

FCC Part 15 Notice:

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Special Instructions:

Shielded interconnect cables and a shielded AC power cable must be employed with this equipment to ensure compliance with the pertinent RF emission limits governing this device. Changes or modifications not expressly approved by the system's manufacturer could void the user's authority to operate the equipment.

Assembled From Tested Components by:

EZ Automation
3302 N. Van Dyke Rd.
Imley City, MI 48444
(810) 895-2040
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Product Name EZ Automation

Product Model EAS

EZ Automation EAS/CAP Encoder Decoder

www.voicetracking.com

(810) 895-2040

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GETTING STARTED PROGRAMMING:



OVERVIEW: This section will take you step by step through the programming setup process to get your EAS system programmed and running. This initial setup should be performed by or at least with the assistance of your Engineering department. It is important that the initial programming is done properly.

PART 1: SYSTEM SETUP.

STEP 1: GETTING TO THE STATION SETUP SCREEN. The first step is configuring the EAS unit. To enter the setup, go to the menu bar click on **Config**, then on **Station Setup**. This will take you to the station setup screen.

A screenshot of a software window titled "User Configuration". The window has a blue title bar with standard Windows window controls. Inside, there are two columns of text input fields. The left column contains: "Identifier" (WXYZ//FM), "Input 1 Alias" (WABC), "Input 2 Alias" (WCBS), "Input 3 Alias" (N/A), and "Input 4 Alias" (N/A). The right column contains: "Msg Timeout" (120), "UTC Comp" (4), "Home FIPS" (000000), "Originator Code" (EAS), and "2-Tone Length" (8). At the bottom of the window is a large "Update" button.

STEP 2: Identifier. Enter the station callsign in the upper left field. This must be 8 characters long. Fill any unused spaces with slashes "/" (required).

STEP 3: Input Alias(s). Fill in the sources name you are receiving on the analog inputs. This step is optional but is recommended.

STEP 4: Message Timeout. This is the recording timeout in seconds for received EAS messages (required). 120 seconds is typical.

STEP 5: UTC Comp. This is the difference between universal time and your time zone in hours (required).

STEP 6: Home FIPS. This is your home county (required). This the state code plus county code. Example: Say a station is licensed to New York, New York....New York's state code is 36. New York's county code is 061. So the code is 0+36+061 or 036061. A list of FIPS codes is available at this website: <http://www.epa.gov/enviro/html/codes/state.html>
You may also obtain your county code from PART 2 on the next page.

STEP 7: EAS Originator Code. This is a three-letter code assigned to the type of facility (required). A broadcast station would use EAS. The National Weather service uses NWS. Other government agencies use CIV.

STEP 8: 2-Tone Length. This is the length in seconds of the two-tone attention signal (850Hz and 953 Hz) transmitted during alerts. At the time of this writing, 8 seconds is required.

PART 2: COUNTY SETUP.

STEP 1: GETTING TO THE EVENT/FIPS SETUP SCREEN. This is the second part is configuring the EAS unit. To enter the setup, go to the menu bar click on **Config**, then on **Event/FIPS Setup**. This will take you to the setup screen (see picture below).

The screenshot shows the 'Config Events/FIPS' window with two main panes. The left pane, 'Area Config', has dropdowns for 'State' (set to 'NY') and 'County' (set to '036061 New York'). Below these is a button 'Add County Code + Event Code + Priority' and a list of event codes with their descriptions. The right pane, 'Event/Priority Config', has a dropdown for 'Opt. Adjust Priority' (set to '2') and a button 'Change Priority of Selected'. Below these is a list of event codes with their descriptions. The 'TOR 2 (Tornado Warning)' entry is highlighted in blue in both lists.

Area Config

State: NY

County: 036061 New York

Add County Code + Event Code + Priority

036061 BZW 4 (New York (Blizzard Warning))

036061 CAE 4 (New York (Child Abduction))

036061 CDW 3 (New York (Civil Danger Warning))

036061 CEM 3 (New York (Civil Emergency))

036061 CFW 4 (New York (Coastal Flood Warning))

036061 CFA 0 (New York (Coastal Flood Watch))

036061 DSW 4 (New York (Dust Storm Warning))

036061 EQW 4 (New York (Earthquake Warning))

036061 EVI 3 (New York (Evacuation Immediate))

036061 FRW 3 (New York (Fire Warning))

036061 FFW 3 (New York (Flash Flood Warning))

036061 FFA 0 (New York (Flash Flood Watch))

036061 FFS 0 (New York (Flash Flood Statement))

036061 FLW 4 (New York (Flood Warning))

036061 FLA 0 (New York (Flood Watch))

036061 FLS 0 (New York (Flood Statement))

036061 HMW 3 (New York (Hazardous Materials Warning))

036061 HWW 4 (New York (High Wind Warning))

036061 HWA 0 (New York (High Wind Watch))

036061 HUW 3 (New York (Hurricane Warning))

036061 HUA 0 (New York (Hurricane Watch))

036061 HLS 0 (New York (Hurricane Statement))

036061 LEW 3 (New York (Law Enforcement Warning))

036061 LAE 3 (New York (Local Area Emergency))

036061 NMN 0 (New York (Network Message Notification))

036061 TOE 0 (New York (911 Telephone Outage Emergency))

036061 NUW 3 (New York (Nuclear Power Plant Warning))

036061 DMO 0 (New York (Practice/Demo Warning))

036061 RHW 3 (New York (Radiological Hazard Warning))

036061 SVR 3 (New York (Severe Thunderstorm Warning))

036061 SVA 0 (New York (Severe Thunderstorm Watch))

Event/Priority Config

Opt. Adjust Priority (0=Log Only, 1=High, 9=Low Priority): 2

Change Priority of Selected

CDW 3 (Civil Danger Warning)

CEM 3 (Civil Emergency Message)

CFW 4 (Coastal Flood Warning)

CFA 0 (Coastal Flood Watch)

DSW 4 (Dust Storm Warning)

EQW 4 (Earthquake Warning)

EVI 3 (Evacuation Immediate)

FRW 3 (Fire Warning)

FFW 3 (Flash Flood Warning)

FFA 0 (Flash Flood Watch)

FFS 0 (Flash Flood Statement)

FLW 4 (Flood Warning)

FLA 0 (Flood Watch)

FLS 0 (Flood Statement)

HMW 3 (Hazardous Materials Warning)

HWW 4 (High Wind Warning)

HWA 0 (High Wind Watch)

HUW 3 (Hurricane Warning)

HUA 0 (Hurricane Watch)

HLS 0 (Hurricane Statement)

LEW 3 (Law Enforcement Warning)

LAE 3 (Local Area Emergency)

NMN 0 (Network Message Notification)

TOE 0 (911 Telephone Outage Emergency)

NUW 3 (Nuclear Power Plant Warning)

DMO 0 (Practice/Demo Warning)

RHW 3 (Radiological Hazard Warning)

SVR 3 (Severe Thunderstorm Warning)

SVA 0 (Severe Thunderstorm Watch)

SVS 0 (Severe Weather Statement)

SPW 3 (Shelter in Place Warning)

SMW 3 (Special Marine Warning)

SPS 0 (Special Weather Statement)

TOR 2 (Tornado Warning)

TOA 0 (Tornado Watch)

TRW 3 (Tropical Storm Warning)

TRA 0 (Tropical Storm Watch)

TSW 3 (Tsunami Warning)

TSA 0 (Tsunami Watch)

VOW 3 (Volcano Warning)

WSW 4 (Winter Storm Warning)

WSA 0 (Winter Storm Watch)

Delete Selected Items Above

You will first want to adjust the priority of the Event Codes (optional). This is done on the right-hand pane. Click on the item(s) you want to adjust so it is highlighted in blue, select the Priority from the drop-down, and then press **Change Priority of Selected**. For example in most areas, a Tornado Warning would be second-highest priority after a national level emergency (EAN) which is a 1 priority. We suggest setting TOR (Tornado Warning) to a priority of 2. A priority of 0 means no automatic action will be taken, but it will be logged.

STEP 2: Adding Counties to Event Codes. In this step you must highlight the **Event/Priority** codes on the right that you want your system to respond to (you may hold CTRL key to select multiple one, and/or you may drag to select all of them. Next, on the upper left, select a **State** and then select a **County** in your coverage area. Lastly, press the **Add County Code + Event Code + Priority** button to add them to the list on the lower left (see picture below). You will need to change the county and press the Add button for all counties in your service area.

Config Events/FIPS

Area Config

State: NY

County: 036061 New York

Add County Code + Event Code + Priority

036061 BZW 4 (New York (Blizzard Warning))

036061 CAE 4 (New York (Child Abduction))

036061 CDW 3 (New York (Civil Danger Wa))

036061 CEM 3 (New York (Civil Emergency))

036061 CFW 4 (New York (Coastal Flood W))

036061 CFA 0 (New York (Coastal Flood W))

036061 DSW 4 (New York (Dust Storm Warn))

036061 EQW 4 (New York (Earthquake Warn))

036061 EVI 3 (New York (Evacuation Imme))

036061 FRW 3 (New York (Fire Warning))

036061 FFW 3 (New York (Flash Flood Warn))

036061 FFA 0 (New York (Flash Flood Wat))

036061 FFS 0 (New York (Flash Flood Stat))

036061 FLW 4 (New York (Flood Warning))

036061 FLA 0 (New York (Flood Watch))

036061 FLS 0 (New York (Flood Statement))

036061 HMW 3 (New York (Hazardous Mater))

036061 HWW 4 (New York (High Wind Warn))

036061 HWA 0 (New York (High Wind Watch))

036061 HUW 3 (New York (Hurricane Warn))

036061 HUA 0 (New York (Hurricane Watch))

036061 HLS 0 (New York (Hurricane Stat))

036061 LEW 3 (New York (Law Enforcement))

036061 LAE 3 (New York (Local Area Emer))

036061 NMN 0 (New York (Network Message))

036061 TOE 0 (New York (911 Telephone O))

036061 NUW 3 (New York (Nuclear Power P))

036061 DMO 0 (New York (Practice/Demo W))

036061 RHW 3 (New York (Radiological Ha))

036061 SVR 3 (New York (Severe Thunderst))

036061 SVA 0 (New York (Severe Thunderst))

Delete Selected Items Above

Event/Priority Config

Opt. Adjust Priority (0=Log Only, 1=High, 9=Low Priority): 0

Change Priority of Selected

CDW 3 (Civil Danger Warning)

CEM 3 (Civil Emergency Message)

CFW 4 (Coastal Flood Warning)

CFA 0 (Coastal Flood Watch)

DSW 4 (Dust Storm Warning)

EQW 4 (Earthquake Warning)

EVI 3 (Evacuation Immediate)

FRW 3 (Fire Warning)

FFW 3 (Flash Flood Warning)

FFA 0 (Flash Flood Watch)

FFS 0 (Flash Flood Statement)

FLW 4 (Flood Warning)

FLA 0 (Flood Watch)

FLS 0 (Flood Statement)

HMW 3 (Hazardous Materials Warning)

HWW 4 (High Wind Warning)

HWA 0 (High Wind Watch)

HUW 3 (Hurricane Warning)

HUA 0 (Hurricane Watch)

HLS 0 (Hurricane Statement)

LEW 3 (Law Enforcement Warning)

LAE 3 (Local Area Emergency)

NMN 0 (Network Message Notification)

TOE 0 (911 Telephone Outage Emergency)

NUW 3 (Nuclear Power Plant Warning)

DMO 0 (Practice/Demo Warning)

RHW 3 (Radiological Hazard Warning)

SVR 3 (Severe Thunderstorm Warning)

SVA 0 (Severe Thunderstorm Watch)

SVS 0 (Severe Weather Statement)

SPW 3 (Shelter in Place Warning)

SMW 3 (Special Marine Warning)

SPS 0 (Special Weather Statement)

TOR 2 (Tornado Warning)

TOA 0 (Tornado Watch)

TRW 3 (Tropical Storm Warning)

TRA 0 (Tropical Storm Watch)

TSW 3 (Tsunami Warning)

TSA 0 (Tsunami Watch)

VOW 3 (Volcano Warning)

WSW 4 (Winter Storm Warning)

WSA 0 (Winter Storm Watch)

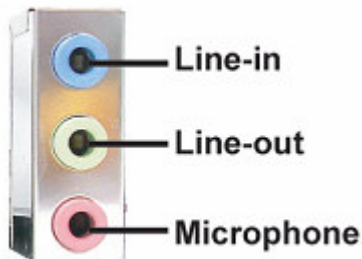
Congratulations! You have completed the software setup part of the instructions. Your system is almost ready to be put into operation.

Audio Wiring:

Note: Static Sensitivity: Some of the devices contained in unit are susceptible to static discharges. Appropriate static control procedures should be employed at all times when servicing. All devices connected to the unit should be grounded. For example, a properly grounded three-prong outlet is probably acceptable. In the event that the device does not have a proper grounding plug, a #12 or #14 stranded grounding wire should be added to the device in a “star” configuration. Many stations neglect to connect their satellite receivers, dishes, cable modems, DSL lines and etc to a common ground system. Because of the potential for lightning damage, all of the devices really need to be connected to a “star-type” common ground. In addition, a UPS with power, telephone, antenna, and Ethernet protection is strongly urged.

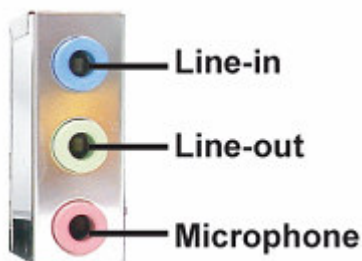
Installation: The basic components of installation are the Audio Inputs, and the audio output. The unit should be wired with #18-22 gauge stranded audio wire such as a Belden 8451 or 8723 or equivalent.

Audio inputs:



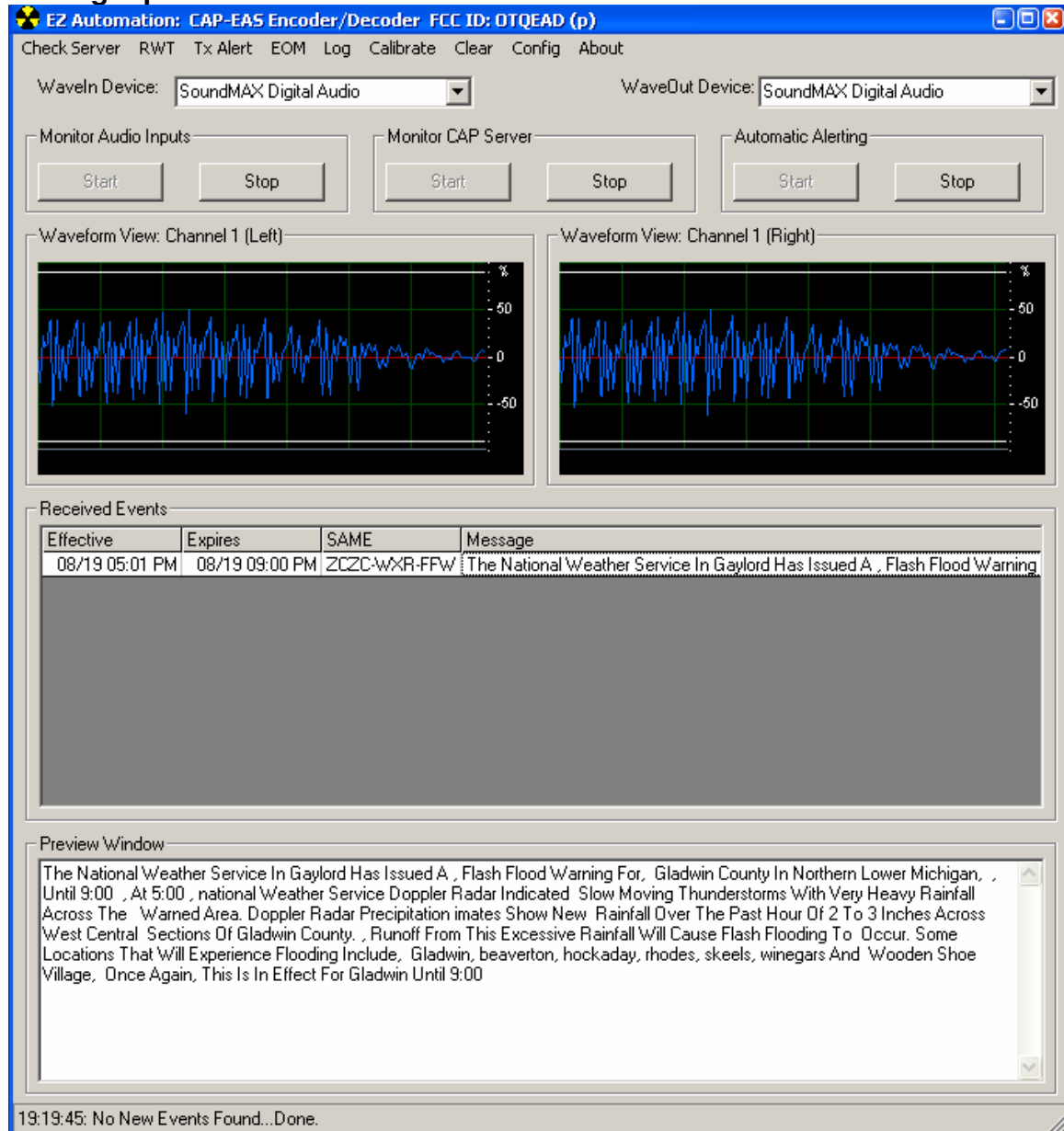
The **Line In** is unbalanced line-level inputs. The inputs should be taken directly from the audio output source from each device. The left input audio is input #1 (tip), and the right input (ring) is input #2. An optional 3rd/4th input is available on front panel.

Audio Output:



The **Line Out** is low impedance (approximately 600 Ohms). The output should be connected directly in the main audio path (IE before the audio processor) through an audio switch.

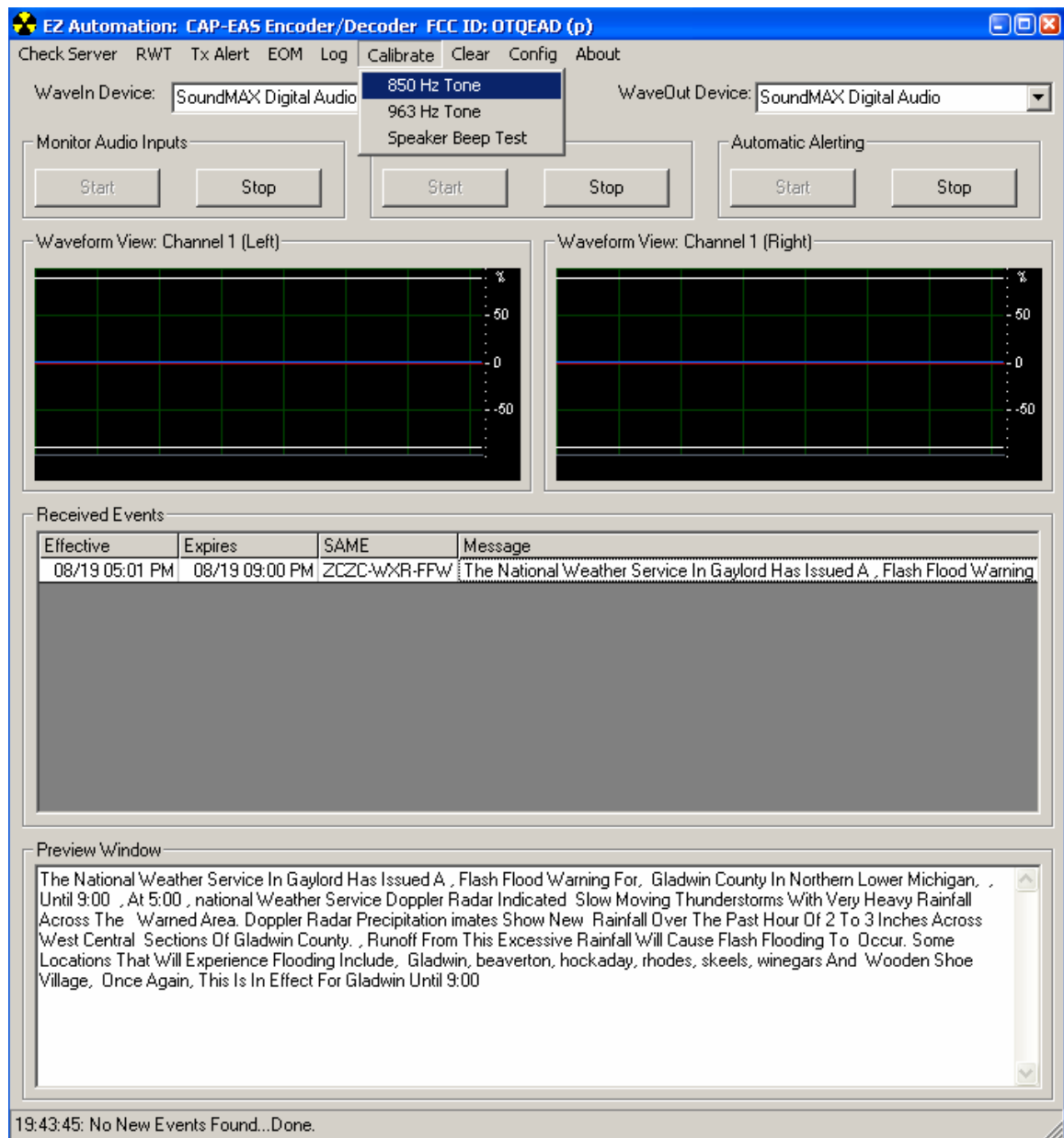
Setting Input Audio Levels:



All receivers should be adjusted so loudest signal peaks just occasionally reach the bottom white line segments in the **Waveform View** window. Remember the **Left** channel is 1st audio input, and the **Right** channel is audio 2nd audio input. Note: The audio card's audio input can be adjusted if receiver has insufficient level adjustment, but we suggest adjusting the receiver audio level first. You can also monitor the receiver audio via the internal speakers:

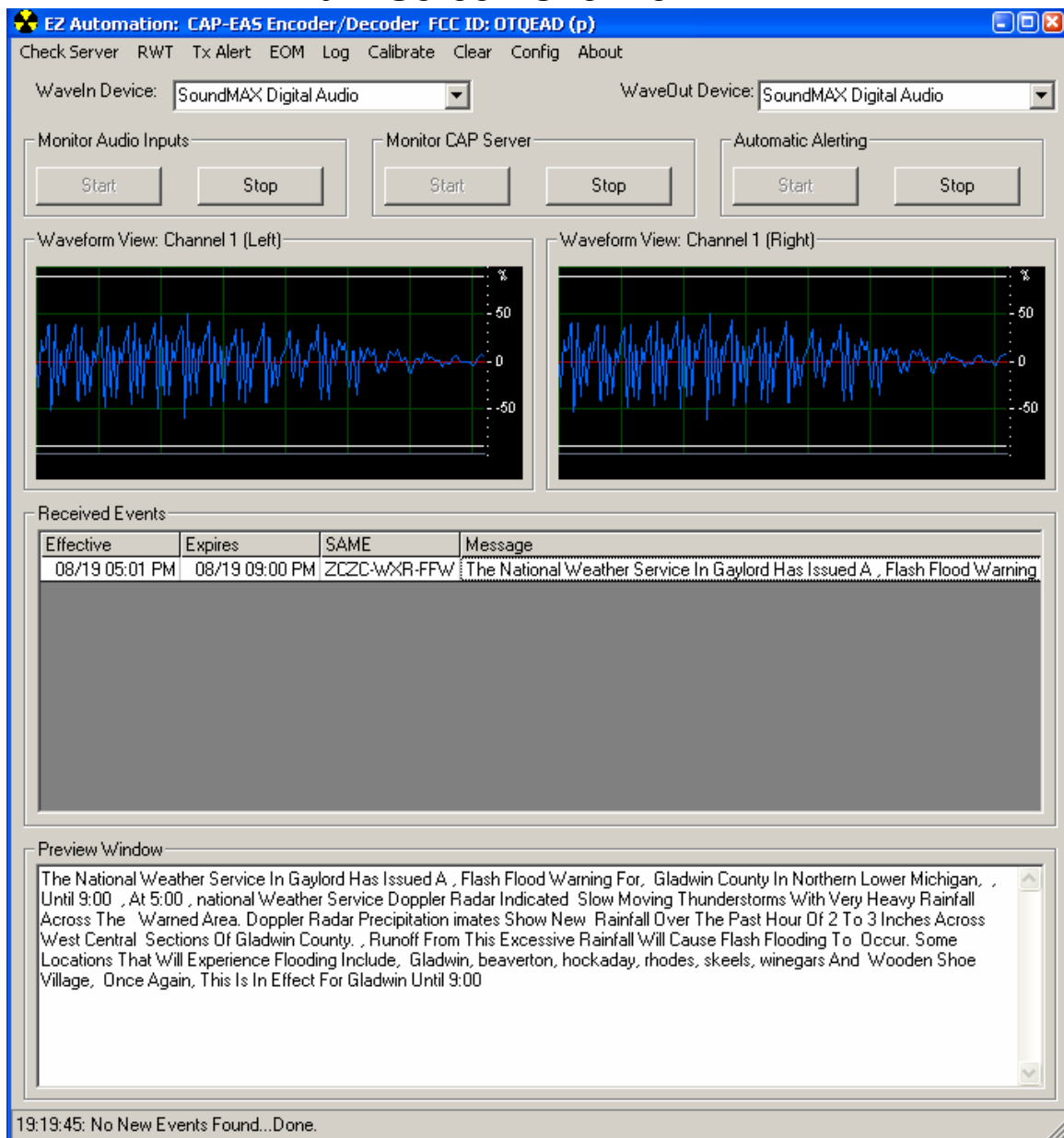


Setting Output Audio Levels:



You may test and set the audio output levels by clicking on menu then on **Calibrate** and then either **853Hz** or **960 Hz** tone button. This will allow the adjustment of audio levels in the broadcast facility produce at least 40% modulation as required by FCC rules at the time of writing.

Main Screen Overview



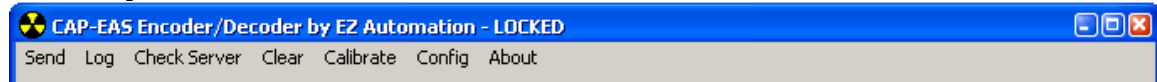
The main screen is straightforward in its operation.

The **Monitor Audio Input** button is used for starting/stopping the monitoring of the external receivers.

The **Monitor CAP Server** button is used for starting/stopping the monitoring of the IPAWS server.

The **Automatic Alerting** button is used for starting/stopping the automatic transmission of EAS alerts not already in progress (queued alerts can still be sent manually by clicking on **Tx Alerts** button).

Menu System:



The menu bar has other features:

Send, Build Header is used to create a new custom header.

Send, RWT is used to send a Required Weekly Test.

Send, Send Qued Alert is used to send a queued alert when in manual mode (automatic alerting is off).

Send, EOM is used to send another End of Message signal in situations where an interruption of your broadcast signal (IE momentary power outage) has caused down-stream stations not to receive the EOM signal, which may cause those stations to get stuck rebroadcasting your facility.

Log is used to display both receive and transmit logs.

Check Server polls the IPAWS server for any updates. This may be useful in severe weather situations to acquire an alert quicker after another source has already alerted you to an active alert.

Clear is used to clear the **Received Events** and **Preview Window** on main screen. This may be useful to clear items that have been processed to make it visually easier to see when new events arrive.

Calibrate is used to calibrate system levels (see page 6).

Config is used to access configuration screens to setup software (see pages 1 to 4).

About is used to see the version number and copyright notices.

Wave Inputs/Outputs:



Used for configuration of audio device inputs and outputs. Select the designated audio device.


Received Events:

Received Events			
Effective	Expires	SAME	Message
08/19 05:01 PM	08/19 09:00 PM	ZCZC-WXR-FFW	The National Weather Service In Gaylord Has Issued A , Flash Flood Warning


This area of the screen displays any received messages, either from the analog inputs or the IPAWS server. Received alerts may be sorted in each column by clicking on the column heading.

Clicking on row will display full message in the Preview Window.

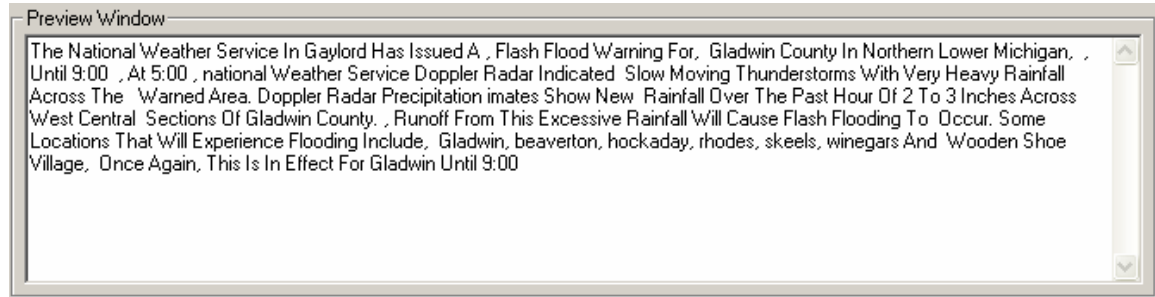
Double-clicking on a row will launch the **EAS Header** form, for manually transmitting an alert with a voiceover announced by local personnel:

 **EAS Header Generator**

The National Weather Service In Gaylord Has Issued A , Flash Flood Warning For, Gladwin County In Northern Lower Michigan, , Until 9:00 , At 5:00 , national Weather Service Doppler Radar Indicated Slow Moving Thunderstorms With Very Heavy Rainfall Across The Warned Area. Doppler Radar Precipitation imates Show New Rainfall Over The Past Hour Of 2 To 3 Inches Across West Central Sections Of Gladwin County. , Runoff From This Excessive Rainfall Will Cause Flash Flooding To Occur. Some Locations That Will Experience Flooding Include, Gladwin, beaverton, hockaday, rhodes, skeels, winegars And Wooden Shoe Village, Once Again, This Is In Effect For Gladwin Until 9:00



Preview Window:



This window shows more detailed information about messages, alerts being transmitted/received or any errors (such as lost internet connection).

Status Bar:



The status bar at the bottom of window shows you what the system is doing at the present time (or the last thing it did). In the example above the status bar shows the system did a check of the IPAWS server and that No New Events were found. The status bar will also show if there is an internet connection issue, and if any alerts are being received or transmitted. Any errors will also be displayed in the Preview Window.

Troubleshooting (Always try a reboot before contacting us for a problem not on this list):

Q: "Invalid Wave Device" error is caused by missing, defective, or recently deleted sound card configurations. Check Control Panel for audio device configurations.

Q: Slow operation, or stuttering audio symptoms.

A: This is typically caused by wayward programs, a virus (CPU usage at 100%) or improper driver, or other hardware failure such as a bad drive. Hit CTRL-ALT-DEL and check the list of program to see which ones are consuming resources, also try a reboot of system.

Q: When closing program or after a power failure, it does not start exactly where it left off.

A: We recommend the unit be left on 24/7/365 and a high quality UPS that can power the unit for at least 30 minutes hour be installed.

Q: My time keeps drifting or jumping, how do I fix it?

A: You should supply a stable Internet connection with high throughput and low latency. Double-click on the clock in the lower right hand corner. Check to make sure time zone is correct and daylight saving enabled (provided you're up to date on software patches). Under Internet Time tab check "automatically sync with an Internet time server". Press the "update now" to see if time will sync. If the sync works properly but you'd like to have it update more often then follow instructions on this webpage: <http://www.helpwithwindows.com/WindowsXP/tune-17.html>

Specifications:

Cooling Fan: 2 x 80mm ball bearing fans

Indicator: Power ON/OFF x 1, HDD x 1, RX/TX

Connectors: One front **USB** port, four rear **USB**, two serial, one parallel, Ethernet, and two PS/2.

Dimensions (W x D x H): 16.9" x 15.25" x 3.5" (430mm x 387.3mm x 88mm)

Environment Temperature: 0/50 °C, 32/122 °F (Operating) -20/60 °C, -4/140 °F (Non-Operating)

Relative Humidity: to 95%, non-condensing

Vibration (5-500 Hz): 0.5 Grms (Operating), 2 G (Non-Operating)

Power: 115 VAC, switchable to 230 VAC (-87%/+115% Tolerance)

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Product Name EZ Automation

Product Model EAS

EZ Automation Warranty Agreement

EZ Automation (Manufacturer) warrants that this product is free of defects in both materials and workmanship. Should any part of this equipment be defective, Manufacturer agrees, as its option, to:

A. Repair or replace any defective part free of charge (except transportation charges) for a period of 11 Months from the date of original purchase, provided the owner returns the equipment to Manufacturer at the address set forth below. No charge will be made for parts or labor during this period.

B. Furnish replacement for any defective parts in the equipment for a period of 11 Months from the date of original purchase. Replacement parts shall be furnished without charge except labor and transportation.

This Warranty excludes assembled products not manufactured by Manufacturer whether or not they are incorporated in a Manufacturer product or sold under a Manufacturer part or Model number.

THIS WARRANTY IS VOID IF:

A. The equipment has been damaged by negligence, accident, fire, lightening, act-of-nature or mishandling, or has not been operated in accordance with the procedures described in the operating and technical instructions; or

B. The equipment has been altered or repaired by other than Manufacturer or authorized service representative or Manufacturer; or

C. Adaptations or accessories other than those manufactured or provided by manufacturer have been made or attached to the equipment which, in the determination of Manufacturer, shall have affected the performance, safety, or reliability of the equipment; or,

D. The equipment's original serial number has been modified or removed.

NO OTHER WARRANTY EXPRESS OR IMPLIED, INCLUDING WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR USE, APPLIES TO THE EQUIPMENT, nor is any person or company authorized to assume any warranty for Manufacturer or any other liability in connection with the sale of Manufacturer products.

Manufacturer does not assume any responsibility for consequential damages, expenses or loss of revenue or property, inconvenience or interruption in operation experience by the customer due to a malfunction in the purchased equipment. No warranty service performed on any product shall extend the applicable warranty period.

In case of unsatisfactory operation, the purchaser shall promptly notify Manufacturer at the address set forth below in writing, giving full particulars as to the defects or unsatisfactory operation. Upon receipt of such notice, Manufacturer will give instructions respecting the shipment of the equipment, or such other matters as it elects to honor this warranty as above provided. This warranty does not cover damage to the equipment during shipping and Manufacturer assumes no responsibility for such damage. Customer shall pay all shipping costs.

This warranty extends only to the original purchaser and is not assignable or transferable.

**EZ Automation
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