



# PowerWave 4/8/16 Voice Board

## Installation and Programming Guide

### Introduction

The 90 second voice board is designed to work with the PW- 4 / 8 & PW-16 alarm panels. The Voice Board provides up to 90 seconds of speech storage. The speech messages are programmed via the handheld speech programmer. The voice board also has a Microphone input for connection of the optional MIC BOARD. The MIC board allows the owner to listen to sounds within the protected premises to determine if an intruder is on-site. The speech messages can be used to annunciate different alarm types or to give status reports for Command Control. Command Control allows the user to Arm/Disarm the alarm or turn Outputs On/Off (with voice prompts) from a remote telephone by using secret 4 digit codes.

### Installation

The Voice board has 1 female socket fitted on the underside of the board. The 18 way socket plugs into the opposite socket on the PowerWave socket. In both cases the board can only be installed one way. Please always ensure that the alarm panel is powered down while fitting the voice board to prevent damage from occurring.

### Programming the Voice Messages

You must have a Speech Programmer to set up the appropriate voice messages. The Speech Programmer plugs into the 10 way header pins on the Voice Board. The brown wire on the Speech Programmer must line up with the pin labeled "1" on the Voice board header pins. On the Speech Programmer there are two pushbuttons labeled "Record" and "Play".

To record a message onto the Voice Board first press the button labeled "Reset" on the Voice Board to ensure that you will be starting at the beginning of the speech storage memory locations.

Then simply press the "Record" button (the record LED on the programmer & voice board will turn on) and speak clearly into the microphone (10cm distance) on the Speech Programmer.

NOTE: Ensure that each message is a minimum of 2 seconds in length.

When the message is finished release the "Record" button (the record LED on the programmer & voice board will turn off).

At this point if you press the "Record" button again you can now record a second message

starting immediately following the first message recorded. Releasing the “Record” button will stop the recording again.

Continue with this process until all messages have been successfully recorded.

To review the messages, first press the “Reset” button on the Voice Board to return to the beginning of the message storage memory locations.

Then press the “Play” button momentarily to start the playback of the first message. When the message is finished the Voice board will stop the playback mode. To listen to the next recorded message press the “Play” button again. Repeat this operation until all recorded messages have been reviewed. When all messages have been reviewed, press the “Reset” button to reset the voice board back to the beginning.

<b>Panel Type ➡ Message Number ↓</b>	<b>PW4&amp;PW8</b>	<b>PW16</b>
<b>1+X</b>	Area “A” Armed	Area “A” Armed
<b>2+X</b>	Area “A” Disarmed	Area “A” Disarmed
<b>3+X</b>	Area “B” Armed	Area “B” Armed
<b>4+X</b>	Area “B” Disarmed	Area “B” Disarmed
<b>5+X</b>	Output # 1 On	Area “C” Armed
<b>6+X</b>	Output # 1 Off	Area “C” Disarmed
<b>7+X</b>	Output # 2 On	Output # 1 On
<b>8+X</b>	Output # 2 Off	Output # 1 Off
<b>9+X</b>	Output # 3 On	Output # 2 On
<b>10+X</b>	Output # 3 Off	Output # 2 Off
<b>11+X</b>	Output # 4 On	Output # 3 On
<b>12+X</b>	Output # 4 Off	Output # 3 Off
<b>13+X</b>	Output # 5 On	Output # 4 On
<b>14+X</b>	Output # 5 Off	Output # 4 Off
<b>15+X</b>	Output # 6 On	Output # 5 On
<b>16+X</b>	Output # 6 Off	Output # 5 Off
<b>17+X</b>	Output # 7 On	Output # 6 On
<b>18+X</b>	Output # 7 Off	Output # 6 Off
<b>19+X</b>	Output # 8 On	Output # 7 On
<b>20+X</b>	Output # 8 Off	Output # 7 Off
<b>21+X</b>		Output # 8 On
<b>22+X</b>		Output # 8 Off

# Command Control Programming

Command Control messages are one's that are used to give voice status information during dial-in control of Arm/Disarm or Output's.

The Command Control Messages **Must** be recorded in the correct order for everything to work properly and must be recorded **After** all alarm messages have been recorded.

For example, if you required **X = 5** alarm messages as listed below;

- 1-"Burglar alarm"
- 2-"Fire alarm"
- 3-"Panic alarm"
- 4-"Low Battery"
- 5-"Freezer alarm"

These messages would be recorded first. The next message would then be the first Command Control Message (please refer to the list below for the order of command control messages).

In this example, the Command Control Messages would begin at message number  $1+5=6$ . In the PW-4/8 panel the address for the start message for Command Control is "P250E", in the PW-16 it is "P777E".

The order for the Command Control Messages are as follow;

If some Command Control Messages are not used but other messages following these messages are to be used then "Dummy" messages must be recorded so that the order is maintained.

For example; If the Arm/Disarm feature for Area "A" is being used but there is no Area "B" (because the system is not partitioned) but outputs 1 & 2 will have remote Command Control functions then 2 very short messages must be added in following Command Control message # 2 (Area "A" Disarm message). These 2 short messages are for the Area "B" arm/disarm messages that although are not being used, must be recorded to maintain the correct order.

Then the messages for output 1 & 2 can be recorded. The "Dummy" messages do not have to be very long, a quick momentary press of the "Record" that is enough to bring on the record LED's will be sufficiently long to serve the purpose.

## Operating Instructions

### Acknowledging Voice Alarm Messages.

If an alarm occurs that is set for Voice Reporting, the panel will call the pre-programmed telephone number/s. When the call is answered, the Voice Alarm message will be sent. The panel will then wait for 5 seconds looking for a DTMF tone on the line (a DTMF tone is generated when any key on a normal pushbutton telephone is pressed). If the panel receives a DTMF tone it will hang-up and cancel any further calls for that particular alarm event. If not it will repeat the voice message a further 3 times with the 5 second pause in between waiting to hear a DTMF tone that will stop the alarm reporting. If no DTMF tone was received after the total of 4 attempts the panel will dial the next pre-programmed number on the list and repeat the sequence again.

### Command Control Operation

If Command Control is set up then a valid code holder can call the alarm using any standard pushbutton telephone. When the panel answers the in-coming call it will generate 2 different tones for approximately 2 seconds each. When the tones have finished the panel will be look-

ing for a valid 4 digit DTMF code e.g. 1, 2, 3, 4. If the code entered in at the keypad on the telephone matches one of the valid DTMF codes programmed into the panel the appropriate voice message will be sent.

For example; If the code 1,2,3,4 was the Arm/Disarm code for Area "A" and the code holder entered this code in at their telephone, the alarm panel will respond with the voice message relating to the current status of Area "A".

Now by pressing the " \* " button at the remote telephone the panel will change the status of Area "A" (if already Armed it will Disarm the panel or vice versa) and give the corresponding voice message relating to this new state.

Output Control is very similar with the exception that the output number you wish to control must be entered in after the valid 4 digit code e.g. if the output control code was 2,5,8,0 and you wanted to control output # 2 then the code 2,5,8,0,2 must be entered in at the remote telephone. Once again, if this was a valid code to control the outputs the panel will respond with the voice message relating to the current status of the output concerned (in this case output 2). By pressing the " \* " button the state of the output will be changed and the message relating to the new status will be sent.

At any time if an incorrect code is accidentally entered a single press of the " # " button at the telephone will reset all digits sent ready for a new sequence of 4 digits.

## Microphone Control

If the optional microphone is connected to the Voice Board, it is possible to dial into the alarm panel from any telephone and turn on the Microphone input to allow audible verification of an intruder on-site.

To do this, once the panel has answered the in-coming call as before, all you have to do is enter in the valid 4 digit Microphone code followed by the " \* " button.

If the panel is currently in alarm at the time of turning on the microphone, all alarm outputs are turned off so that any foreign sounds may be heard. To turn the microphone input off you simply press the " \* " button again. If the microphone is not turned off properly it is automatically turned off when the call is terminated and the outputs are returned to their previous state. The various Command Control program address codes for both panels are listed in the chart below.

<b>Panel Type ➡</b> <b>Command Control</b> <b>Function ↓</b>	<b>PW4/PW-8</b>	<b>PW-16</b>
<b>Area "A" Arm/Disarm</b>	P334E	P372E
<b>Area "B" Arm/Disarm</b>	P335E	P373E
<b>Area "C" Arm/Disarm</b>	-	P374E
<b>Output Control</b>	P336E	P371E
<b>Microphone Control</b>	P337E	P375E