Audio Alerts

The EFIS will generate audio voice outputs for a variety of conditions, listed in the table below. Audio is generated on the "Audio Output" pin, which is wired to an intercom/audio panel auxiliary audio input.

HX, HXr, SX, and 10.1 Series displays have audio alerts enabled by default. Mini and EX displays require additional options to enable the audio alerts. The voice alerts don't require any configuration other than adjusting volume levels and loading the files if they aren't already loaded. Displays shipped after Feb 2015 should already have the voice alerts loaded.

Configuring Audio Alerting

All audio setup is made via the "Audio Alerts" settings table that is accessed on the Set Menu, General Setup. This settings table is located near the bottom of the general setup menu, just above the autopilot gains settings.

Audio Settings:

- Audio Alerts (On/Off) Text Description "Enables/Disables Audio Outputs from EFIS into airplane audio system."
- Audio Altitude Alerts (On/OFF) Text Description "Enables/Disables audio alerts of altitude above runway and minimum descent altitude."
- Audio Alert Volume (1-64) Text Description "Controls volume level of audio alerts provided to airplane's audio system."
- Audio Advisory Chime (On/Off) Text Description "Enables/Disables a chime sound that is used for all EFIS generated messages and alarms that do not have an audio message."
- Copy Alerts – Select this to copy .wav files into the EFIS. All .wav files must be provided. Any missing files will cause the existing .wav file to be deleted.

Customizable Audio Alerts

The audio for the audio alerts are generated by .wav files that are loaded into the EFIS via a USB memory stick. Computer synthesized voice audio alerts are provided for download on the GRT Avionics website. The synthesized voice is easily distinguishable from other voices, but users may also record their own audio alerts. Be sure these are .wav files, with the file name specified in the table below, and must be uncompressed mono wav file in 16-bit 22050 Hz or 44100 Hz. The entire file will be played without interruption, so keep the alert short.

Alarms Operation

Audio alerting will generate a warning tone, caution tone, or advisory chime prior to each audio alert. If

no audio alert (.wav file) is provided, only the tone or chime will be heard.

The "ALARMS" softkey is provided on the PFD screen (PFD screen, under "MORE" for the HXr), to control if all alarms (ALL), or only oil and fuel pressure alarms (F/O-Prs) will be generated by the EFIS. (This controls all alerting, not just the audio alerts.) The F/O-Prs selection can be useful when flying aerobatics.

The "ALARMS" softkey selection will reset to "ALL" at power-up.

Inhibiting of Audio Alerts

All audio alerts except those designated as "Warning", are inhibited under the following conditions.

1. All alerts for the first 15 seconds after the EFIS is booted up.
2. For 1 minute after transitioning from ground to air (takeoff), all are inhibited except "Warning" category.
3. If the "Alerts" softkey is set to "O/F-Prs" only an oil and fuel pressure alarms will be generated (This softkey selection will return to "ON", Press Only. the next time the display unit is powered-up.)
4. If the "General Setup", "Audio Alerts", is set to "OFF", no audio alerts, tones, or chimes will be generated.
5. If the "General Setup", "Altitude Call-outs" is set to "OFF", no height above runway or minimum descent altitudes audio alerts are generated.

	Alert Type / *.wav filename*	GRT .wav file alert	Category
1	Min Oil Pressure – (applies to cruise or normal min oil pressure alarms) / *oil_pressure.wav*	"Oil Pressure"	Warning
2	Low Fuel Pressure / *fuel_pressure.wav*	"Fuel Pressure"	Warning
3	Landing Gear / *landing_gear.wav*	"Landing Gear" (repeats every 15 seconds)	Warning
4	AOA (If AOA is enabled). /no wave file required	Tone that is on goes from 10% to 100% on as AOA goes from 4 degrees below stall AOA, to stall AOA.	Warning
5	Obstacle Warning / obstacle.wav	"Obstacle"	Warning
6	Traffic / *traffic.wav*	"Traffic"	Warning
7	Autopilot Disconnect for reason other than manual disconnect (such as failure, airspeed going invalid). / *ap_disconnect_warning.wav*	"Autopilot Disconnect"	Warning
8	Max Oil Temperature / *oil_temperature.wav*	"Oil Temperature"	Caution
9	Max CHT (Applies to highest CHT. Multiple cylinders with high CHT will not generate multiple alarms. / *cht.wav*	"Cylinder Head Temperature"	Caution
10	Voltage/ *low_volts.wav*, *high_volts.wav*	"High Volts", "Low Volts"	Caution
11	Max Fuel Flow / *fuel_flow.wav*	"Fuel Flow"	Caution
12	Vne Exceeded / *speed.wav*	"Speed"	Caution
13	Height above runway. Applies only when synthetic approach selected. "Minimums" applies if decision altitude. / *500.wav, 200.wav, 100.wav*	"500", "200", "100", "Minimums"	Advisory – Audio Only
14	Autopilot Elevator Trim Required / *trim.wav*	"Elevator Trim"	Advisory
15	200 feet above minimum descent altitude / *minimums.wav*	"Approaching Minimums"	Advisory
16	Autopilot Disconnect (occurs for any reason including manual disconnect) / *ap_disconnect.wav*	"Autopilot Disconnect"	Advisory
17	Waypoint Sequencing / *waypoint.wav*	"Waypoint"	Advisory
18	All other messages/alerts that generate a message on the EFIS.	Chime Sound	Advisory