GARMIN

G1000™

audio panel pilot's guide

Record of Revisions			
Revision	**Date of Revision**	**Revision Page Range**	**Description**
A	12/01/04	6A-1 – 6A-17	Initial release.

6A.1 INTRODUCTION

This manual provides the pilot with a description of the GMA 1347 and its operating instructions.

The Garmin GMA 1347 is an audio control panel and marker beacon system. Pressing the audio panel keys controls audio selection of COM, NAV, telephone and intercom. LED annunciators indicate when a key function is selected.

***NOTE:** This audio panel is intended to be used only as part of the G1000 Integrated Cockpit System.*

The GMA 1347 includes a six-position intercom system (ICS) with electronic cabin noise de-emphasis and two stereo music inputs. Separate knobs for the pilot and copilot/passenger control intercom audio level. The intercom provides four selectable modes of isolation (All, Crew, Pilot, Copilot).

A cabin speaker is available to listen to selected aircraft radios. MASQ (Master Avionics Squelch) processing reduces ambient noise from the avionics inputs.

Each microphone input has an automatic squelch threshold. Manual squelch is available by pressing the **MAN SQ** key.

The GMA 1347 provides a digital recorder that can play back up to two and a half minutes of COM audio. Recording is automatic when a COM signal is received. Playback is controlled by pressing the **PLAY** key. Playback can be stopped by pressing the **MKR/MUTE** key.

The unit controls marker beacon receiver audio and features marker beacon audio muting.

As part of the G1000 Integrated Cockpit System, the GMA 1347 also operates the display reversionary mode.

Two GMA 1347 audio panels can be mounted in an aircraft. In dual panel installations, two (2) units can be connected to the same radios.

CAUTION: When the GMA 1347 Audio panel is turned OFF or is inoperative, certain autopilots are affected. No warning tone is supplied when the autopilot disengages and the middle marker sense signal is not supplied.

6A.2 UNIT DESCRIPTION

The GMA 1347 features three (3) major groups of keys as shown in Figure 6A.2.1:

- Communication keys
- Navigation keys
- Intercom system (ICS) keys

Each key is labeled to indicate the name of the function. The triangular key annunciator above the keys are white when illuminated.

The knobs at the bottom of the unit control ICS volume and squelch threshold levels. The **small** knob adjusts the volume/squelch level for the pilot. The **large** knob adjusts the volume/squelch level for the copilot/passenger. The red **DISPLAY BACKUP** button below the dual volume/squelch knob controls reversionary mode selection.

FRONT PANEL CONTROLS

- Transceiver audio selector keys (**COM1**, **COM2**, **COM3**)
- Transmitter (audio/mic) selection keys (**COM1 MIC**, **COM2 MIC**, **COM3 MIC**)
- Split COM key (**COM 1/2**)
- Dedicated telephone interface key (**TEL**)
- Passenger address key (**PA**)
- Speaker key (**SPKR**)
- Marker beacon receiver audio select/mute key (**MKR/MUTE**)
- Marker beacon receiver high sensitivity key (**HI SENS**)
- Aircraft radio audio selector keys (**NAV1**, **NAV2**, **ADF**, **DME**, **AUX**)
- Intercom manual squelch key (**MAN SQ**)
- Digital recording playback key (**PLAY**)
- Intercom system (ICS) isolation keys (**PILOT**, **COPLT**)
- Volume/squelch knob (**VOL/SQ**)
- Reversionary mode button (**DISPLAY BACKUP**)

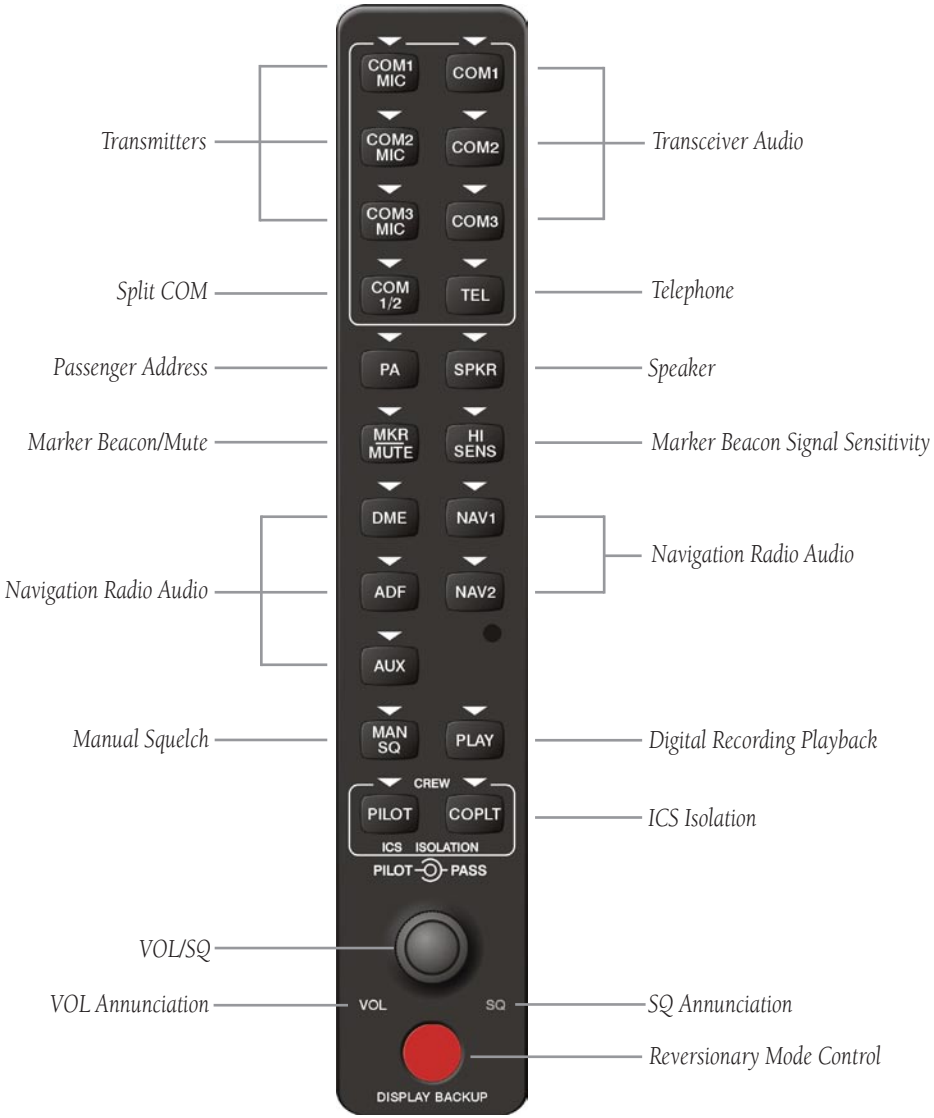


Figure 6A.2.1 Front Panel Controls

TRANSCEIVERS

The GMA 1347 handles three different transceivers:

- **COM1 MIC**
- **COM2 MIC**
- **COM3 MIC**

NOTE: *A push-to-talk (PTT) switch must be pressed to transmit on the selected radio.*

Each audio panel can accept up to six (6) microphone inputs, allowing for a two-person crew and up to four (4) passenger intercom stations in the aircraft.

MONO/STEREO HEADSETS

The GMA 1347 can accommodate up to six (6) headsets, pilot, copilot and up to four (4) passengers.

NOTE: *The use of stereo headsets is highly recommended.*

Use of a monaural headset in a stereo jack shorts the right headset channel output to ground. A person listening on a monaural headset hears only the left channel in both ears. If a monaural headset is used at one of the passenger positions, any other passenger listening on a stereo headset hears audio in the left ear only, unless the headset has a mono/stereo switch that is set to mono.

UNMUTED/UNSWITCHED INPUTS

The unit provides four (4) unmuted/unswitched inputs that are always present on the headsets or speaker. These inputs are the following aural warnings:

- ALTITUDE WARNING
- UNSWITCHED 1
- UNSWITCHED 2
- UNSWITCHED 3

6A.3 UNIT OPERATION

POWER-UP AND FAIL-SAFE OPERATION

Power-up

The GMA 1347 performs a self-test during power-up. All panel annunciator lights illuminate for approximately two (2) seconds. Once the self-test is completed, the settings are restored to the ones in use before the unit was last turned off.

See the System Overview section for additional power up information.

Fail-safe Operation

A fail-safe circuit connects the pilot's headset and microphone directly to COM1 in case power is interrupted or the unit is turned off. In this case, audio is not available on the speaker.

SELECTING AND DESELECTING KEYS

LED annunciators indicate when a key function is selected. Pressing a key activates and deactivates the function, turning the annunciator light on and off.

LIGHTING

LED key annunciators and backlighting are controlled automatically by the G1000 Control Display Unit (CDU).

TRANSCEIVER KEYS

The following eight (8) transceiver keys appear at the top of the GMA 1347 front panel: **COM1 MIC**, **COM2 MIC**, **COM3 MIC**, **COM 1/2**, **COM1**, **COM2**, **COM3**, and **TEL**. COM audio can be selected by pressing either the desired COM key or by pressing a COM MIC key.

Figure 6A.3.1 Transceivers

COM MIC Keys

Pressing the **COM1 MIC**, **COM2 MIC** or **COM3 MIC** key selects the COM radio as the active transceiver. The receiver audio key, **COM1**, **COM2**, **COM3** is also selected. The COM frequency is highlighted green in the active frequency field of the PFD and MFD.

Only one microphone source can be selected at a time. If **COM2 MIC** is pressed when **COM1 MIC** is active, the unit switches to COM2.

COM Keys

Pressing the **COM1**, **COM2**, or **COM3** receiver key selects the COM radio as an active receiver source. Any combination of radios can be selected separately or simultaneously regardless of the active transceiver selection. The active COM radio is always heard through the headsets.

Transmitting

When a transmitter is keyed, the active transceiver MIC key annunciator blinks approximately once per second. A white TX indication appears next to the active COM frequency on both the PFD and the MFD during transmission.

NOTE: Audio level of the COM radio(s) is controlled by the COM volume controls located on both the PFD and MFD (see the VHF NAV/COM Pilot's Guide).

COM SWAP

A remotely mounted switch can be used to transfer the active transceiver between COM1 MIC and COM2 MIC. Pressing the switch has no effect if COM3 is the active transceiver.

OPTIONAL COM MUTING

COM muting on receive and COM muting on transmit options can each be disabled if desired. Contact a Garmin-authorized service center for details.

COM Muting on Receive

When COM muting on receive is enabled, all secondary COM audio is muted during detection of received primary COM audio.

NOTE: If COM muting on receive option is enabled, only primary COM radio reception is recorded by the digital clearance recorder.

COM Muting on Transmit

When COM muting on transmit is enabled, all secondary COM audio is muted during transmission over the primary COM radio.

TELEPHONE INTERFACE

The GMA 1347 contains a dedicated telephone interface that is closely linked to the ICS operation. It is controlled by the **TEL** key. See Table 6A.3.3 for a summary of the telephone distribution and the various ICS isolation modes.

NOTE: The ringer to the TEL channel is muted during COM radio transmissions.

SPLIT COM FUNCTION

Pressing the **COM 1/2** key selects the split COM function. During split COM operation, the **COM1**, **COM1 MIC**, **COM2** and **COM2 MIC** keys are active.

When the **COM 1/2** key is selected, COM1 is used by the pilot for transmission and COM2 is used by the copilot. The COM1 MIC annunciator blinks when the pilot's microphone is keyed and the COM2 MIC annunciator blinks when the copilot's microphone is keyed.

In this mode, both the pilot and the copilot can transmit simultaneously over separate radios. The pilot can still monitor COM3, NAV1, NAV2, DME, ADF, AUX and MKR audio as selected, but the copilot is only able to monitor COM2.

Split COM mode is cancelled by pressing the **COM 1/2** key again.

NOTE: Split COM performance varies significantly across installations and is affected by both the distance between the antennas and the separation of the tuned frequencies.

PA FUNCTION

A passenger address function is provided by pressing the **PA** key. Push-to-talk (PTT) must be used to deliver PA announcements over the headsets.

SPEAKER

All of the radios can be heard over the cabin speaker. Pressing the **SPKR** key selects and deselects the cabin speaker. Speaker audio is muted when the PTT switch is keyed.

The speaker volume is adjustable above and below a nominal value. Contact a Garmin-authorized service center for details.

MARKER BEACON RECEIVER

Description and Operation

The GMA 1347 marker beacon is used as part of the ILS system. The marker beacon receiver is always ON and receives at 75 MHz. The GMA 1347 provides a marker audio muting capability.

The receiver detects the three (3) marker tones, **outer**, **middle** and **inner**, and illuminates the appropriate marker beacon indicators. The marker indicators are located to the left of the Altimeter on the PFD (Figure 6A.3.3). The outer marker frequency is 400 Hz with a blue indicator, the middle marker frequency is 1,300 Hz with an amber indicator and the inner marker frequency is 3,000 Hz with a white indicator. Refer to Table 6A.3.1 for a summary of the marker beacon signal characteristics.

When the **MKR/MUTE** key is selected, the annunciator light illuminates and the audio signal can be heard over the speaker or headsets during marker reception.

When the **MKR/MUTE** key is annunciated and a marker beacon tone is received, pressing the **MKR/MUTE** key mutes the audio but does not affect the annunciators. The audio returns when the next marker signal is received. If the **MKR/MUTE** key is pressed during signal reception, while marker beacon audio is muted, marker audio and the **MKR/MUTE** key annunciator light are turned off.

NOTE: The marker beacon receiver lights operate independently of the marker beacon audio and cannot be turned off.

The marker beacon audio output level is adjustable by a Garmin-authorized service center.

NOTE: The GMA 1347 is capable of driving external marker beacon lamps.

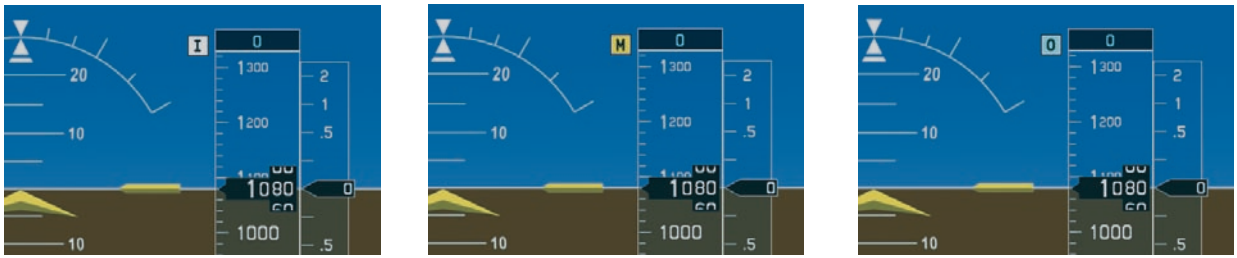
Marker Beacon Signal Sensitivity

The **HI SENS** key can be pressed for increased marker beacon signal sensitivity. The HI SENS function is used to receive an earlier indication of nearing a marker during an approach.

Figure 6A.3.2 Marker Beacon

Beacon	Audio Frequency	Audio Keying	Rate	Lamp Color
Outer Marker	400 Hz	— — —	2 dashes per second	Blue
Middle Marker	1,300 Hz	• — • —	95 dot-dash combinations **per minute**	Amber
Airway/Inner Marker	3,000 Hz	• • • •	6 dots per second	White

Table 6A.3.1 Marker Beacon Signal Characteristics



Inner Marker **Middle Marker** **Outer Marker**

Figure 6A.3.3 Marker Beacon Signal Indicator Lights on the PFD

NAVIGATION RADIOS

Pressing **DME**, **ADF**, **AUX**, **NAV1**, or **NAV2** selects and deselects the radio source and activates the annunciator. Selected audio can be heard over the headset and the speakers. All radio keys can be selected individually or together.

Figure 6A.3.4 Navigation Radios

When no further navigation radio audio is heard, the amount of background noise is reduced by the Master Avionics Squelch (MASQ) feature.

ENTERTAINMENT INPUTS

The current ICS isolation mode affects the distribution of the entertainment inputs MUSIC 1 and MUSIC 2.

NOTE: *MUSIC 1 and MUSIC 2 cannot be completely turned off. Audio level for these inputs can be set above and below a nominal value. Contact a Garmin-authorized service center for adjustment.*

MUSIC 1

MUSIC 1 can be heard by the pilot in COPILOT mode and in ALL mode, and can be heard by the copilot in PILOT mode and in ALL mode.

MUSIC 1 Muting

MUSIC 1 muting occurs when aircraft radio, marker beacon or ICS activity is heard.

NOTE: *MUSIC 1 muting during ICS activity can be disabled. Contact a Garmin-authorized service center for details.*

Muting of MUSIC 1 is also triggered by marker beacon activity when in ALL, CREW or COPILOT mode. After muting ceases, MUSIC 1 gradually returns to its original volume level. This characteristic is known as "soft mute." The time required for MUSIC 1 to return to its original volume level at the headset outputs is between 0.5 and 4 seconds.

NOTE: *If the **MKR/MUTE** key is pressed and held for three (3) seconds, the GMA 1347 toggles music muting ON and OFF during radio signal reception. Upon toggling, either one (1) or two (2) beeps can be heard; one (1) beep indicates that music muting is enabled and two (2) beeps indicate that music muting is disabled.*

MUSIC 2

MUSIC 2 can be heard only by the passengers and is never muted.

INTERCOM SYSTEM (ICS) ISOLATION

The intercom system (ICS) provides four (4) isolation modes: ALL**,** PILOT, COPILOT and CREW. The desired mode can be selected or deselected using the **PILOT** and **COPLT** keys.

The possible ICS isolation states are summarized in the table below. Table 6A.3.3 summarizes the ICS operation for the four (4) ICS isolation modes and telephone distribution.

PILOT Mode

PILOT mode is selected when only the **PILOT** key is annunciated. In PILOT mode, the pilot can hear the selected radios, the copilot can hear MUSIC 1, the passengers can hear MUSIC 2, and the copilot and passengers can communicate with each other.

COPILOT Mode

COPILOT mode is selected when only the **COPLT** key is annunciated. In COPILOT mode, the copilot is isolated from everyone else. The pilot and passengers can hear the selected radios and communicate with each other. In this mode, the pilot can hear MUSIC 1, while the passengers can hear MUSIC 2.

Figure 6A.3.5 ICS Isolation Keys

CREW Mode

CREW mode is selected when both the **PILOT** and **COPLT** keys are annunciated. In CREW mode, both the pilot and copilot can hear the selected radios and communicate with each other, while the passengers can only hear MUSIC 2.

ALL Mode

ALL mode is selected when the **PILOT** and the **COPLT** keys are not annunciated. In ALL mode, everyone hears the selected radios and is able to communicate with everyone else. In this mode, both the pilot and copilot can hear MUSIC 1, while the passengers hear MUSIC 2.

	Current ICS Isolation State			
Input	**PILOT**	**COPILOT**	**CREW**	**ALL**
PILOT Key Press	ALL	CREW	COPILOT	PILOT
COPLT Key Press	CREW	ALL	PILOT	COPILOT

Table 6A.3.2 ICS Isolation Mode Transitions

Mode	PILOT LED	COPLT LED	TEL LED	Pilot Hears	Copilot Hears	Passenger Hears	Input to Phone
ALL	OFF	OFF	OFF	Selected radios; pilot; copilot; passengers; MUSIC 1	Selected radios; pilot; copilot; passengers; MUSIC 1	Selected radios; pilot; copilot; passengers; MUSIC 2	None
	OFF	OFF	ON	Selected radios; pilot; copilot; passengers; MUSIC 1; TEL audio	Selected radios; pilot; copilot; passengers; MUSIC 1; TEL audio	Selected radios; pilot; copilot; passengers; MUSIC 2; TEL audio	Pilot; copilot; passengers
PILOT	ON	OFF	OFF	Selected radios; pilot	Copilot; passengers; MUSIC 1; TEL audio	Copilot; passengers; MUSIC 2; TEL audio	Copilot; passengers
	ON	OFF	ON	Selected radios; pilot; TEL audio	Copilot; passengers; MUSIC 1	Copilot; passengers; MUSIC 2	Pilot
COPILOT	OFF	ON	OFF	Selected radios; pilot; passengers; MUSIC 1	Copilot; TEL audio	Selected radios; pilot; passengers; MUSIC 2	Copilot
	OFF	ON	ON	Selected radios; pilot; passengers; MUSIC 1; TEL audio	Copilot	Selected radios; pilot; passengers; MUSIC 2; TEL audio	Pilot; passengers
CREW	ON	ON	OFF	Selected radios; pilot; copilot	Selected radios; pilot; copilot	Passengers; MUSIC 2; TEL audio	Passengers
	ON	ON	ON	Selected radios; pilot; copilot; TEL audio	Selected radios; pilot; copilot; TEL audio	Passengers; MUSIC 2	Pilot; copilot

Table 6A.3.3 ICS Isolation Modes & Telephone Distribution

VOLUME/SQUELCH CONTROL

When the GMA 1347 **MAN SQ** key is selected, pressing the **VOL/SQ** knob toggles between volume and squelch adjustment. When the unit is in volume adjustment mode, the **VOL** annunciation on the lower left of the **VOL/SQ** knob is lit and volume can be adjusted. When the unit is in squelch mode, the **SQ** annunciation on the lower right of the **VOL/SQ** knob is lit and squelch threshold level can be adjusted.

Figure 6A.3.6 Volume/Squelch Control

NOTE: *When the **MAN SQ** key is not selected (auto-squelch is active), pressing the **VOL/SQ** knob has no effect on the VOL/SQ selection state and **VOL** is automatically annunciated.*

When transitioning from auto to manual squelch, the unit returns to the previous VOL/SQ selection (see table below).

NOTE: *The volume and squelch controls for the COM and NAV radios are located on the PFD and MFD bezels (refer to the VHF NAV/COM Pilot's Guide for details).*

Intercom VOL/SQ

Intercom Volume Control

Intercom volume can be controlled with the **VOL/SQ** knob. The **small** knob controls the pilot ICS volume. The **large** knob controls the copilot/passenger ICS volume. Turning either knob clockwise increases audio level. Turning either knob counterclockwise decreases audio level. When **MAN SQ** is off (key not annunciated) volume adjustment is automatically selected and the **VOL** annunciation is lit.

		Current VOL/SQ State		
Input		**Auto, VOL selected**	**Manual, VOL selected**	**Manual, SQ selected**
MAN SQ Key Press	**Previous State: Manual, VOL selected**	Manual, VOL selected	Auto, VOL selected	Auto, VOL selected
	Previous State: Manual, SQ selected	Manual, SQ selected		
GMA 1347 VOL/SQ Knob Press		Auto, VOL selected	Manual, SQ selected	Manual, VOL selected

Table 6A.3.5 Transitioning from Auto to Manual Squelch Mode

To adjust ICS volume when MAN SQ is OFF (key not annunciated):

1. Turn the appropriate **VOL/SQ** knob.

To adjust ICS volume when MAN SQ is ON (key annunciated), do one of the following:

1a. If the unit is in manual squelch threshold adjustment mode (**SQ** annunciation at the lower right of the **VOL/SQ** knob is lit), press the **VOL/SQ** knob to toggle to ICS volume adjustment mode, and turn the appropriate **VOL/SQ** knob.

1b. If the unit is already in ICS volume adjustment mode (**VOL** annunciation at at the lower left of the **VOL/SQ** knob is lit), turn the appropriate **VOL/SQ** knob.

Intercom Squelch Control

Each microphone input has an automatic squelch threshold. Manual squelch override as well as keyed ICS operation (for noisier cockpits) is also available.

The **VOL/SQ** knob manually adjusts squelch threshold when the **MAN SQ** key is annunciated and the **SQ** annunciation is lit. The small **VOL/SQ** knob controls pilot squelch threshold and the large **VOL/SQ** knob controls copilot/passenger squelch threshold. Turning either knob clockwise increases the threshold. Turning either knob counterclockwise decreases the threshold.

***NOTE:** In manual squelch mode, when the **VOL/SQ** knob is adjusted to minimum, all crew audio inputs can break squelch. When the **VOL/SQ** knob is adjusted to maximum, the ICS audio is heard only when an ICS PTT is pressed.*

To adjust squelch threshold level manually when MAN SQ is OFF (key not annunciated):

1. Press the **MAN SQ** key:

2a. If the **VOL** annunciation is lit, press the **VOL/SQ** knob for **SQ** annunciation and turn the **VOL/SQ** knob.

2b. If the **SQ** annunciation is already lit, turn the **VOL/SQ** knob.

To adjust squelch threshold level manually when MAN SQ is ON (key annunciated):

1a. If the **VOL** annunciation is lit, press the **VOL/SQ** knob for **SQ** annunciation and turn the **VOL/SQ** knob.

1b. If the **SQ** annunciation is already lit, turn the **VOL/SQ** knob.

Volume Adjustments

The audio level of various signals can be adjusted if desired by a Garmin-authorized service center.

MASTER AVIONICS SQUELCH (MASQ)

MASQ (Master Avionics Squelch) reduces ambient noise from the aircraft radios. When no audio is detected, MASQ processing further reduces the amount of background noise from the radios.

The Master Avionics Squelch (MASQ) threshold level can be adjusted or disabled by a Garmin-authorized service center.

DIGITAL CLEARANCE RECORDER WITH PLAYBACK CAPABILITY

The GMA 1347 provides a digital clearance recorder with playback capability of up to 2.5 minutes of COM signal recording. Recorded COM signals are stored in separate memory blocks. Signals from all of the selected COM radios are recorded and can be played back. Anyone able to hear the selected COM radios is able to hear the COM signal playback.

Once the 2.5 minutes of recording time have been reached, the recorder begins recording over the stored memory blocks, starting from the oldest block. Powering off the unit automatically clears all recorded blocks.

Figure 6A.3.7 Playback

NOTE: *In split COM mode the pilot or copilot COM audio can be configured for recording and playback. Contact a Garmin-authorized service center for details.*

The **PLAY** key controls the playback function.

- Pressing **PLAY** once plays back the latest recorded memory block, then returns to normal operation.
- Pressing **PLAY** during playback of a memory block halts the playback of this block and plays back the preceding recorded block. The **PLAY** key can be used to backtrack through the recorded memory blocks to reach and play back any desired block.

NOTE: *Pressing the **MKR/MUTE** key during playback halts playback and returns the recorder/playback to normal operation.*

During playback, the **PLAY** annunciator light blinks approximately once per second. If a COM input signal is detected during playback, playback is halted and the new COM input signal is recorded as the latest block.

NOTE: *The recorder can be disabled using an external switch or permanently disabled by a Garmin-authorized service center.*

NOTE: *If the COM muting on receive option is enabled, only the primary COM radio signal reception is recorded by the digital clearance recorder.*

REVERSIONARY MODE

The red **DISPLAY BACKUP** button selects the reversionary mode for all displays. Reversionary mode operation displays important flight and engine information on both the PFD and MFD, in case of display failure.

In dual audio panel configuration the **DISPLAY BACKUP** button operates on the pilot side only.

Figure 6A.3.8 Reversionary Mode Button

COCKPIT VOICE RECORDER INTERFACE

The GMA 1347 provides the ability to interface to a cockpit voice recorder (CVR). The unsquelched pilot microphone input (all vocal inputs from the pilot) is combined with all audio heard on the pilot's headset and cabin speaker and is output to the pilot CVR channel. The unsquelched copilot microphone input is combined with all audio heard on the copilot's headset and the cabin speaker and is output to the copilot CVR channel.

DUAL PANEL OPERATION

In a dual installation, one GMA 1347 is in the pilot position, the other is in the copilot position. The units are referred to as the pilot side and copilot side audio panels. Both the pilot and the copilot can transmit at the same time from either the pilot side unit or copilot side unit.

ICS key selections (PILOT and COPILOT) and the telephone key (TEL) annunciate together in a dual installation. When a key is pressed on either the pilot side or the copilot side, both units annunciate the same selection. COM3 MIC and the TEL have no priority.

***NOTE:** In dual configuration, the pilot always hears the audio selected on the pilot's audio panel and the copilot always hears the audio selected on the copilot's audio panel.*

Intercom operation of dual audio panels is identical to that of single audio panel operation. The passengers hear selected radios from the pilot or copilot side, depending on the installation.

When ICS is connected to the copilot side in PILOT mode, the passengers hear radios selected by the copilot, the passenger audio, the copilot and MUSIC 2. When ICS is connected to the copilot side in COPILOT mode, the passengers hear the passenger audio, the pilot and MUSIC 2

Simultaneous COM Transmission

Dual GMA 1347 installations allow both the pilot and copilot to transmit simultaneously over separate radios. When either COM transmitter is keyed, transmit-interlock shuts off the other COM receiver. This prevents interference from the active COM transmitter.

With two pilots aboard, transmit-interlock may interfere with communications. When either the pilot or copilot transmits on a COM radio, no audio is heard on the other COM receiver. This means that if the pilot is communicating with ATC on COM1, while the copilot is transmitting on COM2, all of the pilot's reception is lost during the time of copilot transmission.

If transmit-interlock is not activated, all the selected receivers are heard at all times. Without transmit-interlock, during simultaneous transmission, interference may be heard on the COM receivers. Transmission by one radio produces static or squeal, resulting in loss of communication on other radios.

Dual COM performance varies significantly depending on the distance between the antennas and the tuned frequency separation.

Figure 6A.3.9 Dual G1000 Audio Panels (GMA 1347)

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