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# **DOOR/GATE STATION OPERATION**

#### **HOW TO TALK TO DOOR/GATE STATIONS:**

A visitor activating the Front Door/Gate Button **21** activates an electronic door chime that rings at all stations providing local volume controls are not turned to minimum and the stations are not set to monitor mode.

# To talk to a visitor at the Front Door or Gate

- Press and hold the 'DOOR' key
   17 at the master or at any room
   station
- The green light will come on
- Commence the conversation and release the 'DOOR' button to listen to reply
- · The green light turns off
- The visitor does not have to press anything......just talk

- Continue the conversation pressing the 'DOOR' button to talk and releasing the 'DOOR' key to listen
- When the conversation is complete the system will reset after approximately 20 seconds from when the 'DOOR' key 17 was last released OR the system can be reset manually by pressing the 'CANCEL / CLEAR' key 3

### IMPORTANT EXCEPTION

 Stations set to Monitor MODE or with volume control turned to minimum will not hear the electronic chime when a visitor presses the Front Door/ Gate button 21

# **AUXILIARY / LOCK OUTPUT**

Electronic door locks, Automatic gates, Courtesy lights, Alarm panic circuits, etc. can be controlled from the master or any room station if optional auxiliary output boards have been fitted to your system. These outputs can be programmed to time out or toggle depending on the application.

#### To activate an output:

 Press and release the 'AUXIL-IARY OUTPUT' key 18 at master or any room station followed by the predetermined number on the 'DIALING KEYPAD' 20 for the device you wish to control

- If the output is programmed to time out, the device will de-activate or reset after a predetermined period of time
- If the output is programmed to toggle the output will remain on until the 'AUXILIARY OUTPUT' key
   18 followed the predetermined number on the 'DIALING KEYPAD'
   20 are pressed again

NOTE: For this Optional feature to be available the fitting of Auxiliary output boards and additional wiring are required at installation.

# SELECT CALLS

A Select Call directs communication to a particular station within the system with the exception of door stations. If your system has been programmed for double digit format to allow for more than eight Select Call channels, refer to section "Initiating a Select Call – Double Digit Format" below.

# INITIATING A SELECT CALL – SINGLE DIGIT FORMAT:

- Press and hold the selection number (1-8) on the dialing keypad 20 at any room station
- The green light will turn on indicating your microphone is active
- Commence your conversation then release the key to listen for a reply
- The green light will turn off at the initiating station and will turn on at the receiving station(s) enabling the person(s) receiving the call to reply
  - \*\* Those replying to a call need not press any buttons. All replies are 'hands free'
- When the conversation is complete, the system will reset after approximately 20 seconds from when the selected number was last released OR the system can be reset manually by pressing the 'CANCEL / CLEAR' key 3

# INITIATING A SELECT CALL – DOUBLE DIGIT FORMAT:

 Press the first digit of the selection number (1-3) on

- dialing keypad **20** at any room station
- · The red light will begin flashing
- Press and hold the second digit of the selection number (1-8) on the dialing keypad
- The green light will turn on indicating your microphone is active
- Commence your conversation then release the second digit key to listen for a reply
- The green light will turn off at the initiating station and will turn on at the receiving station(s) enabling the person(s) receiving the call to reply
  - \*\*Those replying to a call need not press any buttons. All replies are 'hands free'
- Continue the conversation by pressing the second digit key to talk and releasing the second digit key to listen
- When the conversation is complete the system will reset after approximately 20 seconds from when the second digit key was last released OR the system can be reset manually by pressing the 'CANCEL / CLEAR' key 3

# IMPORTANT EXCEPTIONS

- Stations with volume controls turned to minimum will not receive any calls
- Stations set to PRIVACY MODE will not allow a 'hands free reply'
- Do not initiate a call if the red light is flashing as this indicates that someone is already using the system to communicate

# **GENERAL INFORMATION**

The following general procedures must be observed in relation to the location and installation of System One Home Communication components:

- Stations are not to be installed "back to back" or in "line of sight" of each other as this will cause feed-back (squealing).
- Where stations are to be fitted externally, appropriate measures to provide protection from weather are to be taken.
- Avoid running Intercom cable in parallel to electrical wiring.
- The Power supply is not to be installed in a cavity wall or any area (roof etc) where temperatures are likely exceed 100°F.
- Guidelines for maximum cable lengths as set out in this manual are to be observed to avoid the possibility of operating problems due to excessive voltage drop.
- The maximum number of stations on a system including Master, Room and Door stations is generally limited to 20. It is important that the power supply is properly matched to the size of the system. (See Power Supply pg 8)

**CAUTION:** Failure to use specified cable may cause problems with the performance of the system and will void warranty on the equipment.

**IMPORTANT:** Responsibility will not be taken for problems that arise from the improper use of cable or interference generated externally to the system.

Interference by light dimmers, fluorescent lighting and similar electrical products, must be corrected at the source.

An aid to reducing the effects of this type of interference is to place stations and wiring no closer than 30cm (12") from any AC device or wiring.

The circuitry of the intercom has been designed to minimize the effects of Radio Frequency Interference however total immunity to this type of interference cannot be guaranteed where the levels of interference generated are extreme.

# LOCATION OF EQUIPMENT

#### **ROOM STATIONS**

Careful consideration must be given to present and/or future layout of furniture so as not to locate stations in inappropriate positions.

To avoid audio feedback, room stations should be kept at least 13-16 ft away from other stations. Never have more than one station in any one room and avoid mounting stations in the same wall cavity.

i.e. directly below and above one another in a two story house.

A suitable height is generally 4'6" from the floor to the center of the unit.

Stations located on timber frame walls should be located adjacent to a stud to allow for firm fixing.

Stations located on cavity brick walls will require the installation of wall boxes.

Stations installed on single brick walls will also require wall boxes; however, the cable will need to be chased and conduited into the brick wall.

The rear of the brick wall will need to be rendered or lined as the depth of a room station is approximately the same as a brick.

Where stations are required in bathrooms or laundries, they must be kept clear of water or steam.

Where stations are mounted on a tiled surface, a wall box should be

installed prior to lining/tiling of the walls and the tiles will need to be cut to the inside dimensions of the wall box.

Where room stations are mounted outside and are exposed to the weather, the fitting of weather proof covers will be required.

Stations must not be installed in saunas.

### FRONT DOOR/GATE STATION(S)

These stations are best located adjacent to the front door or at the front gate at a suggested height of 4'6" and may require a wall box depending upon the surface to which they are to be affixed.

Any Station exposed to the weather will require the fitting of a weatherproof cover.

Where stations are to be installed in solid brick or concrete columns at a front gate, it is required that the cable be run in conduit from the station to ground level and back to the house.

#### **POWER SUPPLY**

The power supply is usually located no less than 6 ft and not more than 16 ft from the point of connection at the master. (or from the point of connection at a room station if a master has not been fitted)

#### **PRIVACY MODE**

This mode caters for situations where you want to prevent other stations from listening in to a particular room by disabling the station's ability to reply to incoming calls. (The only way a station that is in privacy mode can communicate with other stations, is if it is initiating the call.)

#### To engage Privacy Mode:

 Press the 'PRIVACY' key 16 at the station where this mode of operation is required. (The green light will flash indicating the station is in Privacy Mode)

#### To disengage Privacy Mode:

Press the 'PRIVACY' key 16
 (The green light will stop flashing indicating the station is no longer in Privacy Mode)

# PAGING CALLS

A Paging Call communicates to all other stations with the exception of door stations and is the best method of speaking to someone if you're not exactly sure where they are.

### To page all stations:

- Press and hold the 'HOUSE' key
   1 at the master or any room station
- The green light will turn on indicating your microphone is active
- Commence your conversation then release the 'HOUSE' key 1 to listen for a reply
- The green light will turn off at the station initiating the call and will turn on at all receiving stations enabling the person(s) receiving the call to reply

- \* Those replying to a call need not press any buttons. All replies are 'hands free'
- Continue the conversation pressing the 'HOUSE' key 1 to talk and releasing the 'HOUSE' key 1 to listen
- When the conversation is complete the system will reset after approximately 20 seconds from when the 'HOUSE' key was last released or the system can be reset manually by pressing the 'CANCEL/CLEAR' key 3

### IMPORTANT EXCEPTIONS

- Stations set to Monitor MODE or with volume control turned to minimum will not receive Paging calls
- Stations set to PRIVACY MODE will not allow a 'hands free reply'
- Do not initiate a call if the red light is flashing as this indicates that someone is already using the system to communicate

# MODE DEFINITIONS

System One allows you to choose or alter settings at individual stations. To gain the greatest benefit from your system, we strongly recommend you carefully read what settings are available and how you can use them to your advantage.

### **MUSIC MODE**

Any station set to this mode can listen to any other station being monitored, and can listen to music from the master or auxiliary input jack where these have been fitted.

#### To select Music Mode:

 Press the 'MUSIC' key 24 at the station where this function is required (Red light will come

- on indicating station is in Music Mode)
- Ensure 'LOCAL VOLUME CONTROL' 6 is set to a reasonable level

#### To de-select Music Mode:

Press the 'MUSIC' key 24
 (Red light will turn off indicating station is no longer in Music Mode)

#### **MONITOR MODE**

Any station set to this mode can be listened to by other stations.

### For example:

To ensure that a baby is sleeping soundly or that a sick child or an elderly parent is comfortable at night.

#### To select Monitor Mode:

Press the 'MONITOR' key 23
 (The green light will come on indicating the microphone is activated)

#### To de-select Monitor Mode:

Press the 'MONITOR' key 23
 The green light will turn off indicating the microphone is deactivated.

#### NOTE:

- Any station desiring to listen to a monitored station should be set to Music Mode – See above
- Listening to monitored stations is more effective if the radio is turned off at the master\*\*
- Any station set to monitor mode will <u>not</u> respond to paging calls, door calls, and door chimes.
- Any station set to monitor mode will respond to select calls which allows for communication to the station being monitored.

Suggested locations are kitchen cupboards, pantry, bedroom wardrobes etc.

Because the power supply dissipates heat more effectively in a cool environment it is recommended that the supply **not** be located in the roof space of a dwelling. It is also advantageous to have easy access to the supply should it be required that the system be turned off.

#### **ANTENNA (AM/FM AERIALS)**

The antenna arrangement is a critical part of the installation if a quality radio reception is required.

The AM and FM aerials should be located in the highest point of the roof and at least 6 ft away from any electrical or intercom wiring.

Because the FM antenna is directional, experimentation with positioning is recommended to achieve the best possible result.

Where the roof is lined with foil insulation or is of metal construction, an external whip or car radio antenna may be required for AM.

Connecting a specialized FM antenna or connecting to a TV antenna can greatly improve FM reception in poor signal areas.

#### **AUXILIARY INPUT JACK**

Optional accessory allowing music from an external source such as a Tape Deck,

CD player or walkman to play throughout the Intercom System.

Two different types of Input Jack are used: -

**Type A** - For use with a Master **Type B** - for use without a Master

The Input Jack should be installed in a wall near the location where the external music source is to be situated.

NOTE: An appropriate lead will be required to connect the music source to the Input Jack.

The use of appropriate cable from the Input Jack to the master (or from the Input Jack to a room station where a master is not used) is essential. See section 'What Cable To Use'.

# AUXILIARY/LOCK OUTPUT BOARD

Optional Accessory allowing Electronic door locks, Automatic gates, Courtesy lights, Alarm panic circuits, etc. to be controlled from the Master or any Room station.

There are two (2) outputs on each board which can individually be programmed to time out or toggle depending on the application.

Four (4) of these boards can be fitted to any one system allowing a total of eight (8) Auxiliary outputs in total.

Each board is fitted in conjunction with a room station and is located in the side compartment of the room station back housing.

**NOTE:** Additional wiring is required for this feature to be available. See section 'What Cable To Use'.  $_{\Lambda}$ 

# CABLE

### WHERE TO RUN CABLE

#### Cables can be run either:

- In the roof space
- In false ceilings/bulkhead area
- Through &/or around external walls
- Under floors (subject to access being available)

#### Note:

Intercom cables should be run as far away from AC wiring as practicality permits.

Avoid running intercom cable in parallel to AC or any other type of wiring. (Running across at right angles is OK where necessary)

All aerial wires should be taken to the highest and most accessible point in the roof.

Allow additional cable at each station for the purpose of termination.

In the case of cavity brick walls, ensure the wires are pulled through one of the holes at the rear of the wall box.

## WHAT CABLE TO USE?

#### General

System One is designed to operate using 8 core cable; however, operation is also possible using 6 core cable with the disadvantage that music will be muted at all room stations while private communication is in progress.

The system may be Star Wired from a central point or Loop Wired however the number of stations on a loop is governed by the length of the loop, and also whether or not a standby battery is being used in conjunction with the supply. See section "Maximum Cable Lengths".

Important Note: Different cables have different characteristics hence it is recommended that 'Valet Cable' be used on all new installations. Many other cables will work acceptably however responsibility cannot be taken for problems that arise from the use of other cables.

The proper use of shielded cable on VLC & TC terminals will prevent "clicks & pops" caused by Control Voltage changes from being induced onto audio lines.

### **Power Supply**

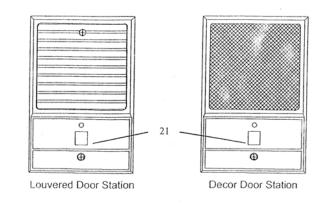
Heavy duty 'Figure 8' cable (24 x 0.20mm or better) should be run from the Power Supply to the master. (Power Supply to any room station if a master is not fitted)

#### AM Aerial

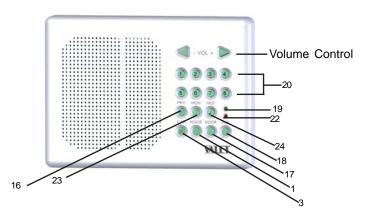
The coaxial cable supplied with the master is to be run from the master to the highest point in the roof where the antenna tail provided (or a car radio antenna) must be plugged into the socket at the end of the cable. The plug at the master end of the cable must be cut off. Additional AM coax leads can be plugged into one another if additional length is required.

# PARTS IDENTIFICATION

#### Door Station



### **System One MINI**



\*Bold numbers throughout User Manual Section correspond with these keys

# **CABLE FUNCTIONS**

#### POS - 15 VDC (RED)

May measure from 13.8V to 15.5 VDC with respect to 0V depending on voltage drop due to cable length.

NEG - 0 VDC (BLACK)

#### TC - TIMER CONTROL (SHIELDED RED)

Holds receiving stations on line for period controlled by initiating station. Normally low. Goes high when chime activated or call initiated from any station.

Stays high until chime or call is reset.

### VLC - VOLTAGE LEVEL CONTROL (SHIELDED WHITE)

Carries different voltage levels generated by initiating station to allow targeting of calls etc. Voltage is present for duration of button press or chime activation.

COMMUNICATION LINES - COM1 (WHITE) & COM2 (BLUE)
Carries balanced audio signal for Chimes, Private Calls & Paging Calls.

MUSIC/ MONITOR LINES - MUS1 (GREEN) & MUS2 (ORANGE) Carries balanced audio signal for Music and Monitoring.

#### AUX - AUXILIARY OUTPUT CONTROL (SINGLE CORE)

Carries different voltage levels generated at initiating station, to control specific outputs on Auxiliary Output boards.

NOTE: Shielded cable recommended for TC and VLC Lines to prevent

spikes caused by rising and falling control signals being induced

onto audio lines.

#### **FM Aerial**

Run the 300 ohm FM Ribbon antenna supplied with the master from the master to the highest point in the roof. If using coaxial cable to connect to an alternative 75 ohm antenna, be sure to fit a balun to the 300 ohm terminals at the master.

### **OPTIONAL AUXILIARY INPUTS**

### **Auxiliary/Lock Outputs [Optional]**

An additional single core cable is required between all room stations (and master if fitted).

Heavy duty 'Figure 8' cable (24 x 0.20mm or better) is to be run from each relay output (via power source if applicable) to each auxiliary device.

**Note:** Clearly tagging all cables at the master or central wiring point is recommended, as this can be extremely helpful in the event of having to isolate a problem such as a damaged cable.

#### MAXIMUM LENGTH FOR CABLE RUNS

As stated in the previous section the system may be Star Wired from a central point or Loop Wired however the number of stations on a loop is governed by the length of the loop, and also whether or not a standby battery is being used in conjunction with the supply.

The table below shows the relationship between the length of a cable run and the number of stations permitted on the run. The length of a cable run is determined from the station to which the Power supply is connected.

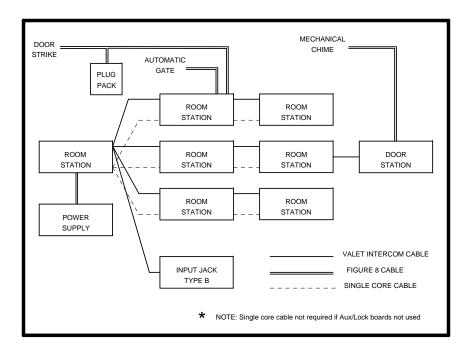
### WITHOUT STANDBY BATTERY WITH STANDBY BATTERY

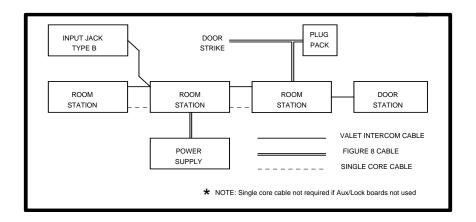
MILLIOUS CIMILED DATE LINE		***************************************	
400 feet	one station on loop	200 feet	one station on loop
200 feet	two stations on loop	100 feet	two stations on loop
130 feet	three stations on loop	70 feet	three stations on loop
100 feet	four stations on loop		

**Note:** These maximum distances can be doubled where required by running a "fig 8" cable (14 x 0.2 mm) in parallel with the red & black wires.

wires. 6

# **WIRING DIAGRAM**



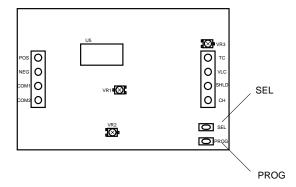


#### **Procedure**

- 1) Press the Program button (PROG) The red LED illuminates and the current chime is played.
- 2) Press the Program button again to select voltage output option mode The red LED flashes the current output voltage option.
- 3) Press the Select button (SEL) The next output option is displayed.

- 4) Repeatedly press the Select button until the desired voltage output option is displayed.
- 5) Press the Program button again to lock in selection and exit program mode
- The red LED extinguishes.

NOTE: Pressing the Select button after all 3 output options have been sampled, will result in returning to the first output option.



# SIX WIRE OPERATION USING ROOM STATIONS

Although System One is designed to operate optimally using 8 wire Hook-up, it will also operate using 6 wire hook-up with the trade off that music will mute at all stations during private communication. (With 8 wire hook-up music only mutes at the 2 stations involved in communication)

To operate a system using 6 wire hook-up, the following is required.

#### **Room Stations**

- Press "PRIVACY" and "MONITOR" buttons simultaneously to enter Program Mode.
- Press "HOUSE" button to select "6 wire" mode. (Green LED off)
- Press "CLEAR" button to exit Program Mode.

- Music lines (MUS1 and MUS2) are omitted. (No wire links required at Room Stations)
- The station will toggle between 6 wire mode (Green LED off) and 8 wire mode (Green LED on) each time the "HOUSE" button is pressed while in program mode.

#### **CHANGING THE CHIMES**

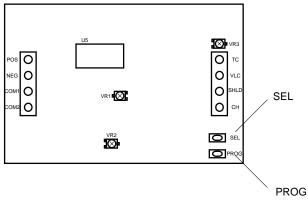
The chime melody can be changed to any one of nine options by means of the two programming switches (SEL & PROG) situated on the door station circuit board as indicated below.

#### **Procedure**

- 1) Press the Program button (PROG) The red LED illuminates and the current chime plays.
- 2) Press the Select button (SEL) The next chime option plays.
- 3) Repeatedly press the Select button until the desired melody is heard.

- 4) Press the Program button to lock in selection The red LED flashes.
- 5) Press the Program button again to exit program mode The red LED extinguishes.

NOTE: Pressing the Select button after all 9 chime options have been sampled, will result in returning to the first chime option.



#### **CHIME VOLTAGE OUTPUT**

The CH Terminal provides an output voltage whenever the chime button is pressed.

The duration of this output voltage is set by 1 of 3 programming options.

### **Chime Voltage Output Options**

Option #1 Single flash
Option #2 Double flash
Option #3 Triple flash

Voltage present for duration of Bell Press Voltage present for duration of Chime Voltage present for 10 seconds from moment of Bell Press

The chime output voltage duration can be changed by means of the two programming switches (SEL & PROG) situated on the door station circuit board as indicated below.

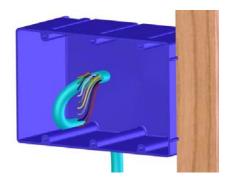
# INSTALLATION OF MINI ROOM STATIONS

## **ROUGH IN**

A composite 3-gang box can be used to house the System One MINI.

- 1) Attach the 3-gang electrical box to a wall stud at desired location.
- Run Valet intercom cable
   (8VM500) or Cat5 cable to all
   installed room station locations.

**WIRING** Valet System One intercoms can be wired in a loop or star style configuration. Star configuration is also refered to as "home run". If the "home run" style of wiring is desired, we recommend utilizing a structured wiring enclosure with RJ45 style connectors for a hassle-free installation.



Typical rough-in configuration

# **POWER SUPPLY**

1) Attach VPS3DC Power Supply.

### Requirements

A Regulated 13.8/15V DC power supply is required to power the system.

The required current rating of the supply will vary depending on the size of the system and is equal to the sum of the current draw of each unit used.

CURRENT DRAW

MASTER - 350 mA peak

STATIONS - 150 mA peak

AUX O-P BOARD - 60 mA per board

An 800 mA plug pack will operate a system comprising of 5 Room/Door Stations.

A 2 Amp plug pack will operate a system comprising of 13 Room/ Door Stations.

## **Multiple Supplies**

Multiple power supplies may be used to provide additional current however their output voltages need to be identical to minimize power losses.

#### Standby Battery (Optional)

Many 15 VDC power supplies accommodate the use of a standby battery which may be used to allow the entire system to run in the event of a mains power fail.

The duration of battery backup is dependant upon:

- a) the size of battery(s) used
- b) the number of stations connected

A system using a 12V 6.5AH battery with ten stations connected to a master will run for approximately 3 hrs with music playing at a moderately high volume. (6 hrs w/ music off)

# **INSTALLATION - FINISH OUT**

### 1 Install the terminal block.

See Fig. 1 for how to wire the terminal block.

Wiring configurations for Valet Cable and Cat5 Cable have both been provided. (Fig. 2)

Also shown in the figure 1 is the proper location to install the 220K resistor. Only one resistor will need to be installed for the system and it is recommended that the resistor is installed at the station that has the power supply connected to it.

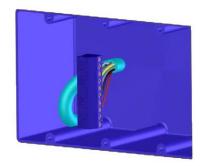


Fig. 1

**Wiring Configurations** (AUX) or Empty (MUS2) Orange (MUS1) Green (COM2) Blue (COM1) White Valet Cable Wiring (SHLD) Drain Configuration (VLC) Yellow (TC) Grey (NEG) Black Wires from Power Sur (POS) Red (AUX) or Empty (MUS2) Brown/White (MUS1) Brown (COM2) Blue/White (COM1) Blue (SHLD) Drain Cat-5 Cable Wiring (VLC) Green/White Configuration (TC) Green (NEG) Orange/White Wires from Power Suppl (POS) Orange Fig. 2 **Exit program mode** by pressing the "CANCEL/CLEAR" button.

Note: Single and Double Digit format cannot be mixed in one system.

- Each station is to be individually programmed to the same format.
- Repeated pressing of the "AUX" button while in program mode will toggle between Single and Double Digit formats.

### **KEYPAD BACKLIGHTING**

Model VR102 Room Stations have Keypad backlighting which can be enabled and disabled by pressing the "DOOR" button while in Program mode, as outlined above.

### DOOR STATION ADJUSTMENTS

There are three adjustments on the door station which may require fine tuning after installation.

**NOTE:** A flat bladed screw driver with a blade width of between 2mm and 2.4mm is required for these adjustments.

The use of an incorrect screw driver will result in the pot being damaged.

#### **Door Station Volume**

Speaker volume at the door station is adjusted by means of a miniature trim pot (VR1) located in the center of the circuit board. Turning this pot will vary the speaker volume.

This adjustment can be made while someone is communicating

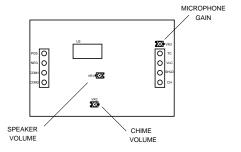
to the door station from one of the internal stations or while the chime is activated.

#### **Chime Volume**

Chime volume is adjusted by means of a miniature trim pot (VR2) situated at the bottom of the circuit board as indicated below. Turning this pot will vary the chime volume throughout the system. This pot should be adjusted so the chime volume comes through at an acceptable level at an internal room station with its slide volume control set to around level 4 or 5.

#### Microphone Gain

The microphone gain pot (VR3) is generally set half way and would rarely require adjustment. The microphone level can be turned down where the door station causes feedback in a room station due to close proximity or can be turned up if the communication level at internal stations is too low.



9 while someone is communicating 14

# **PROGRAMMING**

For the purpose of Select Calling (Calling individual or grouped stations), each station must be allocated either a Single Digit or Double Digit number.

If more than one station is allocated the same number, the stations having the same number will form a group.

Allocating a number to a station, is done by means of programming via the keypad.

#### SINGLE DIGIT CODING

Single Digit Format is the default programming setting intended for systems requiring up to 8 select call channels.

This format offers the convenience of calling individual stations by pressing only one button.

**Enter program mode** by pressing the "PRIVACY" and "MONITOR" buttons simultaneously.

If not previously programmed the station will already be in the default setting of Single Digit Format where the red LED will repeatedly flash the programmed number. (the default number being 1)

Enter a number between 1 and 8 by pressing the corresponding button.

The Red LED will repeatedly flash the programmed number.

**Exit program mode** by pressing the "CANCEL/CLEAR" button.

#### **DOUBLE DIGIT CODING**

Double Digit Format is a programming option intended for systems requiring from 9 to 24 select call channels.

This format requires that two buttons be pressed in sequence for calling individual stations.

**Enter program mode** by pressing the "PRIVACY" and "MONITOR" buttons simultaneously

If not previously programmed the station will be in the default setting of Single Digit Format where the red LED will repeatedly flash the programmed number.

(the default number being 1)

Press the "AUX" button to toggle to Double Digit Mode.

In Double Digit mode the red LED will repeatedly flash the following information.

- Two quick flashes representing Double Digit Mode
- One to three flashes representing the first digit (default = 1)
- One to eight flashes representing the second digit (default = 1)

Enter a double digit number in the ranges of 11 to 18, 21 to 28, 31 to 38. (24 possibilities in total)

The red LED will repeatedly flash the following information.

- Two quick flashes representing Double Digit Mode
- One to three flashes representing the first digit of the new number
- One to eight flashes representing the second digit of the new number

# 2 Mount the metal bracket to the 3-gang box.

The metal bracket can only be installed one way.

There is a red "UP" arrow in the upper right hand corner of the bracket that indicates which way the bracket is to be installed.

The metal mounting bracket is to be secured to the 3-gang box by the four #6 x 7/8" screws each with a #6 washer behind the screw. This allows for 1/16" adjustment for proper leveling.

Fig. 3

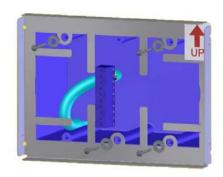


Fig. 3

#### 3 Bend the Tabs

The metal mounting bracket has 8 tabs along the interior perimeter of the bracket.

Once the bracket has been securely fastened to the 3-gang box, these 8 tabs will need to be bent 90° into the 3-gang box opening. (Fig. 4) These tabs are for use in a retro-fit application.

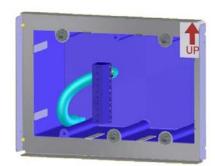
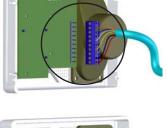


Fig. 4

### **Connect the Terminal block**

The Terminal Block can now be connected to the 10 pin strip located on the back of the PC Board.

The Terminal Block must be connected exactly as shown in Fig. 5. If using Valet cable, the Red wire should be on the bottom connector of the 10 pin strip. Keep in mind, if using Cat5 cable, the Orange wire should be on the bottom connector of the 10 pin strip. In both instances the screws that secure the wires into the Terminal Block must be facing away from the speaker.



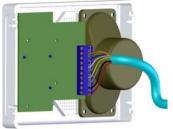


Fig. 5

## Mount the MINI to the wall

Once the Terminal Block is properly installed on the back of the PC Board, the room station can be mounted to the wall.

Attaching the System One MINI to the mounting bracket is very easy. Simply slide the room station over the metal bracket until the back of the facia is flush with the face of the wall. (Fig. 6)



Fig. 6

### Secure the screws & cover with end tabs

Once the facia is flush against the wall, the screws that are already installed in the metal mounting bracket will need to be tightened to hold the facia in place.

After securing the facia to the mounting bracket, the end tabs that cover up the screws will need to be snapped onto the ends of the facia. (Fig. 7)



**INSTALLATION OF DOOR STATIONS** 

### **INSTALLATION OF DOOR/GATE STATIONS**

Depending on the type of wall to which the station is to be affixed i.e. timber or brick, door station housing DSH may be needed.

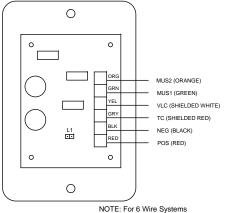
Where stations are exposed to extreme weather, a weather proof cover should be fitted.

Green and orange wires are not used at door station. Tape green and orange wires back to white outer sheath of valet cable.

Do not connect green and orange wires of door station cable at room station end. Tape back in same manner as above.

Where a door station is part of a wiring loop, the door station should always be the last station on the loop.

## **INPUT JACK**



- Connect Green & Orange of input jack to Com1 (White) and Com2 (Blue) of room station.
- Fit iumper to L1

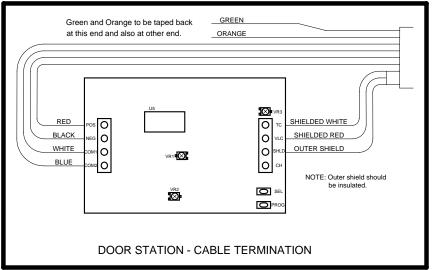


Fig. 7