

# PABX



## User's Manual

Group Telephone System

Please read this manual before using

© MD

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# Chap 1 Brief Introduction & Features

## 1.1 System Overview

With its design and manufacture according to G.712 and G.732 protocols of CCITT, the system integrates virtues of various KTSs with advanced functions of PABX, and has unique advantage in innovation. As a type of new generation with over 50 powerful functions for business and management, it has wide application in offices, enterprises, hotels.....etc. In a word, it is a ideal equipment for users to better communication conditions, improve work efficiency, control call fee payment, and make office intelligent come true.

## 1.2 Features

1. Top-quality elements of system hardware, ISO 9000 standard, excellent circuit design. So a complete system is of advanced technology and high integrated level.
2. Programming can be made by regular phone
3. Other normal functions:

- Direct Access when Power Failure©©©©©©©©
- Memory Protect while Power Off
- Call Transfer
- Flash Time Choice
- Auto/Operator Mode (except 108)
- Outgoing Message Recording (except 108)
- Call Forwarding (except 108)
- Auto Report Ext. Num (except 108)
- Call All Extensions (except 108)
- Priority Access and Monitoring
- Do not Disturb (except 108)
- C.O. Line Booking (except 108)
- C.O. Line Caller ID

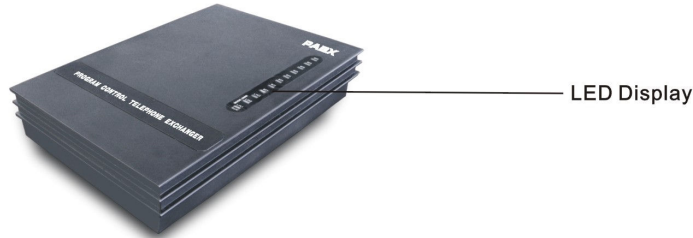
- Remote Programming
- Ringing Identify
- Call Pick up
- Music on holding
- Outgoing Call Transfer
- Three Way Conference
- C.O. Line Reservation (except 108)
- Operator Setting (except 108)
- Ringing Ext. Assign
- Multiple Dial-out Mode
- Call Restriction Class
- Assign Special Call out Number
- Call Duration Control
- C.O. Line Group (Assign Ext. to C.O.)
- Flexible Coding (Change Ext. No.)

# Chap 2 Installation & Connection

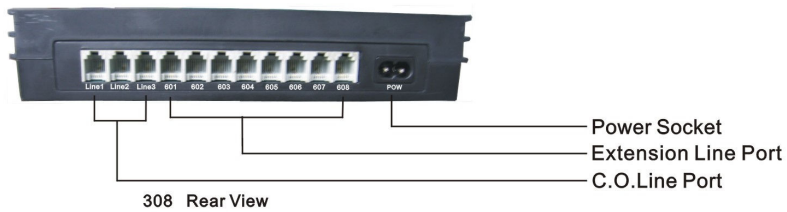
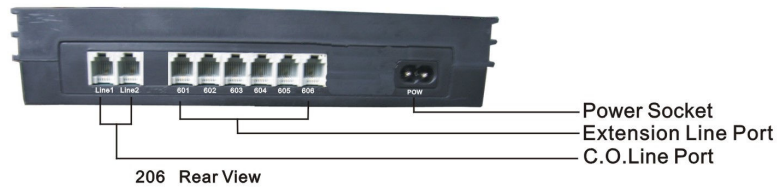
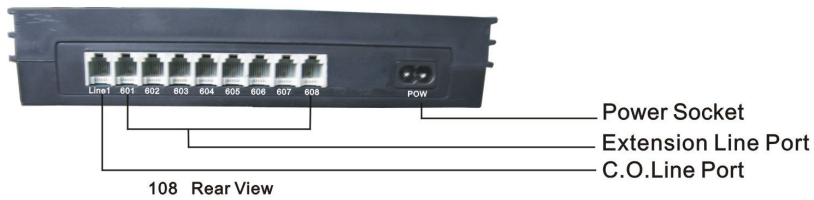
## Before Installation

For easy and quick installation and connection, it is strongly recommended that the user read and follow the following instruction carefully so as not to damage the system accidentally by incorrect operation.

## 2.1 System Appearance



Front View



## 2.2 Technical Parameter

Power Supply Voltage	-----AC 220V or AC 110V, 50-60Hz
Power Dissipation	----- $\leq 20VA$
Exchange Mechanism	-----Analog spatial division
Type of Telephone	-----Dual Tone Multi-Frequency
Communications Lines	-----108---2 (1 for Ext., 1 for CO line) ; 206---3; 308---7
IC Power Supply	----- $\pm 5V$
Distortion	----- $\leq 10\%$
Ring Voltage	-----AC 70V $\pm 10\%$ 50HZ
Crosstalk Attenuation	----- $\geq 70$ dB
Transmission Loss	----- 0.37 dB

## 2.3 Attention

Please pay attention to the important items of installation:

1. The telephone exchange shall be installed in a stable indoor place with dry, ventilated environment. (Temperature Range: 0-45°C, Humidity Range: 20%-80%. Avoid straight sun shine or in the environment of flammable or caustic gas.) Special telephone wire is preferable.
2. A marginal space around the exchange should be remained for heat sink, inspection and maintenance of the system.
3. A wall bore is available at the underside of mainframe for wall installation. Desk installation is also admitted. But the contact of wall bolt and circuit board inside the mainframe should be avoided.
4. Please keep the exchange away from other equipment producing large electromagnetic disturbance (such as motor and large transformer).
5. None of the wiring of any extension should share the pipeline with power supply or antenna. Neither should the extension be close to antenna for air broadcasting (including short-wave).
6. Avoid damaging the power-supply cable. Keep it away from water. Encountering the leakage of water cut off the power immediately.
7. Please don't impact or shake the exchange at any situation. Don't remove the exchange in working status.



8. If the wiring pipeline of the extension is disturbed by electromagnetic wave while substitution is unavailable in site, special insulating wire for communication is suggested for substitution, also, the insulating net of which should be grounded.

## **2.4 Warning**

1. The wiring should not be done in thundering.
2. Avoid using telephone in thundering.
3. Please don't use the telephone in flammable and leaking gas environment.
4. Unless the equipment is disconnected, please don't touch the broken part of the wiring or any connection ends.

**Note:** Lightning stroke is an accident, which will not be regarded as normal maintenance.

## **2.5 Installation procedure**

### **2.5.1 Connecting C.O. lines & extensions to the unit:**

1. Please connect the monomer-crystal with EXT. line and C.O. line separately;
2. Make sure to avoid short circuit.
3. Connecting extensions according to the in-dilated extension positions and C.O. lines to the corresponding line ports on the unit.

### **2.5.2 Zero-load power-on inspection:**

1. The operation voltage of this product is AC220V or AC110V. Check out the voltage of local power supply. A UPS backup is highly recommended.
2. Plug in the power supply line, indicating normal power supply and working state of the machine.
3. Pick up the handset of extension 601. A sharper internal dial tone indicates that the system is working normally. You can start to setup operation now.

## **2.6 Direct Access when Power Failure**

The C.O. lines will be connected direct to the special Exts automatically when the power failure. The No.1 C.O. line will be connected to Ext. 601 and No.2 to Ext.602, No.3 to Ext.603, So you only can use the Three Exts as normal phone with direct C.O. line (206: Only No.1 C.O. line can be connected to Ext.601 directly, i.e. No.2 C.O. line cannot be connected directly when there is power failure.)

For example when someone call in with No.1 C.O. line at the time of power failure, the Ext.601 will ring, you can only pick up Ext. 601 and talk with the caller.

# Chap 3 System programming

## 3.1 Before programming

- All the programming must be carried out on the extension 601, 602, 603, 604; all the programming must be into system programming status.
- All the extensions must be of dual tone multi-frequency phone.
- You are allowed to operate one by one, and end the process by simply pressing #. You don't have to hang up if something wrong occurs, you could press \* to restart.
- If programming-extension (601,602,603,604) is in Direct-Dialing-Out mode, you need to press \* to enter the internal system, then start programming.
- When the setting is finished, a long beep indicates that the setting is done correctly and saved in the system. If instead an array of short chirps is heard, that would indicate an error occurred in the setting. You need to check it out and reset the system. It is only after the end of the long beeps you can continue another system operation.
- You must use "enable C.O. lines" command according to the actual trunk lines before using this product, if you don't enable any C.O. line, the system will consider there is no C.O. line and doesn't auto detect C.O. line (In default setting: 108 is in Enable status;206/308 are in Disable status)

### How to programming

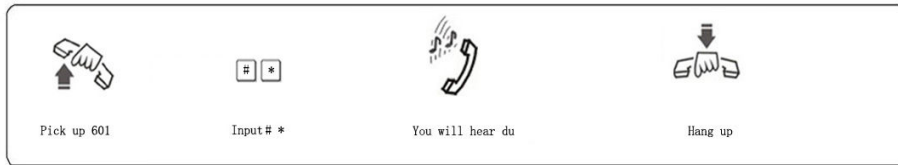
At first you must according 3.2.1 instruction enter into system programming status, and then you can begin to program as the following instruction.


## 3.2 Basic Command

### 3.2.1 Enter into System Programming Status

Format: # \*

Example: For programming the system, you should enter # \* first



-  1. You are required to dial: \*\* in the Direct-Dialing-Out mode.
2. In default setting, 108 is Direct-Dialing-Out mode and 206/308 is Indirect-Dialing-Out mode .
3. Programming telephone is EXT.601, or EXT.602, or EXT.603, or EXT. 604

### 3.2.2 Flash Time Setting

Format: 00F #

F=1 -----0.8s

F=2 -----1.0s

F=3 -----1.2s

F=4 -----1.5s

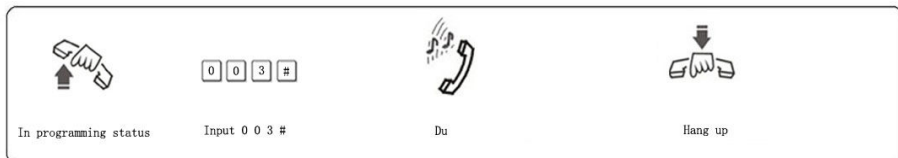
F=5 -----1.8s

Explanation: F means the flash time.

Description: For active the hold and divert operating use.

In default setting: F=2 (1.0s)

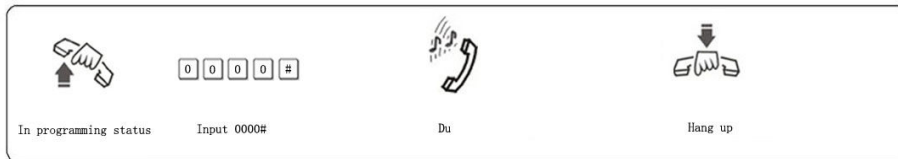
Example: Set the flash time to 1.2S




### 3.2.3 System Return to Default Setting

Format: 0000 #

Description: The system will restart with the default factory setting.



 The command has no effect on the status of enabling/disabling C.O. line.

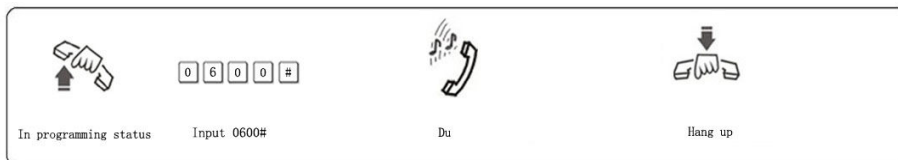
### 3.3 Enable/Disable C.O. Lines


**You must use these commands according to the actual trunk lines before using this product!!! If you don't enable any C.O. line, the system will consider there is no C.O. line and doesn't auto detect C.O. line!!!**

#### 3.3.1 Enable All C.O. Lines

Format: 0600#

Description: Enable all C.O. lines



 In default setting: 108 is in Enable status; 206/308 are in Disable status

#### 3.3.2 Disable All C.O. Lines

Format: 0610#

Description: Disable all C.O. lines

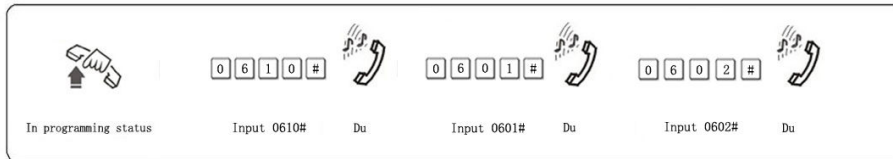
#### 3.3.3 Enable No. M C.O. Line (except 108)

Format: 060M#

Explanation: M: C.O. line No. M = 1 - 3

Description: Enable the M C.O. line

Example: You have 308 model product, you want use C.O. line 1 and C.O. line 2, and the line 3 is not in use.



### 3.3.4 Disable No.M C.O. Line (except 108)

Format: 061M#

Explanation: M: C.O. line No. M = 1 - 3

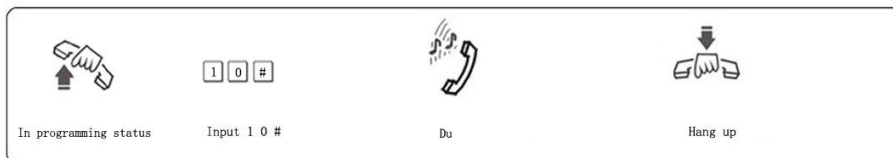
Description: Disable the M C.O. line

### 3.4 Setting Operating mode (except 108)

#### 3.4.1 Setting Auto-attendant Mode (OGM) for All C.O. Lines

Format: 1 0 #

Description: allows all the C.O. lines in Auto-attendant Mode (DISA --Direct Inward System Access status). In this mode, Caller will hear the OGM recorded message, while all extensions are in MUTE mode



1. If the caller doesn't know the extension number, he can inquire the operator by dialing "0".
2. Outgoing Message must be record when setting this mode.

#### 3.4.2 Setting Operator Mode for All C.O. Lines

Format: 11#

Description: Allows all the C.O. lines in Operator mode. In this mode, the operator extensions and other ringing extensions will ring when an incoming call is received.

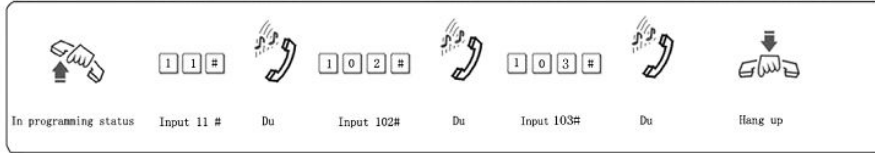
### 3.4.3 Setting Auto-attendant Mode (OGM) for Certain C.O. line

Format: 10M #

Explanation: M: C.O. line No.1-No.3

Description: allows the No.M C.O. lines in Auto-attendant Mode (DISA --Direct Inward System Access status).

Example: Set C.O. line 2 and 3 in Auto-Attendant mode, other C.O. line in operator mode.



1. If the caller doesn't know the extension number, he can inquiry the operator by dialing "0".
2. Outgoing Message must be record when setting this mode.

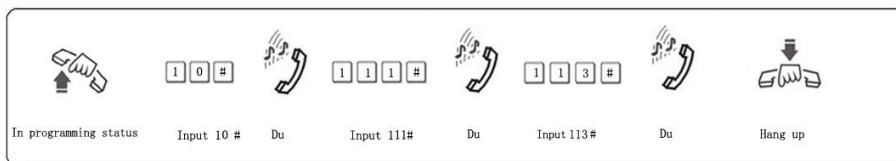
### 3.4.4 Setting Operator Mode for Certain C.O. line

Format: 11M#

Explanation: M: C.O. line No.1-No.3

Description: allows the No.M C.O. line in Operator mode.

Example: Set C.O. line 1 and 3 in operator mode, other C.O. line in Auto-attendant mode.



## 3.5 OGM (Outgoing Message) (except 108)

### 3.5.1 OGM (Outgoing Message) Recording

Format: 12 #

Description: Used to record an outgoing message for Direct Inward System Access (DISA).



1. The recording time is a maximum of 12 seconds, "du" is heard to start recording and another "du" to end recording;
2. The new message will overwrite the old one;
3. Please use high quality telephone to ensure high quality of recording;
4. If the caller dials a number before the system finishes playing the message, the system will terminate playing the message, waiting for the caller to complete dialing;
5. The caller will be connected to operator if he dials 0 first for inquiry;

### 3.5.2 Monitoring the recorded OGM

Format: 13 #

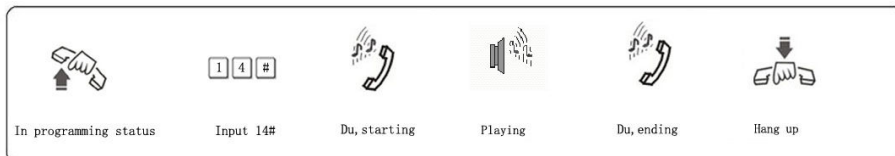
Description: Confirms the recorded message in the OGM recording program, you can check if the recording is satisfied or not, if not, you can record again.



### 3.6 Monitoring the Holding Music (except 108)

Format: 14 #

Description: Perform the music on holding melody or test the quality of telephone unit.





## 3.7 Setting Operator and Ring Ext.

### 3.7.1 Setting Operator (except 108)


Format: 15N #

Explanation: N: the Ext. line No., N=1-8

Description: To assign any Ext as the operator. In the default setting, Ext.602 is the operator.

Example: Setting Ext.602 as operator



 In operator mode, this programming doesn't change the ringing extension assignment

### 3.7.2 Assign Ringing Extensions for Certain C.O. Line

Format: 3MN0#

Explanation: M: the C.O. line No. M=1 – 3; N: the Ext. line No. N= 1 - 8

Description: In operator mode when calling of No.M C.O. line come in, Exts N will ring at the same time.

Default setting: 108—All Exts will ring; 206/308— Ext. 601 and Ext.602 will ring.

### 3.7.3 Disable Ringing Ext. for Certain C.O. Line

Format: 3MN1#

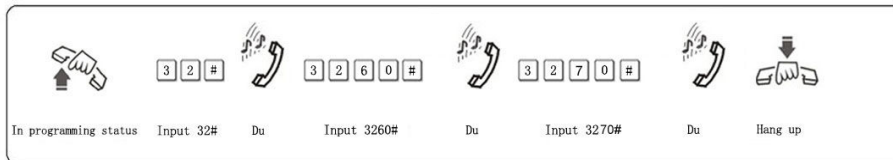
Description: Disable Exts N ring when calling of No.M C.O. line come in.

### 3.7.4 Disable All Exts Ringing for Certain C.O. Line

Format: 3M#

Description: Disable all Exts ring when calling of No.M C.O. line come in.

Example: Setting 606 and 607 ringing when the C.O. line 2 comes in.



1. This function must be in Operator Mode.
2. This programming only for C.O. line Incoming call. The extension which is not set ringing will ring under Intercom Calling, Call Transfer.
3. This function is one way to set some extensions for not disturbed.
4. In Disable All status, the system will set all Exts. ringing automatically when the C.O. line comes in.

### 3.8 Auto-attendant Mode no Answer Process (except 108)

#### 3.8.1 Cut off C.O. Line

Format: 160 #

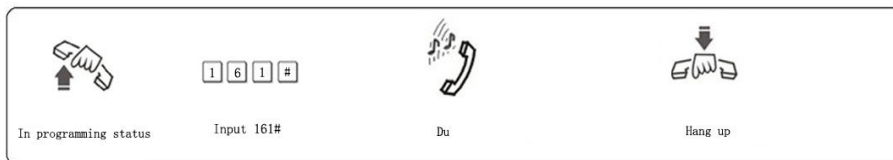
Description: In auto-attendant mode, if the C.O. line doesn't dial the extension number over 5 seconds or more after hearing the OGM, then the C.O. line will be cut off.

Default setting: The C.O. line will be cut off if no dialing.

#### 3.8.2 Transfer to Operator

Format: 161 #

Description: In auto-attendant mode, if the C.O. line doesn't dial the extension number over 5 seconds or more after hearing the OGM, then the C.O. line will be transferred to Operator.



### 3.9 Dialing-out Mode Setting

#### 3.9.1 Set Indirect-Dialing-Out Mode for All Exts

Format: 21#:

Description: Indirect-Dialing-Out mode for all the Exts(dialing 9 for outgoing).

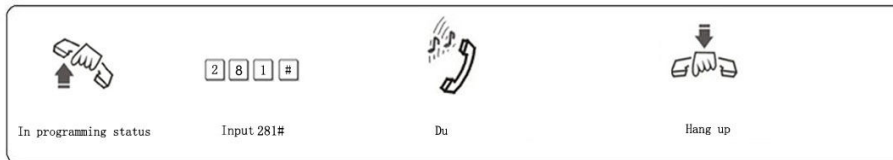
#### 3.9.2 Set Indirect-Dialing-Out Mode for Certain Ext.


Format: 2N1#

Explanation: N: the Ext. line No., N = 1 - 8

Description: Indirect-Dialing-Out mode for Ext. N (dialing 9 for outgoing).

Example: Set Indirect-Dialing-Out mode for Ext.608



 In default setting, 108 is Direct-Dialing-Out mode and 206/308 is Indirect-Dialing-Out mode

#### 3.9.3 Set Direct-Dialing-Out Mode for All Exts

Format: 20#

Description: set Direct-Dialing-Out mode for all the Exts.

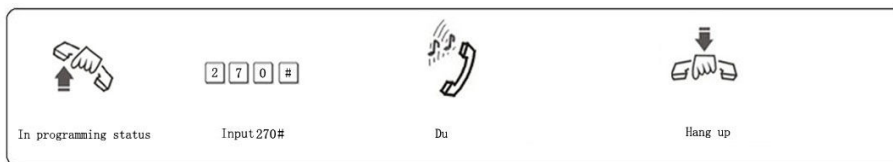
#### 3.9.4 Set Direct-Dialing-Out Mode for Certain Ext.


Format: 2N0#

Explanation: N: the Ext. line No., N = 1 - 8

Description: set Direct-Dialing-Out mode for Ext.N.

Example: Set Direct-Dialing-Out mode for Ext.607



-  1. In Direct-Dialing-Out mode, extension make intercom call should dial \*first, then dial the extension number.
2. No need dial 9 before outgoing call.

## 3.10 Call Restriction-Class Assignment

### 3.10.1 Class Assignment for All Extensions

Format: 40 L#

Explanation: L: class number, L= 0 - 6

Description: Assign dialing-out class L for all Exts.

L=1: no any restriction

L=2: call out with restriction of International long-distance dialing

L=3: call out with restriction of domestic long-distance dialing

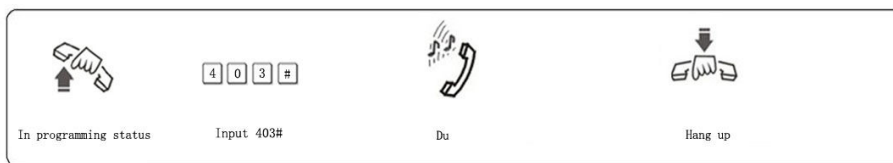
L=4: call out with restriction initial of item A.

L=5: call out with restriction initial of item B.

L=6: only for intercom call

L=0: only for some special calling number

Example: Assign the calling class to be 3 for all extensions.



1. In default setting, the class for all extensions is 2

2. This command enables a user to set class restriction on extensions in a fast and convenient way, especially when most extensions have the same class.

For example, if you want set extension 603 to class 3 and extension 608 to class 4, and the rest extensions to class 5, then you can set the restriction rank to be 5 for all extensions and change the restriction class to 3 for extension 603 and 4 for 608

### 3.10.2 Class Assignment for Certain Extension

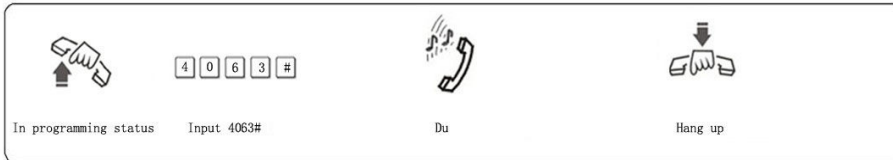
Format: 40 N L#

Explanation: N: the Ext. line No., N = 1 - 8

L : class number, L= 0 - 6

Description: Assign dialing-out class L for certain Ext. N

Example: Assign class 3 for Ext.606



### 3.11 Setting Restriction Item (A/B)

#### 3.11.1 Setting Restriction Item A

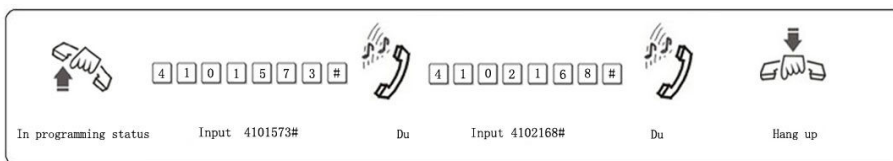
Format: 4 1 Q ABCD#


Explanation: ABCD: the initial digits of the calling number to be locked, it can be from 1-digit to 4-digits, it should be ended with # if less than 4-digits.

Q --- The group series from 01 to 16.

Description: to restrict the call-out number starting with ABCD

Example: Ext.608 is be assigned dialing-out class 4, now you want Ext.608 can't dial the numbers with initial digits – 573,168



-  1. Item A can lock 16 groups of initial digits.
- 2. Restrict Item A only work for dialing-out class 4.

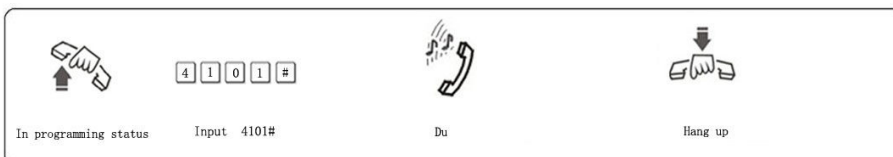
#### 3.11.2 Clear Restriction Group of Item A

Format: 41 Q #

Explanation: Q: The group series from 01 to 16.

Description: to clear the call-out restriction of certain numbers of group Q.

Example: you want to clear the call-out restriction of certain numbers with initial digits—573 of group 01,



### 3.11.3 Clear All Restriction of Item A

Format: 4 1 #

Description: to clear all the call-out restriction of certain numbers of item A

### 3.11.4 Setting Restriction Item B

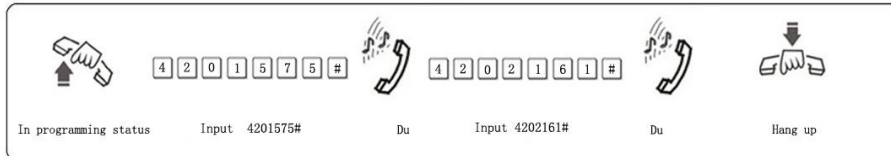
Format: 4 2 Q ABCD#

Explanation: ABCD: the initial digits of the calling number to be locked, it can be from 1-digit to 4-digits, it should be ended with # if less than 4-digits.

Q --- The group series from 01 to 16.

Description: to restrict the call-out number starting with ABCD

Example: Ext.606 is be assigned dialing-out class 5, now you want Ext.606 can't dial the numbers with initial digits – 575,161



1. Item B can lock 16 groups of initial digits.
2. Restrict Item B only works for dialing-out class 5.

### 3.11.5 Clear Restriction Group of Item B

Format: 42 Q #

Explanation: Q: The group series from 01 to 16.

Description: to clear the call-out restriction of certain numbers of group Q.

### 3.11.6 Clear All Restriction of Item B

Format: 4 2 #

Description: to clear all the call-out restriction of certain numbers of item B

## 3.12 Assign Special Calling-out Number

### 3.12.1 Assign Special Calling-out Number for Class 0

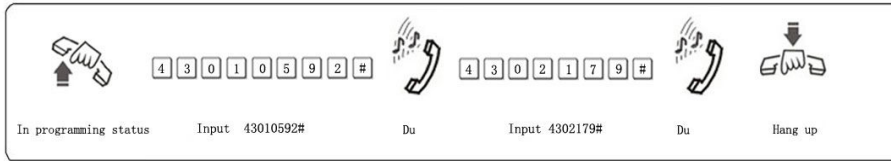
Format: 4 3 P ABCD#

Explanation: ABCD: the initial digits of the calling number to be locked, it can be from 1-digit to 4-digits, it should be ended with # if less than 4-digits.

P --- The group series from 01 to 16.

Description: Permit to dial the phone numbers starting with <ABCD> only.

Example: Ext.605 is be assigned dialing-out class 0, now you want Ext.605 can dial the numbers with initial digits – 0592,179



- 1. 16 groups of initial digits can be set.
- 2. This function only work for dialing-out class 0.

### 3.12.2 Clear Permission of Certain Group

Format: 43P #

Explanation: P: The group series from 01 to 16.

Description: to cancel the permission of certain calling-out numbers of group P

### 3.12.3 Clear All Permission

Format: 4 3 #

Description: to cancel all the permission of special calling-out numbers.

## 3.13 Calling Time Restriction Setting / Clear

### 3.13.1 Calling Time Restriction Setting

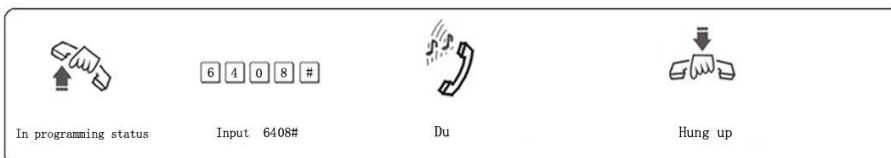
Format: 6NTT#

Explanation: N: the EXT No. (N = 1 – 8)

TT: the time restriction duration (2 digits), should be in 01-99 minutes.

Description: set the Ext N outgoing call duration to within TT minutes. This function can only limit the time of exterior call.

Example: Set Ext.604 outgoing call duration to 8 minutes



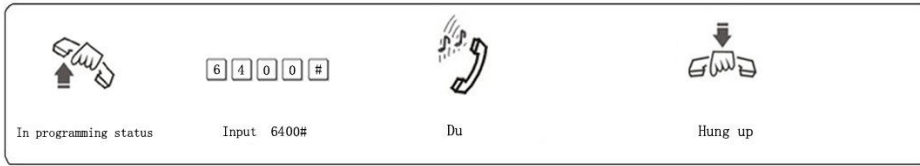
### 3.13.2 Clear Calling Time Restriction

Format: 6N00#

Explanation: N : the EXT No. (N = 1 - 8)

Description: Clear the Ext N outgoing call duration restriction.

Example: Clear the Ext.604 outgoing call duration restriction.



### 3.14 Allow Ext. to Use Certain C.O. Line / Restrict (except 108)

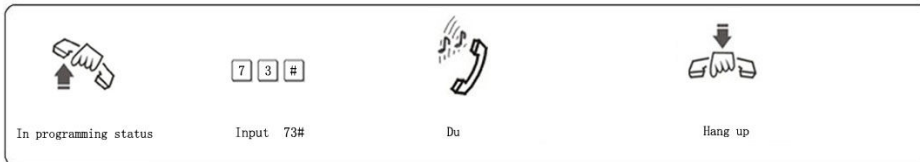
#### 3.14.1 Allow All Exts to Use Certain C.O. Line


Format: 7M#

Explanation: M: C.O. line No, M = 1 - 3

Description: This function allows Every Exts. can use C.O line M.

Example: Allow every exts. can use C.O. line 3



-  1. This function is for the outgoing call and can't change the function of C.O line ringing assignment.

#### 3.14.2 Allow Certain Ext. to Use Certain C.O. Line

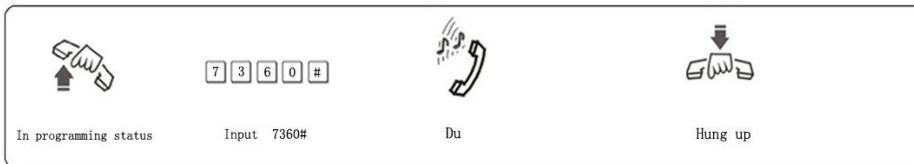
Format: 7MN0#

Explanation: M: C.O. line No, M = 1 - 3      N: Ext. No, N = 1 - 8

Description: This function assigns the extensions N outgoing to use the certain C.O. line (M).

Example: Allow Ext.606 can use C.O. line 3





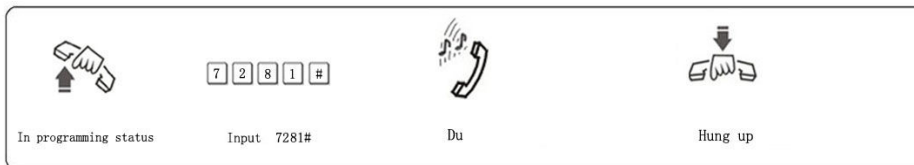
### 3.14.3 Restrict Certain Ext. to Use Certain C.O. Line.

Format: 7MN1#

Explanation: M: C.O. line No, M = 1 – 3 ;      N: Ext. No, N = 1 - 8

Description: This function restrict the Ext. N to use C.O. line M

Example: Restrict Ext.608 can use C.O. line 2



## 3.15 Flexible coding

### 3.15.1 Assign Extension Number (Freely Change the Exts. Number)

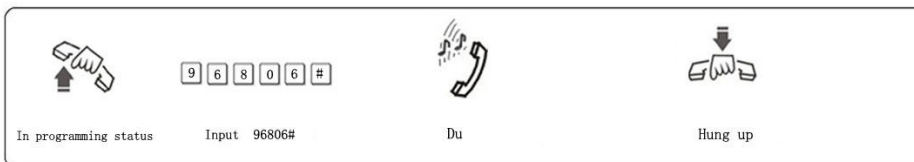
Format: 9Nabcd#

Explanation: N : the extension series number, N = 1 - 8,

abcd: the new number, 1 to 4 digit number, if new Ext number not exceeding to 4-digit number, press # in the end.

Description: Change old Ext number to new Ext number “abcd”

Example: Change Ext 606 to 806



1. The new numbers range from 1-8999; all extensions numbers can not be in duplicate.
2. The number can't begin with 0 and 9,

3. The length (digits) of new number must follow the extension No.1; it must be emphasized that if the length (digits) of new number changed, all the extensions must be reset after setting extension No.1. All the new numbers should be equal digits, and not in duplicate.

For example, to set the extension's number to 4-digit number (8001-8008), the user should dial 918001# at first, then dial 928002#, 938003#...one by one, up to 988008.

### **3.15.2 Restoring Original Extension Numbers**

Format: 9000#

Description: return to the Exts number of the default setting, that is: from 601 to 602 603... 606... 608 one by one, etc.

# Chap 4 Operating Instruction

## 4.1 Outward Call

This system provides 3 dialing modes to meet the different need of customers.

### 4.1.1 Outward Dialing 9 First (or Dialing Directly)

Format: Pick up the handset and dial 9 first after hearing the internal dialing tone, then dial the desired number after hearing the C.O. line dialing tone.

Description: When the Ext is in Indirect-Dialing-Out mode, you'll hear the internal dialing tone after pick up the handset, dial 9 then you enter the C.O. line, you may dial the desired number after hearing the C.O. line dialing tone.

Example: You call out with number 80129876 in Indirect-Dialing-Out mode



1. The user should dial 9 within 15 seconds after hearing the internal dialing tone.
2. If Ext. is at Direct-Dialing-Out mode, pick up the handset and dial desired number directly after hearing the C.O. line tone. In this situation you can redial the last telephone number.

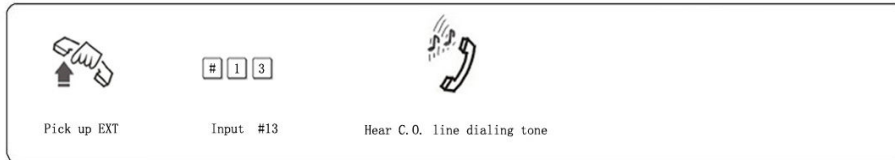
### 4.1.2 Outward Call by Choosing a Certain Line (except 108)

Format: # 1 M (Indirect-Dialing-Out mode, refer chap 3).

Explanation: M: C.O. line port number

Description: In some occasion, the user may make an outward call by an exclusive line and we define it as choosing line dialing. (M = 1 -3)

Example: At Indirect-Dialing-Out mode, the user want call out by C.O. line 3

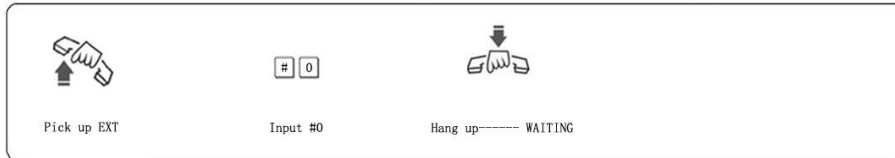


If the Ext is at Direct-Dialing-Out mode, you should input: \* # 1M.

### 4.1.3 Automatically Callback when Busy (except 108)

Format: # 0 then hang up.

Description: Indirect-Dialing-Out mode, allows you to make the Ext. ring back automatically when any C.O. line become free



1. If there is free C.O. line, the Ext will ring back automatically. The ring duration is 10 seconds during that you should pick up the ring call, otherwise the call cancelled.

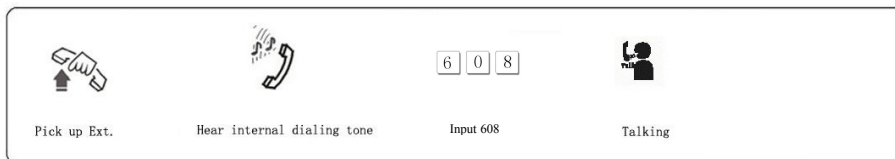
2. If the Ext is at Direct-Dialing-Out mode, you should input: \* # 0 then hang up.

## 4.2 Intercom Call

### 4.2.1 Intercom Call at Indirect-Dialing-Out Mode.

Format: Dial the Ext. number directly.

Example: Call the Ext.608



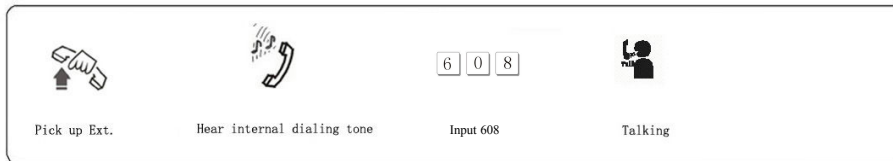
Intercom calling is free of charge.

## 4.2.2 Intercom Call at Direct-Dialing-Out Mode

Format: \* + Ext number

Description: Make internal call from Ext. with Direct-Dialing-Out mode.

Example: Call the Ext.608



## 4.3 Answering call

### 4.3.1 Answering Calls at Operator Mode

The Ext (s) which is set to ring will ring when an incoming call is received, and pick up the handset you may answer the call directly. Under the default mode, Ext.601 and Ext.602 will ring.

### 4.3.2 Answering Calls at Auto-attendant Mode (except 108)

The system use one paragraph of OGM messages, the relevant messages will be heard automatically when a exterior caller call the C.O. line.

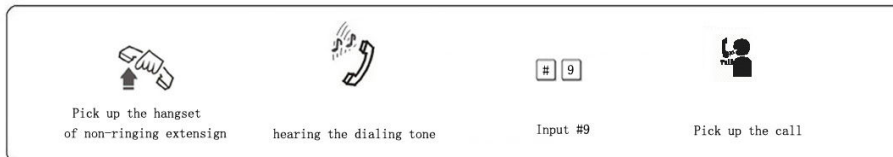


When a caller dials "0" for inquiry, operator extension will ring. If operator extension is busy, you can use the function 4.9.3 "Call Forwarding When Ext is Busy"

### 4.3.3 Call Pick Up

Format: # 9 (Indirect-Dialing-Out mode)

Description: Allows you to answer an incoming call (direct or transferred) that is ringing at another Ext.



1. If the Ext is at Direct-Dialing-Out mode, you should input: \* # 9.
2. Internal call also can be picked up.

## 4.4 C.O. Line Reservation (except 108)

Format: Pat the hook and ## (Reservation)

\*#9 (Restore)

Description: Extension N is talking with C.O. line A and at this time B calling in , Extension N Pat the hook and press ## to make A in state of caller On Holding( A is hearing music while waiting ). At this moment, Extension N also can make Call Pick Up(input #9), Call Transfer, Dialing Out etc.... if Extension N will restore the connection with C.O. line, just input \*#9



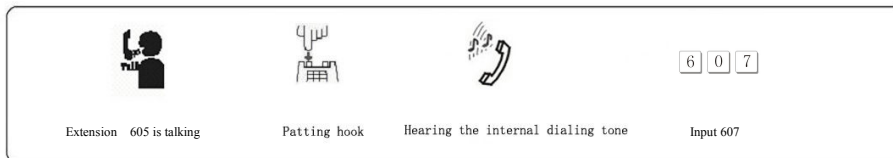
The maximum duration time of C.O. line call holding is 2 minutes.

## 4.5 Call Transfer

Format: Pat the hook (or press the FLASH button) then dial the Ext. number.

Description: 1. Allow you to transfer an incoming call to another Ext.

2. The Flash time can be set. Example: Ext.605 is talking to C.O. line and want to transfer the C.O. line to Ext .607. Then Ext .605 can transfer the incoming call to Ext .607 by patting the hook (or pressing the FLASH ) and dialing 607.



There may be following 8 cases after a call is transferred from Ext. A to Ext. B:

1. A does not hang up and B picks up his handset .Then communication between A and B is established while the outside caller is on hold (music on hold). Whoever hang up (A or B), the system will transfer outside caller to the other.
2. A does not hang up and B does not answer A within 25 seconds. Then A will restore the connection with CO. line, and B will stop ringing.
3. A hangs up and B answer the call; B will answer the outside caller.
4. A hangs up and B does not answer the call within 25 seconds, call will be back to A and will ring, if A never picks up the call in 30 seconds or A is busy, the system will cut off.

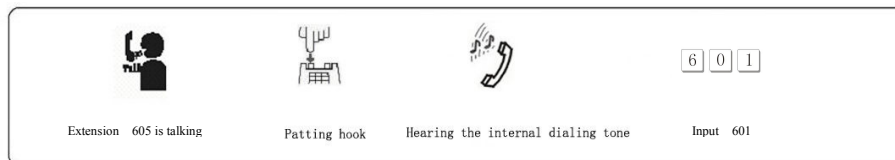
5. After A pat the hook then hear the error message, that means the system is busy, A can continue to pat the hook (or press the FLASH button) until the error message is disappear.
6. A make invalid operation or B is busy, After System indicate with "du-du-du", A can repeat the operation.
7. A hangs up and B does not pick up. A pick up again and press: # 9 (If the Ext is at Direct-Dialing-Out mode, you should input: \*# 9), then A will restore the connection with C.O. line.
8. The EXT, which transfer the call (pat the hook), has 5 seconds to dial the Ext. number. Otherwise the incoming call will be back to him again.

#### 4.6 Secretary Function (Outgoing Call Transfer Function)

Format: Pat the hook then dial the Ext number

Description: This function let you make an outgoing call from one Ext then divert and connect other Ext. to C.O. line

Example: Ext .605 makes an outward call then transfers the call to Ext. 601.



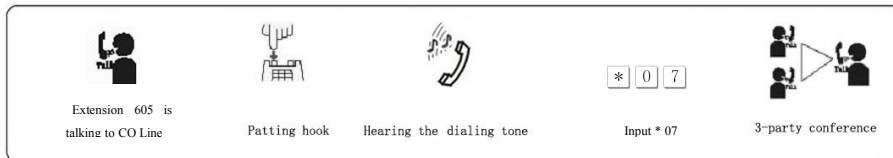
1. You should input the Ext number within 5 seconds after patting the hook ( or press FLASH button ) and hearing the internal dialing tone, otherwise you'll be came back to the C.O. line again .
2. You can uniform manage the system by using C.O. line Restriction and Secretary Function, Such as: the operator uniform books the long distance calls, then transfer to the needed.

#### 4.7 Three Way Conference (1 C.O. Line and 2 Exts)

Format: Pat the hook (or press FLASH button) and \* and Ext .number

Description: Allows you to add a third party to a two-party conversation and make a three-party conference. You can have only two Ext. with one C.O. line.

Example: Ext. 605 is talking to C.O. line caller and he want to transfer the call to 607. Then 605, 607 and C.O. line can talk at the same time.



1. There may be following 2 cases after a call is transferred from A to B.
  - a. A does not hang up and B picks up his handset. Then communication amount A B and C.O. line is established, whoever hang up (A or B), the system will transfer outside call to another one.
  - b. A does not hang up and B does not answer A within 25 seconds. If Ext. B does not answer A within 25 seconds, then A will restore the connection with C.O. line, and B will stop ringing.
2. The Ext, which transfer the call, has 5 seconds to dial the Ext number required otherwise his incoming call will be back to him again.

## 4.8 Call Forwarding (except 108)

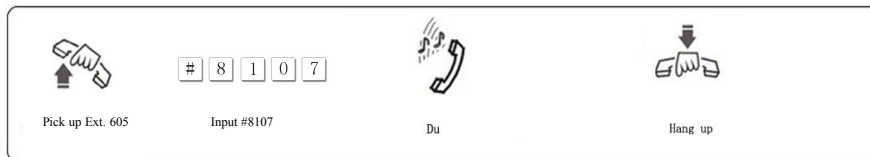
### 4.8.1 Setting Call Forwarding Directly

Format: # 81 abcd then hang up

Explanation: <abcd> is desired Ext number. This is at Indirect-Dialing-Out mode.

Description: Allows the Ext user to transfer incoming calls automatically to desired Ext.

Example: The user of ext. 605 wants to go to 607 for work then he can forward all the incoming calls of 605 to 607



1. In Direct-Dialing-Out mode, you should set with \* # 81 abcd and clear with \*#81#.
2. Pick up the handset of Ext with Call Forwarding function you will hear nothing and can't do any operating, you must hang up to cancel the function first
3. When power failure, this setting will not be stored.



## 4.8.2 Clear Setting Call Forwarding Directly

Format: # 81 # then hang up

Description: Clear setting call forwarding directly of this extension.

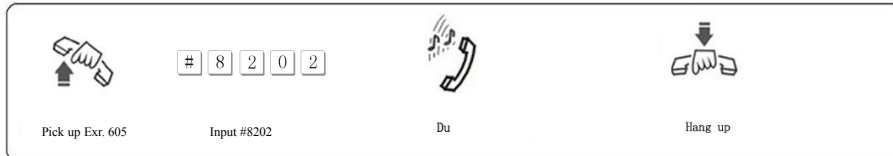
## 4.8.3 Call Forwarding When Ext is Busy or Nobody Available

Format: # 82 abcd then hang up

Explanation: <abcd> is desired Ext number. This is at Indirect-Dialing-Out mode.

Description: If a Ext is busy or nobody available after 25 seconds, the incoming call will be transferred to desired Ext. automatically.

Example: When the ext. 605 is busy or no answer, then he wants to transfer the incoming calls to the operator 602



1. At Direct-Dialing-Out mode, you should set with \* # 82 abcd and clear with \*#82#.
2. When power failure, this setting will not be stored.

## 4.8.4 Clear Setting Call Forwarding When Ext is Busy

Format: # 82 # then hang up

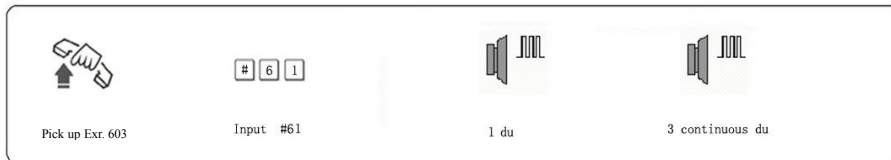
Description: Clear setting of call forwarding when Ext is busy or nobody available after 25 seconds

## 4.9 Inquiry Functions (except 108)

Format: # 61

Description: During installing and testing of the system, it is very convenient to find the Ext number. The system use “du” for this purpose.

Example: After input # 61 on Ext. 603 you may hear 1 “du” , at about 1.5 seconds later , at last you may hear another 3 continuous “du” , that mean the Ext number is 603



- 1. 10 continuous du stands for “0”
- 2. If the Ext is at Direct-Dialing-Out mode, you should input: \* # 61.

#### 4.10 Call All Extension (except 108)

Format: #88

- If the Ext is at Direct-Dialing-Out mode, you should input: \*# 88

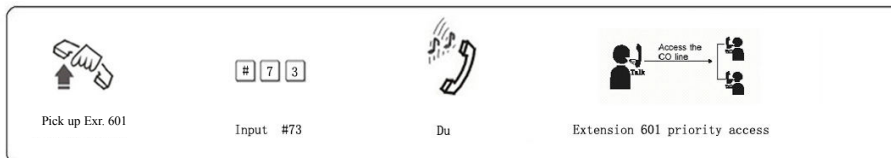
#### 4.11 Priority Access and Monitoring

Format: # 7 M

Explanation: M: the C.O. line port number. M = 1 - 3

Description: Establish direct connection with C.O. line regardless whether or not this line is occupied. This feature ensures the director or owner of a company monitor the C.O. line communication.

Example: Priority access to C.O. line 3.



- 1. Only Ext.601 has priority access
- 2. If the Ext is at Direct-Dialing-Out mode, you should input: \* # 7 M.
- 3. The monitor is responsible for the legal issues resulting from the operation.

#### 4.12 Connect with Operator Directly (except 108)

Format: 0

Description: Ext will connect with operator directly

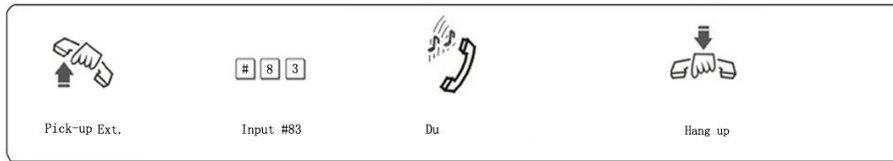
- If the Ext is at Direct-Dialing-Out mode, you should only input: \* 0.

## 4.13 Setting Don't Disturb / Clear (except 108)

### 4.13.1 Setting Don't Disturb

Format: #83

Description: If "Don't Disturb" is set for the extension, then this extension will not ring.



 If the Ext is at Direct-Dialing-Out mode, you should input: \* # 83

### 4.13.2 Clear Don't Disturb

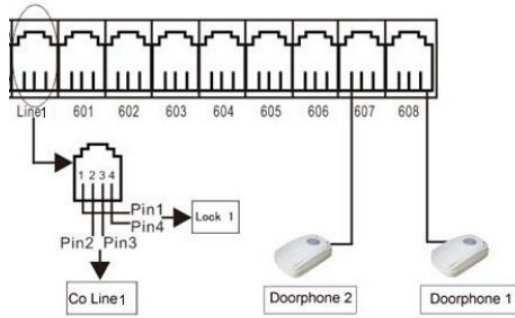
Format: Pick-up the handset

Description: To cancel "Don't disturb" function, you just pick up the handset.

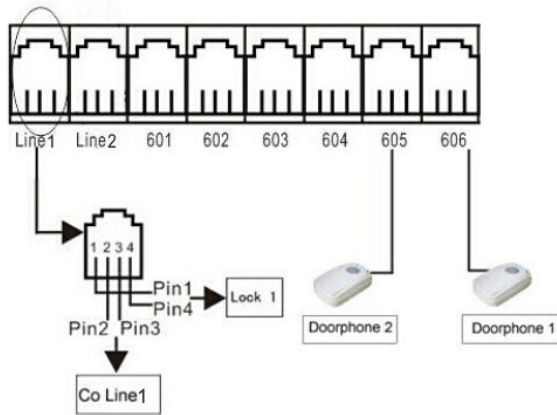
# Chap 5 Door-phone Functions

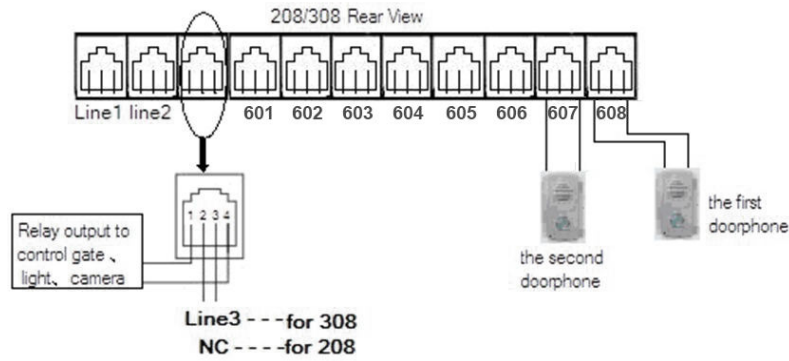
## 5.1 Connections instruction:

108 Rear View



206 Rear View





The system offer up to door opener(door-open switch, connect with the wire of electron -controlled lock. ) interfaces,and the system can define two extensions to be doorphone.

## 5.2 Setting Door-phone function

### 5.2.1 Setting the connector port for Door-phone

Format: 80N# set the first doorphone (N is ext no.)  
 81N# set the second doorphone (N is ext no)  
 8000# clear the first doorphone  
 8100# clear the second doorphone

Default: not set doorphone

### 5.2.2 Doorphone ringing Extensions Assignment

Format: 8 2 #

Description: Clear all extensions assigned to the doorphones .

Format: 8 2 N#

Description: Assign Ext. N to be the ring extensions when the doorphone calling

**NOTE:**1、 In default setting: Ext.601 &Ext.602 is assigned to all doorphone call either in day mode or night mode.

2、 Maximun 8 extensions can assigned to the doorphones either in day mode or night mode.

### 5.2.3 Setting Duration of switch Signal

Format : 1 8 5 TT#

Explanation: TT = 01-99 opener action time is TT\*0.1s

Description: Setting the door opener action time (the relay for door opener's shutting time).


## 5.3 Operating Instruction

**Operation1:** Press the doorphone calling and press\*1 to open the door lock.

**Description:** when visitor press the special door-phone,The extensions assigned to the doorphone will ringing, at this moment the

door-phone will be at the status of music on hold (if nobody answer after 25s,the system will send a busy tone to door-phone),you pick up the operator extension and can talk to the visitor. While the other ring Exts.will stop ringing.

- During talking with the doorphone ,the Extension input \* 1 to open the door lock.

 1、 Each Extension can pick-up the call and open the door when the visitor press the door-phone

2、 When visitor press the special door-phone, If the extensions assigned to the doorphone are all busy at this moment, the system will send a busy tone to door-phone, in the mean time, the extensions will hear a du-du-du awaiting indication ( but very short).

3、 the system should have 3 ringing tones available for different calls:  
-one for the internal calls  
-one for the doorphone call  
-one for the C.O.line incoming calls

**Operation2** : directly open the door

Pick-up + # 19 to open the door lock directly.

**Note:** If the Ext is at Direct-Dialing-Out mode, you should input: \* # 19.

**Description:** use any extension to action the N.O. relay to switch one time for many different controls (gate, light, camera...).

# **Chap 6 Maintenance & Troubleshooting**

## **6.1 Outgoing calls can't be made**

- 1). C.O. line is set to special Extension;
- 2). Extension hangs up improperly;
- 3). CPU and internal data is disorder caused by unstable power.
- 4). Call restriction class is 6.

## **6.2 Outside calls can't dial in**

- 1). The conjunction of C.O. line loose;
- 2). C.O. line was connected to other equipment;
- 3). No message recording at auto-operator mode.

## **6.3 Intercom can't be made**

- 1). Extension hangs up improperly;
- 2). Extension number wrong.

BREAKDOWN	CAUSE	SOLUTION
Running light malfunction	Power off	Check the power socket and Power supply
No sound from extension	Disconnected wiring or malfunction of telephone.	Reconnect the wiring or try to remove the telephone's failure
Cacophony	Bad connection	Screw down the joint
	The distributing of line is not reasonable	Leave telephone from the disturbing source
Bad tone	Mix using of non-standard telephones	Use the standard telephones
No incoming telephone display	Devoid function of incoming telephone display	Write application to telecommunication office
	Wrong setting of No-disturbing and it status.	Rescind the No-disturbing and set incoming telephone display status.
Dial-out malfunction	Exterior line disconnected	Connect to the exterior line
	Exterior line is not connected well	Check whether the line is connected well
Limited calling time	Time limited	Rescind the limit
Cannot program the telephone	Wrong coding	Check the programming extension and use the right code
Others	Others	Refer to professional



## Chap 7 Glossaries

Programming extension-----	Extension No.601, 602, 603, 604
N-----	Series number of the extensions (1-8 with corresponding input ports 1-8) (one digits)
abcd-----	Number of the extension(1-8999,except for the digits with the first digit of 0 or 9,outward code of special trunk line, in equal length)is accordance with N.
M-----	Series number of the exterior line (No.1-3with corresponding input ports of Line 1- 3, thereinto,108---M=1; 206---M=1-2; 308---M=1-3)
P-----	Licensed Group Number (01-16)
Q-----	First-digit restrict group number (01-16)
ABCD-----	Licensed or restricted number of first 1-4 digits, end for #
L-----	Service grade (Grade of private passwords or outgoing call), grade 0-6
TT-----	Time in minute for call duration control, ranges from (01 to 99)
F-----	Flash time class.

## Chap 8 Default Settings

- C.O. line: 108 is in Enable status; 206/308 are in Disable status.
- Operating mode: All C.O. line in Operator mode, but 108 doesn't has auto-attendant mode.
- Dialing out mode: 108 is in Direct-Dialing-Out mode; 206/308 is in Indirect-Dialing-Out mode, dialing "9" for outgoing
- All C.O. lines are ungrouped
- Operator: Ext. 602
- Ring Ext.: 108: All Exts. ring together; 206/308: Ext.601 and Ext.602 ring.
- Extension service class assignment: 2
- Time Restriction: No
- Flash time: 1.0s
- Outgoing Exts. Assign to Certain C.O. lines: No
- Original EXT number: 601 to 608
- Restrict Item A / Item B: No setting
- Special Calling-out Number: No setting

# Chap 9 System Programming & Operation Instruction

## 9.1 Index of Basic Operation

No.	Description	Indirect-Dialing-Out mode Command	Direct -dialing-out mode
1	Outward Dialing	9 + desired number	desired number
2	Outward Dialing by a Exclusive Line(except 108)	# 1 M	* # 1 M
3	Intercom calling	Ext number	*+Ext number
4	Call Transfer	Pat hook + Ext number	
5	Secretary Function	Pat hook + Ext number	
6	3-Party Conference Call	Pat hook + * + Ext	
7	Caller on holding (except 108)	Pat hook + ##	
8	Call Pickup	# 9	* # 9
9	Call Forwarding Directly (except 108)	setting: #81 +Ext number	*#81+Ext Number
		clear : #81#	*#81#
10	Call Forwarding when Ext is busy or nobody available (except 108)	Setting: #82 +Ext number	*#82+Ext number
		clear : #82#	*#82#
11	Automatically Call back Busy- come on (except 108)	# 0	* # 0
12	Automatic Reporting of Ext number (voice) (except 108)	# 61	* # 61
13	Connect with Operator Directly (except 108)	0	* 0
14	Priority Access and Monitoring (only Ext.601)	# 7 M	* # 7 M
15	Setting Don't disturb (except 108)	#83	*#83

16	Use broadcast function (except 108)	#88	*#88
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## 9.2 Index of system programming

No.	Description	Command
1	Start the System Programming	(*) # *
2	Return to Default Setting	0000 #
3	Enable all C.O. lines	0600 #
4	Disable all C.O. lines	0610 #
5	Enable No. M C.O. line (except 108)	060M #
6	All C.O. lines in Auto-attendant Mode (except 108)	10 #
7	C.O. line M in Auto-attendant Mode (except 108)	10 M #
8	All C.O. lines in Operator Mode (except 108)	11 #
9	C.O. line M in Operator Mode (except 108)	11 M #
10	OGM Recording (except 108)	12 #
11	OGM Play (except 108)	13 #
12	Monitor Holding Music (except 108)	14 #
13	Setting Operator (except 108)	15 N #
14	System option for no dialing in The DISA----Cut off C.O. line (except 108)	160 #
15	System option for no dialing in The DISA----Transfer to Operator (except 108)	161 #

16	Direct-Dialing-Out mode for Ext.N	2 N 0 #
17	Indirect-Dialing-Out mode for Ext.N	2N1 #
18	Direct-Dialing-Out mode for all the Exts.	20 #
19	Indirect-Dialing-Out mode for all the Exts	21 #
20	Enable Exts N ring When calling of No.M C.O. line come in	3MN0 #
21	Disable Exts N ring When calling of No.M C.O. line come in	3MN1 #
22	Disable all Exts ring When calling of No.M C.O. line come in	3M #
23	Assign dialing-out class L for certain Ext. N	40NL #
24	Assign dialing-out class L for all Exts	40L #
25	Restrict the Certain Numbers from item A	41 Q ABCD #
26	To cancel the restriction of item A	41 #
27	To clear group Q of restriction item A	41Q#
28	Restrict the Certain Numbers from item B	42 Q ABCD #
29	To cancel the restriction of item B	42 #
30	To clear group Q of restriction item B	42Q#
31	Assign Special Calling-out Numbers	43 P ABCD #

32	To cancel the permission of special calling-out numbers	43 #
33	To cancel group P of special calling-out numbers.	43 P #
34	Time Restrict Setting	6N TT #
35	To cancel time restrict	6N00 #
36	assign the extensions N outgoing to use the certain C.O. line (M) (except 108)	7MN0 #
37	To restrict the EXT.N to use C.O. line M. (except 108)	7MN1 #
38	Allow every Exts. to use C.O. line M (except 108)	7M #
39	The Exts number return to the default setting	9000 #
40	To change the Ext.N to new number "abcd"	9Nabcd #