DD-214
- 6-place Stereo
- 2 (Com 1, Com 2)
- 4
- Speaker On: 300mA, AUX, NAV
- Internal
- 0-50,000 feet, unpressurized
- 1.5 lb.
- 6.25" W x 1.3" H x 6.8"
- DO-148C

### ORDERING INFORMATION

PMA7000B Audio Selector with 6-place Intercom and Marker Beacon...

### ORDERING INFORMATION

| PART NO. | PMA7000B No Marker Beacon...
<table>
<thead>
<tr>
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<tr>
<td>050-791-0103</td>
<td>Warranty: 2-Year Pro Support Exchange Program, when installed by an authorized PS Engineering Dealer</td>
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### PMA7000B

This IntelliVox® enabled 6-place hi-fi stereo intercom makes adjusting VOX a thing of the past. 2-Com capability connects either a HF/VHF radio or can be connected to a full duplex telephone. Alternate Intercom Mode allows the pilots to be on the intercom but won’t hear any radio activity and when the radio does become active, the crew will not hear the pilot. Split mode allows the pilot to be on one Com while the copilot on another, enjoy the benefit of off-loading some radio work to your copilot.

### PMA7000BT

This unit adds integrated Bluetooth® capability. Bluetooth® provides the ability to pair other Bluetooth® enabled devices providing wireless connections to Bluetooth® enabled telephones and music devices. What a great tool to get your IFR clearance when you are in the airplane.

### TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Approval Basis</th>
<th>PMA-TSO C50b, C55b, FAA-ETSO C126, C128</th>
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</thead>
<tbody>
<tr>
<td>Certification Documents</td>
<td>RTCA DD-160C, DD-178B, DD-143, DD-214</td>
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<tr>
<td>Intercoms</td>
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<td>Transceivers</td>
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<td>Unswitched Inputs</td>
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<tr>
<td>Power Requirement</td>
<td>11.25 VDC, 1.5 A</td>
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<td>Power Consumption</td>
<td>Speaker ON: 300mA, AUX, NAV</td>
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<tr>
<td>Marker Beacon</td>
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<td>Volume</td>
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<td>Weight</td>
<td>1.5 lb.</td>
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<tr>
<td>Dimensions</td>
<td>6.25&quot; W x 1.3&quot; H x 6.8&quot; deep (installed instrument panel)</td>
</tr>
<tr>
<td>Environmental Conditions</td>
<td>DO-148C</td>
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</table>

### APPROVAL BULLET POINTS

- FAA TSO # C50b, C55b, FAA-ETSO C126, C128
- RTCA DD-160C, DD-178B, DD-143, DD-214
- 2 (Com 1, Com 2)
- Internal (optional)
- 4
- 11.25 VDC, 1.5 A
- Speaker ON: 300mA, AUX, NAV
- Internal
- 0-50,000 feet, unpressurized
- 1.5 lb.
- 6.25" W x 1.3" H x 6.8"
- DO-148C

### ORDERING INFORMATION

PMA7000B Audio Selector with Bluetooth® and Marker Beacon...

| PART NO. | PMA7000BT Audio Selector with Bluetooth® and Marker Beacon...
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<tbody>
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<td>Warranty: 2-Year Pro Support Exchange Program, when installed by an authorized PS Engineering Dealer</td>
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<tr>
<td>050-791-0204</td>
<td>Warranty: 2-Year Pro Support Exchange Program, when installed by an authorized PS Engineering Dealer</td>
</tr>
</tbody>
</table>

### CHECKLIST OF CAPABILITIES:

- IntelliVox® automatic VOX system with individually gated microphones
- 6-Place hi-fi stereo intercom with SoftMute™
- Two music mute modes: Mute On and Mute Off
- Built-in Marker Beacon Receiver
- Cellular telephone input with dedicated On/Off hook switches for uncompromised flexibility
- Split mode for dual audio panel capability
- Two hi-fi fidelity stereo music source inputs
- Three isolation modes - Pilot isolate, ALL, and Crew
- Four unswitched inputs
- Selectable music routing for passengers
- Selectable intercom mode with “Alternate Intercom Mode”
- RAM (Radio Active Mode) eliminates constant background noise from unswitched inputs

---

### PMA7000B

- PMA4000B
- PMA6000B
- PMA7000 Series
The PMA8000 Series Audio Selector Panel is the original GARMIN GMA340* Plug ‘N Play audio panel. This makes upgrading for the aircraft owner who owns the GMA340 to the more capable PMA8000 as easy as sliding one out and sliding one back in.

For pilots who need more from their audio panel to meet their mission, there are several models to choose from, starting with the PMA8000B all the way up to the PMA8000E, a true dual audio panel system.

For pilot’s who need more from their audio panel for the cockpit din is especially useful when there are several advanced functions that can be accessed by the front panel pushbuttons.

- Alternate Intercom Function places everyone on the intercom but the passengers will hear no aircraft radio and when the aircraft radio is active, the crew will not hear the passengers.
- Music Distribution allows front panel selection on how music 1 and music 2 will be distributed within the aircraft. There is also front panel control of music volume
- The Monitor Function allows the primary radio to mute the secondary radio, making it easier to catch ATC calls when you are listening to ATIS

If you have installed our original mid-1990’s PMA6000 series audio panel in your avionics stack, this Plug ‘N Play audio panel will provide a tremendous upgrade for those panels without any reworking at all. The only thing that is required for installation is a 3/32” Allen Wrench.

Having all of the capabilities of the PMA7000BT with the exception that the microphone is monaural not stereo, this upgrade will provide IntelVox®, a significantly improved user interface, and the ability to make phone calls and streaming music via Bluetooth®.

This expanded version of the PMA7000B includes a 10-place intercom and an optional Cockpit Voice Recorder (CVR) output. For environments where having a Hot Mic is beneficial, the PMA7000H not only has IntelVox® but also has provisions for Push-To-Talk Intercom. This capability is especially useful when there may be direct wind noise on the microphones or the cockpit din is just too high for any VOX circuit.

You can have this new one...

### PMA7000 Series

- **PMA7000M**
  - Bluetooth®, IntelliVox®, automatic VOX system with individually gated microphones
  - 6-Place monaural intercom with Soft mute
  - Two music mute modes: Mute On and Mute Off
  - Improved built-in Marker Beacon Receiver
  - Cellular telephone input and music streaming (Bluetooth®)
  - Split mode for dual transmit capability
  - Three isolation modes: Pilot Isolate, AIL, and Crew
  - Four unswitched inputs
  - Selectable intercom mode with “Alternate Intercom Mode”

- **PMA7000M Mono Audio Selector with 6-place intercom and Marker Beacon**
  - Same as PMA7000M with CVR.

- **PMA7000M 10 place hi fi stereo intercom**

- **PMA7000BT Same as PMA7000H with Bluetooth®**

### TECHNICAL SPECIFICATIONS

- **PMA7000H**
  - FAA-TSO C35d, C50c
  - DO-214, DO-160D
  - EASA ETSO C50c, C35d

- **PMA7000H-BT Same as PMA7000H with Bluetooth**

- **PMA7000H  Same as PMA7000H with CVR**

- **PMA7000B includes a 10-place stereo audio panel in your avionics stack, this Plug ‘N Play audio panel**
  - FAA-TSO C35d, C50c
  - DO-214, DO-160D
  - EASA ETSO C50c, C35d

### TECHNICAL SPECIFICATIONS

- **Power Consumption**
  - 75 VA peak
  - 1.5 A

- **Power Requirement**
  - 11 to 32 VDC, 2.5 Amp

- **Output Power**
  - Speaker: 3 Watts (14V), 10 Watts (28V.)

- **Audio Freq. Response**
  - Headphones: ± 3 dB 20 Hz - 18 kHz
  - Distortion typical: <1% w/o clipping

- **Marker Receiver**
  - 75 MHz, Crystal Controlled

### ORDERING INFORMATION

- **PMA7000M Mono Audio Selector with 6-place intercom and Marker Beacon**
  - A1D1CABSMXXXXXXZBABATBXXE2XXX

- **PMA7000M 10 place hi-fi stereo intercom**

- **PMA7000BT Same as PMA7000H with Bluetooth®**

### CHECKLIST OF CAPABILITIES:

- **IntelliVox®, automatic VOX system with individually gated microphones**
- **6-Place hi-fi stereo intercom with Selectable Muting Modes**
- **Monitor Function which allows automatic muting of the non-primary radio**
- **Music Mute mode: Mute On, Mute Off, Radio Monitor, Intercom Mute**
- **Dedicated front panel music volume control**
- **Built-in Marker Beacon Receiver**
- **Cellular telephone input with “DuTel™” telephone distribution**
- **Easy front panel control for telephone sidetone on/off**
- **Continuous Loop Digital Aircraft Radio Recorder**
- **Front panel jack for phone, iPod, or unswitched audio warnings**
- **2 - Hi-fidelity stereo music inputs (no ground loop isolation)**
- **3 - Isolation modes - Pilot Isolate, AIL, and Crew**
- **5 - Unswitched inputs, including front panel jack**
- **Selectable Mixture Distribution**
- **Selectable Intercom Mode with special “Alternate Intercom Function”**
- **RAM (Radio Active Mute) eliminates constant background noise**

### WARRANTY

- 3-year Pro-Support exchange program, when installed by an authorized PS Engineering Dealer. After the warranty expires, a fixed repair fee will cover any repair. See Warranty Information in Installation manual.
The PMA8000G marks another major milestone in the company's innovative history. This audio panel has significant advancement in audio panel technologies. It will fit pilots who expect more from their audio panel while not adding any additional workload or complex set of push button sequences. The PMA8000G is a natural choice for pilots who demand ease of use with a deep set of audio panel capabilities.

Introducing flightmate® the first system ever to be available in an audio selector panel. The pilot can create checklists, emergency procedures, just about anything that pilot can say, he can store into non-volatile memory, making those checklist chores a bit easier.

IntelliAudio® is another standard capability that will make listening to multiple radio calls manageable. With Com 1 in the 10 o’clock position and Com 2 in the 2 o’clock position, pilots can pay attention to the radio that is most important at any one instant of time.

Bluetooth® Interconnectivity allows the pilot to have access to his Bluetooth® enabled telephone or entertainment device. The ability to contact ATC by way of the telephone with the engines running and radios tuned and set at an uncontrolled airfield makes getting into the air under IFR condition much easier. This audio panel has significant advancement in audio panel history. This audio panel has an advanced feature set.

External Marker Outputs

Marking the transition from a single transmitter to a dual audio panel system allows the Pilot and Copilot to treat their respective audio panels as their very own, never second guessing what configuration the other person has his audio panel in. Because of this intelligent approach, the Pilot and Copilot will treat their respective audio panels as their very own, never second guessing what configuration the other person has his audio panel in.

Pilot programmable aural alert annunciations can be programmed right from the front panel of the audio panel while using the pilot’s headset microphone to record them. Now you can take up to 4 discrete inputs and have them associated with pre-recorded messages, making it easier to determine exactly what condition needs to be addressed.

And we have included a USB charging port that is rated at 10 watts. This charger provides enough power for iPads that are running the most demanding applications and still be trickle charging the iPad battery.

Finally, ease of use. We took a fresh approach to the user interface, making access to the advanced functions much easier than in past iteration of the PMA8000 series.

The PMA8000G provides for an additional communications transceiver. While most aircraft have two Com radios, there are cases where a third transceiver is required. The PMA8000G not only allows the connection of these three radios, it also provides 3 unique split transmit modes.

This is particularly helpful when there are special missions required. As an example, Com 3 could be a HF or UHF radio. Unlike the GMA340 where only Pilot Com 1 - Com 2 is offered, the PMA8000G adds this additional flexibility.

The PMA8000G is a system that consists of two interconnected audio panels. This provides the Pilot and Copilot their own audio selector panel. With the intelligent digital interface control, the Pilot has command of the entire audio panel system yet can easily offload some of the radio work to the Copilot.

Intercom configurations allow the Pilot undisturbed radio communications while permitting the Copilot and passengers to communicate.

“Strange States” are a thing of the past thanks to the PMA8000E’s built-in intelligence. This system prevents the Copilot from over-riding the Pilot’s audio panel configurations, or interrupting the Pilot’s radio communications. Because of this intelligent approach, the Pilot and Copilot will treat their respective audio panels as their very own, never second guessing what configuration the other person has his audio panel in.

Each audio panel is Bluetooth® enabled. They can be used privately be the Pilot or Copilot or shared with each other. The Copilot’s Bluetooth interface can also be shared with the passengers.

Through the use of expansion units, it is possible to have up to 12 passengers connected to the system.

ORDERING INFORMATION

PART NO.: PMA8000G—Audio Panel with IntelliAudio®, 6-Place IntelliVox® stereo intercom, Bluetooth®, IntelliAudio®, and USB charger. ............................ 050-480-0912

With BT Streaming ........................................ 050-480-0913

TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS

Approval Data

PMA8000G Audio Panel with IntelliAudio®, 6-Place IntelliVox® stereo intercom, Bluetooth®, IntelliAudio®, and USB charger... ............................ 050-480-0912

With BT Streaming ........................................ 050-480-0913

With BT Streaming ........................................ 050-480-0913

PMA8000E - Dual Audio Panel System with Digital Interface

Ordering Information

PART NO.: PMA8000C - PMA8000E

PMA8000C - Audio Panel, Marker Beacon, Bluetooth®, stereo intercom. ........................................ 050-890-0303

PMA8000E - Dual Audio Panel System with Digital Interface. ........................................ 0512636

Warranty

3-year Pro-Support exchange program, when installed by an authorized PS Engineering Dealer. After the warranty expires, a fix repair fee will cover any repair. See warranty information in installation manual.

Garmin GMA340 and GMA340E are trademarks of Garmin International, Inc. PS Engineering, Inc. is not associated or affiliated with Garmin International, Inc. in any way.
The PAC24 was designed as a versatile audio system that meets the needs of airborne law enforcement, EMS, forestry, and special mission aircraft.

Best yet, the recently updated PAC24 is designed to be easily retrofitted into the same installation as a King KMA24H (-71). This makes adding modern, flexible, audio control and a high performance intercom easy and cost effective into aircraft with aging audio panels.

The PAC24 contains PS Engineering's legendary IntelliVox easy and cost effective into aircraft with aging audio panels.

For non-aviation HF and UHF radios, a tactical radio adapter is required.

PAC24 Observer

PAC45

Special Mission Audio Controller

For the special mission pilot, where hearing many radios all at the same time is part of the job, and differentiating specific radio calls is not an easy task. That is until now.

MultiTalker™ offers this unique capability to the special mission pilot, the ability to pay attention to the radio call that is important at any one instant in time. MultiTalker™ allows the pilot to place 6 individual com radio traffic, up to nine unique positions within a stereo headphones.

The PAC45 is pin compatible with the NAT AMS series making upgrading replacing legacy systems easier.

PDA360EX

For Experimental Aircraft Only
INTERCOMS

PM1200

The PM1200 is designed for the noisiest of aircraft, including open cockpit and warbird aircraft. The Active Microphone Processor (AMP) uses emphasis and de-emphasis to strip much of the background noise out of the intercom audio.

The PM1200 provides both our IntelliVox® auto-squelch and Push-to-Talk intercom (PTT-ICS) so that when the cockpit noise is too high for VOX operation, a press of the Copilot’s volume control places the PM1200 into PTT-ICS mode.

And for those pilots who like to wear ear plugs while wearing headsets, the PM1200 has the ability, when connected to a 24 volt system, of providing up to 120mW! Now that’s a lot of audio punch!

TECHNICAL SPECIFICATIONS

<table>
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<th>Specification</th>
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</thead>
<tbody>
<tr>
<td>Headphone Impedance</td>
<td>70 mW @ 13.75 VDC</td>
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<tr>
<td>Output Power</td>
<td>13.8 - 27.5 Volts DC, &lt; 250 mA</td>
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<td>Input Power</td>
<td></td>
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<td>Approval Basis</td>
<td>RTCA/DO-214, DO160C</td>
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<tr>
<td>Dimensions</td>
<td>1.25” H x 2.60” W x 5.50” D</td>
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</table>

ORDERING INFORMATION

PART NO.

PM1200 2-place high performance intercom with AMP® and IntelliVox®, specifically designed for high noise environments. Includes jack kit.

PM1200 for blind mounting

11960

PM1200A (11931A) has 2-unswitched audio inputs while the PM1200 (11932) provides the additional function of Crew mode. In this setting, the passengers are on intercom while the crew on another.

PM1000II

The PM1000II is a 4-place panel mounted intercom with VOX. Individual volume and squelch controls for the crew reduces the number of microphones that are on at any one time, reducing the din of the cockpit.

The standard PM1000II (11922) provides Pilot Isolate and All modes. The PM1000II with Crew (11920) has the additional capability of separating the passengers from the crew.

This design makes it easy to balance intercom, radio and music volume levels. And with Soft Mute®, the Pilot will never miss a radio call because the monaural music is automatically muted.

TECHNICAL SPECIFICATIONS

<table>
<thead>
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<th>Specification</th>
<th>PM1000II</th>
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<td>Input power</td>
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<td>Headphone Impedance</td>
<td>75-100Ω typical</td>
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<td>Audio Output</td>
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<tr>
<td>+4 dB MHz freq response</td>
<td>200 Hz - 15KHz</td>
</tr>
<tr>
<td>-4 dB Music freq response</td>
<td>200 Hz - 15KHz</td>
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<tr>
<td>Weight</td>
<td>12 Ounces (0.342 kg)</td>
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<tr>
<td>Dimensions</td>
<td>1.25” H x 2.60” W x 5.50” D</td>
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</table>

ORDERING INFORMATION

PART NO.

PM1000II 4-Place Intercom, FAA-TSO

Panel intercom with ISO and ALL, music input. Installation hardware included.

Same as above with 1-minute digital recorder (non-TSO)

6-Place Expansion unit

PM1000II 4-Place Intercom with Crew, FAA-TSO

Panel intercom with ISO, CREW and ALL, dual music input. Installation hardware included.

Same as above with 1-minute digital recorder (non-TSO)

PM3000

The PM3000 has its roots in the first available stereo intercom, the PM2000. With audiophile stereo music sound, this panel mount provides high-quality intercom and aircraft radio audio, while Soft Mute® provides the Pilot the ability to select having the muting function turned on or off. This eliminates the need for constant changes in the stereo music when the aircraft radio becomes active.

The VOX in the PM3000 earned the reputation “Set it and forget it, it’s the most forgettable-intercom you’ll ever use.” The single VOX control sets the trip level for the PM3000, making it easy to balance intercom, radio and music volume levels. And for those pilots who like to wear ear plugs while wearing headsets, the PM3000 provides the ability to switch the audio inputs.

The PM3000A (11931A) has 2-unswitched audio inputs while the PM3000 (11932) provides the additional function of Crew mode. In this setting, the passengers are on intercom while the crew on another.

TECHNICAL SPECIFICATIONS

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ORDERING INFORMATION

PART NO.

PM3000A 4-Place Stereo Intercom, FAA-TSO

Intercom with ISO and ALL, differential music input, two unswitched inputs. Installation hardware included.

Same as above with 1-minute digital recorder (non-TSO)

PM3000 6-Place Stereo Intercom with Crew, FAA-TSO

Intercom with ISO, CREW and ALL, stereo inputs. Installation hardware included.

Same as above with 1-minute digital recorder (non-TSO)

PMA7000M

• Lowers cost of installation when upgrading from a PMA6000M

• 6-Place IntelliVox® mono intercom with muting

• 4 - unswitched unmuted inputs for additional aural alerts

• Full duplex telephone input with DuTell™ telephone distribution

PMA7000B and PMA7000BT

• Lowers cost of installation when upgrading from a KMA24

• 6-Place IntelliVox® mono intercom with muting

• 4 - unswitched unmuted inputs for additional aural alerts

• Full duplex telephone input with DuTell™ telephone distribution

PMA8000G with flightmate®

• IntelliAudio® True Dimensional Sound for clear com reception

• flightmate® Pilot recorded messages for checklists, memos, etc.

• Bluetooth® for wireless telephone and music streamers

• USB charge for continuous 10 watts of charging power

The PMA450 – Dual Bluetooth® Capability

• IntelliAudio® True Dimensional Sound for clear com reception

• flightmate® Pilot recorded messages for checklists, memos, etc.

• Bluetooth for wireless telephone and music streamers

• Unprecedented music distribution and streaming capability

• Continuous 15 watts of charging power from USB-C port