Mini-PBX
Telephone Switching System
User and Installation Guide

Model:

TSS308GE-A NZ

Imported, Distributed and Serviced by:

ATLAS GENTECH

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1   SAFETY MARKING LABEL

ATLINKS

MODEL NO. TSS308GE2-A NZ

Input Voltage: 230VAC ~ 50 Hz
Max. Input Current: 0.1A
Max. Power Consumption: 20VA

For indoor use only
Do not expose to heat or moisture
Do not open, no serviceable parts inside

Made in China

CAUTION: When using this equipment, there are basic safety instructions that should always be followed. Refer to IMPORTANT SAFETY INSTRUCTIONS provided with this product and keep them for future reference.

2   INTRODUCTION

This Mini-PBX is designed to provide a low cost professional telephone switching system.
Up to 3 external analogue telephone lines and up to 8 internal extensions can be connected.

2.1   <u>FEATURES</u>

- Operator Attendant Mode –allows an 'operator' or one designated extension to answer all incoming calls
- Auto-Attendant Mode – allows the external caller to dial the desired extension or operator directly.
- Call transfer – allows the extension to transfer an external call to another extension
- Call Pick Up – allows a non ringing extension to answer a call to another extension.
- Music on hold with internal or external source option
- External CO Line Ring assignment – any extension(s) can be assigned to ring when there is an external call.
- Flexible numbering of extensions – any extension can be allocated any 'extension number' in the range from 100 to 999.
- Seven levels of call restriction – controls what numbers an extension can dial – i.e. no International calls without permission
- Call duration control – limits the time a person can be on a call
- Power failure transfer of external CO lines to fixed internal extensions – can still make and receive calls in case of power outage (limited service)
- Three-way conference – an external caller can speak to two internal extensions at the same time.
- Intercom communication – call from one extension to another (not using external telephone network, so no charge)
- Multiple communication paths
- Call forwarding – a user can program their extension to forward an external or internal call to another telephone extension.
- Door Phone and Door Lock Opener (optional)
- Computer interface for Call Accounting package (optional)

2.1.1   GLOSSARY OF TERMS USED

CO   Central Office or Local telephone Exchange

DTMF   Dual Tone Multi Frequency: Tones used for dialing.

DISA   Direct Inward System Access to internal extensions

2.2 SPECIFICATIONS

- Capacity: 1 to 3 external CO Lines
  1 to 8 internal Extensions

- Exterior sockets: 3 for external CO lines,
  8 for internal extensions,
  1 for Door Phone and Door Lock (optional)
  1 for external Music on Hold Source
  1 for Computer with Call Accounting package (optional)

- Transmission specification: Extension to extension ≤ 1.5dB
  Extension to trunk line ≤ 2.0dB

- Ringing Voltage: 65VAC 50Hz

- Feeding current: 48v-60v/25mA

- Relative unbalance against ground: 300Hz-600Hz ≥ 40dB
  600Hz-3400Hz ≥ 46dB

Dialing mode: DTMF

Power supply: Input Voltage: 230VAC ±10% ~ 50Hz
  Max power consumption: ≤20VA

Operational environment: Room Temperature
  Relative humidity ≤90% (non condensing).

TELEPERMIT
✓ This GE TSS308GE2NZ
Telephone Switching
System may be connected
to the Telecom Network

PTC 207 / 07 / 025

✔ Z109

Special Notes for New Zealand:

PTC200 General Warning

1. The grant of a Telepermit for any item of terminal equipment indicates only that Telecom has accepted that the item complies with minimum conditions for connection to its network. It indicates no endorsement of the product by Telecom, nor does it provide any sort of warranty. Above all, it provides no assurance that any item will work correctly in all respects with another item of Telepermitted equipment of a different make or model, nor does it imply that any product is compatible with all of Telecom's network services.

PTC200 6.11.1 (3) All Customer Equipment (fail safe requirements)

2. Under power failure conditions this appliance may not operate. Please ensure that a separate telephone, not dependent on local power, is available for emergency use.

PTC200 10.3.3 Fault Clearance (2) Secondary Fixed Wiring

3. In the event of any problem with this device, it is to be disconnected, and a CPE item connected to one of its terminal ports may be connected directly in its place. The user should then arrange for the product to be repaired. Should the matter be reported to Telecom as a wiring fault and the fault is proven to be due to this product, a call out charge will be incurred by the customer.

3   PARTS DIAGRAM

CHECK THAT THESE PARTS WERE IN THE BOX AS RECEIVED

4   INSTALLATION & CONNECTION

For easy and quick installation and connection, it is strongly recommended that you read and follow these instructions carefully, so as not to damage the product accidentally by setting it up incorrectly.

4.1   <u>IMPORTANT INSTALLATION INFORMATION</u>

- Never install telephone wires during an electrical storm (thunder and lighting)

- Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations

- Never touch un-insulated telephone wires or terminals unless the telephone line has been disconnected at the network interface

- Use caution when installing or modifying telephone lines

4.2   <u>PRODUCT INSTALLATION RECOMMENDATIONS</u>

Caution: The Power Plug should be installed in a socket outlet which is close to the equipment and easily accessible

The following places are not recommended for product installation:

- Avoid places where shock or vibration are present

- Avoid dusty places

- Avoid places where water or oil may come into contact with the product.

- Avoid places near high-frequency generating devices such as micro wave ovens, sewing machines or electric welders

- Avoid places within 2 metres of television sets

- Avoid places where the environment is hot and where there is no air movement.

4.2.1   **INSTALLATION OPTIONS**

This product is designed for wall mounting or for sitting on a shelf.

If the unit is going to be wall mounted, you must drill two holes into the wall, 50mm deep and 160mm apart. After inserting two wall plugs of the correct diameter into the wall, you can screw two screws into the two wall plugs. The unit can then be mounted on the wall.
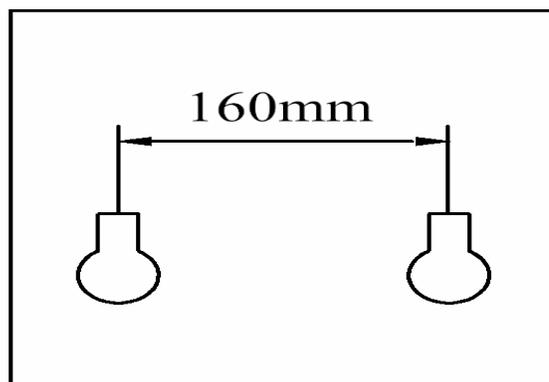
4.3   LAYOUT OF THE TSS308GE2-A NZ PABX

Layout of TSS308GE2-A

Front View

Left View

Model TSS308GE2-A Back View

Name of Parts:

1 ——— LED's for Power Supply, working state of 3 CO Lines and 8 Extensions

2 ——— RS232 Link to PC

3 ——— External Music On Hold Input

4 ——— Output to Door Bell and Door Lock

5 ——— CO Line Jacks for CO 1 to CO 3

6 ——— Extension Jacks for Ext.801 to Ext.808

7 ——— 230VAC Power Socket

8 ——— 230VAC Power Switch
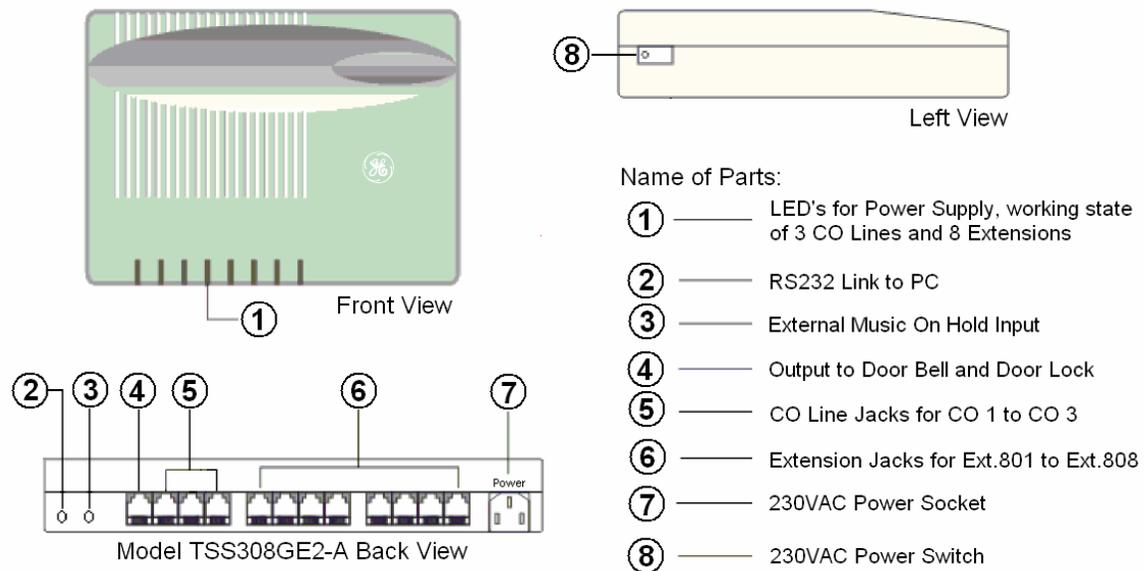
4.4   CONNECTION PROCEDURES

4.4.1   CONNECTING EXTERNAL CO LINES & INTERNAL EXTENSIONS TO THE UNIT:

- Connect external CO lines to the corresponding CO line ports on the unit

- Connect internal extensions according to the indicated extension positions

- Take care not to make short circuits

4.4.2 EXAMPLE OF A FULL INSTALLATION

CD Player for External
Music on Hold (Optional)

Computer for Call Accounting (Optional)

Model TSS308GE2-A Back View

230VAC ~50Hz
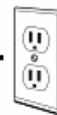
Door Lock (Optional)

Ext.808

Ext.807

Ext.806

Ext.805

CO 1

CO 2

CO 3

Ext. 801

Ext.804

Door Phone (Optional)

Ext.802

Ext.803

4.5 DOOR PHONE & DOOR LOCK

To meet the needs of our customers, two additional functions have been added

- TALK-BACK DOOR PHONE
- ELECTRICALLY CONTROLLED DOOR LOCK

These products are suitable for offices and villas.

4.5.1 CONNECTING DOOR PHONE & DOOR LOCK TO THE UNIT

Connect the head of the bell cable coming from the Door Phone & Door Lock to the Bell socket at the back of the PABX.

Connect the long cores of the bell cable (A&B) to the Door Phone or Mini Telephone.

Connect the short cores of the bell cable (C&D) to the electrically controlled lock.

(To open the Door Lock, the unit will send a short but strong electrical pulse)

Please refer to the schematic below.
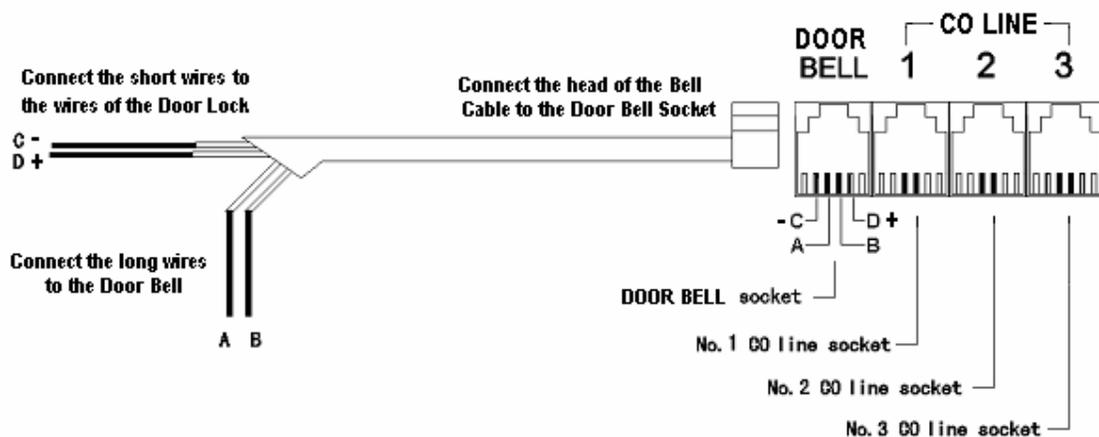
- If a door phone is required it should be purchased seperatly.
- An electrically controlled Door Lock can be purchased from a lock shop or electronics store.

Environment

Used equipment must be disposed of in compliance with current environmental protection regulations. You should return it to your reseller or dispose of it at an approved recycling centre.

4.6   MAINS POWER

4.6.1 CHECK 230VAC POWER BEFORE CONNECTING THE MINI PBX:

- The operating voltage of this product is 230VAC ±10%. Before connecting the Mini-PBX to the local power supply check the voltage of the local power supply.

  A UPS (Uninterrupted Power Supply) backup is highly recommended if the local power supply is unstable.

- Plug in the power cord and turn on the Mains Power Switch.

  The Power On LED will flash at a slow rate to indicate that the PABX is working correctly.

  If the Power On LED does not flash at a slow rate, then the PABX is not working correctly and needs to be returned to the service centre.

- Pick up the handset of any extension. A 'sharp' internal dial tone indicates that the system is working correctly. You can now start the setup operation.

4.6.2   POWER FAILURE

In the event of a power failure, each external CO line is automatically connected to a dedicated internal extension. During the power failure you will hear dial tone from the CO line after lifting the handset. You can now dial external numbers without restriction.

External CO line No. 1 is connected to internal extension 801.
External CO line No. 2 is connected to internal extension 802.
External CO line No. 3 is connected to internal extension 803.

5   OPERATING INSTRUCTIONS

5.1   RECEIVING AN EXTERNAL CALL FROM THE CO LINE
5.1.1   OPERATOR ATTENDANT MODE

When an external call from an external CO line is received; assigned extensions will ring.
Lift the handset of any ringing extension to answer the call. A call can also be answered from non-ringing extensions by using the "Call Pick Up" feature. If necessary, the extension that answered the call can transfer the call to another extension.

| Extension rings | Pick up the handset of the ringing extension | Talking | Hang up |
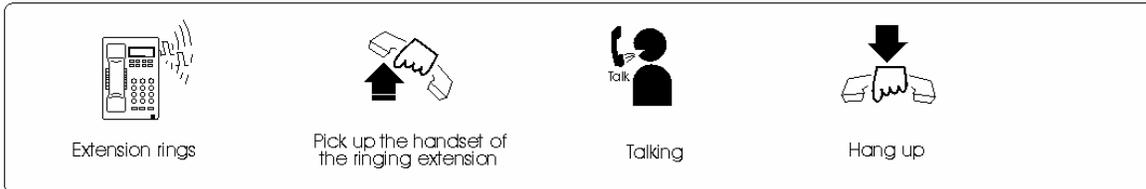
5.1.2   AUTO ATTENDANT MODE

When an external call is received from an external CO line; the unit will answer the call and play an Out Going Message. The calling party has the option to dial the number of an internal extension directly e.g. 803 or dial 0 for the operator.

If the calling party doesn't enter any extension number within a certain period, the unit will play the Out Going Message once more.

If the calling party still doesn't enter any extension number, the unit will ring the operator's telephone. If the operator does not answer within a certain period, the call will be released.

If the calling party enters an extension number, the external call will be transferred to that extension. If that extension does not answer within a certain period, then the call will be released.

 If the calling party dials more than 3 digits for the desired extension number, then only the last 3 digits entered are validated. E.g. if the calling party dials 853805, then the system will use 805.

5.2   INTERNAL CALL

An extension can make an internal call to another extension by lifting the receiver and dialing the number of the desired extension within a short period. If the extension is in Direct External Dialing Mode you must dial '*' to get internal dial tone before dialing the desired extension number.
The ringing of an Internal call is different from the ringing of an incoming external call.

Example: To make an internal call to extension 807. Extension 805 picks up the telephone and dials 807 (or *807 if in Direct External Dialing Mode) directly within a short period.

| Pick up EXT | Hearing the Dialing tone | Input 807 | Internal communication | Hang up |
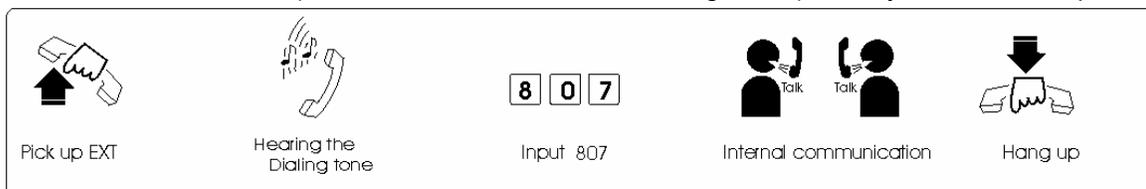
5.3 EXTERNAL CALL

An extension can be in two different modes.

When in Direct External Dialing mode the extension is connected to the next free external CO line directly.

When in Non Direct External Dialing mode the extension can get an external CO line by dialing '9' or by tapping the Hook Switch.

5.3.1 DIRECT EXTERNAL DIALING

When in Direct External Dialing mode, the extension will hear dial tone from the external CO line after lifting the receiver. The external number can now be dialed directly. You should dial at least three digits within a short period, otherwise the system will disconnect the external call.

To make an internal call, you must lift the receiver and dial * to get internal dial tone before dialing the desired extension number.

| Pick up EXT. | Hearing the CO line dialing tone | Dialing CO line number | Talking | Hang up |
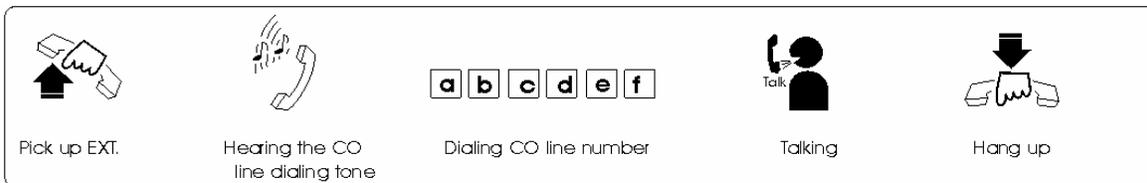
When the extension is in Direct External Dialing Mode you can press the "Redial" Button to redial the last number dialed.

5.3.2 MAKING AN EXTERNAL CALL BY DIALING 9

Lift receiver to get internal dial tone. Dial 9 to get external dial tone and then dial the desired external number.

| Pick up EXT | Dial 9 first | Hearing the CO line dialing tone | Dialing CO line number | Talking | Hang up |
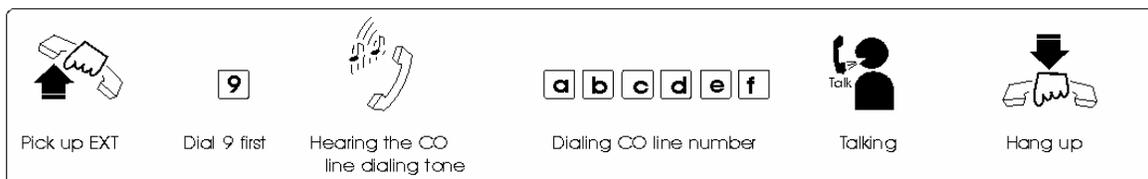
5.3.3   MAKING AN EXTERNAL CALL BY PRESSING THE <FLASH KEY> OR BY TAPPING THE HOOK SWITCH

If you prefer, an external CO line can be accessed by pressing the <FLASH KEY> or by tapping the Hook Switch. You must lift the receiver to get internal dial tone, press the <FLASH KEY> or tap the Hook Switch to get dial tone from the external CO line and then dial the desired external number.

Pick up EXT   Tap hook switch   Hearing the Dialing tone   Extension a b c d e f / Dialing CO line number   Talking   Hang up
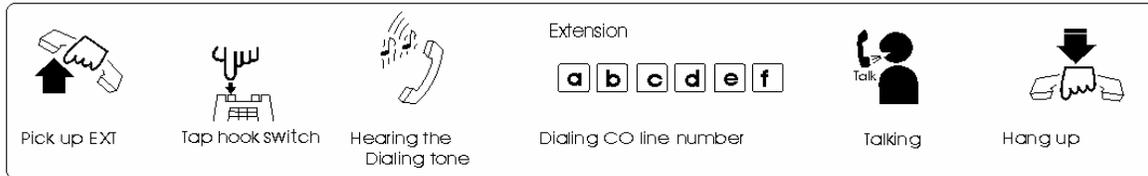
- When making an external call the system will search for a free CO line, starting from the first CO line port. If you hear busy tone then all CO lines are busy. Hang up and try again later.

- You can press the 'Redial' button to redial the last number dialed.

5.3.4   PREFERRED LINE ASSIGNMENT---OUTGOING

Format: #n
               n = CO line number

Description: A telephone user can select a particular external CO line by lifting the receiver and dialing '#n', where 'n' is the number of the desired CO line port.

Example: To make an external call through CO line 3, lift the receiver and dial '# 3' within a short period.
               If busy tone is heard, then external CO line 3 is busy

Pick up EXT   Dial # 3   Hearing the Dialing tone   a b c d e f / Dialing CO line number   Talking   Hang up
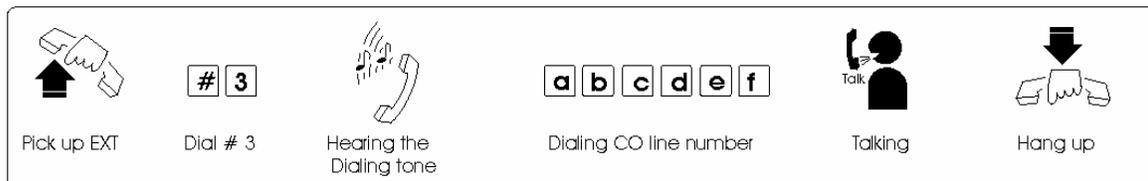
5.4   MAKE AN EXTERNAL CO CALL WITH THE HELP OF AN OPERATOR OR AN ASSISTANT

The operator or assistant can initiate an external call and then transfer the call to another extension (see Paragraph 5.6).

Example: The operator (extension 805) initiates an external call, then transfers the call to extension 801
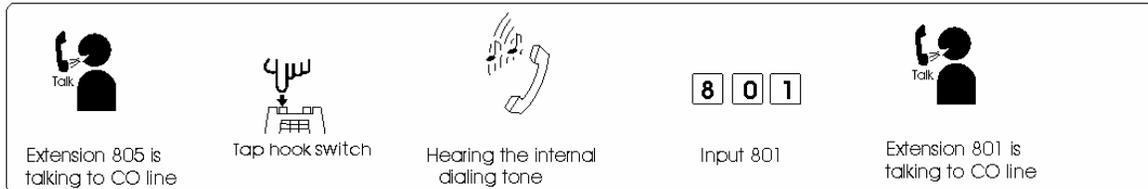
| Extension 805 is talking to CO line | Tap hook switch | Hearing the internal dialing tone | Input 801 | Extension 801 is talking to CO line |

- The range for recognizing a Hook Switch tap generated line break as an internal flash can be programmed from 550ms to 2000ms (see Paragraph 6.14). The operator can press the FLASH button on the telephone instead of tapping the Hook Switch
- After tapping the Hook Switch and hearing internal dial tone, the operator should dial the extension number within a short period. Otherwise the operator will be reconnected to the external CO line.

5.5   EXTERNAL CALL WAITING

Format: Press the <FLASH KEY> or tap the Hook Switch to get internal dial tone, then dial #99

Description: When you are on an external conversation, a Call Waiting tone from the Local Telephone Exchange may inform you that there is another external call waiting.
You can answer the waiting external call by pressing the <FLASH KEY> or by tapping the Hook Switch to get internal dial tone and then dialing #99. This will put the first external caller on hold at the exchange and connect you to the second external caller.
If the second external caller hangs up you will be reconnected to the first external caller.

Note: For the "Call Waiting" feature to work, you must subscribe to Call Waiting Service from the Local Telephone Company

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5.6   TRANSFER AN EXTERNAL CALL TO ANOTHER EXTENSION

Format: Press <FLASH KEY> or tap the Hook Switch to get internal dial tone, then dial the desired extension number and hang up

Description: Allows an extension to transfer a received external call to another extension

Example: Extension 805 receives an external call. To transfer this call to extension 807, extension 805 must press the <FLASH KEY> or tap the Hook Switch to get internal dial tone, then dial 807. During the transfer, the external caller is put on hold and receives Music on Hold. When extension 807 lifts the receiver, the external caller is transferred; Music on Hold stops and the conversation can resume.

| Extension 805 is talking to CO line | Tap hook switch | Hearing the internal dialing tone | Input 807 | Extension 807 is talking to CO line |
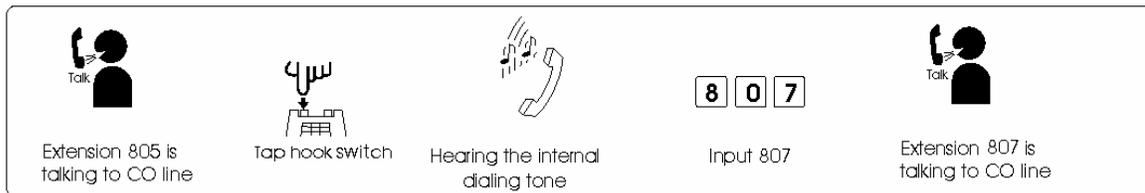
There are 4 different cases when A transfers an external call to B:

- Extension A does not hang up, extension B lifts the handset

  Communication between A and B is established. The external caller is put on hold with Music on Hold. Whoever hangs up (A or B), the system will transfer the external call to the other.

- Extension A does not hang up, extension B does not answer extension A.

  If extension B does not answer extension A within a certain period, then extension A will be reconnected to the external caller and extension B will stop ringing.

  If extension A wants to reconnect to the external call before extension B times out, extension A must go On-Hook, then go Off-Hook to get internal dial tone and dial #7 (Call Pick Up) to reconnect to the external call. Extension B will stop ringing.

- Extension A hangs up and extension B answers within a certain period.

  The external caller will be transferred to extension B.

- Extension A hangs up, but extension B does not answer the call. Within a certain period, the external caller will be transferred back to extension A. If extension A does not answer the call within a certain period or is busy, then the external call will be lost.

- **Note:** The range for recognizing a Hook Switch tap generated line break as an internal flash can be programmed from 550ms to 2000ms (see Paragraph 6.14).

- After pressing the <FLASH KEY> or tapping the Hook Switch and hearing internal dial tone, extension A should dial the number of extension B within a short period,

otherwise extension A will be reconnect to the CO line.

5.7 SETTING UP A CONFERENCE CALL (3 PARTY)

Format: Press <FLASH KEY> or tap Hook Switch to get internal dial tone, then dial * followed by the desired extension number

Description: Allows an extension on an external call to add another extension for a 3 Party conference call

Pick up the handset of non-ringing extension	hearing the dialing tone	Input # 7	Pick up the call
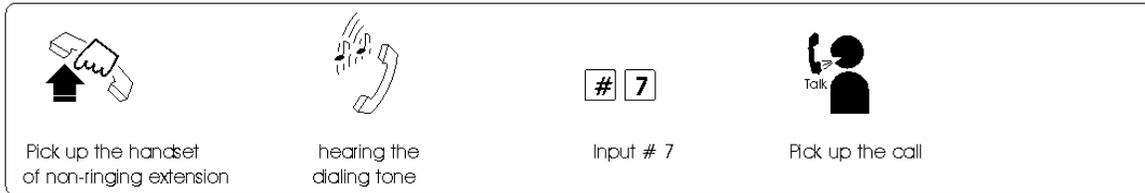
5.8 CALL PICK UP

Format: # 7

Description: Allows a user of a non-ringing extension to answer a call that is ringing on another extension.

Extension 805 is talking to CO line	Tap hook switch	Hearing the internal dialing tone	Input * 807	3-party conference

• If the extension is in Direct External Dialing Mode, then you must dial *#7

5.9 CALL FORWARDING

5.9.1   SET UP CALL FORWARDING

Format: # * abc

abc = extension number of destination.

Description: Allows an extension user to transfer incoming calls automatically to another extension.

Example: The user of extension of 805 has to go to another office (extension number is 807) for some business. He activates Call Forwarding on his extension so that all calls to extension 805 are transferred to extension 807 automatically.

Pick up EXT. 805	hearing dialing tone	Input #* 807	Hearing the music	Hang up
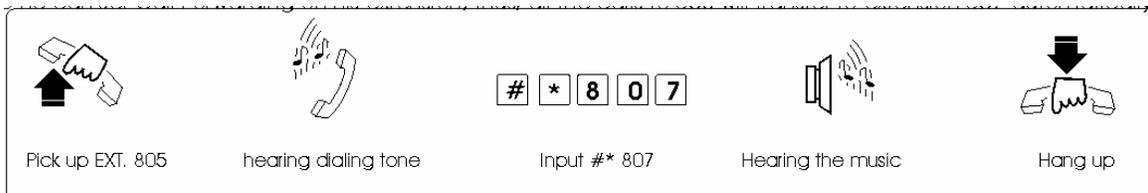
5.9.2   CLEAR CALL FORWARDING

To clear the Call Forwarding you simply lift and then replace the receiver.

5.10 PRIORITY ACCESS

Format: # 9 n

n = CO line port number

Description: Allows user of Extension 801 to access a certain CO line, even though other people are using that CO line.

Example: Extension 801 accesses CO line 3, even if it is busy.

Pick up 801 and unlock   Input #93   Extension 801 priority access
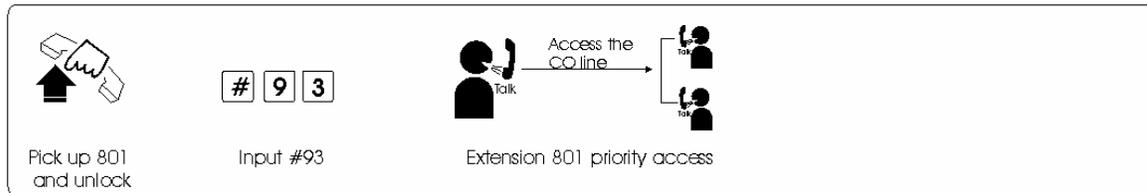
5.11 ANSWERING A CALL FROM THE DOOR PHONE

5.11.1   ANSWERING THE DOOR PHONE FROM A RINGING EXTENSION

Format: Pick up the ringing extension

Description: A visitor at the door picks-up the Door Phone receiver. The designated extension rings. The ringing extension lifts the receiver and talks to the visitor at the door.

Doorbell Calling   Pick up EXT.   Answer the Doorphone call

5.11.2   ANSWERING THE DOOR PHONE FROM A NON RINGING EXTENSION

Format: # 7 (same as Call Pick Up)
Description: Allows any non-ringing extension to answer the Door Phone.

Doorbell Calling   Pick up EXT.   Hearing the dialing tone   Input # 7   Pickup the doorbell call

If the non ringing extension is in Direct External Dialing Mode, then you must dial *#7 to answer the Door Phone. (same as Call Pick Up)

5.12 TO OPEN THE DOOR LOCK

5.12.1   TO OPEN THE DOOR LOCK AFTER ANSWERING THE DOOR PHONE

Format: Press <FLASH KEY> or tap the Hook Switch to get internal dial tone, then dial #83

Description: This is to open the door after speaking to the visitor at the door

Example: Open the door

5.12.2   TO OPEN THE DOOR LOCK REMOTELY

Format: #83

Description: The door can be opened by any extension at any time by dialing #83.
Example: Open the door remotely.

• If the extension is in Direct External Dialing Mode, then you must dial *#83 to open the door

6 SYSTEM PROGRAMMING

6.1 GENERAL PROGRAMMING INSTRUCTIONS

6.1.1 DEFAULT SETTING

This system has default factory settings. If any of the programming needs to be changed, you can change settings by system programming.

6.1.2 EXTENSION USED FOR PROGRAMMING

System programming can only be performed from extension 801.

6.1.3 BEFORE PROGRAMMING

You need to enter the password to enter system programming.

If extension 801 is in Direct External Dialing Mode, you must dial * before dialing *01 to enter the password.

6.1.4 PROGRAM A SYSTEM SETTING

Press * to start programming a system setting.

Enter the code and parameters for changing a system setting.

Press # to complete the programming of a system setting.

To correct a wrong system setting, press * to program the system setting again.

There is no need to hang up the telephone.

6.1.5 AFTER PROGRAMMING A SYSTEM SETTING

After programming a system setting, a long "Beep" indicates that the system setting has been made successfully.

A series of short "Beeps" indicates that the system setting was unsuccessful.

Please check and try again or reset the unit.

6.2 PASSWORD

6.2.1 INPUT THE SYSTEM PASSWORD

Format: * 01 abcd #

abcd = system password

Description: Allows you to input the system password to enter into system programming mode

Pick up 801   Input * 01 abcd #   You will hear du   programming

> If you have entered into programming mode by system password, you should not hang up extension 801 until all the desired system settings have been modified; otherwise you will have to re-enter the system password to re-enter programming mode.

6.2.2 CHANGE THE SYSTEM PASSWORD

Format: * 02 ABCD #

ABCD = new system password (Default password = 0000)

Description: Changes the old system password to a new system password

Example: The default system password is 0000. We suggest that you change the default system password before using the PABX.

If you want to change the system password to 5678, you should input *01 0000 # to enter the system, then input *02 5678 # to change the system password to 5678

Suppose you need to change the system password again to 1111, you should input *01 5678 # to enter the system, then input *02 1111 # to change the system password to 1111

6.3 ATTENDANT MODE ASSIGNMENT

6.3.1 OPERATOR ATTENDANT MODE ASSIGNMENT (DEFAULT SETTING)

Format: * 2 1 #

Description: In this mode, certain extensions will ring (see paragraph 6.6) when an incoming call is received. Pick up any ringing extension to answer the call.

Pick up 801
and unlock   Input * 2 1 #   You will hear du   Hang up

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6.3.2   AUTO ATTENDANT MODE ASSIGNMENT WITH OUTGOING MESSAGE (OGM)

Format: * 2 0 #

Description: In this mode the external caller will hear the Out Going Message (OGM) recording. None of the extensions will ring.

| Pick up 801 and unlock | Input * 2 0 # | You will hear du | Hang up |

If the external caller does not know the extension number, the external caller can press 0 to speak to the operator. If operator No. 1 is busy, then the call will be auto transferred to operator No. 2. If both operators are busy, then the line will auto search from extension 802-808. The next idle extension will ring. Pick up the ringing extension to answer the call.

6.3.3   AUTO ATTENDANT MODE ASSIGNMENT WITH OUTGOING MESSAGE (OGM) FOR DESIGNATED CO LINES

Format: * 20 m #
    m = CO line port (1 or 2 or 3)

Description: Used to assign certain CO lines to Auto Attendant Mode with Out Going Message, while other CO lines remain in Operator Attendant Mode

Example: Assign CO line 2 and CO line 3 to Auto Attendant Mode with Out Going Message, and assign remaining CO lines to Operator Attendant mode.

| Pick up 801 and unlock | Input * 2 0 2 # | You will hear du | Input * 2 0 3 # | Hang up |

We suggest you assign all CO lines to Operator Attendant mode first before assigning certain CO lines to the Auto Attendant Mode. This will avoid conflicts with previous settings.

6.3.4   OPERATOR NO 1 ASSIGNMENT FOR AUTO ATTENDANT MODE

Format: * 2 5 abc #
    abc = extension number (Default setting = Ext. 802)

Description: Assign an extension to be Operator No 1 for Auto Attendant Mode.

Example: Assign extension 807 to be Operator No.1

| Pick up 801 and unlock | Input * 2 5 807 # | You will hear du | Hang up |
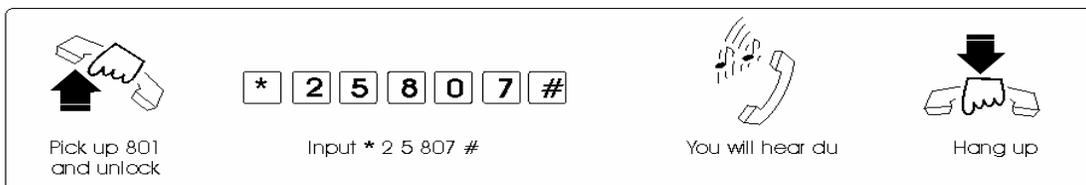
6.3.5   OPERATOR NO 2 ASSIGNMENT FOR AUTO ATTENDANT MODE

Format: * 2 6 abc #

   abc = extension number (Default setting = Ext. 803)

Description: Assign an extension to be Operator No 2 for Auto Attendant Mode. The incoming call will be auto transferred to Operator No. 2 if Operator No. 1 is busy.

Example: Assign extension 806 to be Operator No. 2.
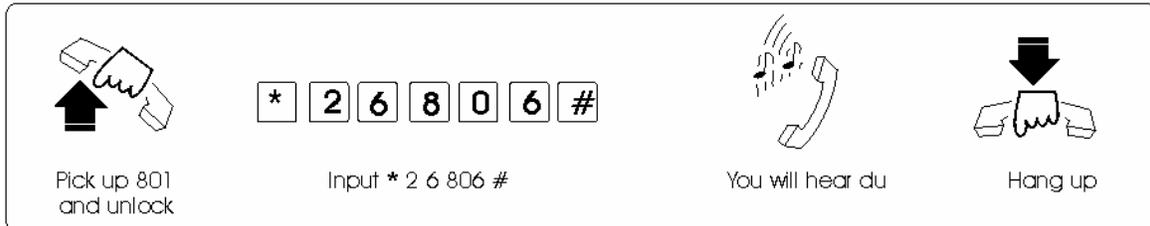
Pick up 801 and unlock   Input * 2 6 806 #   You will hear du   Hang up

☞
- If both Operators are busy, then the line will auto search from extension 802-808. The next idle extension will ring. Pick up the extension to answer the call.
- If the incoming call cannot be auto transferred because all extensions are busy, then the external caller will hear busy tone.

6.4   EXTERNAL DIALING MODE

6.4.1   EXTERNAL DIALING MODE ASSIGNMENT

Format: * 8 abc n #
   abc = extension number
   n = 0 = access to CO line by dialing 9 or by pressing the <FLASH KEY> or by tapping the Hook Switch
   n = 1 = direct access to CO line

Description: An extension can be programmed to have access to the external CO line

   1.) By dialing 9 first or by pressing the <FLASH KEY> or by tapping the Hook Switch (n=0).

   2.) By direct access (n=1).

Example: Assign extension 803 to have direct access to external CO line 1

Pick up 801 and unlock   Input * 8 803 1 #   Du   Hang up
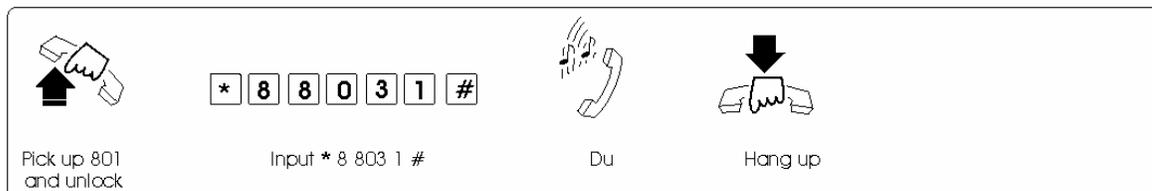
☞
- You should dial * first to make an internal call when the extension is in Direct External Dialing Mode
- The default setting is to have access to the external CO line by dialing 9 or by pressing the <FLASH KEY> or by tapping the Hook Switch

6.4.2   RESTORE TO DEFAULT EXTERNAL DIALING MODE

Format: * 8 000 #

Description: All extensions are programmed to have access to external CO lines by dialing 9
                  first or by pressing the <FLASH KEY> or by tapping the Hook Switch

| Pick up 801 and unlock | Input * 8 000 # | Du | Hang up |
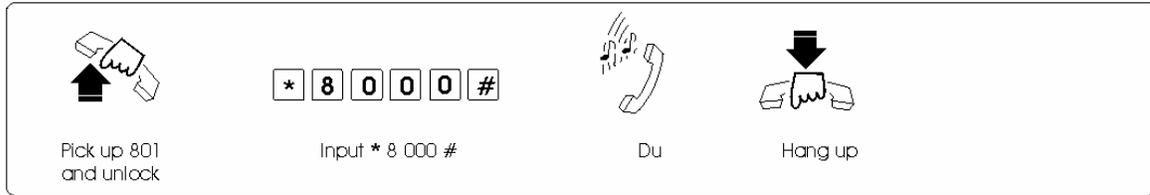
6.5   EXTERNAL (CO) LINE CONNECTION ASSIGNMENT

Format: * 3 a b c #

abc = CO line port number (Default setting = 123)

Description: Assigns which external (CO) line is connected to which CO line port

Example: The Company has three external CO lines. To connect external CO line 1 to CO line
             port No. 1, external CO line 2 to CO line port No. 3 and external CO line 3 to CO line
             port No. 2, input * 3 132 #

| Pick up 801 and unlock | Input * 3 1 3 2 # | Du | Hang up |

- Normally the selection order of CO line ports is from port one to port two, port three … one by one. For some situations, you may wish to ignore one port and jump from port two to port three. (as in the example above).
- For CO lines, it is recommended you connect incoming CO lines to the high position CO ports and outgoing CO lines to low position CO ports.
- If no CO lines are connected and the unit is to be used only as an intercom system then input * 3 #
- If only CO line 1 is connected, then input * 3 1 #
- If only CO lines 1 & 2 are connected, then input * 3 1 2 #

6.6   RINGING EXTENSIONS ASSIGNMENT

6.6.1   RINGING EXTENSIONS ASSIGNMENT FOR EXTERNAL (CO) LINES

Format: * 1 m abcd #

m = CO line port number

abcd = last digit of extension port (Default setting = Ext. 801 to 804)

Description: You can select which extension(s) ring when there is an incoming call on an external CO line.

Example: Assign extension 802 to ring when there is an external call on CO line 1.

Assign extension 803 and 806 to ring when there is an external call on CO line 2.

| Pick up 801 and unlock | Input * 1 1 2 # | You will hear du | Input * 1 2 3 6 # | You will hear du | Hang up |
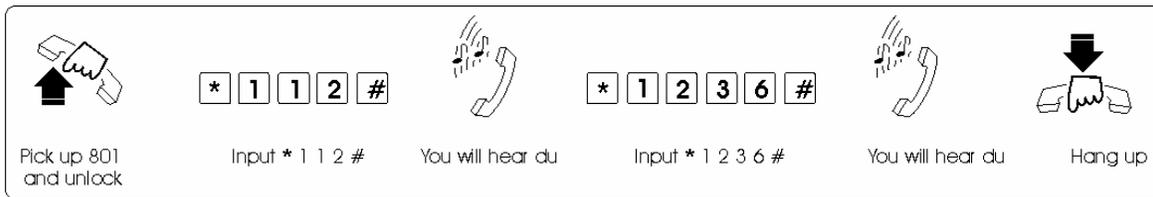
- The ringing extensions can only be assigned among extensions 801 to 808
- The CO line port must be in operator mode

6.6.2   RINGING EXTENSIONS ASSIGNMENT FOR DOOR PHONE

Format: * 14 abcd #

abcd = last digit of the ringing extensions

Description: Assign extensions which will ring when the Door Phone is activated

Example: Assign extension 802, 803 & 807 to ring when the Door Phone is activated

| Pick up 801 | Input * 14 237 # | Du | Hang up |
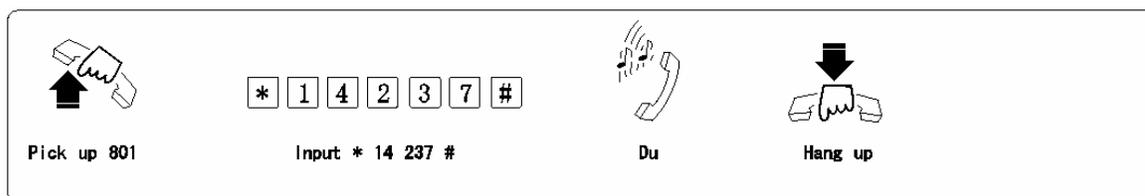
If a visitor lifts the Door Phone receiver, extensions 802, 803, & 807 will ring at the same time.

Any extension is able to answer the Door Phone. If not ringing, use Call Pick-Up.

6.7 CALL RESTRICTION-CLASS ASSIGNMENT

6.7.1 CALL RESTRICTION CLASS ASSIGNMENT FOR A CERTAIN EXTENSION

Format: * 5 1 abc n #

abc = extension number

n = 0 = Permits calling a special number only

n = 1 = No restriction for outgoing calls

n = 2 = Restricts dialing International calls (Default setting)

n = 3 = Permits dialing Local calls only

n = 4 = Restricts dialing of calls defined in Restriction Group A

n = 5 = Restricts dialing of calls defined in Restriction Group B

n = 6 = Permits Internal calls only

Description: Assigns the outgoing calling rights for an extension.

Example: Allow dialing Local calls only for extension 806. Restrict dialing to calls in Restriction Group A for extension 808 (see paragraph 6.7.3). Permit dialing Internal calls only for extension 803

Pick up 801 and unlock | Input * 51 806 3 # | Du | Input 808 4 # | Du | Input 803 6 # | Hang up
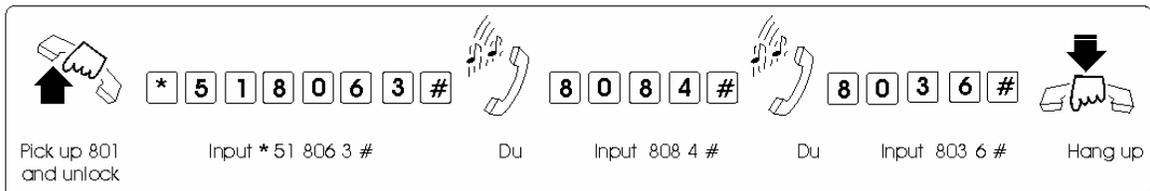
Note: The default setting is n = 2 = Restricts dialing International calls

6.7.2 CALL RESTRICTION CLASS ASSIGNMENT FOR ALL EXTENSIONS

\Format: * 5 1 n #

n = same as paragraph 6.7.1

Description: Assigns the outgoing calling right for all extensions.

Example: Assign extension 804 and 805 to class 2 (n=2) and all the other extensions to class 3 (n=3). To save time, you can set all the extensions to class 3 (n=3) first, then assign extension 804 and 805 to class 2 (n=2).

Pick up 801 and unlock | Input * 51 3 # | Du | Input 804 2 # | Du | Input 805 2 # | Hang up

\
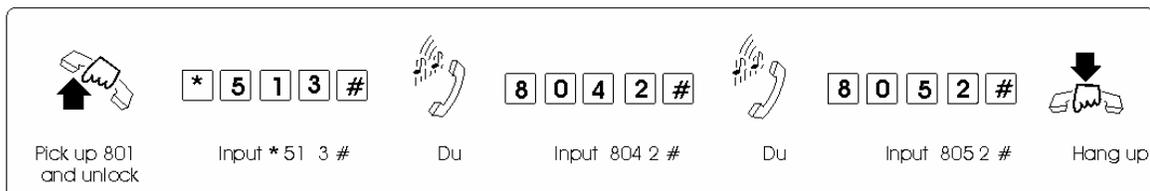
6.7.3   RESTRICTION GROUP A FOR LOCAL CALL ASSIGNMENT

Format: * 5 2 abcd #

   abcd = prefix of number to be restricted

Description: Restricts dialing certain Local Call numbers

Example: Restrict dialing of local call numbers with prefixes 576 and 8
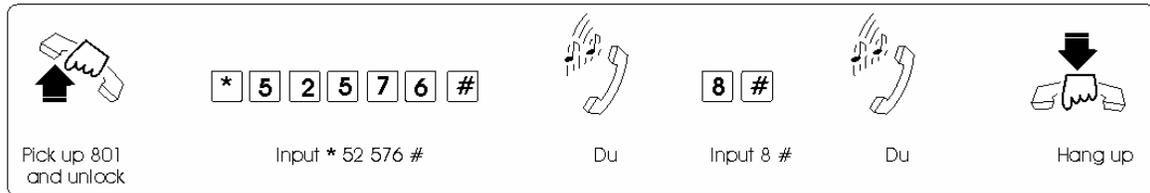
Pick up 801 and unlock | Input * 52 576 # | Du | Input 8 # | Du | Hang up

- The restricted prefix can have a maximum of 4 digits
- A maximum of 10 restricted prefixes can be assigned to group A
- This setting is only applicable to extensions with class 4 (n=4)

6.7.4   CLEAR RESTRICTION GROUP A FOR LOCAL CALL ASSIGNMENT

Format: * 5 2 #

Description: You can use this format to clear all previously programmed restrictions in Restriction Group A, prior to making changes.

6.7.5   RESTRICTION GROUP B FOR LOCAL CALL ASSIGNMENT

Format: * 5 3 abcd #

   abcd = prefix of number to be restricted

Description: Restricts dialing certain Local Call numbers

Example: Restrict dialing of local call numbers with prefixes 4358 and 739
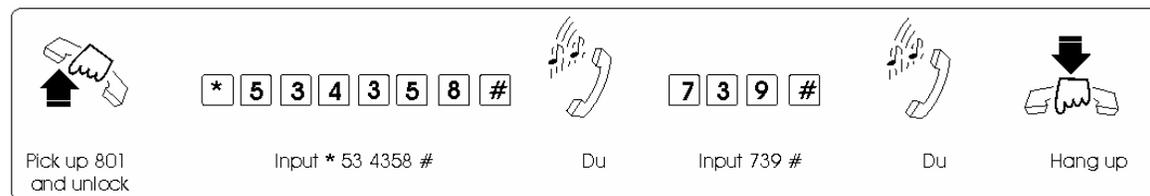
Pick up 801 and unlock | Input * 53 4358 # | Du | Input 739 # | Du | Hang up

- The restricted prefix can have a maximum of 4 digits
- A maximum of 10 restricted prefixes can be assigned to group B
- This setting is only applicable to extensions with class 5 (n=5)

6.7.6   CLEAR RESTRICTION GROUP B FOR LOCAL CALL ASSIGNMENT

Format: * 5 3 #

Description: You can use this format to clear all previously programmed restrictions in Restriction Group B, prior to making changes

6.8   SPECIAL DIALING NUMBERS (PREFIX)

6.8.1   SPECIAL DIALING NUMBERS (PREFIX) ASSIGNMENT

Format: * 5 4 abcd #

abcd = special prefix number (toll number prefix = 0 + 3 digits max.

local number prefix = 3 digits max.)

Description: Permits users to dial special toll numbers or local numbers

Example: Permit extension 803 to dial special numbers starting with prefixes 0468 or 200 or 300 only

Pick up 801 and unlock   Input * 51 803 0 #   Du   Hang up

- The extension needs to be set to Class 0 (n=0)
- The setting above is just to assign extension 803 to Class 0
- The setting below is to add the special dialed prefix

Pick up 801 and unlock   Input * 54 0468 #   Du   Input 200 #   Du   Input 300 #   Du   Hang up
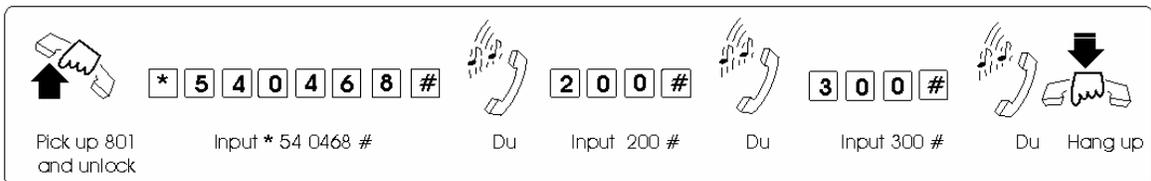
- The prefix of special toll numbers can have a maximum of four digits
- The prefix of special local numbers can have a maximum of three digits
- A maximum of 10 special prefixes can be assigned to the Special Dialing Number group
- This setting is only available to class 0 (n=0) extensions

6.8.2   CLEAR SPECIAL DIALING NUMBERS (PREFIX) ASSIGNMENT

Format: * 5 4 #

Description: Use this format to clear all previously programmed special prefix settings if you want to make changes to the Special Dialing Numbers

6.9 RESTRICT THE LINE'S RIGHT TO USE

6.9.1 ASSIGN CO LINE TO BE EXCLUSIVELY ACCESSED BY DESIGNATED EXTENSION (S) FOR OUTGOING CALLS

Format: * 4 1 m abc #
            m = CO line port number
            abc = current extension number

Description: Assign CO line to be exclusively accessed by designated extension(s) for outgoing calls. Even if the CO line is free, other extensions cannot access this CO line for outgoing calls.

Example: To assign CO line 2 to be exclusively accessed by extensions 803 and 805
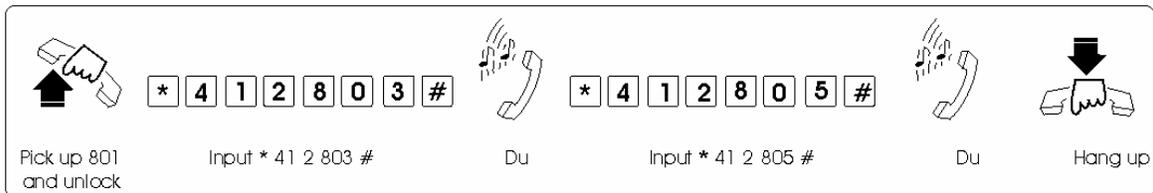
The above programming can also be performed in the following (batch) way.
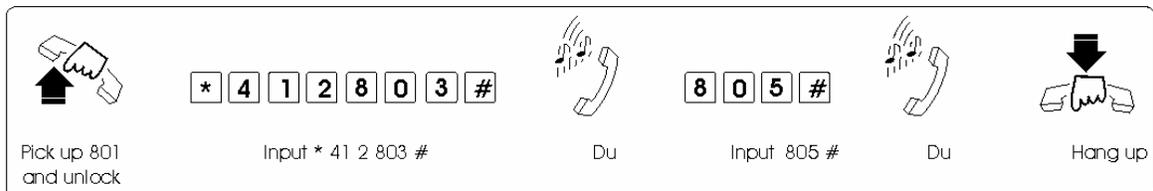
- Each CO line can have a maximum of 4 designated extensions.
- Other extensions cannot access this CO line for outgoing calls, even if the CO line is free.
- To cancel this setting, reset the CO line (see paragraph 6.5)

6.9.2 ASSIGN EXTENSION (S) TO ACCESS ONLY A DESIGNATED CO LINE FOR EXTERNAL CALLS

Format: * 4 2 m abc #

           m = CO line port number;

           abc = extension number

Description: Assign extension to use only a designated CO line for external calls. Even if other CO lines are free, this extension cannot access them for external calls.

Example: Assign extension 807 to use CO line 2 only, and extension 808 to use CO line 3 only

Pick up 801 and unlock   Input * 42 2 807 #   Du   Input 3 808 #   Hang up

- These extensions can only use the designated CO line for external calls; they cannot access other CO lines, even if other CO lines are free.
- To cancel this setting, reset the CO line (see paragraph 6.5).

6.10 EXTENSION NUMBER ASSIGNMENT

6.10.1   CHANGE EXTENSION NUMBER

Format: * 7 abc ABC #

         abc = previous extension number

         ABC = new extension number

Description: Allows you to change the numbers of the extensions

Example: Change extension number 804 to 537; 802 to 881; 806 to 652

Pick up 801 and unlock   Input * 7 804 537 #   Du   Input 802 881 #   Du   Input 806 652 #   Hang up
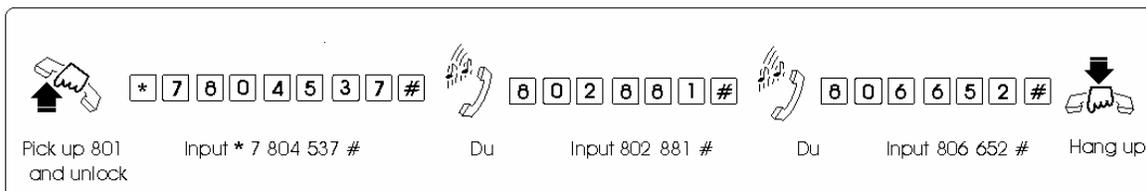
- Available extension numbers are between 100 and 999
- The new extension number cannot as the same as an existing extension number

6.10.2   RESTORE TO DEFAULT EXTENSION NUMBERS

Format: * 7 000 #

Description: We suggest using this format to restore all the extension numbers to their default settings before you change certain extension numbers

\\

Pick up 801 and unlock   Input * 7 000 #   Du   Hang up
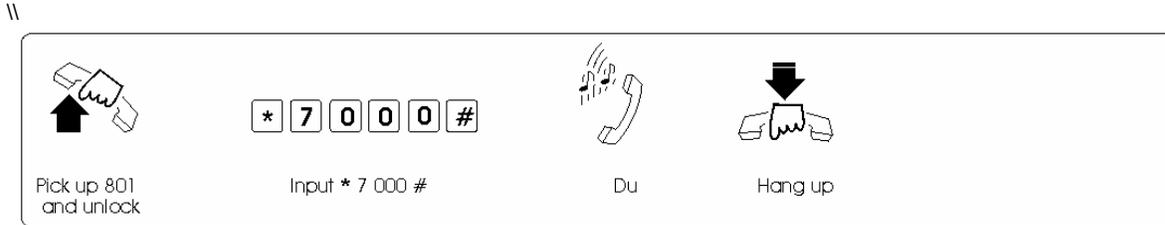
6.10.3   USER EXTENSION NUMBER CONFIRMATION

Format: # 8 1

Description: Allows a user to find out what his extension number is

Example: Suppose the extension number is 806, then the user will hear "Du" every 0.5 seconds Eight times (that confirms that the first digit is 8); after 1.5 seconds, the user will hear "Du" every 0.5 seconds Ten times (that confirms that the second digit is 0); after 1.5 seconds, the user will "Du" every 0.5 seconds hear Six times (that confirm that the last digit is 6).

Pick up EXT. 806   Input #81   8 continuous du   10 continuous du   6 continuous du

6.11 CALL DURATION LIMIT

6.11.1   LIMIT CALL DURATION

Format: * 9 abc MN #
              abc = extension number
              MN = Call Duration limit, which can be set from 1 minute to 99 minutes

Description: The system disconnects outgoing calls when the set time expires

Example: Assign extension 803's call duration to 5 minutes and extension 806's call duration to 15 minutes

Pick up 801 and unlock   Input * 9 803 5 #   Du   Input * 9 806 15 #   Du   Hang up
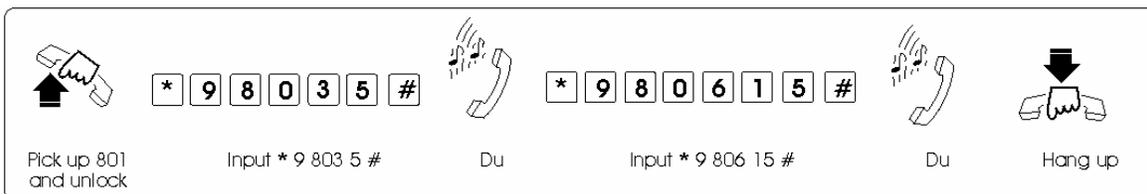
☞
- The actual limited call duration is about 20 seconds longer than the duration set, in order to compensate for dialing time.
- The maximum call duration limit that can be set is 99 minutes.

6.11.2 CLEAR LIMITED CALL DURATION

Format: * 9 abc #

abc = extension number

Description: Permits the user to make calls without a time limit

Example: Clear the limited call duration for extension 805

[*] [9] [8] [0] [5] [#]		
Pick up 801 and unlock	Input * 9 805 #	Du	Hang up
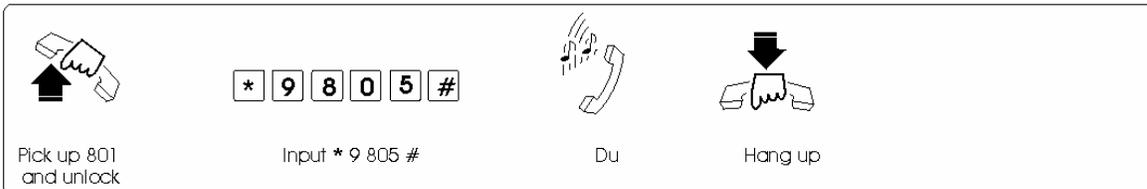
6.12 OUTGOING MESSAGE (OGM)

6.12.1   RECORDING OF OUT GOING MESSAGE

Format: * 2 2 #

Description: Record an Out Going Message (OGM) for Direct Inward System Access (DISA)

Message Example: "Thank you for calling XXXX. Please enter the extension number of the person you want to speak to, or dial 0 to talk to our operator."

Example: Record an Out Going Message (OGM)

[*] [2] [2] [#]				
Pick up 801 and unlock	Input * 2 2 #	Du, begin to record	Recording	Du, ending	Hang up
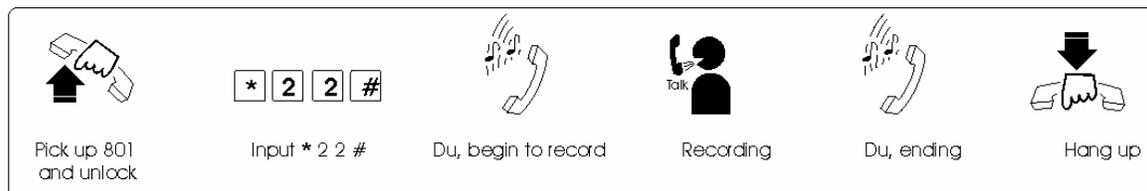
☞
- The maximum recording time is 12 seconds. "DU" is heard at the beginning of the recording and another "DU" is heard at the end of the recording.
- There is no limit to the number of times the message can be recorded. A new message overwrites the old message.
- Use a high quality telephone to ensure that the recording is also of high quality.
- OGM Recording will stop if an external caller dials extension 801 before the OGM Recording has been completed.

6.12.2 LISTEN TO OUT GOING MESAGE

Format: * 2 3 #

Description: Allows you to listen to the Out Going Message (OGM) recording for a short period and to test the quality of the telephone.

Pick up 801 and unlock   Input * 2 3 #   Playing   Du,ending   Hang up
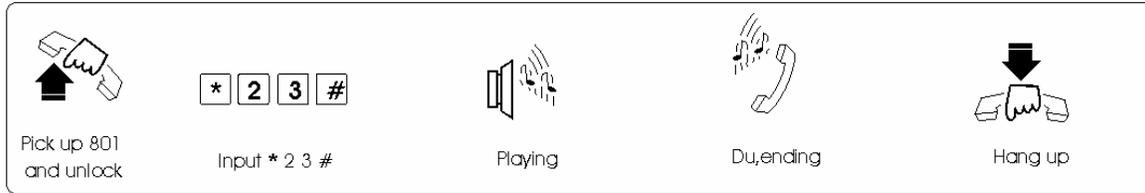
6.13 INTERNAL OR EXTERNAL MUSIC ON HOLD

6.13.1   CONNECTING EXTERNAL MUSIC ON-HOLD

This system has integrated internal Music On Hold. Just plug an external Music On Hold source into the external Music On Hold jack and the system will play external Music On Hold instead of the internal Music On Hold.

 Some external music devices may generate a tone when radio interference appears on the signal line or AC port respectively. Those units will revert to normal operation when the radio interference stops.

6.13.2 LISTEN TO INTERNAL OR EXTERNAL MUSIC ON HOLD

Format: * 2 4 #

Description: Allows the user to listen to the internal or external Music On Hold melody for a short period and to test the quality of the telephone.

Pick up 801 and unlock   Input * 2 4 #   Playing music   Hang up
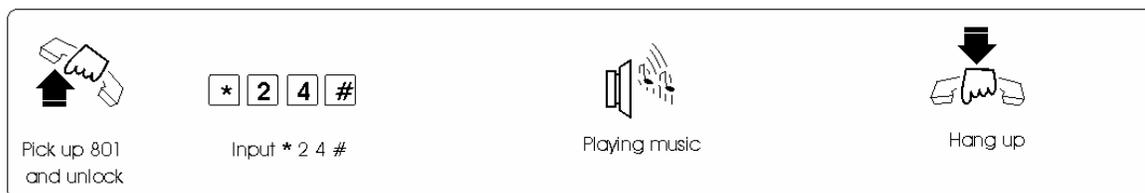
6.14 SELECT SYSTEM LINE BREAK TIME RANGE FOR INTERNAL FLASH RECOGNITION

Format: * 81 m #

                m = 1 = line break time of 40mS to 550mS
                m = 2 = line break time of 40mS to 750mS
                m = 3 = line break time of 40mS to 1000mS (Default Setting)
                m = 4 = line break time of 40mS to 1200mS
                m = 5 = line break time of 40mS to 1500mS
                m = 6 = line break time of 40mS to 2000mS

Description: When the user presses the <FLASH KEY> or taps the Hook Switch, the telephone generates a line break. If the telephone-generated line break time is less or equal to the selected system line break time range, then it is recognised as an internal flash. If the telephone generated line break time is greater than the selected system line break time range, then it is recognised as an internal line release (same as going On-Hook).

Example: Assign system line break time detection range from 40mS to 1200mS.

| Pick up 801 and unlock | Input * 81 4 # | Du | Hang up |

6.15 RESTORE SYSTEM DATA DEFAULT SETTINGS

Format: * 6 000

Description: This will re-initialise the programmed system data. When all the programmed data is cleared, the system resets and restarts using the default settings.

| Pick up 801 and unlock | Input * 6 000 # | Du | Hang up |
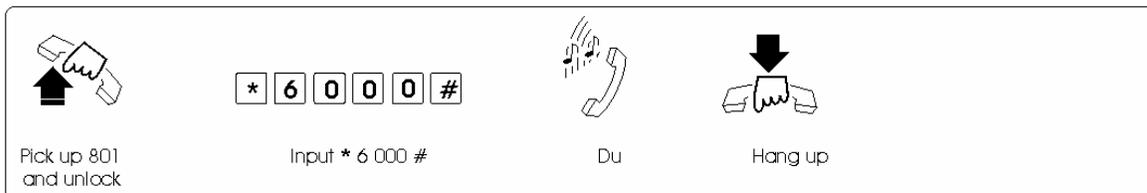
Default Values:

Password----------------------------------0000 (once changed, it can not be reset to 0000)
Attendant Mode---------------------------Operator Attendant Mode
Operator No.1 --------------------------- Extension 802
Operator No.2 --------------------------- Extension 803
Ringing Extensions --------------------- 801 ~ 804
Class of Extension --------------------- n = 2
Extension numbers --------------------- 801 ~ 808
Outbound access------------------------ Dial 9 or press <FLASH KEY> or tap the Hook Switch

6.16 DOOR PHONE & DOOR LOCK ACCESSORIES

6.16.1 DOOR PHONE

- Any Analogue Telephone can be used
- Suggest Alcatel 2410-NK
- Two-way communication
- 2 wire connection

Door Phone

6.16.2 DOOR LOCK

- Both Electrical Control & Manual Control
- Normal key equipped
- 2 wire connection
- Powered by the Mini PBX

Door Lock

 Some Door Phones may generate a tone when radio interference appears on the signal line or AC port respectively. Those units will revert to normal operation when the radio interference stops.

7 SUMMARY OF SYSTEM OPERATION AND PROGRAMMING

No.	Format	Explanation	Page
1	# n	Preferred Line Assignment---Outgoing	17
2	Flash abc	Transfer an external Call to another Extension	19
3	Flash * abc	Setting up a Conference call (3 Party)	20
4	# 7	Call Pickup	20
5	# * abc	Set up call forwarding	20
6	Go Off-Hook, On-Hook	Clear call forwarding	20
7	Flash # 83	To open the door lock after answering the door bell	22
8	# 83	To open the door lock remotely	22
9	# 9 n	Priority Access	21
10	# 9 9	External Call Waiting	18

No.	Format	Explanation	Page
11	* 0 1 abcd #	Input the system password	24
12	* 0 2 ABCD #	Change the system password	24
13	* 1 m abcd #	Ringing extensions assignment for External (CO) Lines	28
14	* 14 abcd #	Ringing extensions assignment for Door bell	28
15	* 2 0 #	Auto Attendant Mode (OGM) Assignment	25
16	* 2 0 m #	Auto Attendant Mode (OGM) Assignment for Certain CO lines	25
17	* 2 1 #	Operator Attendant Mode Assignment	24
18	* 2 2 #	Record Out Going Message (OGM)	35
19	* 2 3 #	Listen to Out Going Message	36
20	* 2 4 #	Listen to internal or external Music on Hold	36
21	* 2 5abc #	Operator No. 1 Assignment for Auto Attendant mode	25
22	* 2 6abc #	Operator No. 2 Assignment for Auto Attendant mode	26
23	* 3 abc #	External (CO) Line Connection Assignment	27
24	* 4 1 m abc #	Assign CO line to be exclusively accessed by designated extension(s)	32
25	* 4 2 m abc #	Assign extension(s) to access only a designated CO line for ext. calls	33
26	* 5 1 abc n #	Call restriction class Assignment for Certain Extension	29
27	* 5 1 n #	Class Assignment for All Extensions	29
28	* 5 2 abcd #	Restriction Group A for Local Call Assignment	30
29	* 5 2 #	Clear Restriction Group A for Local Call Assignment	30
30	* 5 3 abcd #	Restriction Group B for Local Call Assignment	30
31	* 5 3 #	Clear Restriction Group B for Local Call Assignment	30
32	* 5 4 abcd #	Special Dialing Number (Prefix) Assignment	31
33	* 5 4 #	Clear Special Dialing Number (Prefix) Assignment	31
34	* 6 000 #	Restore System Data Default Settings	37
35	* 7 abc ABC #	Change Extension Number	33
36	* 7 000 #	Restore default Extension Numbers	34
37	* 8 abc n #	External Dialing Mode Assignment	26
38	* 8 000 #	Restore default External Dialing Mode	27
39	* 81 m #	Select system Line break Time Range for internal flash recognition	37
40	# 8 1	Self-Extension Number Confirmation	34
41	* 9 abc MN #	Limit Call Duration	34
42	* 9 abc #	Clear Call Duration Limit	35

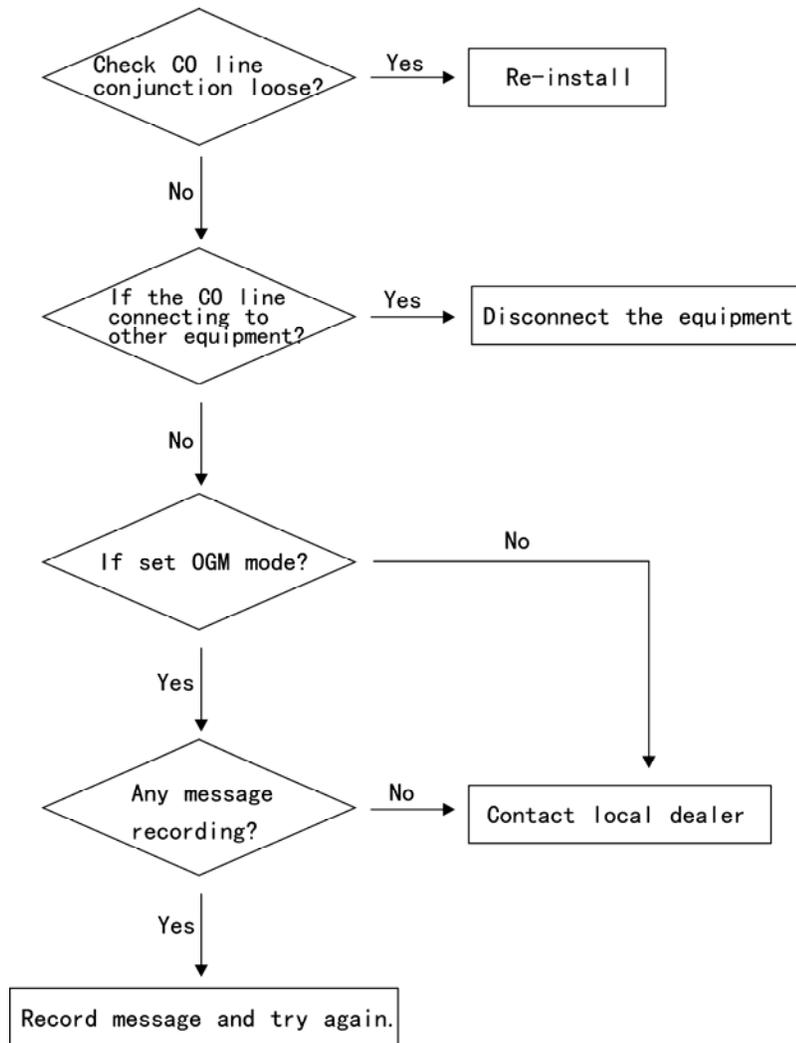## 8   MAINTENANCE & TROUBLESHOOTING

8.1   OUTGOING CALLS CAN'T BE MADE

- Programmed to be in no CO line mode;
- Call restriction class is 6;
- CO line is set to special Extension;
- Extension improperly hung up;
- CPU and internal data is corrupted due to unstable or noisy power.

8.2 EXTERNAL CALLS CAN'T BE RECEIVED

- The connection to the CO line is loose
- The CO line is connected to other equipment
- No OGM message recorded for Auto Attendant mode

```
        ╱╲
       ╱    ╲  Check CO line        Yes      ┌──────────────┐
      ╱        ╲ conjunction loose? ────────▶│  Re-install  │
       ╲      ╱                              └──────────────┘
        ╲  ╱
         No│
           ▼
        ╱╲
       ╱    ╲  If the CO line      Yes      ┌──────────────────────────┐
      ╱        ╲ connecting to     ────────▶│ Disconnect the equipment │
       ╲      ╱  other equipment?            └──────────────────────────┘
        ╲  ╱
         No│
           ▼
        ╱╲
       ╱    ╲                      No
      ╱        ╲ If set OGM mode?  ──────────────────────┐
       ╲      ╱                                          │
        ╲  ╱                                             │
        Yes│                                             │
           ▼                                             ▼
        ╱╲                                 ┌──────────────────────┐
       ╱    ╲  Any message       No        │ Contact local dealer │
      ╱        ╲ recording?  ──────────────▶│                      │
       ╲      ╱                             └──────────────────────┘
        ╲  ╱
        Yes│
           ▼
 ┌──────────────────────────────┐
 │ Record message and try again.│
 └──────────────────────────────┘
```

8.3   INTERCOM CALL CAN'T BE MADE

- Extension improperly hung up
- Extension number is wrong
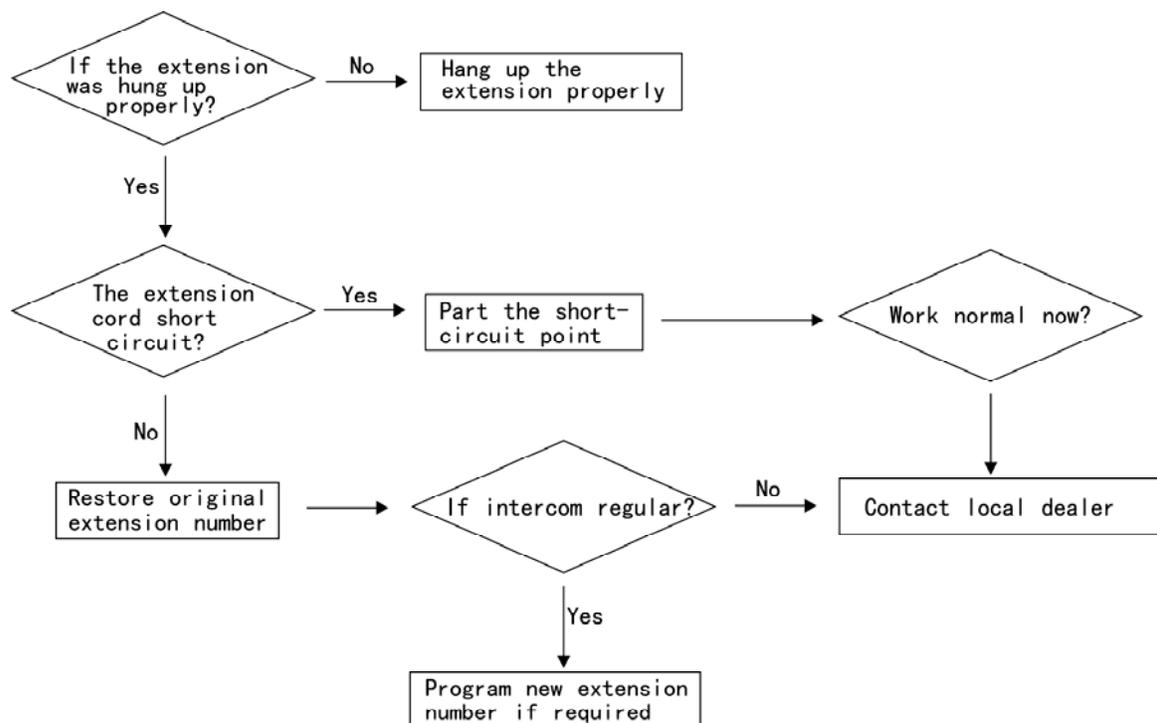
8.4   WARRANTY INFORMATION

This product is guaranteed for a period of 12 months from the date of purchase.
Should you experience difficulties with the product, please contact Atlas Gentech (NZ)
Limited for assistance.
If the product is then found to be faulty you will be asked to return it directly to us with a copy
of the purchase receipt.
This guarantee shall not apply to a fault caused by an accident or a similar incident or
damage, liquid ingress, negligence, abnormal usage or any other circumstances on the
purchaser's part.
Furthermore, this guarantee shall not apply to a fault caused by a thunderstorm or lightning,
excessive or any other voltage fluctuations or faults on the telephone line.
(As a matter of precaution, we recommend disconnecting this unit during a thunderstorm).
This guarantee does not affect your statutory rights.

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