TWISTER EMERGENCY ALERT SYSTEM

USERS MANUAL

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Description

1.0 Description

1.1 Introduction

Cadco Systems' Twister Emergency Alert System (TEAS) is designed to provide the user with a simple, low cost, quality solution to the FCC requirement to monitor two audio sources for local, state, and national emergency messages. Cadco has a long history of developing and marketing alert systems. Cadco played a leading role in developing the previous generation of alerting equipment, called the Civil Emergency Alert System (CEAS). Using the knowledge gained from our experience serving our customers alerting needs, Cadco has designed the TEAS to fulfill CFR 47, Part 11 requirements while giving the user the functionality necessary to meet local and regional needs.

1.1 Overview

The TEAS

EAS messages may be transmitted through several sources.

The TEAS uses a front panel LCD and associated keypad to provide easy to use password protected menus for user/site specific input, alert statusing, message sequencing, and alert activation.

The TEAS monitors two assigned audio inputs. Either the internal National Weather Service Receiver and the internal broadcast band FM Receiver may be used for monitoring assignments or any other two audio sources may be connected to the rear panel and used in lieu of the internal receivers. Local and state emergency procedures determine which audio sources to monitor. EAS messages are received through the audio inputs, public switched telephone interface, or serial port.

The received audio FSK tones are converted to digital form using a FSK Decoder. The transmitted digital signals representing the EAS codes are converted to analog using a FSK Encoder.

When an EAS message is received it is checked for validity. The microprocessor determines the message validity by comparing repetitive messages and looks for a successful two out of three compare ratio. Invalid messages, those that do not match two out of three times, are

discarded without further action. The messages are also compared to FCC guidelines for valid messages.

Valid messages are compared with previously received messages that still have active timer periods. Duplicate messages are discarded. New messages are compared with a list of pre-selected header codes and are either stored for manual processing, automatic delay, or immediately relayed automatically, as determined by the pre-selected header parameters.

The audio portion of the EAS message is digitized and stored in an internal digital voice storage. The audio is also available at the front monitor speaker and at the back panel audio out.

A baseband video message may be relayed. Internal video sync detector circuitry constantly monitors the back panel video input plug and will automatically up convert to IF and pass on any video messages.

Expanded text messages can be compiled and stored internally for automatic relay. Using an internal character generator and IF modulator, text messages are easily transported from the TEAS to a cable headend. Text messages may be compiled using the front panel keypad, LCD, and program menus, the public switched telephone interface, and/or the RS-232 I/O port.

When an alert is transmitted, the TEAS places the EAS FSK data tones, two tone attention signal, audio message, expanded text message, and/or the video message to the character generator/IF modulator section. The output of the IF modulator is a properly sequenced EAS alert modulated at 45.75Mhz, ready for up converting for further propagation.

Audio sources are either stored or live. Live sources are the front panel microphone, two monitored audio source assignments, or the public switched telephone network interface. There are two stored sources. One source stores up to two minutes of audio from the public switched telephone network interface. The other stored source is up to two minutes of audio from the two monitored assignments or the microphone. When a message is relayed manually, the user can specify which source the audio will come from.

EAS messages are logged using the following ports:

- Serial Port (user console)
- Internal Printer
- Front Panel LCD

Assigned audio sources are continuously monitored. Any EAN event will automatically override any other alert.

4.2 User Input

User input and control is provided by means of the front panel keypad and associated menus displayed on the front panel LCD display, the public switched telephone interface, and the RS-232 I/O port. All functions are password protected. The password, if forgotten can only be changed by an authorized individual.

4.3 Aural and Visual Indicators

The TEAS uses four front panel LED's, internal speaker, LCD display, and dry relay contact closures to signal encoder, decoder, and two tone activation.

EAS MENUS

NORMAL / POWER-UP DISPLAY:

```
HH:MM:SS  MM:DD
CADCO EAS V#.#
IMMEDIATE MODE
```

PRESS ANY KEY

MAIN FUNCTION MENU:

1) REQ WEEKLY TEST
2) REQ MONTHLY TEST
3) SETUP
4) SERV 5) CANCEL

RECEIVED ALERT DISPLAY:
REQUIRED WEEKLY/MONTHLY TESTS:

(Originator)
(Event)
(Location)
(Valid Time Period)
(Local Tme Transmitted)

SETUP:

PASSWORD: XXXX

DN> PREV UP>NEXT
ENT>NEXT X

UPON PASSWORD ENTRY:

1) INITIATE ALERT
2) ACTIVE ALERTS
3) MODE/SETUP
5) MAIN SCREEN

1) INITIATE ALERT SUB-MENUS

SELECT EVENT MENU:

SELECT EVENT CODE:

```
XXX
DN>NEXT UP>PREVIOUS
ENT> NEXT X PGM>DONE
```

SELECT ORIGINATOR MENU:

```
SELECT ORIGINATOR:
  EAS-

DN>NEXT      UP>PREV
PGM>DONE
```

EXPANDED TEXT MESSAGE MENU:

```
TEXT MESSAGE:
The National Weather service
has
issued a tornado watch for...
ENT>Use      PGM>Change
```

ALERT VALID FROM TIME MENU:

```
VALID FROM TIME:
LCL  XX:XX
DN>NEXT UP>PREVIOUS
ENT>NEXT X PGM>DONE
```

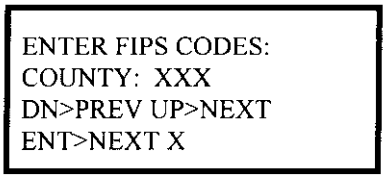
ALERT VALID TO TIME MENU:

```
VALID TO TIME:
LCL  XX:XX
DN>NEXT UP>PREVIOUS
ENT>NEXT X PGM>DONE
```

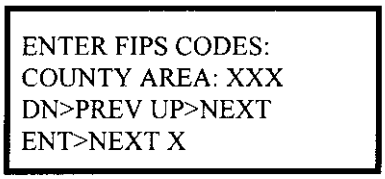
VALID FIPS CODES MENU:

```
ENTER FIPS CODES:
STATE:  XX
DN>PREV UP>NEXT
ENT>NEXT X
```

COUNTY AREA CODE MENU:

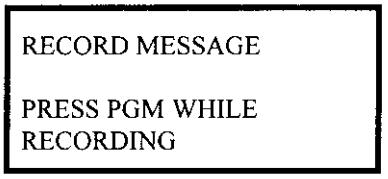


COUNTY CODE MENU:

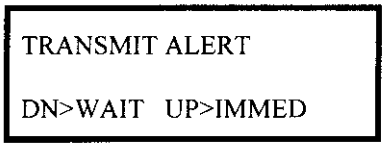


AUDIO MESSAGE MENU:

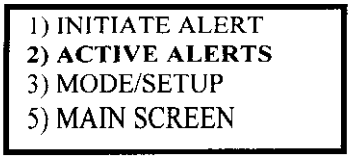
RECORD MESSAGE MENU:



TRANSMIT ALERT MENU:



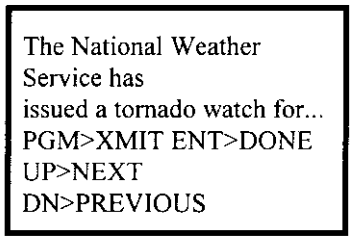
UPON PASSWORD ENTRY (cont.):



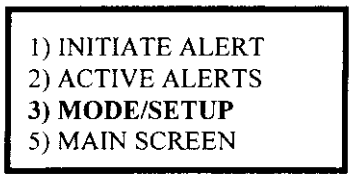
2) ACTIVE ALERTS MENU

ACTIVE ALERTS MENU:

EXPANDED TEXT MESSAGE MENU:



UPON PASSWORD ENTRY (cont.):



3) MODE MENUS

SELECT OPERATIONAL MODE/RESET UNIT MENU:

OPERATIONAL MODE MENU:

PGM>IMMED
ENT>DELAY

DELAY MODE MENU:

DELAY MODE
DEFAULT IS 00 MINUTE
XX

UPON PASSWORD ENTRY (cont.):

1) INITIATE ALERT
2) ACTIVE ALERTS
3) MODE/SETUP
5) MAIN SCREEN

3) MODE MENUS

SELECT OPERATIONAL MODE/RESET UNIT MENU:

1) OPERATIONAL MODE
2) RESET UNIT

RESET MENU:

RESET
ARE YOU SURE?
PGM>RESET ENT>SKIP

UPON PASSWORD ENTRY (cont.):

1) INITIATE ALERT
2) ACTIVE ALERTS
3) MODE/SETUP
5) MAIN SCREEN

4) SETUP MENU

SETUP MENU:

```
SETUP
1) EVENT CODES
2) PHONE CONTROL
MENU
3) OPERATING
PARAMETERS
```

SETUP>EVENT CODES

ENTER EVENT CODE MENU:

```
ENTER EVENT CODE:
XXX
```

EXPANDED TEXT MESSAGE MENU:

```
EXPANDED TEXT
MESSAGE
The National Weather
Service has
issued a tornado watch for...
PGM>Change ENT>Use
```

UPON PASSWORD ENTRY (cont.):

```
1) INITIATE ALERT
2) VIEW ACTIVE
ALERTS
3) MODE
4) SETUP
```

4) SETUP MENU

SETUP MENU:

```
SETUP
1) EVENT CODES
2) PHONE CONTROL
MENU
```

3) OPERATING PARAMETERS

SETUP>PHONE CONTROL

PHONE OPTIONS MENU:

PHONE OPTIONS: 1) PHONE PASSWORD 2) NUM OF RINGS 3) VOICE PROMPT MESSAGES

SETUP>PHONE CONTROL>PHONE PASSWORD

PHONE PASSWORD MENU:

PHONE PASSWORD: XXXX DN>NEXT UP>PREVIOUS ENT>NEXT X PGM>DONE

VERIFY PHONE PASSWORD MENU:

PHONE PASSWORD: XXXX DN>NEXT UP>PREVIOUS ENT>NEXT X PGM>DONE

VERIFY PHONE PASSWORD RESULTS MENU:

PHONE PASSWORD

WAS/WAS NOT
ACCEPTED.
ENT>TRY AGAIN
PGM>DONE

SETUP>PHONE CONTROL>NUMBER OF RINGS

SET NUMBER OF RINGS MENU:

NUMBER OF RINGS:
X
DN>NEXT
UP>PREVIOUS
PGM>DONE

SETUP>PHONE CONTROL>VOICE PROMPT MESSAGES

I DO NOT KNOW WHAT THIS IS USED FOR! USER CAN SET UP VOICE PROMPTS?

UPON PASSWORD ENTRY (cont.):

1) INITIATE ALERT
2) ACTIVE ALERTS
3) MODE/SETUP
5) MAIN SCREEN

SETUP MENU:

SETUP
1) EVENT CODES
2) PHONE CONTROL MENU
3) OPERATING

PARAMETERS

SETUP>OPERATING PARAMETERS

OPERATING PARAMETERS MENU:

OPERATING
PARAMETERS
1) SETTINGS
2) CLOCK
3) SITE SETTINGS

UPON PASSWORD ENTRY (cont.):

1) INITIATE ALERT
2) VIEW ACTIVE ALERTS
3) MODE
4) SETUP

SETUP MENU:

SETUP
1) EVENT CODES
2) PHONE CONTROL MENU
3) OPERATING PARAMETERS

SETUP>OPERATING PARAMETERS

OPERATING PARAMETERS MENU:

OPERATING
PARAMETERS
1) SETTINGS
2) CLOCK
3) SITE SETTINGS

SETUP>OPERATING PARAMETERS>CLOCK

DATE AND TIME MENU:

```
CLOCK SETTINGS:
1) LOCAL TIME ZONE
2) SET LOCAL TIME
3) SET DATE
```

SETUP>OPERATING PARAMETERS>CLOCK>LOCAL TIME ZONE

LOCAL TIME ZONE MENU:

```
Local Time Zone:
XXX
DN>NEXT UP>PREVIOUS
ENT>NEXT X PGM>DONE
```

SETUP>OPERATING PARAMETERS>CLOCK>SET LOCAL TIME

LOCAL TIME ZONE MENU:

```
Set Local Time:
XX:XX:XX
DN>NEXT UP>PREVIOUS
ENT>NEXT X PGM>DONE
```

SETUP>OPERATING PARAMETERS>CLOCK>SET DATE

SET DATE MENU:

```
Set Date:
XX:XX:XX
DN>NEXT UP>PREVIOUS
ENT>NEXT X PGM>DONE
```

UPON PASSWORD ENTRY (cont.):

```
1) INITIATE ALERT
2) VIEW ACTIVE ALERTS
3) MODE
4) SETUP
```

SETUP MENU:

```
SETUP
1) EVENT CODES
2) PHONE CONTROL MENU
```

3) OPERATING PARAMETERS

SETUP>OPERATING PARAMETERS

OPERATING PARAMETERS MENU:

OPERATING PARAMETERS
1) SETTINGS
2) CLOCK
3) SITE SETTINGS

SETUP>OPERATING PARAMETERS>SITE SETTINGS

USER UNIQUE SETTINGS MENU:

SETTINGS:
1) STATION IDENTIFIER
2) ALERT OPTIONS
3) LOCAL FIPS TABLE

SETUP>OPERATING PARAMETERS>SITE SETTINGS>STATION IDENTIFIER

USER STATION/CABLE SUPPLIER IDENTIFICATION MENU:

USER IDENTIFICATION:
XXXXXXXX
DN>PREVIOUS UP>NEXT
ENT>NEXT X PGM>DONE

UPON PASSWORD ENTRY (cont.):

1) INITIATE ALERT
2) VIEW ACTIVE ALERTS
3) MODE
4) SETUP

SETUP MENU:

SETUP
1) EVENT CODES
2) PHONE CONTROL MENU
3) OPERATING PARAMETERS

SETUP>OPERATING PARAMETERS

OPERATING PARAMETERS MENU:

OPERATING PARAMETERS

1) SETTINGS
2) CLOCK
3) SITE SETTINGS

SETUP>OPERATING PARAMETERS>SITE SETTINGS

USER UNIQUE SETTINGS MENU:

SETTINGS:
1) STATION IDENTIFIER
2) ALERT OPTIONS
3) LOCAL FIPS TABLE

SETUP>OPERATING PARAMETERS>SITE SETTINGS>ALERT OPTIONS

ALERT OPTIONS MENU:

ALERT OPTIONS:
1) ALERT DELAY
2) ALERT DURATION

SETUP>OPERATING PARAMETERS>SITE SETTINGS>ALERT OPTIONS>ALERT DELAY

ALERT DELAY MENU:

ALERT DELAY
XXX
DN>PREVIOUS UP>NEXT
ENT>NEXT X PGM>DONE

UPON PASSWORD ENTRY (cont.):

1) INITIATE ALERT
2) VIEW ACTIVE ALERTS
3) MODE
4) SETUP

SETUP MENU:

SETUP
1) EVENT CODES
2) PHONE CONTROL MENU
3) OPERATING PARAMETERS

SETUP>OPERATING PARAMETERS

OPERATING PARAMETERS MENU:

```
OPERATING PARAMETERS
1) SETTINGS
2) CLOCK
3) SITE SETTINGS
```

SETUP>OPERATING PARAMETERS>SITE SETTINGS

USER UNIQUE SETTINGS MENU:

```
SETTINGS:
1) STATION IDENTIFIER
2) ALERT OPTIONS
3) LOCAL FIPS TABLE
```

SETUP>OPERATING PARAMETERS>SITE SETTINGS>ALERT OPTIONS

ALERT OPTIONS MENU:

```
ALERT OPTIONS:
1) ALERT DELAY
2) ALERT DURATION
```

SETUP>OPERATING PARAMETERS>SITE SETTINGS>ALERT OPTIONS>ALERT DURATION

ALERT DURATION MENU:

```
ALERT DURATION:
XXX
DN>NEXT UP>PREVIOUS
ENT>NEXT X PGM>DONE
```

UPON PASSWORD ENTRY (cont.):

```
1) INITIATE ALERT
2) VIEW ACTIVE ALERTS
3) MODE
4) SETUP
```

SETUP MENU:

```
SETUP
1) EVENT CODES
2) PHONE CONTROL MENU
3) OPERATING PARAMETERS
```

SETUP>OPERATING PARAMETERS

OPERATING PARAMETERS MENU:

```
OPERATING PARAMETERS
1) SETTINGS
2) CLOCK
3) SITE SETTINGS
```

SETUP>OPERATING PARAMETERS>SITE SETTINGS

USER UNIQUE SETTINGS MENU:

```
SETTINGS:
1) STATION IDENTIFIER
2) ALERT OPTIONS
3) LOCAL FIPS TABLE
```

SETUP>OPERATING PARAMETERS>SITE SETTINGS>FIPS TABLE

LOCAL FIPS TABLE:

```
STATE FIPS NUMBER:
XX
DN>NEXT UP>PREVIOUS
ENT>NEXT X PGM>DONE
```

LOCAL COUNTY MENU:

```
COUNTY CODE:
XXX
DN>NEXT UP>PREVIOUS
ENT>NEXT X PGM>DONE
```

COUNTY GEOGRAPHICAL AREA MENU:

```
COUNTY AREA:
X
DN>NEXT UP>PREVIOUS
ENT>ANOTHER PGM>DONE
```

EAS MENUS

NORMAL DISPLAY:

UPON PASSWORD ENTRY:

```
1) INITIATE ALERT
2) VIEW ACTIVE ALERTS
3) MODE
4) SETUP
```

This menu is used to initiate alerts, view all active alerts, set the mode of operation (automatic interrupt or delayed interrupt), and setup user options. 1 specifies the DN key, 2 specifies the UP key, 3 specifies the ENT key, and 4 specifies the PGM key. Press 1 (DN) , 2 (UP), 3 (MODE) or 4 (PGM) to choose a selection.

1) INITIATE ALERT SUB-MENUS

SELECT EVENT MENU:

```
SELECT EVENT CODE:
XXX
DN>NEXT UP>PREVIOUS
ENT> NEXT X PGM>DONE
```

Allows selection of event codes. All event codes identifed by CFR 47, Part 11 are stored in PROM.

EXPANDED TEXT MESSAGE MENU:

```
EXPANDED TEXT MESSAGE:
The National Weather service has
issued a tornado watch for...
PGM>Change ENT>Use
```

All event codes specified by CFR 47, Part. 47 have stored default expanded

text messages. The expanded text message associated with the Select Event action in the previous menu is displayed. The up/down keys are used to show more of the message. The user may change the text message by pressing the PGM key.

ALERT VALID FROM TIME MENU:

```
VALID FROM TIME (local):
XX:XX
DN>NEXT UP>PREVIOUS
ENT>NEXT X PGM>DONE
```

The valid *from* time of the alert is entered. This is the time the alert begins. Use up/down keys to set the *from* time.

ALERT VALID TO TIME MENU:

```
VALID TO TIME (local):
XX:XX
DN>NEXT UP>PREVIOUS
ENT>NEXT X PGM>DONE
```

The valid *to* time of the alert is entered. This is the time the alert begins. Use up/down keys to set the *to* time.

VALID FIPS CODES MENU:

```
VALID FIPS CODES:
XXX
DN>NEXT UP>PREVIOUS
ENT>NEXT X PGM>DONE
```

Enter the FIPS code of the area the alert is valid for. Use DN and UP keys to enter each letter of the code. Press ENT to scroll to the next letter. A total of 31 FIPS codes can be entered. These 31 FIPS codes may represent 31 states or 31 counties in a state, or some combination, such as fifteen counties in one state and sixteen counties in another state.
Default value is entered in the *SETUP* menus.

COUNTY AREA CODE MENU:

```
COUNTY AREA CODE:
X
DN>NEXT UP>PREVIOUS
ENT>NEXT X PGM>DONE
```

Specifies the geographical portion of the county affected by the alert. Numerical value between 0 and 9. Default value is entered in the *SETUP* menus and is 0.

STATE CODE MENU:

```
STATE CODE
XX
DN>NEXT UP>PREVIOUS
ENT>NEXT X PGM>DONE
```

Enter the state code affected by the alert. Use the DN and UP keys to enter the specific letter of the code. Use PGM to scroll to the next letter position. Default value is entered in the *SETUP* menus.

COUNTY CODE MENU:

COUNTY CODE: XXX DN>NEXT UP>PREVIOUS ENT>NEXT X PGM>DONE

Enter the county code affected by the alert. Press the DN and UP keys to enter the specific letter of the code. Press PGM to scroll to the next letter position. Default value is entered in the *SETUP* menus and is 000.

AUDIO MESSAGE MENU:

AUDIO MESSAGE PGM>RECORD ENT>SKIP

Record an audio message associated with the alert. Press PGM to record the message. Press ENT to skip recording a message.

RECORD MESSAGE MENU:

RECORD MESSAGE PRESS PGM WHILE RECORDING

Record the audio message now. Press PGM key and speak into the microphone.

Recording will stop as soon as the PGM key is released. Maximum two minutes recording time is available.

TRANSMIT ALERT MENU:

TRANSMIT ALERT
UP>IMMED DN>WAIT

Choose to transmit alert immediately or transmit alert at a later time. If transmitted at a later time is selected then this alert becomes a pending alert.

2) VIEW/TRANSMIT ACTIVE ALERTS MENU

ACTIVE ALERTS MENU:

ACTIVE ALERTS
PGM>VIEW ENT>DONE

Press UP/DN keys to show all active alerts, one at a time. Press ENT key when done.

EXPANDED TEXT MESSAGE MENU:

The National Weather Service has issued a tornado watch for... PGM>XMIT ENT>DONE UP>NEXT DN>PREVIOUS

Press PGM key to transmit active alert immediately, press EN key to go to previous menu, press UP key to view next active alert or more message of current alert if appropriate, press DN key to view previous alert.

3) MODE MENUS

SELECT OPERATIONAL MODE/RESET UNIT MENU:

1) OPERATIONAL MODE 2) RESET UNIT

Press DN to select OPERATIONAL MODE submenus, press UP to select RESET UNIT menu.

OPERATIONAL MODE MENU:

OPERATIONAL MODE: PGM>IMMED ENT>DELAY

Press PGM for IMMED mode. IMMED MODE will cause any alerts received to be automatically retransmitted with the associated stored expanded text message for that event code and any audio message without delay. DELAY mode will trap received alerts and allow the user to delayed retransmission for up to 15 minutes except for

EAN events which are always transmitted immediately.
Press ENT to go to DELAY MODE menu.

DELAY MODE MENU:

```
DELAY MODE
DEFAULT IS  00 MINUTE
XX
```

Select amount of time delay for DELAY MODE. Valid choices are from 1 to 15 minutes. The default delay of 00 minutes is the IMMED mode. Press UP/DN keys to select a number then press ENT to move to next position.

RESET MENU:

```
RESET
ARE YOU SURE?
PGM>RESET ENT>SKIP
```

Press PGM to immediately reset unit regardless of status. Press ENT to skip resetting unit.

4) FIRST SETUP MENU

SETUP MENU:

```
SETUP
1) EVENT CODES
2) PHONE CONTROL MENU
```

3) OPERATING PARAMETERS

Press DN to setup event codes, press UP to set up the phone control menu, or press ENT to set up the user controlled operating parameters.

SETUP>EVENT CODES

ENTER EVENT CODE MENU:

ENTER EVENT CODE: XXXX

Enter event codes. Press UP/DN to choose specific characters at each position, then press ENT to move to the next position.

EXPANDED TEXT MESSAGE MENU:

EXPANDED TEXT MESSAGE The National Weather Service has issued a tornado watch for... PGM>Change ENT>Use

Press PGM to change the default message.
Press ENT to use the default message.
The UP/DN keys are used to scroll the message off screen.

SETUP>PHONE CONTROL

PHONE OPTIONS MENU:

PHONE OPTIONS:
1) PHONE PASSWORD
2) NUM OF RINGS
3) VOICE PROMPT
MESSAGES

Press DN to change the phone password, press UP to change the number of rings before the unit will answer, or press ENT to change the voice message.

SETUP>PHONE CONTROL>PHONE PASSWORD

PHONE PASSWORD MENU:

PHONE PASSWORD:
XXXX
DN>NEXT UP>PREVIOUS
ENT>NEXT X PGM>DONE

Press DN to select next character, press UP to select previous character, press ENT for next X. When the fourth character is entered, press PGM to verify password.

VERIFY PHONE PASSWORD MENU:

PHONE PASSWORD:
XXXX
DN>NEXT UP>PREVIOUS
ENT>NEXT X PGM>DONE

Press DN to select next character, press UP to select previous character, press ENT for next X. When the fourth character is entered, press PGM to verify password.

VERIFY PHONE PASSWORD RESULTS MENU:

PHONE PASSWORD WAS/WAS NOT ACCEPTED. ENT>TRY AGAIN PGM>DONE

Message indicates if phone password was accepted.
Press ENT to try again, press PGM to go
on to mext menu.

SETUP>PHONE CONTROL>NUMBER OF RINGS

SET NUMBER OF RINGS MENU:

NUMBER OF RINGS: X DN>NEXT UP>PREVIOUS PGM>DONE

Press DN to select next character, press UP
to select previous character, press PGM when
finished.

SETUP>PHONE CONTROL>VOICE PROMPT MESSAGES

I DO NOT KNOW WHAT THIS IS USED FOR! USER CAN SET UP VOICE PROMPTS?

SETUP>OPERATING PARAMETERS

OPERATING PARAMETERS MENU:

OPERATING PARAMETERS
1) SETTINGS
2) CLOCK
3) SITE SETTINGS

Press DN to change settings, press UP to change the date and time, press ENT to change the site settings.

SETUP>OPERATING PARAMETERS>CLOCK

DATE AND TIME MENU:

CLOCK SETTINGS:
1) LOCAL TIME ZONE
2) SET LOCAL TIME
3) SET DATE

Press DN to change the local time zone, press UP to change the local time displayed on the front panel LCD, press ENT to change the date displayed on the front panel LCD.

SETUP>OPERATING PARAMETERS>CLOCK>LOCAL TIME ZONE

LOCAL TIME ZONE MENU:

Local Time Zone:
XXX
DN>NEXT UP>PREVIOUS
ENT>NEXT X PGM>DONE

Enter your local time zone in number of hours greater than
or less than UTC. Press DN to select next character, press
UP to select previous character, press ENT for next X.
When the fourth character is entered, press PGM to verify password.

SETUP>OPERATING PARAMETERS>CLOCK>SET LOCAL TIME

LOCAL TIME ZONE MENU:

Set Local Time:
XX:XX:XX
DN>NEXT UP>PREVIOUS
ENT>NEXT X PGM>DONE

Enter your local time in 24 hour time notation.
The format is HH:MM:SS.
Press DN to select next character, press UP
to select previous character, press ENT for
next X. When the fourth character is entered,
press PGM to verify password.

SETUP>OPERATING PARAMETERS>CLOCK>SET DATE

SET DATE MENU:

Set Date:
XX:XX:XX
DN>NEXT UP>PREVIOUS
ENT>NEXT X PGM>DONE

Enter the calendar date in MM:DD:YY format.
Press DN to select next character, press UP
to select previous character, press ENT for
next X. When the fourth character is entered,
press PGM to verify password.

SETUP>OPERATING PARAMETERS>SITE SETTINGS

USER UNIQUE SETTINGS MENU:

```
SETTINGS:
1) STATION IDENTIFIER
2) ALERT OPTIONS
3) LOCAL FIPS TABLE
```

Press DN to change the station identifier, press UP
to change alert options, press ENT to change FIPS table..

SETUP>OPERATING PARAMETERS>SITE SETTINGS>STATION IDENTIFIER

USER STATION/CABLE SUPPLIER IDENTIFICATION MENU:

```
USER IDENTIFICATION:
XXXXXXXX
DN>PREVIOUS UP>NEXT
ENT>NEXT X PGM>DONE
```

Press DN to select next character, press UP to select
previous character, press ENT for next X. Press PGM when finished.

SETUP>OPERATING PARAMETERS>SITE SETTINGS>ALERT OPTIONS

ALERT OPTIONS MENU:

ALERT OPTIONS:
1) ALERT DELAY
2) ALERT DURATION

Press DN to select ALERT DELAY menu,
press UP to select ALERT DURATION menu.

SETUP>OPERATING PARAMETERS>SITE SETTINGS>ALERT OPTIONS>ALERT DELAY

ALERT DELAY MENU:

ALERT DELAY
XXX
DN>PREVIOUS UP>NEXT
ENT>NEXT X PGM>DONE

Enter time to delay alerts in ten second increments. All alerts, except for EAN events, will be delayed by the amount of time specified. Press DN to next previous character, press UP to previous character, press ENT for next X. Press PGM when finished.

SETUP>OPERATING PARAMETERS>SITE SETTINGS>ALERT OPTIONS>ALERT DURATION

ALERT DURATION MENU:

ALERT DURATION:

```
XXX
DN>NEXT UP>PREVIOUS
ENT>NEXT X PGM>DONE
```

Enter time alerts are displayed in ten second increments. This parameter determines how long an alert will interrupt video. All alerts, except for EAN events, will be displayed by the amount of time specified. Press DN to next previous character, press UP to previous character, press ENT for next X. Press PGM when finished.

SETUP>OPERATING PARAMETERS>SITE SETTINGS>FIPS TABLE

LOCAL FIPS TABLE:

```
STATE FIPS NUMBER:
XX
DN>NEXT UP>PREVIOUS
ENT>NEXT X PGM>DONE
```

Press DN to select next character, press UP to select previous character, press ENT for next X. Press PGM when finished.

LOCAL COUNTY MENU:

```
COUNTY CODE:
XXX
DN>NEXT UP>PREVIOUS
ENT>NEXT X PGM>DONE
```

Press DN to select next character, press UP
to select previous character, press ENT for
next X. Press PGM when finished.

COUNTY GEOGRAPHICAL AREA MENU:

```
COUNTY AREA:
X
DN>NEXT UP>PREVIOUS
ENT>ANOTHER PGM>DONE
```

Valid entries are 0 to 9.
Press DN to select next character, press UP
to select previous character, press ENT for
next X. Press PGM when finished.

APPENDIX A

EAS Protocol

This information is provided for reference only. Complete details concerning FCC rules, regulations, and the EAS protocol may be found in CFR 47, Part 11. No one may modify or change in any manner the FCC approved EAS protocol without the permission of the FCC.

[Preamble]
consecutive string of bits (sixteen bytes of AB hex - 8 bit byte 10101011). clears system, sets AGC, and set asynchronous decoder clocking cycles.

ZCZC-
identifier indicates start of ASCII code.

ORG-
originator code indicates who originally initiated activation of EAS.

Originator	Originator Code
Broadcast station or cable system	EAS
Civil authorities	CIV
Emergency Action Notification Network	EAN
National Weather Service	WXR
Primary Entry Point System	PEP

EEE-
Event code indicates nature of EAS activation.

Nature of activation	Event Codes
National Codes:	
Emergency Action Notification	EAN
Emergency Action Termination	EAT
National Information Center	NIC
National Periodic Test	NPT
Required Monthly Test	RMT
Required Weekly Test	RWT

Local Codes:

Administrative Message	ADR	Blizzard Warning	BZW
Civil Emergency Message	CEM	Evacuation Immediate	EVI
Flash Flood Statement	FFS	Flash Flood Warning	FFW
Flash Flood Watch	FFA	Flood Statement	FLS
Flood Warning	FLW	Flood Watch	FLA
High Wind warning	HWW	High Wind Watch	HWA
Hurricane Statement	HLS	Hurricane Warning	HUW
Hurricane Watch	HUA	Practice/Demo Warning	DMO
Severe Thunderstorm Warning	SVR	Severe Thunderstorm Watch	SVA
Severe Weather Statement	SVS	Special Weather Statement	SPS
Tornado Warning	TOR	Tornado Watch	TOA
Tsunami Warning	TSW	Tsunami Watch	TSA
Winter Storm Warning	WSW	Winter Storm Watch	WSA

PSSCCC-
location code indicates geographic area affected by EAS activation. May be as many as 31 location codes in an alert.

P is a numerical value betwwen 0 and 9 and defines the county subdivisions as follows:
0: all or unspecified portion of county
1: Northwest region
2: North Central region

3: Northeast region
4: West Central region
5: Central region
6: East Central region
7: Southwest region
8: South Central region
9: Southeast region

SS is a numerical value between 01 and 99 (the FIPS identifer) for each state.

State	FIPS #	State	FIPS#	State	FIPS#	State	FIPS#	State	FIPS#
AL	01	AK	02	AZ	04	AR	05	CA	06
CO	08	CT	09	DE	10	FL	12	GA	13
HI	15	ID	16	IL	17	IN	18	IA	19
KS	20	KY	21	LA	22	ME	23	MD	24
MA	25	MI	26	MN	27	MS	28	MO	29
MT	30	NE	31	NV	32	NH	33	NJ	34
NM	35	NY	36	NC	37	ND	38	OH	39
OK	40	OR	41	PA	42	RI	44	SC	45
SD	46	TN	47	TX	48	UT	49	VT	50
VA	51	WA	53	WV	54	WI	55	WY	56

Other

Area	FIPS#								
D.C.	11	AS	60	PR	72	FM	64	PW	70
GU	66	UM	74	MH	68	VI	78	MP	69

CCC is the county number. The user must be able to enter the county number where the user is located, then check all alerts to see if his county is in the alert area. Some service areas may have multiple counties covered by cable systems/alerts. If the user's county number is not in the alert message, the message is ignored, unless the county code is 000 which refers to all of the state or territory.

+TTTT-
indicates the valid time period of a message in 15 minute segments up to one hour and then in 30 minute segments beyond one hour.

JJJHHMM-
day in Julian calendar days (JJJ) of the year and time in hours and minutes (HHMM) when message was initially released by the originator using 24 hour Universal Coordinated Time (UTC). These codes must remain unchanged for retransmitted messages. Encoder will affix day/time automatically to all initial messages.

LLLLLLLL-
call sign or other identification of the broadcast station or NWS office transmitting or retransmitting the message. EAS encoder must affix code to all outgoing messages automatically. This info must be initially entered/set up by the user and can be blank, that is a cable operator may choose to leave this blank.

NNNN-
this is the end of message (EOM) sent as four ASCII N characters.