



# CM101B

## Interactive Voice Module

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Supported Panels	<b>Solution 16</b> <sup>Plus</sup> - V1.12 Firmware or higher <b>Solution 64</b> - V1.63 Firmware or higher <b>Solution 16i</b> - V2.10 Firmware or higher <b>Solution 144</b> - V2.00 Firmware or higher
SolutionLink Version Required	<b>Solutionlink</b> V1.21 or higher

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## Introduction

The CM101B Module allows the alarm panel to deliver concise voice alarm reports when an alarm event occurs. Up to 3 different phone numbers per reporting route can be programmed on the Solution 16i, 16<sup>PLUS</sup> and 64 panels while up to 5 numbers can be programmed per route or destination when using the Solution 144 panel.

The installer or a master user can record their own customised message descriptions for both the system Greeting Message and Zone Names for the first 16 or 32 zones depending on the module installed. Other messages are fixed within the voice module and cannot be changed by the installer or user. These include open/close reports, system trouble reports and emergency alarms etc.

The customised voice messages allow the user to easily interpret the type of report being sent when they answer an incoming call from the control panel.

In addition to voice reporting, the CM101B also provides voice prompting during remote control of the system with full user PIN authentication. Areas and or Outputs can be armed or turned on and off using a mobile phone or any other telephone keypad capable of sending DTMF tones.

Before the remote control session can begin the user will be prompted to log onto the system using their alarm PIN thus preventing unauthorised access.

## Getting Started

There are four main steps required to install and configure the CM101B. They are;

1. Install the CM101B hardware on the control panel.
2. Configure the control panel for voice reporting and remote control functions if required.
3. Program the custom voice messages.
4. Test the system to ensure reports are being sent to the correct numbers and that the handset is capable of sending DTMF tones.



Note

The CM101B Voice Module must be physically installed and configured by a qualified alarm technician.

Following installation the technician will explain the user functions and go through the message customising.

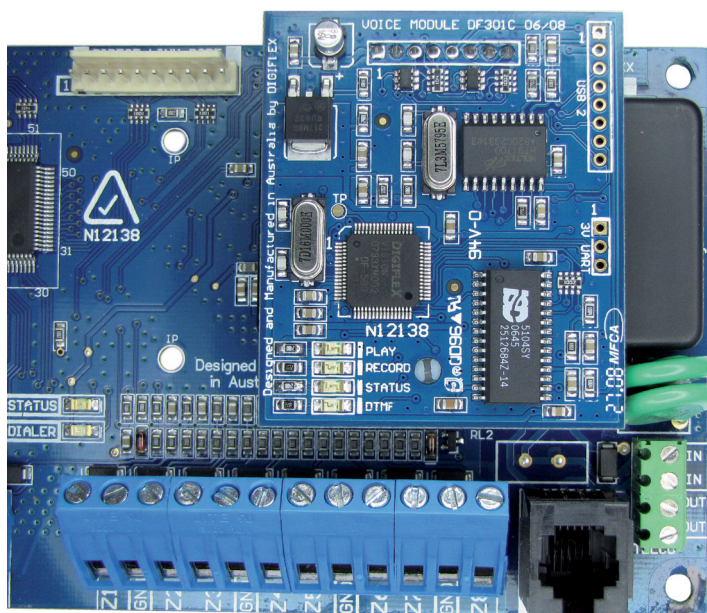
## Step 1 - Installing the Voice Module

### Solution 16i Control Panel

Ensure that the panel is powered off before proceeding. Plug the supplied plastic standoff into the module PCB and then plug it onto the Voice Module" header pins on the panel as shown in Figure 1.

If you are connecting the CM101B to a panel which already has a CM750B IP Module installed then you should use the longer standoffs included in HW750B Riser Kit to raise the CM750B above the voice module.

Once installed, re-apply power the control panel and observe the module's green Status indicator LED. Under normal operation the Status LED will remain on steady for approximately 3 seconds following power up while the system configures the module. Once configured the Status LED will flash once a second.



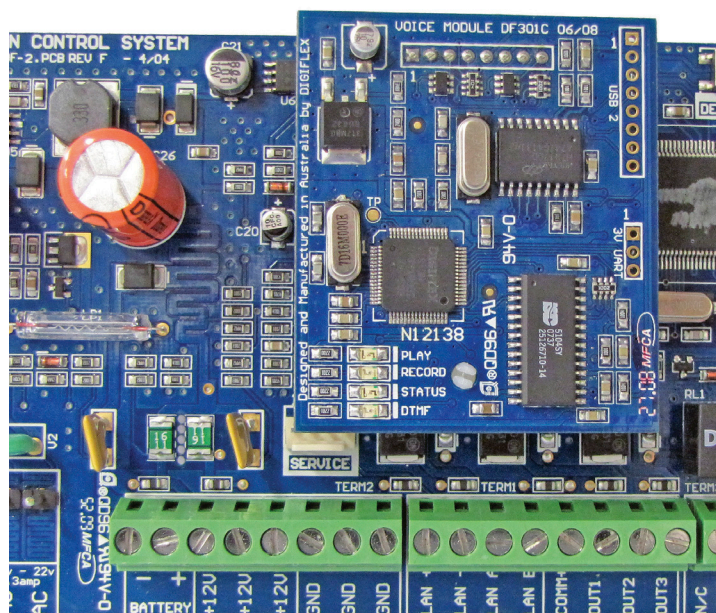
**Figure 1: Module Installed On Solution 16i Panel.**

### Solution 16<sup>PLUS</sup> / Solution 64 Control Panel

Ensure that the panel is powered off before proceeding. Plug the supplied plastic standoff into the module PCB and then plug it onto the Voice Module" header pins on the panel as shown in Figure 2.

Once installed, re-apply power the control panel and observe the module's green Status indicator LED. Under normal operation the Status LED will remain on steady for approximately 3 seconds following power up while the system configures the module. Once configured the Status LED will flash once a second.





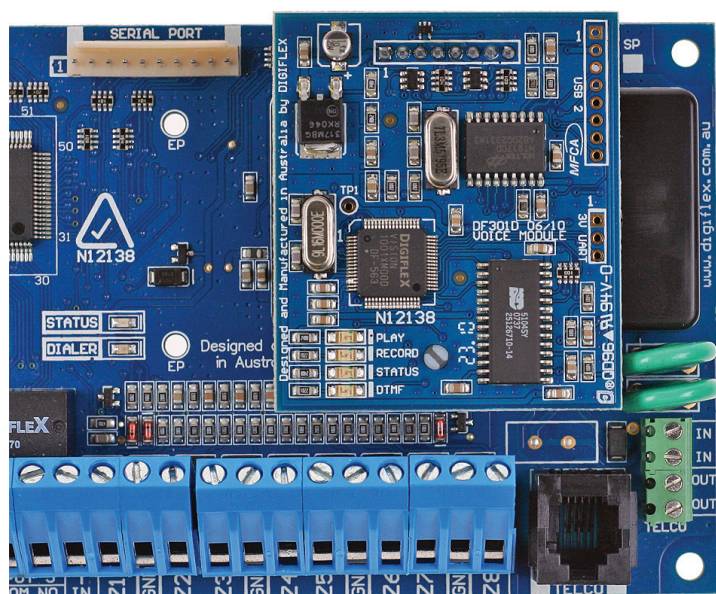
**Figure 2: Module Installed On Solution 64 panel.**

### Solution 144 Control Panel

Ensure that the panel is powered off before proceeding. Plug the supplied plastic standoff into the module PCB and then plug it onto the Voice Module" header pins on the panel as shown in Figure 3.

If you are connecting the CM101B to a panel which already has a CM750B IP Module installed then you should use the longer standoffs included in HW750B Riser Kit to raise the CM750B above the voice module.

Once installed, re-apply power the control panel and observe the module's green Status indicator LED. Under normal operation the Status LED will remain on steady for approximately 3 seconds following power up while the system configures the module. Once configured the Status LED will flash once a second.



**Figure 3: Module Installed On Solution 144 panel.**

## Step 2 - Configuring Voice Message Reporting

A number of programming options need to be configured on the control panel to enable voice module functions.

Most of these can only be programmed by the installer.

In the following pages the relevant menu locations are shown for each of the panels which currently support the Voice Module. If the panel you have is not listed you should refer to the documentation that was supplied with your panel.

### Programming The Transmission Format

To enable voice reporting you will need to program the transmission format for at least one reporting destination as Voice format.

At factory default, the control panel is set up to send all reports to destination 1 in the Contact ID format. If only Voice reporting is required then you should set the reporting format for destination 1 to Voice format. If dual reporting is required it is recommended that you program destination 2 to report in the Voice format.

### Programming The Reporting Routes

Once the reporting formats have been selected configure each route to report to destination 1, destination 2 or both 1 and 2 as required. When using the Solution 16i panel the following locations will need to be configured.


- Open/Close Report Route (MENU 2-2-2)
- Zone Report Route (per zone) MENU 3-1-6)
- Test Report Route (MENU 5-4-2)
- Status Route (MENU 5-4-3)
- Emergency Route (MENU 5-4-4)

See the section called "Voice Module Programming Locations" on page 14 for details on the specific locations that should be programmed for each panel type.

## Programming DTMF Options

If remote control of the panel's areas and outputs is required, then you will need to enable the required DTMF options. The available options are as follows.

1. **DTMF Arming**  
This option allows authenticated users the ability to turn one or more areas All On.
2. **DTMF Disarming**  
This option allows authenticated users the ability to turn one or more area off.
3. **DTMF User Functions.**  
This option allows authenticated users to turn one or more outputs on or off.
4. **DTMF Quick Arm**  
This option allows the alarm panel to be fully armed without needing to log on or authenticate with the alarm panel. The entire system is armed when using this method.



The panel will prompt you to log on using a valid user PIN before you will be able to perform any remote DTMF control functions. You should use your alarm PIN for this function.

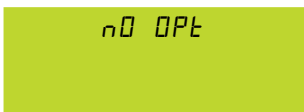
## Programming Telephone Numbers

### Solution 16i Control Panel

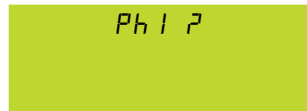
The voice format allows the control panel to send reports to 3 different personal telephone numbers per route (eg. Mobile telephone numbers). The numbers can be programmed or changed by the master user at any time if required. Each telephone number can have a maximum of 32 digits.

In the Solution 16i control panel the phone numbers for voice reporting are programmed in the same location as the Domestic Phone Numbers which is in MENU 5-1-5. You should program the required numbers as follows.

1. **Enter your Master PIN + [MENU].**
2. **Enter [5] + [1] + [5] + [OK].**  
If the control panel is not configured to report via domestic or voice formats, the keypad will display the following:



If the control panel has been configured to report via domestic or voice formats, the keypad will display information for telephone number 1.

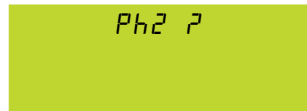


3. **Press [OK] to program phone number 1.**
4. **Using the numeric keys, enter all of the digits of the first telephone number that the control panel will call.**

You can change a single digit by scrolling the cursor left [←] and right [→]. For special characters (eg. Pause = P, A = \*, H = # etc), use the [↑] and [↓] keys.

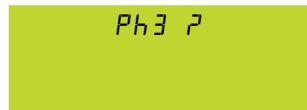
To clear or delete all numbers from the current cursor position to the right, press the [OFF] key. When finished entering the number press [OK].

5. **Press [OK] to program telephone number 2.**




6. **Using the numeric keys, enter all of the digits of the second telephone number (if required) then press [OK] when finished.**

7. **Press [OK] to program telephone number 3.**



8. **Using the numeric keys, enter all the digits of the third telephone number (if required).then press [OK] when finished.**
9. **Press [OK] to save and exit, or press [MENU] to cancel.**



Voice or Domestic reporting must be enabled by the installer or the domestic phone number option will not be available.

## Solution 16<sup>PLUS</sup> / Solution 64 Control Panel

The voice format allows the control panel to send reports to 3 different personal telephone numbers per route (eg. Mobile telephone numbers). The numbers can be programmed or changed by the master user at any time if required. Each telephone number can have a maximum of 32 digits.

In the Solution 16<sup>PLUS</sup> and 64 control panels the phone numbers for voice reporting are programmed in the same location as the Domestic Phone Numbers which is in MENU 5-1-5.

You should program the required numbers as follows.

1. Enter your Master PIN + [MENU].
2. Press [MENU] + [5] + [1] + [5] + [OK]. If the panel has not configured to report via domestic format, the keypad will display the following:

```
Domestic Reports Not
Enabled. Please Contact
Your Security Service
Provider
```

3. If the control panel has been configured to report via domestic format, the keypad will display information for telephone number 1.
4. Using the arrow and numeric keys, enter all the digits of the first telephone number. You can change a single digit in the number by scrolling the cursor left or right. For special characters (eg. , = pause \* or # etc), use the up and down arrow keys. To clear all text from the cursor position to the right, press the [OFF] key.

```
Domestic Phone Number 1
97417_
Press ▲▼ 0-9 OK to SAVE
```

5. When the first number is complete press [OK] to program telephone number 2 if required.

```
Domestic Phone Number 2
86538_
Press ▲▼ 0-9 OK to SAVE
```

6. When the second number is complete press [OK] to program telephone number 3 if required.

```
Domestic Phone Number 3
73653_
Press ▲▼ 0-9 OK to SAVE
```

7. When finished press [OK] to save and exit or press [MENU] to cancel.



Voice or Domestic reporting must be enabled by the installer or the domestic phone number option will not be available.

## Solution 144 Control Panels

The voice format allows the control panel to send reports to 5 different personal telephone numbers per destination (eg. Mobile telephone numbers). The numbers can be programmed or changed by the master user at any time if required. Each telephone number can have a maximum of 32 digits.

In the Solution 144 control panel the phone numbers for voice reporting are programmed in the telephone number locations which are in MENU 5-1-1 and MENU 5-1-2.

You should program the required numbers as follows.

1. Enter your Master PIN + [MENU].
2. Press [MENU] + [5] + [1] + [1] + [OK]. If the panel has not configured to report via voice format, the keypad will display the following:

```
Reporting format does
not allow user changes.
Contact installer for
further information
```

3. If the control panel has been configured to report via voice format, the keypad will display the first 3 numbers currently programmed.

```
Phone 1= 87527832
Phone 2=
Phone 3=
Press ▲▼ OK MENU
```

4. Use the arrow keys to highlight the phone number to edit and press [OK].

Using the arrow and numeric keys, enter all the digits of the telephone number. You can change a single digit in the number by scrolling the cursor left or right. For special characters (eg. , = pause \* or # etc), use the up and down arrow keys to scroll through the available characters. To clear all text from the cursor position to the right, press the [OFF] key.


```
Destination 1 Phone 2
97417_
Press ▲▼ 0-9 OK to SAVE
```

5. When the number is complete press [OK]. Repeat the steps to program the any additional numbers.
6. If voice reporting has also been enabled on route 2



then repeat the number programming sequence for the second group of numbers in MENU 5-1-2.

- When finished press [OK] to save and exit or press [MENU] to cancel.



Voice or Domestic reporting must be enabled by the installer or the phone number option will not be available.


### Acknowledging An Alarm Report

When an alarm event occurs, the panel will call the first programmed telephone number in an attempt to deliver the report. When the phone is answered, the voice module will automatically play the 'greeting message'. The default greeting message is: 'Security System has a message for you, please press hash [#] to hear it'.

Press the [#] key on your telephone to acknowledge the call and then the system will play the voice message for the reported event (eg. if a user turned an area on, the message would playback - 'System Is Armed').

Press the [#] key on your telephone to acknowledge the message. If there is more than one event to be reported, the system will play the next report.


You must acknowledge each message by pressing the hash [#] key after the message is played. The alarm panel will hang up once all messages have been acknowledged.



For the best performance you should wait for the messages to finish playing before pressing the [#] key to acknowledge it. If the acknowledge fails simply repeat the process.

A typical reporting sequence might be as follows.

- Alarm event occurs and the panel calls the first phone number.
- Phone is answered and the greeting message plays. Press the [#] key on your phone to acknowledge the call.
- Alarm Zone 1 message plays. Press the [#] key on your phone to acknowledge.
- Alarm Zone 5 message plays. Press the [#] key on your phone to acknowledge.
- No more messages, system hangs up.



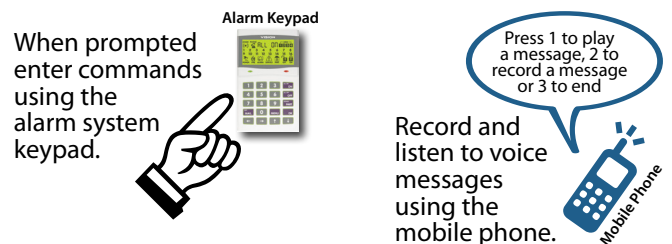
If the call is not acknowledged, the panel will make additional attempts to call the programmed numbers until the maximum allowable attempts are reached or until the call is acknowledged.

A detailed list of all reports that can be sent using the voice format can be found in "Table 6: System Event Messages" on page 16.

### Step 3 - Programming The Custom Voice Messages

The voice module contains a number of recorded messages allowing the system to provide voice prompting and feedback when an alarm is triggered or during remote system control. A number of the messages can be personalised to suit each individual installation. To record a new messages or to playback the current messages you will need to be in front of the system keypad and you will require a mobile telephone.

The system keypad provides feedback on the LCD display and is used the enter commands to the alarm system while the mobile telephone is used to listen to and record the messages. Only the installer or a master user can perform these functions.



**Figure 4: Programming Methodology Diagram**

Currently the system allows for 34 unique voice messages to be customised to suit the installation. These include the zone descriptions for the first 32 zones, an incoming greeting message which will play when remotely controlling the system and an outgoing message which is played when the system is reporting an event.


Each of the messages has a fixed time duration and any new recording must fit into this time period. See "Table 1: Programmable Message Parameters" on page 9.



Customisable Voice Messages		
Message Number	Message Length	Message
1-32	4.25sec	Zone 1 through to Zone 32 name. Default = "Alarm Zone 1" etc Examples of new message could be; "Office Area Zone 1 Kitchen PIR has Alarm", "Hold Up alarm Zone 1" etc.
97	4.25sec	Zone name for zones above 32. "Alarm Expanded Zone"
98	8.9sec	Incoming greeting message. "Security System Please Enter Your PIN Followed by the Hash Key"
99	8.9sec	Outgoing greeting message. "Security System Has a Message, please press the hash [#] key to continue"
So that you can easily distinguish between multiple alarm systems reporting to the same phone numbers you should record the actual site name or residence name in place of Security System in the messages.		

**Table 1: Programmable Message Parameters**

For the incoming and out going messages, it is recommended that you replace only the words Security System in the default messages with a description of the premises. For example replace "Security System has a message, please press the hash [#] key to continue" with "Jones Residence has a message, please press the hash [#] key to continue".



**Note** Some older voice modules only support 16 customer editable zone name fields. The system will display the size of the installed voice module under the Devices / Lan Status program option.

## Solution 16i Control Panel

### Recording and Listening to Messages

1. Enter programming mode using the Installer PIN or Master PIN (eg. [2] + [5] + [8] + [0] + [MENU]).
2. Press [MENU] + [5] + [0] + [6] + [OK].
3. Enter the telephone number of the mobile phone you are using to record the messages from. (eg. 0411123456), then press the [OK] key. The alarm system will now call the programmed number.
4. Answer the incoming call on the mobile telephone and you will hear the following message;

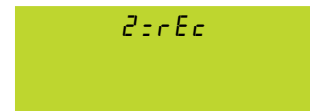
**Press 1 to play a message,  
2 to record a message  
or 3 to end.**

5. The alarm keypad will display the available options on the display awaiting your selection. Using the alarm keypad enter the number corresponding to the operation you want to perform.

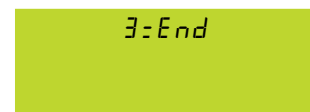
Press [1] = Play a message



Press [2] = Record a message



Press [3] = Exit and terminate the session (end call).



### Playing Back Messages

To playback & listen to an existing voice message follow the instruction in steps 1 to 5 above then,


6. Press [1] on the alarm keypad to playback a message.
7. The system will then prompt you to **Enter the message number followed by the [OK] key**. Enter the message number on the alarm keypad and press the [OK] key and the message will play and be heard on the mobile phone.

See "Table 1: Programmable Message Parameters" on page 9 for a list of the message numbers.

8. After the message has been played, the system will automatically return to the main menu as shown in step 5 above.


## Recording New Messages

To record a new message, follow the instructions in steps 1 to 5 above and then,



**Note** For the best results when recording messages speak loudly and clearly into the mobile phone and reduce as much background noise as possible. We do not recommend recording using hands free operation.

6. Press [2] on the alarm keypad to record a new message.
7. The system will then prompt you to **Enter the message number followed by the [OK] key**. Enter the message number on the alarm keypad and press the [OK] key.
8. On the mobile phone you will hear a short beep indicating that recording has begun. You should now speak clearly into the mobile phone to record the new message as required and press [OK] when finished. If the message duration expires before you finish recording you will hear a long beep indicating that recording has finished. If this happens you may need to speak a little faster when recording or shorten the actual message to fit in the available message space.
9. You should now follow the instructions to playback the message. When you are happy with the newly recorded message repeat the steps to customise the remaining messages. If you would like to overwrite or re-record the same message again simply repeat the appropriate steps until you are satisfied.



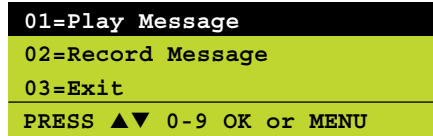
**Note** Currently it is not possible to reset the programmable messages back to the factory default settings. If this is required you should contact your installer for assistance.

### Solution 16 <sup>PLUS</sup> / 64 Control Panels

1. Enter programming mode using the Installer PIN or Master PIN (eg. [2] + [5] + [8] + [0] + [MENU]).
2. Press [MENU] + [5] + [0] + [6].
3. Enter the telephone number of the mobile phone you are using to record the messages from. (eg. 0411123456), then press the [OK] key. The alarm system will now call the programmed number.
4. Answer the incoming call on the mobile telephone and you will hear the following message ;

**Press 1 to play a message,  
2 to record a message  
or 3 to end.**

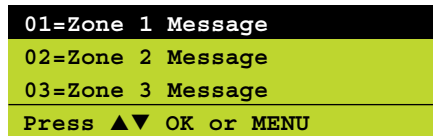
5. The alarm keypad will display the available options on the display awaiting your selection. Using the alarm keypad enter the number corresponding to the operation you want to perform.



6. Press [1] on the alarm keypad to playback and listen to a message, or press [2] to record a new message.

### Playing Back Messages

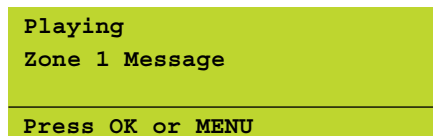
7. The system will then prompt you to **Enter the message number followed by the [OK] key**. Enter the message number on the alarm keypad and press the [OK] key.



Alternatively, you can use the [UP] and [DOWN] keys to scroll to the message required, then press [OK] to select.

See "Table 1: Programmable Message Parameters" on page 9 for a list of the message numbers.


The keypad will display the following whilst playing the current recorded message via the mobile phone.



8. After the message has been played, the system will automatically return to the main menu as shown in step 5 above.

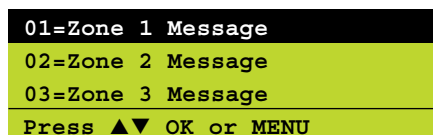
### Recording New Messages

To record a new message, follow the instructions in steps 1 to 6 above and then,



**Note** For the best results when recording messages speak loudly and clearly into the mobile phone and reduce as much background noise as possible. We do not recommend recording using hands free operation.

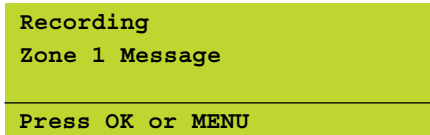
7. The system will then prompt you to **Enter the message number followed by the [OK] key**. Enter the message number on the alarm keypad and press the [OK] key.



Alternatively, you can use the [UP] and [DOWN] keys to scroll to the message required, then press [OK] to select.


See “Table 1: Programmable Message Parameters” on page 9 for a list of the message numbers.

- On the mobile phone you will hear a short beep indicating that recording has begun. You should now speak clearly into the mobile phone to record the new message as required and press [OK] when finished.



If the message duration expires before you finish recording you will hear a long beep indicating that recording has finished. If this happens you may need to speak a little faster when recording or shorten the actual message to fit in the available message space.

- You should now follow the instructions to playback the message. When you are happy with the newly recorded message repeat the steps to customise the remaining messages. If you would like to overwrite or re-record the same message again simply repeat the appropriate steps until you are satisfied.



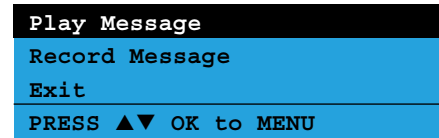
Currently it is not possible to reset the programmable messages back to the factory default settings. If this is required you should contact your installer for assistance.

### Solution 144 Control Panels

- Enter programming mode using the Installer PIN or Master PIN (eg. [2] + [5] + [8] + [0] + [MENU]).
- Press [MENU] + [5] + [0] + [6].
- Enter the telephone number of the mobile phone you are using to record the messages from. (eg. 0411123456), then press the [OK] key. The alarm system will now call the programmed number.
- Answer the incoming call on the mobile telephone and you will hear the following message ;

**Press 1 to play a message,  
2 to record a message  
or 3 to end.**

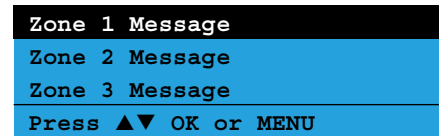
- The alarm keypad will display the available options on the display awaiting your selection. Using the alarm keypad enter the number corresponding to the operation you want to perform.



- Press [1] on the alarm keypad to playback and listen to a message, or press [2] to record a new message.

### Playing Back Messages

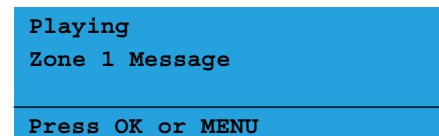
- The system will then prompt you to **Enter the message number followed by the [OK] key**. Enter the message number on the alarm keypad and press the [OK] key.



Alternatively, you can use the [UP] and [DOWN] keys to scroll to the message required, then press [OK] to select.

See “Table 1: Programmable Message Parameters” on page 9 for a list of the message numbers.


The keypad will display the following whilst playing the current recorded message via the mobile phone.



- After the message has been played, the system will automatically return to the main menu as shown in step 5 above.

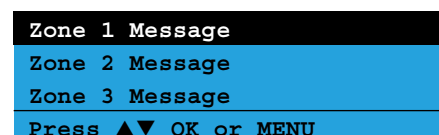
### Recording New Messages

To record a new message, follow the instructions in steps 1 to 6 above and then,



For the best results when recording messages speak loudly and clearly into the mobile phone and reduce as much background noise as possible. We do not recommend recording using hands free operation .

- The system will then prompt you to **Enter the message number followed by the [OK] key**. Enter the message number on the alarm keypad and press the [OK] key.



Alternatively, you can use the [UP] and [DOWN] keys to scroll to the message required, then press [OK] to select.

See "Table 1: Programmable Message Parameters" on page 9 for a list of the message numbers.

- On the mobile phone you will hear a short beep indicating that recording has begun. You should now speak clearly into the mobile phone to record the new message as required and press [OK] when finished.



If the message duration expires before you finish recording you will hear a long beep indicating that recording has finished. If this happens you may need to speak a little faster when recording or shorten the actual message to fit in the available message space.

- You should now follow the instructions to playback the message. When you are happy with the newly recorded message repeat the steps to customise the remaining messages. If you would like to overwrite or re-record the same message again simply repeat the appropriate steps until you are satisfied.

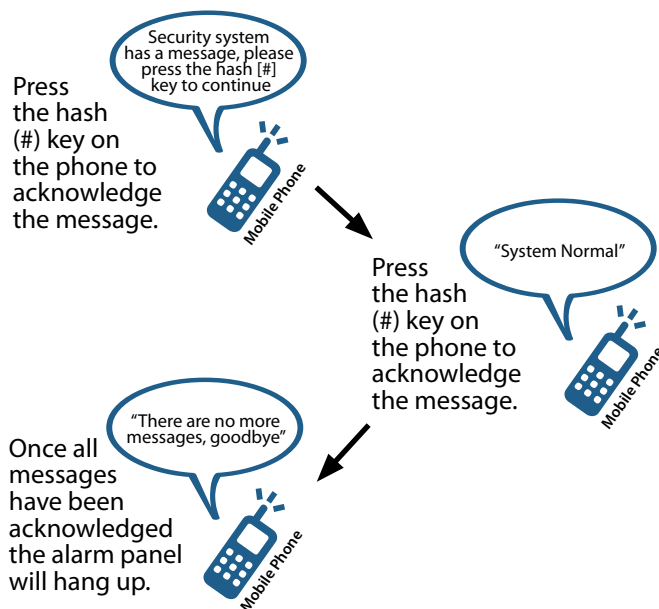
**Note** Currently it is not possible to reset the programmable messages back to the factory default settings. If this is required you should contact your installer for assistance.

### Step 4 - Testing Voice Reporting Operation

To test the voice reporting functionality, you can either trigger an alarm event or press and hold down the MAIL / TEST button on the alarm keypad.

If the system is configured to send test reports in voice format, it will commence dialing the respective phone number(s) that the message is to be reported to. When the phone is answered, the system will play the outgoing greeting message (Message number 99). You will need to press the hash (#) key on the phone to acknowledge the call.

The system will now play the first message which in this example is a test report. An example of a test report message would be "System Normal". Once you have listened to the message, press the hash (#) key to acknowledge it. Each time you acknowledge a message you will hear two confirmation beeps.



**Figure 5: Voice Report Sequence For Test Reports**

The system will now play any remaining messages in the order they occurred. When all messages have been acknowledged (using the [#] key) you will hear "There are no more messages, goodbye" and the system will hang up.

You must acknowledge the call and all messages, or the alarm panel will call the other programmed numbers in an attempt to deliver the message.

**Note** We recommend that you enable test reports when doing voice reporting so you can regularly verify the system operation. The frequency and the time of day that test reports are sent is programmable by the installer in MENU 5-9-1 and 5-9-2.



## Establishing A Remote Connection To The Panel

To use the DTMF or interactive voice control functions you will need to first establish a phone connection between you and the alarm panel.

The way you do this will vary depending on a number of options your installer may have programmed. You should ask them to advise the correct method for your system.

One of the most common ways to connect is using the Answering Machine or Fax Machine bypass method shown in the example below.

1. Call the phone number the alarm panel is connected to and let the phone ring once and then hang up. When counting, remember that "ring ring" is referred to as one ring.
2. Next call the phone number the panel is connected to again and wait for the alarm panel to answer the call. This will be on the first or second ring. Once the panel answers you will be prompted to "Enter Your PIN followed by the hash [#] key. You now have approximately 5 seconds to enter your PIN and log onto the panel.



Remember the second call must be made within 30 seconds of the first call or the connection attempt will fail and you will have to start the process again.

3. To log in, enter your normal alarm PIN followed by the hash [#] key. If the PIN is valid, the alarm system will respond with two short beeps. If the PIN is invalid then a single long beep will be heard.

If a valid PIN is not entered in time, the panel will attempt to establish a modem connection and you will hear sounds very similar to the noise a fax machine makes when answering a call. If this happens you will need to hang up for approximately 60 seconds before trying again.

4. Once validated and logged on to the system, a number of commands can be performed including arming and disarming areas and control of outputs. See the section labelled "Remote Interaction Using Voice Module Commands" on page 13 for more detailed explanation of the remote control functions.



In residential installations, the phone number your panel is connected to will normally be your home phone number. If in doubt check with your installer.

If no keys are pressed for 20 seconds, the alarm panel will play the exit jingle before terminating the session and hanging up.

Pressing [#] [#] at any time while connected will also cause the panel to terminate the session.

## Remote Interaction Using Voice Module Commands

Once you have successfully connected to the panel the voice module will prompt you to log on. You should enter your normal user PIN followed by the hash [#] key.

Once logged on, the voice module will begin playing the main menu. You need to select one of the 4 options by pressing the corresponding number on the phone handset.

Press [1] for area control.

Press [2] for output control.

Press [3] for system status.

Press [4] to end session and hang up.

Depending on your selection, the module will prompt you to enter the area or output number or it will play the system status message.

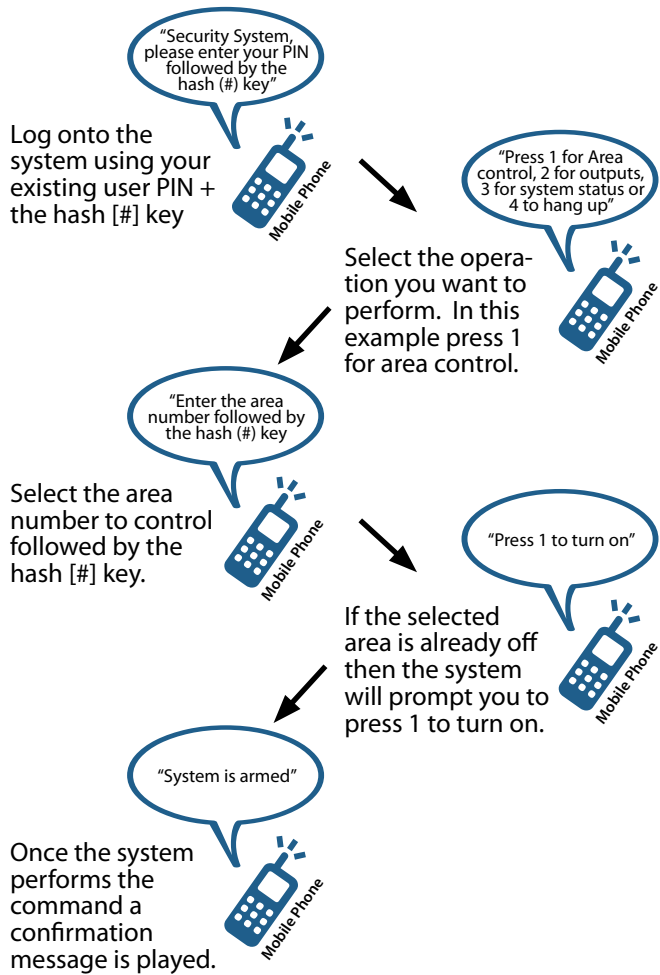
This example assumes that you want to turn Area 1 On. For control of other areas or outputs, enter the corresponding area or output numbers.

Press [1] for area control. The system will then prompt you to enter the area number you wish to control followed by the [#] key. In this example press [1] to select Area 1.

The system will now prompt you to enter [1] + [#] to turn Area 1 on. If the area is already on then the system will prompt you the press [2] + [#] to turn Area 1 off.

Once the command has been performed by the panel a confirmation message will be heard and then the control menu will be ready for the next command to be entered. When finished, press [4] to end the session and hang up.

In a multi area configuration, the system status command will only advise the status of Area 1 regardless of the state of the other areas on the system. To check the state of other areas you should select the area control command and the system will then confirm the status of the selected area.



**Figure 6: Voice Report Sequence For Remote Arming**

The system will only prompt you to turn on an area or output if it is already in the off state. If a long beep is heard after any command, then the system has denied the request. If this continues you should check with the installer to see if they have configured all of the DTMF control options on your system.

**Note** To arm multiple areas at once, select area zero [0] instead of a specific area number when prompted. Only areas that the user belongs to will be armed.

### Voice Module Programming Locations

The following programming options will need to be configured when installing the CM101B on Solution control panels. Options and program locations may vary on different panel models so you should always check the panel installation guide for the most up to date instructions.

Solution 16i Panel		
Location	Description	Default Value
MENU 2-2-2	Open / Close Report Route	1
MENU 3-1-6	Zone Report Route	1
MENU 5-4-2	Test Report Route	1
MENU 5-4-3	Status Report Route	1
MENU 5-4-4	Emergency Report Route	1
MENU 5-1-5	Set Domestic Phone Numbers	No Numbers
MENU 5-3-5	DTMF Options	Various
MENU 5-4-0	TX Format 1	Contact ID
MENU 5-4-1	TX Format 2	Contact ID

**Table 2: Solution 16i Panel Programming Locations**

Solution 16 <sup>PLUS</sup> / Solution 64 Panels		
Location	Description	Default Value
MENU 2-2-2	Open / Close Report Route	1
MENU 3-1-6	Zone Report Route	1
MENU 5-4-2	Test Report Route	1
MENU 5-4-3	Status Report Route	1
MENU 5-4-4	Emergency Report Route	1
MENU 5-1-5	Set Domestic Phone Numbers	No Numbers
MENU 5-3-5	DTMF Options	Various
MENU 5-4-0	TX Format 1	Contact ID
MENU 5-4-1	TX Format 2	Contact ID

**Table 3: Solution 16<sup>PLUS</sup> / 64 Panel Programming Locations**

Solution 144 Panel		
Location	Description	Default Value
MENU 2-2-2	Open / Close Report Route	1
MENU 3-1-6	Zone Report Route	1
MENU 5-4-2	Test Report Route	1
MENU 5-4-3	Status Report Route	1
MENU 5-4-4	Emergency Report Route	1
MENU 5-1-1	Dest 1 Phone Numbers	No Numbers
MENU 5-1-2	Dest 2 Phone Numbers	No Numbers
MENU 5-3-5	DTMF Options	Various
MENU 5-4-0	TX Format 1	Contact ID
MENU 5-4-1	TX Format 2	Contact ID
MENU 1-6-0	Access Report Route	0

Table 4: Solution 144 Panel Programming Locations

### Module LED Indicators

The CM101B module includes four LED indicators that provide instant feedback during installation and commissioning of the module. Additional module feedback is provided through the keypad.

Please refer to Table 5 for the Indicator descriptions and functions.

Voice Module Indicators	
Name	Meaning
<b>STATUS (Green)</b>	<b>ON</b> = Trouble No Communication between Panel and Module. <b>Slow Flash</b> = Normal Operation <b>Fast Flash</b> = Panel Communicating With Module
<b>PLAY (Green)</b>	<b>ON</b> = Voice message is being played.
<b>RECORD (Red)</b>	<b>ON</b> = Voice message is being recorded.
<b>DTMF (Red)</b>	<b>ON</b> = Valid DTMF tone received by the module.

Table 5: PCB Indicator Meanings

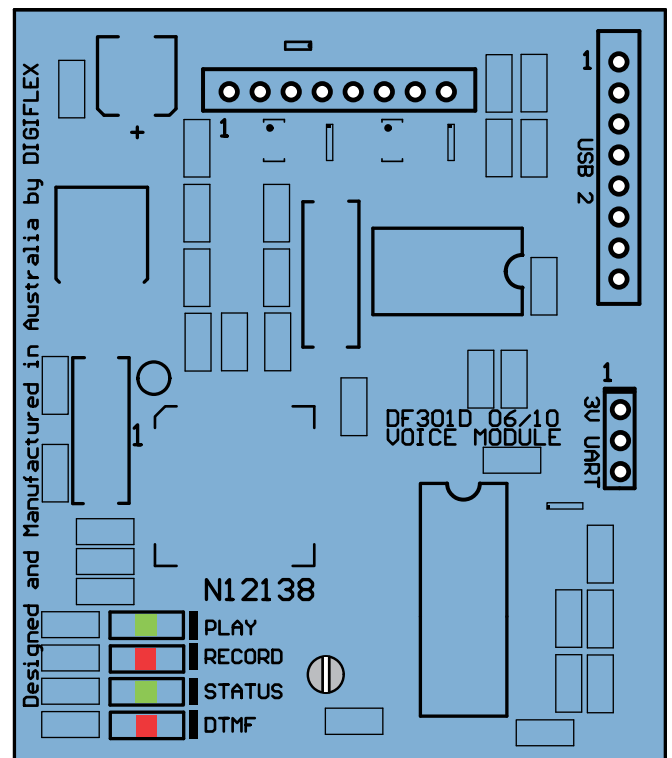


Figure 7: Voice Module Indicators

**System Events and Default Voice Messages**

Reportable Voice Messages			
System Event	Voice Message Report	System Event	Voice Message Report
<b>Zone Input Alarm Reports</b>			
Delay	Alarm Zone xx	Peripheral AC Fail	System Trouble
Instant	Alarm Zone xx	Peripheral Fail (Missing)	System Trouble
Handover	Alarm Zone xx	Peripheral Low Battery	System Trouble
Delay	Alarm Zone xx	Peripheral Over current	System Trouble
24 Hr Burglary	Alarm Zone xx	Peripheral Network Loss	N/A
Panic	Alarm Zone xx	Peripheral Trouble	N/A
Medical	Alarm Zone xx	Peripheral Tamper	General Alarm Activated
Hold-Up	Alarm Zone xx	RF Receiver Jam	N/A
Tamper	Alarm Zone xx	RF Keyfob Panic	Emergency Alarm Activated
Fire Zone	Alarm Zone xx	Clock Error Begin	System Trouble
Keyswitch (Short When Armed)	Alarm Zone xx		
24 Hr Non Burglary	Alarm Zone xx		
Alarm Exit Error	Alarm Zone xx		
Cross Zone Alarm, Instant	Alarm Zone xx		
Cross Zone Alarm, Delay	Alarm Zone xx		
Cross Zone Alarm, Fire	Alarm Zone xx	<b>Open/Close Reports</b>	
		Close – All On – User	System Is Armed
<b>System Reports</b>		Close – All On – Keyfob	System Is Armed
Test Report – Manual	System Normal	Close – All On – Token	System Is Armed
Test Report – Periodic	System Normal	Close – All On – Keyswitch	System Is Armed
Test Report – Off + Normal	System Normal	Close – All On – Remote	System Is Armed
AC Fail	System Power Fail	Close – All On - Schedule	System Is Armed
Battery Low	System Low Battery	Close – Part On – User	System Is Armed
Battery Missing	Low System Battery	Close – Part On – Keyfob	System Is Armed
Comm's Fail – Telephone	System Trouble	Close – Part On – Token	System Is Armed
Phone Line Fail	System Trouble	Close – Part On – Keyswitch	System Is Armed
LAN Voltage Trouble	System Trouble	Close – Part On – Remote	System Is Armed
ACC Voltage Trouble	System Trouble	Close – Part On - Schedule	System Is Armed
Comm+ Voltage Trouble	System Trouble	Close – Last To Close	System Is Armed
Access Denied	General Alarm Activated	Open – First To Open	System Is Disarmed
Duress	Emergency Alarm Activated	Open – User	System Is Disarmed
Keypad Fire	Emergency Alarm Activated	Open – Keyfob	System Is Disarmed
Keypad Panic	Emergency Alarm Activated	Open – Token	System Is Disarmed
Keypad Medical	Emergency Alarm Activated	Open – Keyswitch	System Is Disarmed
Temperature Alarm – High	System Trouble	Open – Remote	System Is Disarmed
Temperature Alarm – Low	System Trouble	Open – Schedule	System Is Disarmed
Output Trouble	System Trouble		

**Table 6: System Event Messages**



## Default Voice Messages

Message Number	Message Length	Description	Message	User Can Program
1	4.25s	Zone 1 name	"Alarm Zone 1"	Yes
2	4.25s	Zone 2 name	"Alarm Zone 2"	Yes
3	4.25s	Zone 3 name	"Alarm Zone 3"	Yes
4	4.25s	Zone 4 name	"Alarm Zone 4"	Yes
5	4.25s	Zone 5 name	"Alarm Zone 5"	Yes
6	4.25s	Zone 6 name	"Alarm Zone 6"	Yes
7	4.25s	Zone 7 name	"Alarm Zone 7"	Yes
8	4.25s	Zone 8 name	"Alarm Zone 8"	Yes
9	4.25s	Zone 9 name	"Alarm Zone 9"	Yes
10	4.25s	Zone 10 name	"Alarm Zone 10"	Yes
11	4.25s	Zone 11 name	"Alarm Zone 11"	Yes
12	4.25s	Zone 12 name	"Alarm Zone 12"	Yes
13	4.25s	Zone 13 name	"Alarm Zone 13"	Yes
14	4.25s	Zone 14 name	"Alarm Zone 14"	Yes
15	4.25s	Zone 15 name	"Alarm Zone 15"	Yes
16	4.25s	Zone 16 name	"Alarm Zone 16"	Yes
17	4.25s	Zone 17 name	"Alarm Zone 17"	Yes
18	4.25s	Zone 18 name	"Alarm Zone 18"	Yes
19	4.25s	Zone 19 name	"Alarm Zone 19"	Yes
20	4.25s	Zone 20 name	"Alarm Zone 20"	Yes
21	4.25s	Zone 21 name	"Alarm Zone 21"	Yes
22	4.25s	Zone 22 name	"Alarm Zone 22"	Yes
23	4.25s	Zone 23 name	"Alarm Zone 23"	Yes
24	4.25s	Zone 24 name	"Alarm Zone 24"	Yes
25	4.25s	Zone 25 name	"Alarm Zone 25"	Yes
26	4.25s	Zone 26 name	"Alarm Zone 26"	Yes
27	4.25s	Zone 27 name	"Alarm Zone 27"	Yes
28	4.25s	Zone 28 name	"Alarm Zone 28"	Yes
29	4.25s	Zone 29 name	"Alarm Zone 29"	Yes
30	4.25s	Zone 30 name	"Alarm Zone 30"	Yes
31	4.25s	Zone 31 name	"Alarm Zone 31"	Yes
32	4.25s	Zone 32 name	"Alarm Zone 32"	Yes
97	4.25s	Zone name for zones > 32	"Alarm Expanded Zone"	No
98	8.9s	Incoming greeting	"Security System Please Enter Your Pin Followed by the [#] Hash Key"	Yes
99	8.9s	Outgoing greeting	"Security System Has a Message. Please Press the [#] Hash key to continue."	Yes
Fixed	8.9s	Menu options	"Press 1 for Area Control 2 for Outputs 3 for System Status or 4 To Hang Up"	No
Fixed	8.1s	Message number	"Enter the message number followed the OK key. Hold down MENU to Exit at any time."	No
Fixed	8.1s	Record and playback	"Press 1 to PLAY a Message 2 to RECORD a Message or 3 to End"	No
Fixed	4.25s	System Trouble	"System Trouble"	No
Fixed	4.25s	System Normal	"System Normal"	No
Fixed	4.25s	Power Fail	"System Power Fail"	No

Fixed	4.25s	Low Battery	"System Low Battery"	No
Fixed	4.25s	System is Armed	"System is Armed"	No
Fixed	4.25s	System is Disarmed	"System is Disarmed"	No
Fixed	4.25s	Select Area	"Enter the Area Number followed by the [#] Hash Key"	No
Fixed	4.25s	Select Output	"Enter the Output Number followed by the [#] Hash Key"	No
Fixed	4.25s	Press 1 for ON	"Press 1 to Turn On"	No
Fixed	4.25s	Press 2 for OFF	"Press 2 to Turn Off"	No
Fixed	4.25s	Keypad Emergency	"Emergency Alarm activated"	No
Fixed	4.25s	General Alarm	"General alarm activated"	No
Fixed	4.25s	No more Messages	"There are no more messages Good Bye"	No

**Table 7: Default Voice Messages**

## Specifications

**Part Number:** CM101B - Voice Module

**Operating Voltage:** Supplied by Panel - Derate the maximum available 12V accessory power from the panel by 20mA when the module is fitted.

**Compatible With:** Solution 16i (Firmware V2.10 or higher)  
 Solution 16<sup>PLUS</sup> (Firmware V1.12 or higher)  
 Solution 64 (Firmware V1.63 or higher)  
 Solution 144 (Firmware V2.00 or higher)

**Max N° of Telephone Numbers Called:** Up to 6 numbers on Solution 16i,16 and 64 panels.  
 Up to 10 on Solution 144 panels.

**N° of Programmable Zone Names:** Up to 32 unique zone names can be programmed - module dependent.  
 See LAN status in panel programming for exact message availability.

**Operating Environment:** 0° to 55°C Relative Humidity 5 to 85% at 30°C non-condensing.

**Fixing Method:** The CM101B mounts directly onto the control panel via the 8 way pin header and is supported at the opposite end using the supplied plastic standoff. Power should be removed before connecting the module to the panel.

**Warranty:** 3 years from date of manufacture (return to base)

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BLCM101BU

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