
EAGLE Alarm Verification
Products, Inc.



MODEL 2244

**FALSE ALARM TERMINATOR™ VOX PRO
TWO WAY AUDIO SYSTEM**

**with Direct Interface to Video Equipment,
Auto-VOX Switching,
Emergency phone Dialing and Integrated Power Supply**

INSTALLATION INSTRUCTIONS



“LEADERS IN TWO WAY AUDIO TECHNOLOGY”

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1.0 GENERAL.

1.1 FEATURES.

The FALSE ALARM TERMINATOR™ VOX PRO features include:

- ◆ Emergency phone auto-dialer interface.
- ◆ Ring detection activation with programmable number of rings.
- ◆ Remote programming.
- ◆ Direct interface to Honeywell Rapideye, cVideo & Westec DVR's.
- ◆ Integrated audio grade power supply.
- ◆ Connection for up to twelve Model 1410 Four Zone Expansion Modules.
- ◆ VCR Audio connection for continuous 24 hour audio recording.
- ◆ Auto-VOX Switching for simple, easy use.
- ◆ Self contained speaker/microphones with quick, convenient terminal connectors.
- ◆ Two wire, non-shielded, microphones.
- ◆ Eagle's Enhanced Voice Technology for extraordinary clarity in talk back mode.
- ◆ Central station detection with automatic disconnect upon central station hang-up.
- ◆ Microprocessor technology which provides a wide range of operating modes.
- ◆ Remote volume control of the microphone from the central station.
- ◆ EEPROM programming for enhanced system capability.

1.2 OPERATION.

The Model 2244 is a two way voice module which can stand-alone or interface directly to either a supported DVR interactive video system.

1.2.1 Operation with Honeywell Rapideye, cVideo or Westec video systems.

The Model 2244 is activated by a switch closure between the TRIP and GND terminals. This closure typically comes from an "Emergency Phone." The 2244 in turn is used to activate the video system and/or an alarm panel. The video system will connect to the central station via a dial-up ISDN or POTS line. Once the connection is made by the video system to the central station, the central station computer will pass a phone number, via the video system, to the Model 2244. This phone number is the number for a phone at the operator's location who is handling the alarm. Once the Model 2244 has the phone number, it will dial out over a second line and connect to the central station operator. The operator can now use the phone to communicate to the premise via the "Emergency Phone" or any of the possible 48-speaker/mic zones. The operator can also use the central station computer to control which zones to turn on/off, control the two way operation or re-program most of the 2244's options.

Note: When the Model 2244 is used with either a cVideo or Westec DVR the Model 2044 Serial Interface module is required.

1.2.2 Operation in a stand alone (dial up mode) when used with other video systems.

When the Model 2244 is used in a stand-alone mode or with video systems other than the Rapideye, cVideo or Westec DVR's, a switch closure between the TRIP and GND terminals will cause the Model 2244 to dial a pre-programmed phone number stored in its' EEPROM. When the called party answers the call, they can use their Touch Tone phone to communicate to the premise via the "Emergency Phone" or any of the possible 48 speaker/mic zones, select which zones to turn on/off, control the 2-way operation or re-program all of the 2244's options.

1.2.3 Operation in a stand alone (trip to audio) mode.

When the 2244 is used in the stand alone (trip to audio) mode it responds to the trip input not by dialing, but by activating the audio mode either immediately or in the five minute one ring call back mode. See Options 6, 7 & 8. In this mode the 2244 is on line as soon as the digital communicator has finished reporting the alarm to the central station. If the 2244 is programmed to activate immediately (link mode) the output from the communicator that causes the closure between the TRIP and GND terminals of the 2244 must activate at exactly the same time the communicator is "kissed-off" (disconnected) in order to maintain the Telco connection. Six seconds after the 2244 is activated by the trip input it will generate an alert tone every two seconds to let the operator know it is on line and waiting for them to press a DTMF digit. Once that occurs the 2244 is controlled via the DTMF digits in the normal fashion.

1.2.4 "Emergency Phone"

The "Emergency Phone" used with the Model 2244 can be a standard telephone designed for the TELCO network but if that type of phone is used a separate switch needs to be installed to activate the Model 2244.

Phones are available that have this switch built in. Contact Eagle Alarm Verification Products customer service for information.

1.2.5 General

The Model 2244 can be expanded from one zone (Model 2244 only) to as many as 48 zones by adding one or more Model 1410 four zone expansion modules.

A VCR via the VCR output can record the audio picked up by Microphone Zone One during standby, along with all the audio present during an alarm call.

The Model 2244 also features an integrated 12VDC power supply and battery charger. The power supply has an AC indicator, DC indicator, Reversed Battery polarity protection with indicator, and a Low Battery sensing circuit with indicator and open collector output.

2.0 REQUIREMENTS.

2.1 POWER.

Operating voltage: 16 VAC 20VA Eagle p/n 115004 Class II Plug-In transformer (user supplied)

2244 Current draw (standby/active): 75 mA / 175 mA

1410 Current draw (active): 10 mA plus 15 mA per active zone

2.2 SYSTEM.

The Eagle 2244 requires the following hardware:

1. A local "Emergency Phone" or other means to Trip the 2244.
2. Connections to power (16VAC & Ground) and telephone (Tip & Ring).
3. Model 1410 Four Zone Expansion Module (optional up to 12 maximum)
4. A minimum of one speaker/microphone (Eagle Model 2172F Flush Mount or 2172S Surface Mount)
5. Model 2044 Serial Interface Module if using either a cVideo or Westec DVR

3.0 INSTALLATION.

3.1 INSTALLATION SUMMARY.

1. Mount the Model 2244 into control panel or wiring box.
2. Connect a telephone cord from the telephone interface to the telephone connection (P4) on the 2244.
3. Connect Model 1410 Four Zone Expansion Module to 2244 via included cable.
4. Run cable (standard 4 conductor) from the 1410 Expansion Module to the speaker/mic location(s).
5. Connect cable from the 2172 speaker/mic to the 1410 Four Zone Expansion Module **SPK & MIC** connectors.
6. Mount one Eagle Model 2172 speaker/microphone, if applicable.
7. Connect additional Model 2172 Speaker/Mic's, if desired, to the Model 1410 Four Zone Expander.
8. Program EEPROM.
9. Connect Earth Ground to terminal strip. Connect power & system ground to terminal strip.
10. Connect the "Emergency Phone" to the tip and ring terminals of the emergency phone terminal strip. Connect the "Emergency Phone" trip (hook) switch to the TRIP and GND terminals.
11. If using the Honeywell Rapideye video systems connect them, via the cable provided, to the DATA IN, CLK and GND terminals. If using the cVideo or Westec DVR connect to the +12, DATA OUT, CLK & DATA IN terminals.
12. Connect the trip input of the video equipment to the N.O. & COM terminals of the relay terminal strip. To turn off sirens during the 2-way session connect a 12vdc relay to the RELY & +12 terminals of the relay terminal strip and run one side of the siren through the relay.
13. If using a VCR to record the audio connect the VCR's audio input to the VCR and GND terminals.

3.2 WIRING AND PLACEMENT.

3.2.1 TERMINAL STRIP DESCRIPTION - WIRING CONNECTIONS

AC/AC: Connect 16VAC 20VA power to these positions. This powers the module.

EARTH GND: Connect EARTH GROUND to this terminal. This is **MANDATORY** for proper surge & lightning protection! Warranty voided without proper EARTH connection.

+ BATT / - BATT: Connect external backup battery here.

(Continued next page.)

DEFAULT: To restore the Default Program Options momentarily short together the two DEFAULT pads.

AUXILLIARY CONNECTOR:

Pin assignments:

- Pin 1..... +5 VDC
- Pin 2..... GND
- Pin 3..... Tones Digitized
- Pin 4..... Tones Analog
- Pin 5..... Tip
- Pin 6..... Ring
- Pin 7..... +12 VDC
- Pin 8..... /Line Seizure

N.C...... This relay is energized whenever the “Hot Phone”

COM...... is off hook and is used to trip the DVR and/or the

N.O...... Alarm panel.

RELY ... To turn off sirens or bells during “Listen” connect a 12 volt DC relay between RELY & +12

+12..... Connect to siren shut off relay and/or Model 2044 Serial Interface Module.

DATA IN..... Connect to Honeywell Rapideye or Model 2044 Serial Interface Module.

CLK..... Connect to Honeywell Rapideye or Model 2044 Serial Interface Module.

DATA OUT.... Connect to Model 2044 Serial Interface Module.

VCR Connect to VCR or other recording device’s Audio Input

GND..... Connect to Honeywell Rapideye or Model 2044 Serial Interface Module and/or VCR Audio Gnd.

T..... Connect to Tip from the “Hot Phone”

R Connect to Ring from the “Hot Phone”

TRIP..... Connect to the hook switch from the “Hot Phone”

GND..... Connect to the hook switch from the “Hot Phone”

Phone Jack..... Connect to Tip & Ring of the “outside” telephone line

MIC Connect to the microphone connection of the Model 2172 Speaker/Microphone Module, no polarity

MIC Connect to the microphone connection of the Model 2172 Speaker/Microphone Module, no polarity

SPK..... Connect to the speaker connection of the Model 2172 Speaker/Microphone Module, no polarity

SPK..... Connect to the speaker connection of the Model 2172 Speaker/Microphone Module, no polarity

Note: The MIC/SPK terminals on the Model 2244 allow the connection of one Model 2172 and are always active and cannot be switched ON/OFF by the central station operator. Use Model 1410 Four Zone Expansion Module for switchable zones.

3.2.2 ACTIVATION RELAY & AUDIO ACTIVE RELAY OUTPUT.

The RELAY on the Model 2244 follows the state of the “EMERGENCY PHONE” trip input. The relay is energized (changes state) when the “EMERGENCY PHONE” is off hook and de-energizes when it is on hook. This relay is used to trip (activate) other devices in the system such as the video equipment and/or an alarm control panel. The relay can be used to disable sirens during the 2-way session.

In addition, an open collector output is provided which is active (gnd.) whenever the 2244 is active and the operator is on line. This output can be used to activate a 12vdc relay with a coil resistance of 48 ohms or greater. The voltage suppression diode is built-in.

TABLE 1: ACTIVATION RELAY & AUDIO ACTIVE RELAY OUTPUT WIRING CONNECTIONS.

TERMINAL ID	CONNECTION
N.C.	Normally Closed contacts of the activation relay.
COM.	Wiper of the activation relay.
N.O.	Normally open contact of the activation relay.
RELY	Transistor open collector output. Connect to one side of a relay coil.
+12	+12 VDC. Connect or the other side of a relay coil.

3.2.3 SPK/MIC (P2) - ONBOARD SPEAKER AND MICROPHONE CONNECTIONS.

The Model 2244 offers an onboard speaker and microphone connections. This allows the unit to be utilized without the Model 1410 Four Zone Expansion Module. THESE CONNECTIONS ARE NOT ZONED. THEY ARE ALWAYS ACTIVE.

TABLE 2: ONBOARD SPEAKER AND MICROPHONE CONNECTIONS.

TERMINAL ID	CONNECTION
MIC	MICROPHONE
MIC	MICROPHONE
SPK	SPEAKER
SPK	SPEAKER

3.2.4 PHONE (P6) - “EMERGENCY PHONE” CONNECTIONS.

The Model 2244 is activated when a local “emergency phone” is taken off-hook, provided it has a separate TRIP OUTPUT which can be connected to the Trip Input of the 2244, or by the “EMERGENCY” button when used with a hands free “Emergency Phone”. This in turn activates the activation relay. The contacts of the activation relay are used to trip the video system and an alarm panel.

TABLE 3: “EMERGENCY PHONE” CONNECTIONS.

TERMINAL ID	CONNECTION
T	Connect one of the “EMERGENCY PHONE” telco connections here.
R	Connect the other “EMERGENCY PHONE” telco connection here.
TRIP	Connect one side of the TRIP output (hook switch) here.
GND	Connect the other side of the TRIP output here.

3.2.5 AIT/VCR – Javelin & Sensormatic DATA BUSS AND VCR AUDIO CONNECTIONS.

The Model 2244 offers connections to connect with the Honeywell Rapid Eye video systems data buss or to an Eagle Model 2044 RS232 Serial Interface for use with cVideo or WESTEC DVR’s. These connections allows the 2244 to be controlled remotely from a central station via the video communications path. Additionally, the Model 2244 offers the ability to output microphone audio to a VCR audio input. When the 2244 is not active the internal microphone and/or mic 1 from the 1410 are fed to the VCR output. When the 2244 is active all audio in both directions is fed to the VCR output.

TABLE 4: VCR & DVR Connections.

TERMINAL ID	CONNECTION
DATA IN	Data in from the video panel.
CLOCK	From the video panel.
DATA OUT	Data to the video panel. cVideo & Westec only
VCR	Audio output to VCR.
GND	Common ground for both video panel and/or VCR.

3.2.6 MODEL 1410 CONNECTOR - "TO FIRST MODEL 1410"

This connector is used to interface the Model 2244 to one or more (up to 12) Model 1410 Four Zone Expansion Modules. The function of each connection is as follows:

TABLE 5: MODEL 1410 CONNECTOR.

Pin	Description
Pin 1	Audio from all microphones that are active on the 1410.
Pin 2	GND from the 2244.
Pin 3	+12 VDC from the 2244.
Pin 4	Audio from just microphone Zone 1. (1 st Model 1410)
Pin 5	Data from the 2244 expansion buss.
Pin 6	Clock from the 2244 expansion buss.
Pin 7	Strobe/latch from the 2244 expansion buss.
Pin 8	Audio to the 1410's speaker drivers.

3.2.7 AUXILIARY CONNECTOR.

This connector is used to connect the **Model 2144** Dial Tone Detection and Line Seizure module or just a user supplied 12 VDC relay used for line seizure.

TABLE 6: AUXILIARY CONNECTOR.

Pin	Description
Pin 1	+5 VDC From the 2244
Pin 2	GND from the 2244.
Pin 3	Digitized Tones to the 2244
Pin 4	Analog Tone from the 2244
Pin 5	Tip
Pin 6	Ring
Pin 7	+12 VDC from the 2244
Pin 8	/Line Seizure (open collector) from the 2244

3.3 ADJUSTMENTS/INSTALLATION.

SPEAKER VOLUME - Adjusts the gain of the speaker connected to the 2244; CW - increases gain; CCW - decreases gain.

ALL MICS VOLUME - Adjusts the gain of all active microphones (these are connected to the VCR output when the 2244 is active); CW - increases gain; CCW - decreases gain.

MIC 1 ONLY VOLUME - Adjusts the gain of microphone #1 on the 1410 Zone Expander ONLY (this is connected to the VCR output when the 2244 is NOT active); CW - increases gain; CCW - decreases gain.

SINGLE MIC VOLUME - Adjusts the gain of microphone CONNECTED TO THE 2244; CW - increases gain; CCW - decreases gain.

3.4 SPEAKER/MIC INSTALLATION.

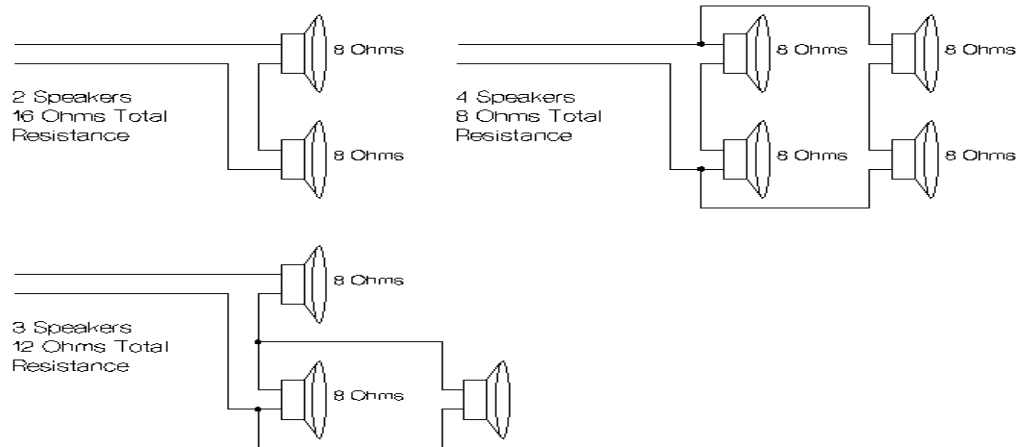
3.4.1 LOCATION.

A speaker/mic can cover a range of up to 2500 square feet. This is dependent on the environment in which they are installed. Installation is recommended at or near system keypads with a minimum of one per floor, excluding basement.

3.4.2 QUANTITY OF SPEAKER/MICS.

Up to four (4) Model 2172 microphones *per channel* may be used with the Eagle FALSE ALARM 2244. Up to four speakers *total* may be used when connected in a series-parallel combination so **as not to drop below eight (8) ohms of total impedance**. See Diagram 1.

DIAGRAM 1: WIRING MULTIPLE SPEAKERS.



4.0 ACTIVATION.

4.1 EMERGENCY PHONE ACTIVATION

Taking the receiver "hand set" of the emergency phone off hook closes the separate switch connected to the TRIP and GND terminals. This activates the dialer function of the 2244 and energizes the activation relay. The 2244 will go off hook, and wait up to 99 seconds for a phone number to dial if used with the Rapideye or Sensormatic video systems. If it does not get a number within the programmed time period it will dial the re-programmed phone number from the 2244's EEPROM.

If the 2244 is used in a standalone mode or with other video systems, when the Trip input is activated the 2244 will wait for three (3) seconds then dial the pre-programmed phone number.

4.2 CALL IN ACTIVATION

The 2244 can be programmed to answer an incoming call with a pre-programmed number of rings. Once the call is answered, a code must be entered to access the audio circuits. (See option 3.)

4.2.1 Voice Message Bypass. (See option 1)

Voice message bypass operates in the following manner:

1. Call the 2244 and let the phone ring the programmed number of times.
2. Hang up and wait a minimum of 10 seconds but no more than 60, and then call the 2244 again.
3. The 2244 will answer on the first ring.
4. Enter the programmed acknowledge sequence. (See option 3)

Note: A one is added to the number of rings programmed and that number is also tested for the Voice Message Bypass. Hence, if a two was programmed in Option 1 either two or three rings will cause the 2244 to set up for Voice Message Bypass.

4.3 LED INDICATORS

The 2244 features five LED indicators, AC, DC, Low Battery, Reversed Battery, and Status. From the LED status indicators, a technician can determine the current status of the module. Table four summarizes the four different modes of the status indicator. The following list summarizes the other four status LED's:

AC - AC is present if LED is ON.

DC - DC is present either from the DC power supply or from the battery if LED is ON.

LB - The battery voltage is low or the battery is missing when the LB LED is flashing.

RB - The battery leads have been connected in reverse (+) to (-) when the RB LED is ON.

TABLE 6: STATUS LED INDICATOR.

# FLASHES EVERY SIX SECONDS	MODE
1 (ONE)	STANDBY OPERATION - ALL OK
2 (TWO)	ONE RING CALL BACK MODE, WAITING FOR RING
3 (THREE)	CALL HAS BEEN ANSWERED, WAITING FOR ACKNOWLEDGMENT CODE.
4 (FOUR)	EMERGENCY PHONE HAS COMPLETED CALL, WAITING FOR CS OPERATOR TO PRESS DTMF DIGIT.
STEADY ILLUMINATION	TWO WAY ACTIVE.

4.4 CENTRAL STATION DETECTION.

The 2244 features central station detection with auto-disconnect. This feature allows the module to detect if the central station receiver operator failed to send a shut down command. The 2244 will automatically shut down (within 15 seconds) of the operator hanging up.

5.0 PROGRAMMING THE MODULE.

5.1 OPTION DESCRIPTION.

Option 1: Voice Message Bypass

This is also known as the ring-pause ring mode. This option selects the number of rings for the first “ring” before hanging up and calling back. The unit will always answer on the first ring subsequent to hanging up after the required number of rings, provided the option is enabled.

Note: You must wait at least 10 seconds, but no longer than 60 seconds, when making the second call.

1 – 9 = Selects Bypass. The number entered selects the number of rings required before hanging up.

0 = Option disabled.

DEFAULT = 0

Option 2: Full Time Call Back

This option determines the number of rings the 2244 will answer when in the call back mode.

1 – 9 = Selects full time callback active. The number entered selects the number of rings before the 2244 answers.

0 = Option disabled.

DEFAULT = 1

Option 3: Call – In or Alarm Call Acknowledge Code

This option determines which sequence of Touch Tone digits will acknowledge the TERMINATOR™ in the call - in mode or after an alarm activation and call to the central station.

1 = Single * will access

2 = Custom code (User Code only) will access

DEFAULT = 1

Option 4: No Activity Time

This option selects how much time must pass before the 2244 hangs up when no DTMF digits are sent from the central station.

0 – 9 = Enter the time, in minutes.

0 = Option disabled.

DEFAULT = 5

Option 5: Phone number transmission delay

This option selects the amount time the 2244 waits for the video equipment to send the telephone number to dial. If the time elapses before a number is received the 2244 will dial the DEFAULT phone number. Time is programmed in number of seconds from 00 to 99 (1sec increments) when using the cVideo/Westec interface or 00 to 99 (4sec increments for a total of 396 seconds) with the Honeywell RapidEye interface.

Example: To program an 20 second wait with the cVideo/Westec interface, enter 20.

Example: To program an 20 second wait with the RapidEye interface, enter 05.

Note: The leading 0 must be entered for numbers less than 10.

Option 6: Momentary or Continuous Trip Input

This option determines whether or not the “Emergency Phone” Trip input will cause the 2244 to latch with a momentary input such as the EMERGENCY button on a hands free “Emergency Phone” or require that the input remain active until the central station operator comes on line as with a standard hand set type “Emergency Phone” with a separate trip switch.

- 1 = Continuous
 - 2 = Momentary
- DEFAULT = 1

Option 7: Emergency Phone or Trip Input

This option determines whether or not the Trip input will be used with an “Emergency Phone” causing the 2244 to dial out or will be used with a “Control/Communicator” causing the 2244 to activate in the conventional audio modes.

- 1 = Emergency Phone
 - 2 = Control/Communicator
- DEFAULT = 1

Option 8: Serial Interface

This option determines what type of DVR interface the 2244 will use. Entering a 2 will select the standard RS232 serial interface as used by cVideo & WESTEC DVR's. Entering a 1 will select the RapidEye limited serial interface.

- 1 = Honeywell RapidEye interface
 - 2 = cVideo or Westec (Requires Model 2044/RS232 Serial interface)
- Standard DEFAULT = 1 Honeywell RapidEye video Default
Westec DEFAULT: = 2 Cvideo or Westec video Default

Option 9: Immediate (Link) or Five Minute One Ring Call Back Mode

If Option 7 (above) is selected as a 2, “Control/Communicator”, then this option determines whether or not the Trip input will cause the 2244 to activate in the Immediate (Link) mode or in the One Ring Call Back mode.

- 1 = Immediate
 - 2 = One Ring Call Back (for 5 minutes)
- DEFAULT = 1

Option 10: 20 Digit Telephone Number

This is the telephone number (up to 20 digits) that the 2244 will dial when the trip input is activated and the 2244 is used in a stand-alone mode or when the Rapideye or Sensormatic video equipment is connected but fails to send a phone number in the programmed time period.

Enter up to 20 digits. If less than 20 digits are used, a # must be entered after the last digit, the # indicates end of the phone number to the 2244 and causes it to exit the program mode and generate the program progress tone.

Standard DEFAULT: 1-555-555-5555
Westec DEFAULT: (not published)

Note PAUSES: A * followed by a number between 1 & 9 can be entered between phone numbers to generate pauses. The number following the * multiplied times 2 equals the pause time in seconds.

Example: to program a phone number with a 2 second pause after the 1st number such as 9 (pause) 5551212 enter the following: 9 * 1 5551212# a 4 second pause would be: 9 * 2 5551212# etc.

Program Access Code (Dealer Code)

This option allows the dealer/central station to access the module but only to enter the programming modes. The Program Access code can only be changed using the Access code change mode. It cannot access the 2-way mode.

Any four digits, 0000 through 9999 (numbers ONLY) may be programmed.
DEFAULT = 1 2 3 4

User Access Code

This option is used to program the USER access code. The USER access code is used when an access code is required on a call in to the 2244. See Option 3.

The USER access code can also be used to re-program itself but not change any other options, the phone number or the Program Access code.

Any four digits, 0000 through 9999 (numbers ONLY) may be programmed. DEFAULT = 5 6 7 8

5.2 ACCESSING PROGRAMMING VIA TELEPHONE CALL-IN.

To enter any of the three program modes call the 2244 using a DTMF telephone.

1. When the 2244 answers, you will hear the ring answer tones, *bop/beep_beep/bop*. Enter the appropriate Acknowledge code. (Default = *) If the Acknowledge code is correct you will hear the acknowledge tone *beep_beep_beep*.
2. Now enter * followed by the DTMF digit representing the program level you wish to enter, re:
Serial Interface = 6
Delay before dialing default = 7
Telephone number = 8
Access codes = 9
Main program = 0
You will hear a single beep after the * and the program progress tones, *bop_bop_bop* after the second digit.
3. Now enter the Program Access Code. (Default = 1 2 3 4) You will hear the program progress tones *bop_bop_bop* if the Program Access Code is correct.
4. Now enter the new phone number, access code or program options. (See Options)
5. If you are programming just a phone number place a # after the last digit. (Example: To program 555-1234, enter 5 5 5 1 2 3 4 #)
6. When you have finished programming and have entered less than all the options, enter * # to save the data and exit the program mode.
7. If you wish to exit the program mode without saving the data enter * * # .

PROGRAMMING NOTES:

If you make a mistake while programming and wish to start over, enter a single * * * , then re-enter the data from the beginning.

If you are programming an access code, including the Program Access Code, the 2244 will automatically exit the program mode when the last digit is entered.

If you are programming options (excluding the phone number) you must press * # to exit the program mode.

When the 2244 exits the program mode via any of the above methods you will hear the program progress tones, *bop_bop_bop*.

5.2.1 DEFAULTING THE PROGRAM

If you get lost in the programming and need to reset the unit to its default programming, momentarily short the two pins labeled DEFAULT located on the edge of the board in the area next to the Stored Audio connector.

6.0 CONTROLLING THE MODULE.

6.1 SWITCHING BETWEEN MANUAL TALK & LISTEN AND VOX.

When connected via either the Rapideye or Sensormatic video systems refer to their manuals for controlling the audio, zones and programming via the central station computer.

When connected to other video equipment or when in a stand-alone mode and after the module has been successfully activated by, either calling it or answering an alarm call made by the 2244 the operator can control the operation of the system using a Touch-Tone® phone in the following manner:

Note: The 2244 can still be controlled via Touch-Tone® phone even when connected to a Rapideye or Sensormatic video system.

<u>DIGIT</u>	<u>DESCRIPTION</u>
1	Switch to "TALK" only mode, high volume.
2	Switch to "VOX" mode normal gain and volume.
3	The DTMF digit 3 will: a) Switch to "LISTEN" only mode at high gain if the 2244 is presently in a mode other than "LISTEN" only, or: b) Toggle from High gain to Normal gain and visa-versa if the 2244 is already in the "LISTEN" only mode.
7	Reset no-activity hang up timer.
9	Hang up the 2244.

CAUTION: IF THERE IS A LOUD, CONTINUOUS BACKGROUND NOISE, SUCH AS A RADIO, THE CENTRAL STATION OPERATOR SHOULD NOT ATTEMPT TO INCREASE THE GAIN OF THE 2244. THIS MAY CAUSE THE SYSTEM TO LOOSE THE ABILITY TO RECOGNIZE THE TONES FROM THE CENTRAL STATION. IF THE MODULE "LOCKS-UP" INTO THE "LISTEN ONLY, HIGH GAIN" MODE, PRESS AND HOLD THE DIGIT 2 FOR A MINIMUM OF FIVE (5) SECONDS. THIS SHOULD UNLOCK THE MODULE. REPEAT IF NECESSARY.

6.2 EXTENDING & DISCONNECTING.

The 2244 provides up to nine minutes of two way provided no DTMF digits are pressed. During two way, the module will generate a "beep" once every minute. Upon the fourth and final minute of two way the module will generate a two tone "beep bop" warning the central station that there is only one more minute of two way before the module automatically disconnects. These beeps will be heard at the premise when module is in the "TALK MODE". The central station will always hear these beeps. To reset the listen in shut down time and cause it to start from zero, press and release digit 7 at any time during the two way (before the module disconnects). Additionally, anytime a DTMF command is sent the module will automatically reset the timer. The only time the 7 command need actually be sent is when the module is used in the "LISTEN ONLY" mode for the duration of the call. To shut down the module, press and release digit 9 at any time. Before the module shuts down it will generate a "beep-beep-bop" tone indicating it is disconnecting.

6.3 SPEAKER & MIC ZONE CONTROL (MODEL 1410).

The 2244 has provisions for selecting zones when utilizing the Model 1410 Four Zone Expansion Module. This provides the central station with the ability to activate or de-activate any or all speaker and microphone zones.

When the module activates, no zones are active. Zones are toggled ON and OFF. Touch tone command # activates the two digit zone command sequence. For example, to toggle zone one, the command # 0 1 is sent. All zones MUST BE TWO DIGITS means the leading 0 is **mandatory** when selecting zones less than 10!

To turn OFF ALL zones, the command # # is sent. To turn ALL zones ON, the command # * is sent.

TABLE 8: TOUCH-TONE® COMMAND SUMMARY.

TOUCH -TONE ® COMMAND	FUNCTION
1	TALK ONLY
2	VOX MODE
3	LISTEN ONLY, HIGH GAIN or TOGGLE
5 n	STORED AUDIO CONTROLS (FUTURE RELEASE)
7	RESET SHUT DOWN TIMER or IGNORE SUBSEQUENT ALARM
9	SHUT DOWN MODULE or ALLOW SUBSEQUENT ALARM TO REPORT
*	ACTIVATE MODULE FROM CALL BACK MODE (DEFAULT)

TABLE 9: MICROPHONE TOUCH-TONE® COMMAND SUMMARY.

TOUCH -TONE ® COMMAND	FUNCTION
# 0 1 – # 4 8	TOGGLE ZONES 1-48
# #	ALL MICROPHONES OFF
# *	ALL MICROPHONES ON

6.4 ON BOARD SPEAKER/MIC CONNECTION.

Only one (1) speaker/mic zone exists on the 2244 board itself and it remains active at all times, independent of which zone is selected.

7.0 OPTIONAL CONNECTIONS.

7.1 MODEL 1410 FOUR ZONE EXPANSION MODULE.

The Model 1410 Four Zone Expansion Module allows the expansion of the 2244 to either four or eight microphone and speaker zones. Each Model 1410 adds four zones. Up to two 1410's can be added (in daisy chain fashion). The first Model 1410 in the chain is connected to the "MODEL 1410" connector (P1) via the cable included with the 1410. Reference the instructions included with the Model 1410 for further details.

7.2 DIGITALLY STORED AUDIO MODULE.

When available, Eagle's Digitally Stored Audio Module stores sounds occurring in the premises prior to alarm activation can be connected to the 2244 Module via the **AUX BOARD (P5)** connector.

8.0 NOTES & RETURNS.

TECHNICAL SUPPORT HOTLINE: 800.447.E3A2G4L5E

When using multiple speaker/mics at the subscriber end, be aware that loud background noise picked up by one speaker/mic will "drown out" the other speaker/mic.

As with all electronic devices, electrostatic discharges can damage the components. Handle the circuit board with care!

Features and specifications subject to change without notification.

Use of this equipment may be in violation of local laws. Please verify and obey all local laws. Eagle Alarm Verification Products, Inc. does not assume any liability for the illegal use of this equipment.

Trademarks and Registered Trademarks are the property of their respective owners.

RETURNS:

IMPORTANT: COPY, COMPLETE AND RETURN THIS FORM WITH YOUR RETURNS.

NOTE: YOU MUST OBTAIN A RMA NUMBER FROM TECH SUPPORT FROM THE FIELD BEFORE RETURNING PRODUCT.

SECTION 1 (TO BE COMPLETED BY DEALER) DATE/...../.....

RMA NUMBER	PHONE No. (.....)
DEALER NAME	FAX No. (.....)
ADDRESS	CONTACT
CITY/STATE ZIP	
SHIP TO	SHIP REPAIRED PRODUCT VIA:
.....	UPS UPS BLUE UPS RED
	YOUR FED-EX #

SECTION 2 (TO BE COMPLETED BY DEALER)

LINE #	PART NUMBER	DESCRIBE PROBLEM	COSMETIC REPAIR (Y/N)
1			
2			
3			

9.0 FCC REQUIREMENTS

1. The Federal Communications Commission (FCC) has established Rules which permit this device to be directly connected to the telephone network. Standardized jacks are used for these connections. This equipment should not be used on party lines or coin lines.
2. If this device is malfunctioning, it may also be causing harm to the telephone network; this device should be disconnected until the source of the problem can be determined and until repair has been made. If this is not done, the telephone company may temporarily disconnect service.
3. The telephone company may make changes in its technical operations and procedures; if such changes affect the compatibility or use of this device, the telephone company is required to give adequate notice of the changes. You will be advised of your right to file a complaint with the FCC.
4. If the telephone company requests information on what equipment is connected to their lines, inform them of:
 - a. The telephone number this unit is connected to
 - b. The ringer equivalence number
 - c. The USOC jack required
 - d. The FCC Registration number

Items 'b' and 'd' are indicated on the label.

The ringer equivalence (REN) is used to determine how many devices can be connected to your telephone line. In most areas, the sum of the RENs of all devices on any one line should not exceed five (5.0). If too many devices are attached, they may not ring properly.

5. In the event of equipment malfunction, all repairs should be performed by our Company or an authorized agent. It is the responsibility of users requiring service to report the need for service to our Company or to one of our authorized agents. Service can be obtained at:

Eagle Alarm Verification Products, Inc.
77 Dingens Street Suite B
Buffalo, NY 14206
SALES: 800.447.E₃A₂G₄L₅E or 716.827.6500
FAX: 716.827.6505

**TECHNICAL SUPPORT HOTLINE:
800.447.E₃A₂G₄L₅E**

or at your local installation company.

EAGLE ALARM VERIFICATION PRODUCTS Model 2244
Complies with Part 68, FCC Rules
FCC Registration #: 1SYUSA-18688-KX-N
Ringer Equivalence : 0.0B

LIMITED WARRANTY

Eagle Alarm Verification Products, Inc. warrants that the products of its manufacture shall be free from defects in materials or workmanship to one year from the date of invoice if such goods have been properly installed, are subject to normal proper use, and have not been modified in any manner whatsoever. Upon return of the defective product to the nearest Eagle Alarm Verification Products dealer, Eagle Alarm Verification Products will, at its sole discretion, either repair or replace, at no cost to the customer, such goods as may be of defective material or workmanship. Customers outside the United States are to return products to their distributor for repair.

In addition, any out of the box failure will be replaced at no charge providing the unit has not been altered physically. Alterations include, but not limited to, soldering, the addition of tape / foam tape or any form of physical damage.

EAGLE ALARM VERIFICATION PRODUCTS, INC. SHALL NOT UNDER ANY CIRCUMSTANCES BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM LOSS OF PROPERTY OR OTHER DAMAGE OR LOSSES OWING TO THE FAILURE OF EAGLE ALARM VERIFICATION PRODUCTS' PRODUCTS BEYOND THE COST OF REPAIR OR REPLACEMENT OF ANY DEFECTIVE PRODUCTS.

EAGLE ALARM VERIFICATION PRODUCTS, INC. MAKES NO WARRANTY OF FITNESS OR MERCHANTABILITY AND NO OTHER WARRANTY, ORAL OR WRITTEN, EXPRESS OR IMPLIED, BEYOND THE ONE-YEAR WARRANTY EXPRESSLY SPECIFIED HEREIN.

INSTALLATION NOTES