



Instruction Manual

EAS DIGITAL/ANALOG OVERRIDE INTERFACE

Model 988

Monroe Electronics
100 Housel Ave
Lyndonville NY 14098-0535
800-821-6001 | 585-765-2254 | fax 585-765-9330
www.monroe-electronics.com
020906

Table of Contents

Warranty	3
Specifications	4
General Overview	5
Getting Started	6 -13
Installation	14
Operation	15
Local Authority Instructions	16
Front Panel View/Figure 1	17
Wiring Diagrams	18, 19

Warranty

Monroe Electronics, Inc. warrants to the owners, each instrument and sub-assembly manufactured by them to be free from defects in material and workmanship for a period of one year after shipment from factory. This warranty is applicable to the original purchaser only.

Liability under this warranty is limited to service, adjustment or replacement of defective parts (other than fuses or batteries) on any instrument or sub-assembly returned to the factory for this purpose, transportation charges prepaid.

This warranty does not apply to instruments or sub-assemblies subjected to abuse, abnormal operating conditions, or unauthorized repair or modification.

Since Monroe Electronics, Inc. has no control over conditions of use; no warranty is made, or implied as to the suitability of our product for the customer's intended use.

THE WARRANTY SET FORTH IN THIS ARTICLE IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES AND REPRESENTATIONS, EXPRESSED, IMPLIED OR STATUTORY INCLUDING, BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. Except for obligations expressly undertaken by Monroe Electronics, in this warranty, Owner hereby waives and releases all rights, claims and remedies with respect to any and all warranties, express, implied or statutory (including without limitation, the implied warranties of merchantability and fitness), and including but without being limited to any obligation of Monroe Electronics with respect to incidental or consequential damages, or damages for loss of use. No agreement or understanding varying or extending the warranty will be binding upon Monroe Electronics unless in writing signed by a duly authorized representative of Monroe Electronics.

In the event of a breach of the foregoing warranty, the liability of Monroe Electronics shall be limited to repairing or replacing the non-conforming goods and/or defective work, and in accordance with the foregoing; Monroe Electronics shall not be liable for any other damages, either direct or consequential.

Return Policy

Materials returned to Monroe must have a Return Material Authorization number. To obtain a RMA number, contact our A/V Switching & Control Customer Service at 585-765-2254 or fax 585-765-9330. Customers have 30 days to determine that the product ordered fills their need and performs as described in Monroe's literature. Units returned for approved repair or credit, must be in the original packaging including all parts and paperwork plus be in very good physical condition. If not, the customer is billed the cost to refurbish the unit and for missing accessories and merchandise. No products may be returned for exchange or credit after 12 months of the shipment date. Monroe reserves the right to repair or replace units under warranty.

Specifications

Number of rings before answer

1 to 8

Automatic time out

1 minute with no or incorrect activities

Access code selection

Any three numerical digits

Alert Duration

15 minutes to 24 hours

Number of FIPS Codes

Nine maximum

Power requirements

+ 12 volts DC; 94-240 VAC wall unit supplied

External switching

Two (2) SPDT relays (SWITCH 1 AND SWITCH 2)
2 Amp 30 volts DC non-inductive loads

Indicator lights

One (1) to indicate "TELEPHONE OFF HOOK"

Maximum message length

60 seconds

Equipment Supplied

Power Supply

11 position plug

USB programming cable

25 foot modular line cord

CD with setup program and instruction manual

General Overview

Some EAS decoder/encoders have no installed or available provision for local access to the emergency alert system in place in their area.

To provide local access for these systems, the 988 offers a means to activate the decoder for selected FIPS areas with a predefined alarm message display and allows the caller to record a message to be played to the telephone caller upon answering.

Getting Started

The following “Getting Started” steps are programming functions that must be accomplished before installing your 988. Please refer to the installation instructions on page 15 in conjunction with the following steps.

After removing the unit from the shipping package, install the setup program on a PC running Microsoft Windows. A USB port must be available.

Connect the power supply to the 988, and install the USB cable from the PC to the 988.

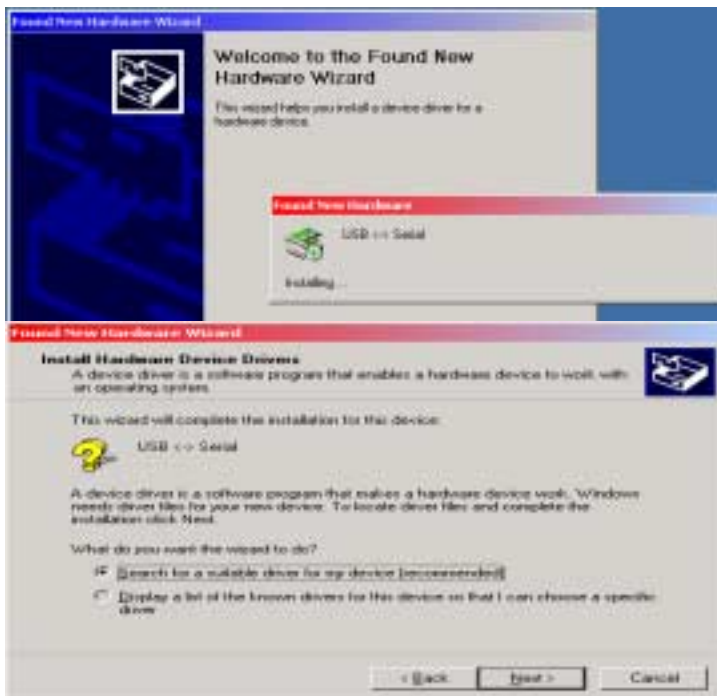
The 988 Setup Software

The 988 software will setup the unit via the USB (Programming) port. It allows the programmer to set up the time in GMT (Greenwich Mean Time), Number of Rings to Answer, Access Code, Station ID, Duration, Originator, Event Type, and up to 9 FIPS codes.

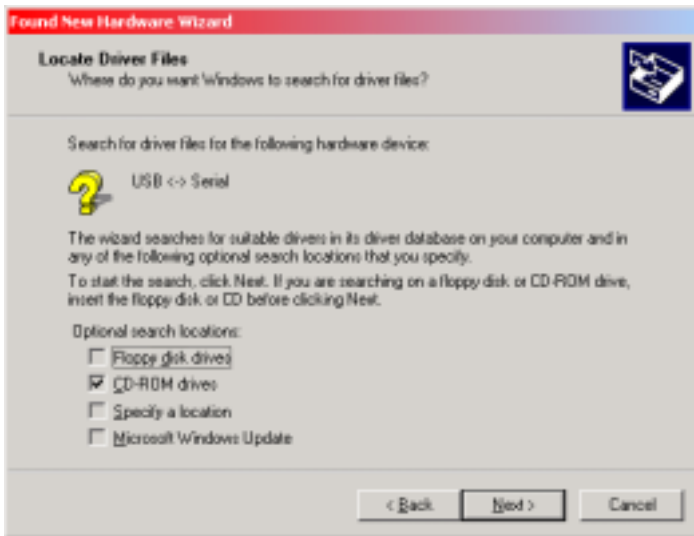
Installing USB driver

Upon initial connection of the 988's Programming port to the USB of the computer, it will ask for the driver location. The driver is a program that is included on the CD supplied.

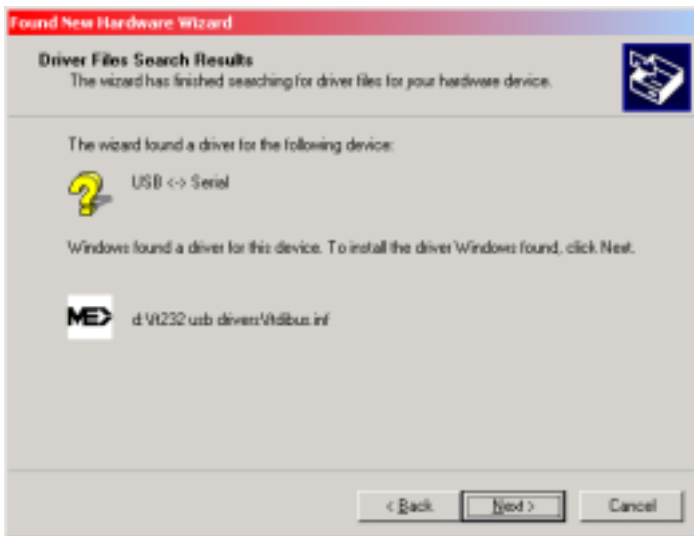
1. Insert the 988 Setup CD into your computer. If the splash screen comes up, click **Exit**.
2. Connect the 988 Programming port to your computer's USB port with the cable provided.
3. Supply power to the 988 unit. If the driver is not yet installed for the USB port, the following will come up. Follow the instructions:



Select “**Search for a suitable driver for my device**”, then click the **Next**.



Select the CD-ROM drives, and then click **Next**.



Click **Next** again.



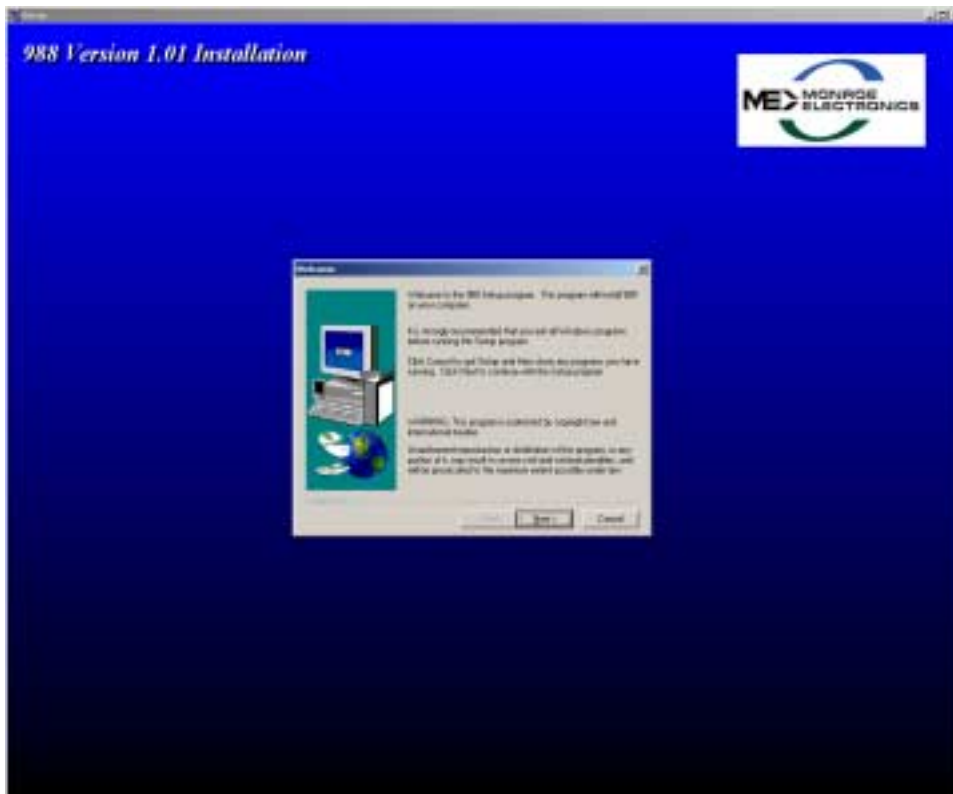
Click **Finish**. Windows may repeat the process again to complete the USB driver installation.

Installing the 988 Setup software

Insert the 988 CD into your computer. The following screen will come up.



Click on **Installation.**

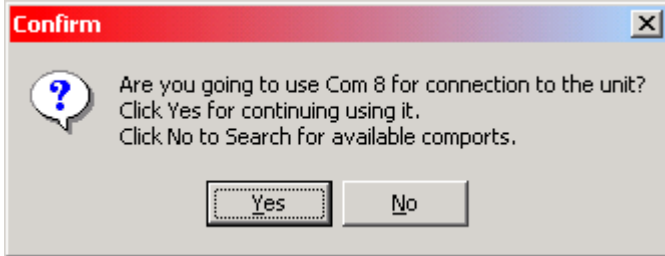


Click on **Next.** Then follow the instructions.

When finished a 988 Icon will be placed on your desktop.

Running the 988 Setup program

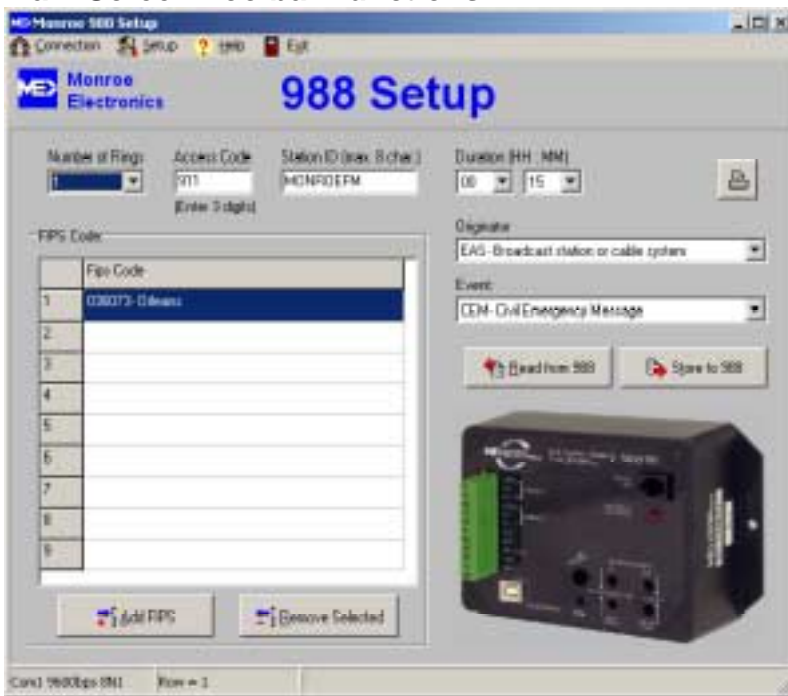
Click on the 988 icon on your desktop to start the program. It will first ask for the comport connection to the 988's USB (Programming) jack. If you completed the installation for the 988 USB driver as mentioned in the previous section, Windows assigned a COM port number for the USB port.



If you're not sure what comport is available, click **No** to search and select the appropriate one, otherwise, select **Yes**.

After selecting the comport, click on the **Read from 988** button to see if communications have been established. If an error occurs, click on the **Connection** drop-down menu on the toolbar to select another comport, then try reading from the unit again.

Main Screen Toolbar Functions



Connection

To select and open a comport to the 988 unit.

Setup Menu

Includes the following Sub Menus.

Get / Set GMT Time

Set GMT (Greenwich Mean Time) on the unit.

Firmware Version

Display the firmware version in the unit.

Firmware Update

Downloads the firmware to the 988. This is for future updates. You can acquire the firmware from Monroe Electronics. Then click on this menu and follow instructions to download it to the unit's flash memory.

Test Alarm Tones

Sends a continuous tone for system level adjustment.

Restore Factory Default

Enters the default setup on screen.

Main Screen The following settings must be programmed and stored into the 988.

Number of Rings to answer __ 1-8.

Access code __ Upon telephoning the unit, a 3-digit code must be entered to access the unit.

Station ID __ Identification of the station that broadcasts the message.

Duration __ The valid time period of the message. In 15-minute increments if less than 1 hour, in 30-minute increments if more than 1 hour.

Originator __ Identifier for which site or station created and transmitted the EAS message. There are five options that can be set:

Broadcast/Cable System__ EAS

Civil Authorities__ CIV

Emergency Action Network__ EAN

National Weather Service__ NWS

Primary Entry Point__ PEP

Event__ The nature of the event or EAS message. This selection determines the text that will be displayed to the customer.

To Set Date & Time (GMT Greenwich Mean Time)

All EAS alerts are encoded using GMT or UTC.

On the tool bar click on **Setup – Get / Set GMT Time**. The following screen will be displayed.

Set GMT (Greenwich Mean Time)

GMT

MM/DD/YY HH:MM:SS

Local Time: Wed. 02/08/06 08:19:20

Select the time zone and daylight saving will update the GMT entry above

Select Time Zone:
 +5:00 = GMT

On Daylight Saving Time

This screen shows the local date and time from your computer, and calculates GMT based on the time zone selected. Verify that the local time and time zone are set correctly. If the minute setting in the GMT box is incorrect, you can manually edit it. To update the time in the unit click on the **Set Time on 988** button.

To verify that the time is programmed correctly, click on the **Read Time from 988** button.

Click on **Close** to get back to the Set Up screen.

Add FIPS code

On the main screen click the **Add FIPS** button to open the following window. These will be the available FIPS codes to be used when originating an alert.

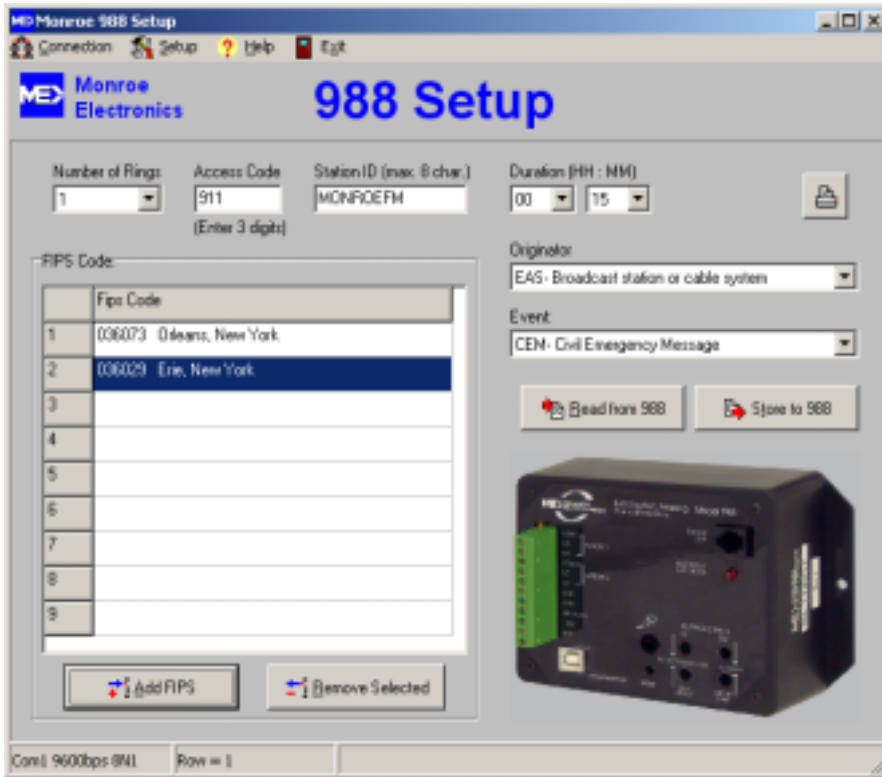


Select the County Subdivision, normally set to **All (0)**, FIPS State, FIPS County, and click on **Add** to add it to the list of available counties.



Click **Close** when done selecting.

Storing The Setup to the Unit



Click on the **Store to 988** button to send and store the setup to the 988 unit.

Programming is now complete. The USB cable can be disconnect from the 988 and you can proceed to the next step and record your access message.

Recording Your Access Message

Upon initial use of the 988, you must enter an access message.

To do this press and hold the record button located through the **Store** access hole in the instrument's front panel (refer to picture on page 17.) In a quiet area and speaking in a normal tone of voice with your mouth about 6 or 8 inches from the microphone on the PC board, enter the message. Please leave a silent period for 4 or 5 seconds after speaking to allow a time for entering the access code, before releasing the record button. When the unit answers the call this message will repeat until the access code is entered. **Note:** If the correct access code is not entered in 60 seconds, the 988 will automatically hang up.

Message to Caller Level

The gain controls are adjusted as follows:

Set all four (4)-adjustment pots to the center of their range.

Dial up the unit and listen to the message.

Adjust the **MESSAGE - TO CALLER** pot for a comfortable level without distortion, and then hang up.

Enter the access code that has been programmed into the unit.

Installation

Connect the telephone cable to the RJ-11 plug, two wires for balanced audio from the screw terminals marked AFSK/AUDIO to the balanced input of the encoder/decoder audio input, and the power supply wires to the + and – screw terminals marked for power. The white wire is the + wire.

If your audio input is unbalanced, connect a wire to the AFSK/AUDIO terminal nearest to the power terminals, and connect this wire to the audio input on your encoder/decoder. Then connect a wire from the terminal marked GND nearest to the power terminals, and connect this to the ground on your encoder/decoder.

Plug in the power supply.

Make sure that your encoder/decoder has been set to accept an audio input from the terminals you have wired it to, and is configured to accept signals from this input as if they were from a separate radio receiver.

Note: During setup, you may want to disable the output from the encoder/decoder so that no alarms are displayed through the cable system.

Operation

Monroe Model 988 interfaces a two-wire (POTS) telephone service with control switching and audio control signals to an FCC approved encoder/decoder.

Upon answering, the unit begins playing back the message stored by the operator, and looks for a series of DTMF tones corresponding to the three-digit access code.

After picking up the telephone line, if no activity is detected for a period of 1 minute, the unit disconnects the telephone line. If the user does not enter the correct access code within a period of 1 minute, the unit will disconnect the telephone line.

Once the telephone caller enters the three-digit access code, the unit will cease playing the message and proceed to the next stage of operation.

Additionally, after the access code has been entered, two separate relays will actuate. Contacts are available on the screw terminals of the connector as Switch 1 and Switch 2.

The Caller must select the FIPS code(s) to be sent out with this alert. To select individual FIPS codes (previously stored in the 988) type their stored number Ex. 1,2,3, followed by the # key to accept. If an incorrect number is entered three beeps will be heard and the user must start the selection over. The user has three tries to enter correct values or the unit will disconnect. To send all of the stored FIPS codes, simply press the # key.

After a tone, approximately 10 seconds long, speak the audio message you wish to broadcast with the local alert.

When done, press the # key or hang up the telephone.

988 Activation Instructions for Local Authorities

1. Dial the phone number of the line connected to the 988.
2. The unit will prompt you with a voice message that was previously recorded.
3. Type in your password. If it is correct, a 2 second tone will be heard and you will proceed to step 4. If it's incorrect the voice prompt will be repeated until the correct password is entered or it will hang up after 1 minute.
4. Select the FIPS code(s) you want to send out with this message. Use this table to list the number associated with the FIPS code(s).

	Fips Code
1	
2	
3	
4	
5	
6	
7	
8	
9	

- 4.1. To select individual FIPS codes (previously stored in the 988) type their stored number Ex. 1,2,3, followed by the # key to accept. If an incorrect number is entered three beeps will be heard and the user must start the selection over. The user has three tries to enter correct values or the unit will disconnect.
- 4.2. To send all of the stored FIPS codes simply press #.
5. The AFSK tones will be heard to indicate the message is being sent.
6. After the AFSK tones complete, you will hear a long tone, approximately 10 seconds. At the completion of the tone the user can begin speaking their audio message. The user can speak for up to 2 minutes.
7. After the voice message is complete the user can press the # key to hang up or simply hang up the phone.

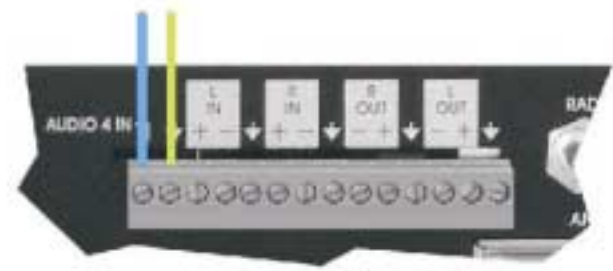
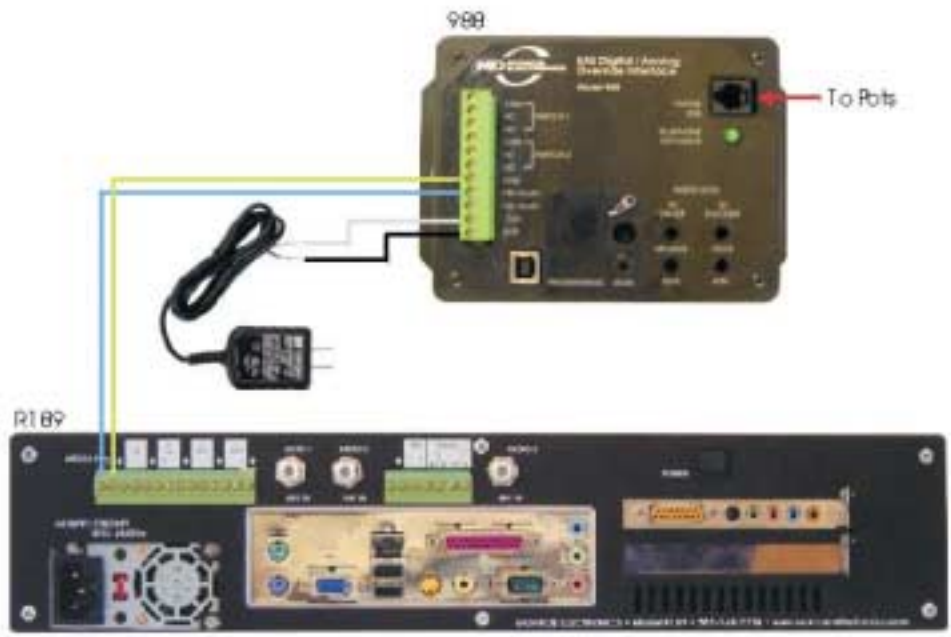
Refer to the picture below for locations of the gain controls, record switch, microphone and wiring.



Wiring Diagrams



Local Access to R189





Local Access to EAS Encoder/Decoder

