CROW

ELECTRONIC ENGINEERING LTD.

Voice Board (2 Way Voice)

ADD-ON BOARD FOR STORING RECORDED VOICE MESSAGES

AND LISTEN-IN .

Installation and Programming Guide

Contents

Introduction

The Voice Board enables you the record multiple voice messages and then link them to events so that a caller can get an audio status on different parts of the system over the telephone. You can also call the Control Panel and using the correct code combinations enables you to listen to any sound originating within protected premises, thereby determining if an intruder is actually on-site or not. When the microphone is activated the sirens are muted in order to keep the background noise to a minimum. This is a full duplex bi-directional voice channel giving you the ability to speak with the intruder when the intruder is within a few meters of the Control Panel. The intruder or visitor can then use the internal microphone to reply to questions you ask over the internal speaker.

Speech messages can be integrated into different alarm types or to give status reports for Command Control.

Command Control then enables you to arm or disarm the alarm system or using voice commands via a remote telephone call (password protected) to turn specific outputs on or off.

Installation

To install the board:

1. Plug in the Voice Board in the Box Header 2x7 on the C.P.
2. Connect the Microphone to the marked terminal with the right polarity.
3. Connect the Speaker to the marked terminal (no polarity).
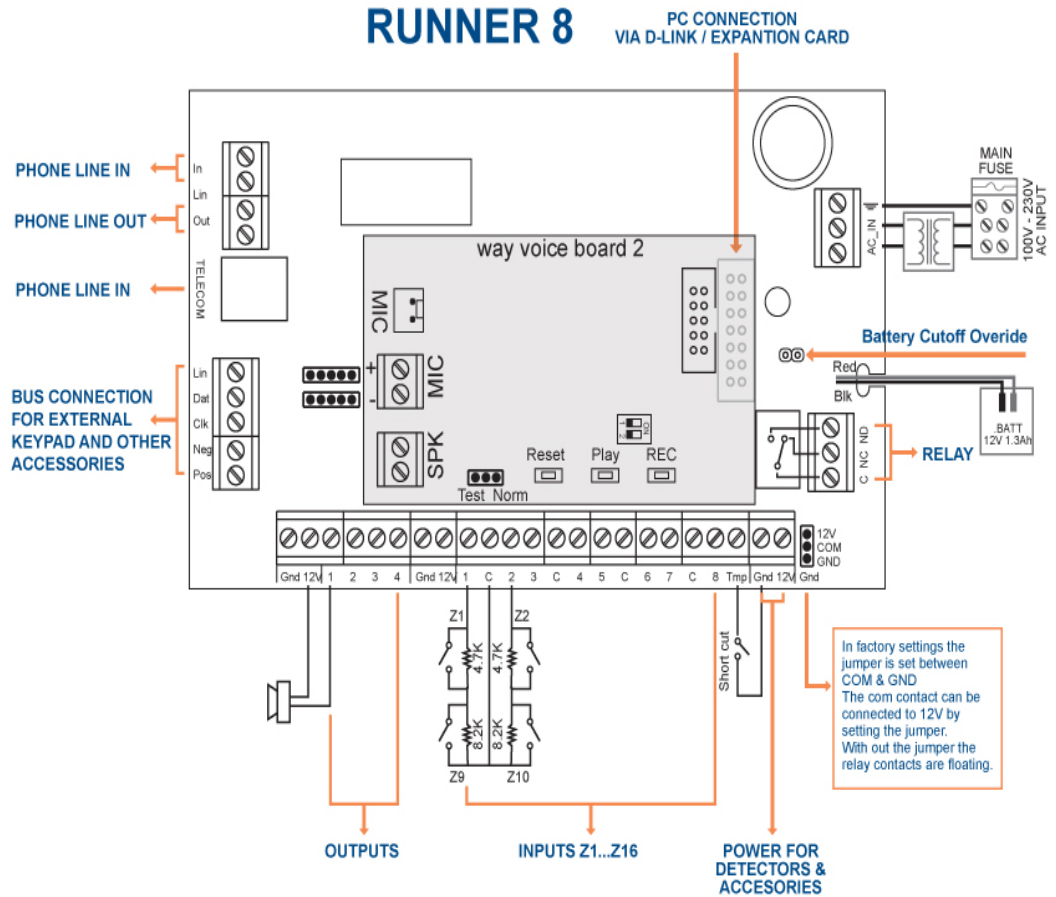
Programming the Voice Messages

To Record a message:

1. Press RESET button on the Voice Board

2. Press the **Rec** button on the voice board continuously during the message record.

   The red LED on the voice board will be turn on during the recording.

3. Speak clearly into the microphone (10-20cm distance).

   Each message must be at least 2 seconds long and less then 30sec.

4. When you have finished recording each message, release the **Record** button to stop the recording.

   The red LED on voice board will turns off.

5. Press the **Rec** button again to record another message immediately after the previous message.

6. Continue making recordings until you have recorded all the messages.

To review the messages:

1. On the Voice Board, press the **Reset** button to go to the beginning of the message area.

2. Set the jumper on the voice board to **TEST.**

   Press the **Play** button momentarily on the programmer to start the playback of the first message.
   At the end of the recorded message playback is stopped.

3. To listen to the next recorded message press the **Play** button again.

4. Repeat this operation until all the required recorded messages have been reviewed.

5. Press the **Reset** button to reset the voice board to the beginning of the message area.

6. Set the jumper on the voice board to **NORM**.

⚠️ **NOTE**

At the end of messages reviewing it's very important to set the jumper to NORM to avoid echo and buzzing on the speaker during 2 way voice functions.

Dipswitch Setting

The Dipswitch designed for adaptation to the quality of PSTN line by amplifies the signals according to the Dipswitch position.

DIP#2	DIP#1	PSTN Line Quality
OFF	OFF	Good
OFF	ON	Not so Good
ON	OFF	Poor
ON	ON	Very Poor

It's recommended to start testing the 2 way voice at the default setting (OFF, OFF) and only if the speaker volume or listen-in is not sufficient than start to set the Dipswitch to lower stage and test it again.

Assignning the messages

Command Control messages are used to give voice status information during dial-in control of Arm/Disarm, Output's, Zones and additional events.

Before programming the Command Control Messages it's recommended to record the messages and manage a list.

At the Table 1 below, assign each event address to appropriate voice message according the list you made.

On each event you can set the Message number 0-99.while set to "0" the message is disabled.

Address	Description	Value (Message No)
P42E 1-8E	Outputs	0-99
P64E 1-2E	Area A&B	0-99
P160E 1-16E	Zone Alarm + STAY Zone Alarm	0-99
P176E 1E	Keypad or Radio Panic Alarm.	0-99
P176E 2E	Fire alarm	0-99
P176E 3E	Medical alarm	0-99
P176E 4E	Main Fail	0-99
P176E 5E	Main Restore	0-99
P176E 6E	Battery Low	0-99
P176E 7E	Battery Restored	0-99
P176E 8E	Tamper	0-99
P176E 9E	Duress Alarm	0-99
P176E 10E	Latchkey Disarm	0-99
P176E 11E	Manual Test Initiated	0-99

Table 1-list of messages address

Operating Instructions

Operating Devices and Create 2 Way Voice Conversation

The Voice Board can be operated with 4 different modes:

1. The dialer is set to call Domestic /Speech and **P175E 2E option 6 set ON**. While the dialer call to the user to report event by sending a voice message over the line, the dialer will keep the telephone line open after being kissed-off (Dialer Acknowledge Code) the user at the phone can then talk to the person in site and listen the site by use DTMF commands to turn on the microphone.

    Note: once the microphone turn ON the panel will keep the conversation for 1 minute, To extend the call for a longer time simply press on the * button before the first minute pass, the panel will close the microphone but not the call, then press * again the panel will open the microphone again for 1 minute.

    You can repeat this process several times.

2. **P175E 2E Option 6 - Hold line open following Domestic/Voice report for DTMF control**.

    Calling the Control Panel and after number of rings (pre-programmed on address P175E 3E) the C.P hold the line and series of tones over the line the user can get to listen-in by typing the DTMF code.

    P175E 3E – AUTO ANSWER RING COUNT - (Value 0-99)

3. This mode is enable to Monitoring Station to verified an Alarm by listen-in after reporting .On this feature there are two modes of operating

    a. Direct On line –The C.P hold the line after reporting the Central station by CID or SIA. At this mode Add **P183E option5 must be turn ON**.

    b. Call Back- After reporting to the Central Station the C.P hang up the line as usual but the operator in the Central Station can call back to the C.P and it will answer after only one ring (Time Out of 10 min after the reporting).At this mode **Add P183 option 5 must turn off** and **P175E 2 E option 8 must turn ON**.

P183E 1-8E-Option 5 – Stay On-line after Alarm report for two way voice.

If this option is turned ON and a full duplex two way voice board is fitted, the panel will send a   command to the monitoring company in CID or SIA formats to tell the receiver to stay on-line so the operator can listen or talk to the site (full duplex two way voice).

P175E 2E Option 8 – Answer After 1 ring for Two Way Voice Call-back Mode

   If this option is turned ON and a full duplex voice board is fitted, the panel will answer an in-coming call after 1 ring and automatically enter full duplex two way voice mode. For full duplex voice mode to be active for call-back, option 5 at P183E must be turned OFF.

4.   **P183E 1–8E–Option 5 – Stay On–line after Alarm report for two way voice with Voice report (P182E 1– 8E Option 4).**

If this option is turned ON while you report with voice format (P182E 1-8E option 4) and a full duplex two way voice board is fitted, the panel will send a Voice alarm to the programmed phone number in Voice formats, the user can then answer the call, hear the voice message and enter his DTMF code programmed at P175E 14E to tell the panel to stay on-line so the user can listen or talk to the site (full duplex two way voice). Operate this option enable you to achieve 2 way listen-in on the same call without the need to hang-up once the panel call.

Description:

Regardless of whether the mode is set to direct on-line or call-back, once two way voice mode is active the panel will generate a short beep every 5 seconds for a 30 second period. If nothing happens and the 30 second timer expires the panels will hang-up (2.5 minutes of 2 way voice open channel with 30 seconds of warning beeps).

If however the DTMF code programmed at P175E14E is entered before the 30 second timer expires (eg if a code of 1234 was programmed at P175E14E then the operator must enter 1-2-3-4-# at their telephone). The short beeps will stop and the two way voice channel will remain open for a period of 3 minutes (if no code is programmed at P175E14E then pressing the # button is all that is needed).

After 2 minutes and 30 seconds the short beeps will start again. The operator must repeat the process above to keep the panel on-line for a further 3 minutes otherwise the panel will hang-up when the 3 minutes expire.

If the operator wishes to terminate the two way voice connection they should enter in 0-0-0-# on their telephone which will tell the panel to hang-up.

If the panel is set for two way voice call-back operation it will answer any in-coming call on the first ring for a period of 10 minutes from reporting the alarm event and hanging up. If the DTMF code at P175E14E (as described above) is not entered within 30 seconds and the panel hangs-up, the panel will still answer any new calls on the first ring unless it has been longer than 10 minutes since the original alarm was transmitted. As soon as the panel receives the correct DTMF acknowledge code the auto-answer feature (answering on the 1st ring) will be reset.

Microphone Control

P175E 13E Microphone Command Control Code

The panel can be configured to allow remote listen-in via an on-site microphone. The Voice Board must be fitted for the microphone feature to be available the code programmed at this address is the DTMF code that must be used when turning the microphone On or Off. When dialling the panel and it has answered the call, after waiting for the panel modem tones to stop you can enter in the 4 digit DTMF code plus the <*> button on the telephone. This will turn the Microphone On. By Pressing the <*> button again the microphone will be turned Off. When finished you simply hang-up and 15 seconds later the panel will release the line.

Acknowledging Voice Alarm Messages

P175E 14E – Dialer Acknowledge DTMF Code Number

If the panel is set to report in Domestic or Voice reporting formats, you can simply kiss-off (acknowledge) the alarm by pressing the <#> button on the remote telephone. Alternatively if you require a more secure kiss-off method to ensure that the alarm is only kissed off by the correct person you can program a 1-4 digit code at this location. If a code is programmed at this location you must enter in the code followed by the <#> button to kiss-off the alarm event. This code is also used in conjunction with the two way voice function

Mute the Siren during the Two- Way Voice Mode

P37E 1-8E Option 4 - Turn Output OFF during Two- Way Voice Mode

If the panel has a full duplex two way voice board fitted and the settings at P175E2E option 8 and P183E option 5 are set to allow full duplex mode, any outputs with this option turned on will be disabled while two way voice is operational. This is to ensure that local sirens do not interfere with the two way voice audio signal.

Force Test Call DTMF Code Number

P175E 15E-Force DTMF Code Number

If a user wishes to remotely force a test call from the panel to a monitoring company using the Contact ID test message, you can dial the panel and when it answers enter the code programmed at this location on the telephone.

If a voice board is fitted you can assign a voice message (see P176E11E below) to indicate that the function was started. If no voice board is fitted but there is a DTMF IC fitted to the panel you will get 3 short beeps after the code is entered to indicate the function was started. Once you hang-up the phone the panel will then make a call to the monitoring company and send a manual test call message. If no code is programmed at this location (ie "0") the function will be disabled. The code can be a 1-4 digit number as required.

NOTE: If using this remote test code and any of the other remote DTMF codes at locations (P63E, P175E12E, P175E13E & P175E14E) you should make this code a 4 digit code to ensure the panel knows what function is being operated. If no other DTMF remote functions are being used this code can be a single digit.

It is also possible to force a locally generated test call from the panel keypad by pressing and holding the <CONTROL> button then <0> within two seconds of pressing control. This will force a test call to the monitoring company.

Programming the Command Control

Command Control Operation Area A&B Arm/Disarm

P63E 1-2E Area A&B Command Control Code

P64E 1-2E Start Message for Area A&B Command Control

The panel can be configured to allow remote Arm/Disarm of each Area via a remote telephone. The codes programmed at this address are the DTMF code that must be used when performing this function. When dialling the panel and it has answered the call, after waiting for the panel modem tones to stop you can enter in the 4 digit DTMF code and the current status will be given of the Area associated with the code entered. After that, if you press the <*> button on the telephone the status of the area will toggle; e.g. if it was previously armed it will change to disarmed or vice-versa. When finished you simply hang-up and 15 seconds later the panel will release the line.

If a Voice Board is connected to the panel it is possible to dial the panel from a remote telephone and Arm or Disarm each Area using a 4 digit code with voice prompts provided by the Voice Board to identify what Area you are controlling.

Command Control Operation Outputs

P175E 12E Output command Control Code

P42E 1-8E Start Message for Outputs1-8

The panel can be configured to allow remote operation of the Outputs via a remote telephone. The code programmed at this address is the DTMF code that must be used when performing this function. When dialling the panel and it has answered the call, after waiting for the panel modem tones to stop you can enter in the 4 digit DTMF code plus the Output number you wish to control, eg <1> for Output # 1, and the current status will be given of the Output associated with the code entered. After that, if you press the <*> button on the telephone the status of the output will toggle eg if was previously on it will change to off or vice versa. When finished you simply hang-up and 15 seconds later the panel will release the line.

If a Voice Board is connected to the panel it is possible to dial the panel from a remote telephone and turn outputs On or Off using a 4 digit code with voice prompts provided by the Voice Board to identify what function you are controlling.

DTMF Code Table

These are the DTMF codes used for sending responses and operating commands.

Command	Description
P175E 12E	Sets the DTMF code for use by the central control center to operate the **OUTPUT** (4 digits).
P175E 13E	Sets the DTMF code for turning microphone **ON/OFF**.
P175E 14E	Dialer Acknowledge DTMF Code
P175E 15E	Forces a test call for testing the DTMF response codes.
P63E 1-2 E	Sets the DTMF code for **ARM** and **DISARM**.

Table 2 –List of DTMF codes