



## GMA 240 Audio Panel



Why settle for just  
an intercom when  
this full audio panel  
is so affordable?

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For pilots of experimental and light sport (LSA) aircraft, Garmin's versatile GMA 240 audio panel offers a lot of capability at a surprisingly affordable price. It's the first non-TSO'd audio panel offered by Garmin, and it shares the same mark-width form factor (plus many control, input and audio features) of our popular GMA 340 certified unit.

By eliminating functions not used in most experimental and LSA operations, Garmin was able to keep the GMA 240's price really low. Yet, this is clearly no stripped-down audio system. Fact is, it will support dual COMM, dual NAV, dual AUX receivers, and dual music audio inputs – plus up to three unswitched inputs for connection to external warning/alerting tones. The GMA 240 has a full-duplex telephone interface with intercom isolation. And the multifunction phone/audio mini jack on the front lets you route cellphone calls or iPod/MP3/XM Radio players right through your aircraft headset – with selectable instant muting when radio transmissions are received from ATC.

The GMA 240 really shines when it comes to music support. Pulling out on the copilot intercom volume/squelch knob turns it into a dedicated music volume knob, allowing easy control of any selected music source. Push-to-talk indication is also provided, as well as VOX intercom (for up to four headsets) with dual-mode isolation. User features include convenient LED-illuminated button controls with photo cell dimming of annunciators. Plus, to make the entire audio experience quieter and clearer, MASQ (Master Avionics Squelch) processing helps filter out unwanted radio static and interference.

The Garmin GMA 240: It's so much more than an intercom – for way less than the price of most comparable audio panels. Better still, it's designed to be an easy-fit installation for today's most popular experimental/ kitplane and LSA cockpits.

### Features:

- User-friendly, intuitive front panel layout
- Full duplex Telephone interface with configurable volume
- Two differential, hi-fidelity stereo music source inputs
- Front panel music volume control, source selection, and music on/off button
- Dedicated controls for music muting by intercom and selected radios
- Easy access Mini-Jack for media player, cellular phone, etc.
- Four place intercom: pilot, copilot, two passengers
- Two stereo headset amplifiers: one for pilot, one for copilot/passengers
- Two selectable intercom operational modes
- Independent pilot, copilot/passenger intercom volume and squelch controls
- Individual VOX circuits for each of four (4) mic inputs
- Automatic selection COMM audio source when corresponding mic is selected
- Memory of explicitly selected COMM audio source(s) when changing COMM mic selection
- MASQ™ Processing with configurable mute threshold
- Configurable alert volumes
- Push-to-talk indication
- Power-off fail-safe to connect Pilot PTT, mic, and Headset to COMM 1 if unit is turned off

Specifications are preliminary and subject to change without notice.

### Specifications

#### General

Weight:	15.5 oz (440 g)
Physical dimensions:	Bezel Height: 1.3" (33 mm) Bezel Width: 6.29" (160 mm) Depth behind Panel (with connectors): 7.12" (181 mm)
Power Requirements:	Input voltage range: 11-33 Vdc Power consumption: 4.3 W normal operation (310 mA @ 13.8 V); 7.5 W max. operation (540 mA @ 13.8 V)
Temperature range:	-20°C to +55°C (normal operation)
Altitude:	55,000 MSL unpressurized

#### Audio panel

Transceiver inputs:	3 (including TEL)
Receiver inputs:	4
Alert (unswitched) inputs:	3 (each with configurable volume)
Input impedance:	500 Ohms
Input isolation:	60 dB min
Alert/Receiver/Transceiver bandwidth:	100 Hz to 6.5 kHz

#### Intercom functions

Positions:	4 (pilot, copilot, 2 passengers)
Volume controls:	3 (pilot, copilot/passengers, music)
VOX level controls:	2 (pilot, copilot/passengers)
VOX circuits:	4 (one per mic input)
Microphone response:	9-pole characteristic cabin noise de-emphasis
Intercom isolation modes:	2:all, pilot ( or configure for all, crew)

#### Music functions

Music inputs (stereo):	2
Music input impedance:	600 Ohms (differential)
Music gain:	-20 dB @ min. volume +26 dB @ max. volume (typ.)
Music input level:	<200 mVrms for full power output @ max. volume (typ.) 3.5 Vrms max. music input level
Music bandwidth:	20 Hz to 20 kHz +0/-3 dB @ full power load
Music distortion:	<0.1% THD+N (typ.) @ full power, full bandwidth
Special functions:	Front panel selection and volume control; Front panel control for muting by radios and intercom; Muting by alerts configurable

#### Front panel jack

Input impedance:	5.1 kOhms
Music input:	Auto detection of music source will use jack as Music 1
Telephone input:	Auto detection of TEL source will use jack for TEL; telephone ring signal is heard without TEL selected; separate TEL volume for front jack and rear TEL input

#### Headphone outputs

Output amplifiers:	2 stereo (pilot, copilot/passengers)		
Output power:	<u>Load</u>	<u>Power</u>	<u>Distortion typ.</u>
	150 Ohms	100 mW	<0.07% THD+N
	50 Ohms	300 mW	<0.10% THD+N

Each headset output is capable of driving up to three 150 Ohm headsets wired in parallel, each driven to 100 mW. Outputs are compatible with higher headphone impedances, those mentioned are for worst-case distortion and bandwidth.



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