PABX

User's Manual

Group Telephone System

Please read this manual before using

Table of Contents

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

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

NOTE:
1. For 208 the N.O. (and for 308 the line3) interface pin1&pin4 is a relay output port for many different controls (gate, light, camera...)
2. For music interface is for external holding music input(connect to MP3..).

Front View

108 Rear View

LED Display

Power Socket
Extension Line Port
C.O.Line Port

Music Interface

206 Rear View

Power Socket
Extension Line Port
C.O.Line Port

Music Interface

208 Rear View

Power Socket
Extension Line Port
C.O.Line Port

Music Interface

308 Rear View

Power Socket
Extension Line Port
C.O.Line Port

Music Interface
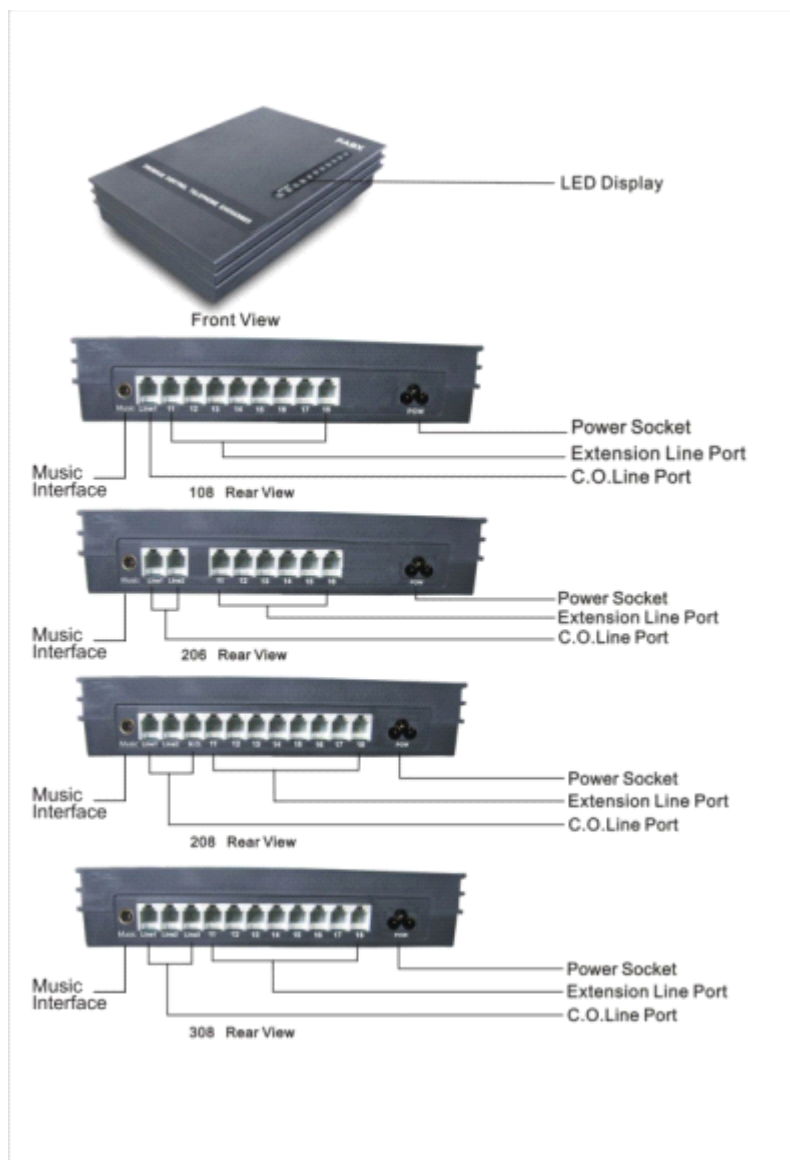
2.2 Technical Parameter

Power Supply Voltage ----------------AC 220V or AC 110V, 50-60Hz
Power Dissipation -----------------------≤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; 208/308---7
IC Power Supply -------------------------±5V
Distortion ---------------------------------≤10%
Ringing Voltage --------------------------AC 70V±10% 50HZ
Crosstalk Attenuation -----------------≧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 environ ment. (Temperature Range: 0-45℃, 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 maint enance 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 work ing 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 11. 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. 11 and No.2 to Ext.12, No.3 to Ext.13, 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.11 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.11 will ring, you can only pick up Ext. 11 and talk with the caller.

Chap 3 System programming

3.1 Before programming

● All the programming must be carried out on the extension 11, 12, 13, 14; 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 (11,12,13,14) 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.

☞ 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: * # * EFGH
Explanation: EFGH is the system password，default is 0000.
Example: For programming the system, you should enter the password first, if the password is 5678，as below:

Pick up Ext.11	Input *#*5678	You will hear di	In programming status

☞ 1. You are required to dial: * # * EFGH in the Direct-Dialing-Out mode.

2. The default password is 0000, so you must enter 0000 in the first use
3. Programming telephone is EXT11, or EXT.12, or EXT.13, or EXT. 14

3.2.2 Change the Password

Format: 09EFGH#
Explanation: EFGH is the new system password.
Description: to change the password of system programming.
Example: Changing the system password from "0000" to "5678"

In programming status   Input 09 5678 #   You will hear du   Hang up

☞ 1. We suggest changing the password before using.

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

In programming status   Input 0 0 3 #   Du   Hang up

3.2.4 System Return to Default Setting

Format: 0000 #
Description: The system will restart with the default factory setting.

In programming status   Input 0000#   Du   Hang up

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

3.2.5 Setting Delay time for outgoing call transfer

Format: 03 T T #
Description: T=01-99, unit is second; this time mean the time which is from finish dialing the last number to the system start to allow system transfer function, The system restriction time also from this time,
Default setting: Duration of time-delay being 5 seconds.
Example: Setting delay time: 8s, then input 0 3 0 8# in programming status.

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 （excep 108）

Format: 060M#
Explanation: M: C.O. line No. M = 1 - 3
Description: Enable the M C.O. line
Example: You have 208/308 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   Day / night mode & weekend mode setting

3.4.0 System Date/Time setting **(Optional)**

Format: 01YYMMDD#   Setting year/month/date of system
Explanation: YY: year, 00-99
                                           MM: month, 01-12
                                           DD: date, 01-31

Format: 02 HHTT#   Setting Hour/Minute of system
Explanation: HH: hour, 00-23, 24 hours mode
                                     TT: minutes, 00-59
Format: 020000W #   Setting week of system
Explanation: W: Week, 1-7(7 = Sunday)
Example: Set system to 2002/12/18 21:30 Sunday

3.4.1 Day/night mode setting (Optional)

Format: 0 4 0#   Set day/night mode to automatically mode
            0 4 1 #   Set day/night mode to manual mode
            0 4 2 HH TT #   day mode start time, HH-hour (24), TT-minute
            0 4 3 HH TT #   day mode end time, HH-hour (24), TT-minute
            0 4 4 0 #   Enable auto-attendant(OGM) in day and night
            0 4 4 1 #   Enable auto-attendant in day (means in night
                             is operator mode)
            0 4 4 2 #   Enable auto-attendant in night (means in day
                             is operator mode)

☞ : 0440#,0441# ,0442# setting must be used after set Operating
mode (refer 3.5.3 or 3.5.4)   to auto-attendant.
Example: Set day/night mode to automatically mode, Day mode start
time is 08:30 and end time is 18:00.And CO line 1 to 11 and CO line 13 to
15 is operator mode in day , is auto-attendant mode in night, CO line 12 、
16   is operator mode in day and night. then you should input 10#, 1112#,
1116#，0420830#, 0431800#, 040#, 0442#。

3.4.2 Weekend mode setting (Optional)

Format: 0 4 8 0 #   enable weekend mode function
            0 4 8 1 #   disable weekend mode function, this is default
                              setting
            04900 #   to set from Monday to Sunday as work day ; this
                              is default setting
            0 4 9 0 W #   to set week W as work day
            0 4 9 1 0 #   to set from Monday to Sunday as weekend day
            0 4 9 1 W #   to set week W as weekend day.
Explanation: W: Week, 1-7(7 = Sunday)
Description: Weekend mode means when the day in week is set to work
day ,then the system' day/night mode will change according the setting in
3.4.1& 4.1, and when the day is define to weekend day,then the system is
in night mode.

Example: To set Monday to Friday as work day,and Saturday and Sunday as weekend day,then iput 04900# ,04916#,04917# ,0480# ,also you should Set day/night mode to automatically mode and day mode start & end time.

3.5 Setting Operating mode (except 108)
NOTE: All the C.O. lines are in operator mode is the default setting, the operator ringing Extension is 11 and 12.

3.5.1 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 cans inquiry the operator by dialing "0".
    2. Outgoing Message must be record when setting this mode.

3.5.2 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.

3.5.3 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.
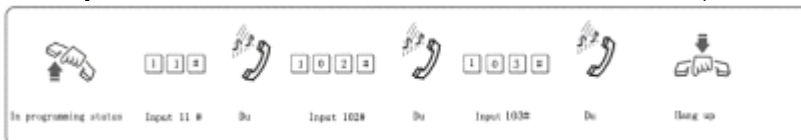
☞ 1. If the caller doesn't know the extension number, he can inquiry the operator by dialing "0".
    2. Outgoing Message must be record when setting this mode.

3.5.4 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.
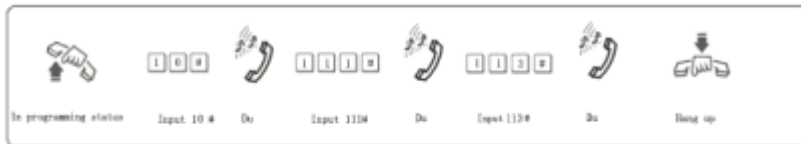
☞ 1.   When the C.O. line is in operator mode, the Operator mode ringing extension (setting refer3.8.2&3.8.3) will be ringing when calling in, the caller can hear the ringing tone.
2.Operator mode or auto-attendant mode, certain C.O. line just can be in one status, but if set the certain C.O. line into   auto- attendant mode, the operator mode will be canceled automatically.

3.55 Enable/Disable OGM   fast dialing function

Format: 1546#   Cancel auto-attendant fast dialing function, this is
                         default setting
           1547#   Set auto-attendant fast dialing function.
Description: while this function is endable , Dial 1 to ext. 11 , dial 2 to ext. 12, dial 3 to ext. 13…… dial 8 to 18, . dial 0   to available ext;   and dial 9 to group 20.

3.5.6 CRBT (Directly ringing while play OGM Process in Auto-attendant Mode)

NOTE: I、This is a new mode; allow you to call in form outside and hear OGM while the system directly to ringing the Assignmented extensions without dialing any extension numbers.
     II、You should set the C.O.line in Auto-attendant mode first.
     III、In the mode we suggest you record the OGM into one paragragh.
Format: 1 67 #   this is default setting
Description: disable directly ringing extensions while playing OGM in
           auto-attendant mode.
Format: 1 6 7 0 #
Description: enable directly ringing extensions while playing OGM in
           auto-attendant mode,and the ringing extensions is the first&
           the second operators
Format: 1 671#   to ringing the first Exts.Group
Format: 1 672#   to ringing the second Exts.Group
Description: Enable directly ringing extensions while playing OGM in
           auto-attendant mode,and the ringing extensions is the setting
           Exts. Groups.

Format: 1 6 7 6 #

Description:enable directly ringing extensions while playing OGM in auto-attendant mode, The system will call the operator mode Ringing Extensions.

3.6 OGM setting　(Outgoing Message) (except 108)

This system have one OGM with 20 seconds(default) recordable time.

3.6.1 Setting OGM paragraph mode

The system use max to four paragraph of OGM messages, and can be set to four modes, see below:

Format:　　0451#　　　　Set OGM to be one paragraph mode
　　　　　　　0452#　　　　Set OGM to be two paragraph mode

Description: In two paragraph mode, it is day/night mode, while in day-time the system use the first paragraph, in night-time the system use the second paragraph)

Format:　　0453#　　　　Set OGM to be three paragraph mode;
　　　　　　　　　　　　　it is default setting
　　　　　　　0454#　　　　 Set OGM to be four paragraph mode

Description: In four paragraph mode, while in day-time the system use the first three　paragraphs recording, in night-time the system use the fourth paragraph) ,also only when you order the OGM with 60&90 seconds recordable time can use this mode.

3.6.2 OGM recordable time

For 20 seconds type
◆ In one paragraph mode is total 20 seconds.
◆ In two paragraph mode each paragraph is 10seconds
◆ In three paragraph mode the first paragraph is 8 seconds, the second &the third paragraph is 6 seconds

For 50 seconds type
◆ In one paragraph mode is total 50 seconds.
◆ In two paragraph mode each paragraph is 25seconds
◆ In three paragraph mode three paragraph 20-15-15 seconds
◆ In four paragraph mode the first is 18seconds ,the fourth paragraph is 16seconds,and the second & the third paragraph is 8 seconds.

For 60 seconds type
◆ In one paragraph mode is total 60 seconds.
◆ In two paragraph mode each paragraph is 30seconds
◆ In three paragraph mode each paragraph is 20seconds
◆ In four paragraph mode the first & fourth paragraph is 20seconds,the second & the third paragraph is 10seconds

For 90 seconds type

◆ In one paragraph mode is total 90 seconds.
◆ In two paragraph mode each paragraph is 45seconds
◆ In three paragraph mode each paragraph is 30seconds

3.6.3 OGM Recording(multiple paragraphs mode)

Format: 1 2 M #   （M=1,2,3, 4, the paragraph of the
OGM ）
Description: Used to record an outgoing message for Direct Inward
System Access(DISA).
OGM 1 recording, this is the first OGM, usually it is for company greeting,
for example, you may record "This is ABC company, please dial
extension number or dial "0" for operator. Thanks you for calling."
OGM 2 recording , this is the second OGM, usually it is for C.O. line dial
extension and this extension is busy, if you want to transfer this
calling to other extension, you may record "Sorry! This extension is
busy. please dial other extension number or dial "0" for operator."
OGM 3 recording , this is the third OGM, usually it is for C.O. line dial
extension and this extension no answer, you may record "Sorry!
This extension do not answer, please dial other extension number
or dial "0" for operator."

☞1>. The recording time is limited, "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/she dial 0 first for
inquiry;

3.6.4 OGM playing(multiple paragraphs mode)

Format: 13 M #   (M=1,2,3, 4 the paragraph of the OGM)
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.

3.6.5 One paragraph OGM Mode

Format: 1200 #
Description: to recording one paragraph OGM
Format: 1300 #
Description: to play and minitor one paragraph OGM
Note: 1. After performed above two commands(1200# or 1300#), system
will change to one paragraph OGM mode automatically.

2. After performed 12M#、13M# two commands, system will change to three paragraphs OGM mode automatically.

3. The OGM mode will be kept after power off.

3.7 Monitoring the Holding Music (except 108)

Format: 14 #

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

| In programming status | Input 14# | Du, starting | Playing | Du, ending | Hang up |

3.8 Setting Operator and Ring Ext.

3.8.1 Setting Operator （excep 108）

Format: 15N #

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

Description: To assign any Ext as the operator. In the default setting, Ext12 is the operator.

Example: Setting Ext.12 as operator

| In programming status | Input 152# | Du | Hang up |

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

3.8.2 Ringing Extensions Assignment to Cance in Day mode

Format: 3 0 M N 0 #

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

N: the Ext. series No. N=1–8(N=1 means Ext.11 …… N=8 means Ext.18)

Description: In operator mode when calling of No.M C.O. line come in and system in day mode(in default setting system in day mode), No. N Ext. will ring at the same time.

In default setting only Ext11, 12 will ring.

Format: 3 0 M N 1 #

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

Format: 3 0 M #

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

Example: Setting Ext.15 and Ext.17 and EXT.18 ringing when the C.O. line 2 come in while the system in day mode, then input 302#,302050#,302070#,302080#.

3.8.3 Ringing Extensions Assignment to Cance in Night mode

Format: 3 1 M N 0 #
Description: In operator mode when calling of No. M C.O. line come in and system in night mode, Exts N will ring at the same time.
In default setting only Ext11, 12 will ring.
Format: 3 1 M N 1 #
Description: Disable No. N Ext. ring when calling of No.M C.O. line come in while system in night mode.
Format: 3 1 M #
Description: Disable all Exts ring when calling of No.M C.O. line come in while system in night mode.
Example: Setting Ext.13 and Ext.15 ringing when the C.O. line 2 come in while the system in night mode, then input 312#, 312030#, 312050#.

☞ 1. Up to 8 Exts are allowed to ring at the same time for one C.O. line while system in either day or night mode .that mean you can repeat input 30MN0# or 31MN0# for 8 times.
2. Before you setting a certain ringing extension, we suggest you better to disable all the Exts ring for this C.O. line.
3. This function must be in Operator Mode.
4. This function only for C.O. line Incoming call. The extension which is not set ringing will ring under Intercom Calling, Call Transfer.
5. This function is one way to set some extensions for not disturbed.
6. If you not use day/night function, you needn't to set night settings

3.8.4 Setting C.O.lines ringing format

Format: 3200#   Set all the C.O.lines calling in ringing are normal format.
32M0#   Set no.M C.O. line calling in ringing is normal format.
Note: Normal format is ringing 1second and suspend 4seconds.
32M1#   Set no.M C.O. line calling in ringing is special format.
Note: special format is 0.3s ringing and 0.3s suspend, 0.3s ringing and 0.3s suspend, 0.3s ringing and 3.5s suspend
Note: the default setting is normal ringing format.

Format: 1 8 8 0 #
Description: While the C.O. line coming in, and all the ringing extensions assigned to C.O. line is busy , the system will send waiting call beep to the ringing extensions for every five seconds, these extensions is assigned to the C.O. line, this is default setting.
Format: 1 8 8 1 #
Description: While the C.O. line come in, and all the ringing extensions assigned to C.O. line is busy, instead of sending the waiting call beep, the system will find the first idle extension begin from Ext. 11 to Ext. 18 in sequence then ringing it.
    ☞   These setting will take effect only when the system in operator mode

3.9 C.O.Line Calling in Auto-attendant ModeProcess

3.9.1 OGM busy Process in Auto-attendant Mode

Format: 1 5 4 0 #
Description: when external call in and the OGM is busy ,then system is waiting(no extensions ringing),this is default setting.
Format: 1 5 4 1#
Description: When multiple external lines calling in, because auto-attendant just one or two lines, some one external line calling just can be waiting, the system can be set to ring the operator mode ringing extension(refer3.8.2&3.8.3) and will not lose any calling.

3.9.2 Auto-attendant Mode no dial Process

Format: 1 6 0 #   this is default setting
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 hung up.
Default setting: The C.O. line will be hung up if no dialing.
Format: 1 6 1 #   or 1610#
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(no dialing in The DISA), then the C.O. line will be transferred to Operator or the Ext.Group (setting see below).
Format: 1 6 1 1#   transfer to the first Exts.Group(default number is 20)
         1 6 1 2# transfer to the second Exts.Group(default number is 21)
Description: The system will call the setting extension group when no dialing in The DISA (OGM)
Format: 1 6 1 6 #
Description: The system will call the operator attendant mode Ringing Extensions refer to user mannul .

3.9.3 Called Extension Busy Process

Format   165#
Description: when the outside user dialing the extension in auto-attendant mode,and the called extension is busy,then the system cut off the line; this is the default setting.
Format: 1650#
Description: when the called extension is busy, the call transferred to operator.
Format: 1651#   to tranfer to the first Exts.Group.
Format: 1652#   to tranfer to the second Exts.Group.
Description: when the called extension is busy ,The system will call the setting extension group.
Format: 1656#
Description: when the extension line busy, the call transferred to the operator attendant ringing extension.
◆   **Above setting just for one paragraph OGM mode.**
Format: 1655#   when calling ext.busy, send prompt tone to the extension

3.9.4 Called Extension No Answer Process

Format: 166#
Description: when the called extension is no answer, the C.O. line will be cut off; this is the default setting.
Format: 1660#
Description: when the called extension is no answer, the call transferred to operator.
Format: 1661#   to tranfer to the first Exts.Group
Format: 1662#   to tranfer to the second Exts.Group
Description: when the called extension is no answer, The system will call the setting extension group.
Format: 1666#
Description: when the called extension is no answer, the call transferred to the operator attendant ringing extension.
◆   **Above setting just be in effect in one paragraph OGM mode.**
◆

3.10 Add Digits for Intercom CID/Disable (Optional)

3.10.1 Add Digits for Intercom CID

Format: 180 KK #
Description: Add KK in intercom Caller ID number

☞ 1、Some CID telephone can't display the CID number less than 4 digits, so we must add more digits for intercom CID.
    2、Default setting: KK=00 ,CID number will   add two digit 00.

Format: 180 #
Description: Disable add digits for intercom Caller ID

3.11 Dialing-out Mode Setting

3.11.1 Set Indirect-Dialing-Out Mode for All Exts

Format: 21#:
Description: Indirect-Dialing-Out mode for all the Exts (dialing 9 for outgoing).

3.11.2 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.18

In programming status   Input 281#   Du   Hang up

☞ In default setting, 108 is Direct-Dialing-Out mode and 206/208/308 is Indirect-Dialing-Out mode

3.11.3 Set Direct-Dialing-Ou Mode for All Exts

Format: 20#
Description: set Direct-Dialing-Out mode for all the Exts.

3.11.4 Set Direct-Dialing-Ou 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.17

In programming status   Input 270#   Du   Hang up
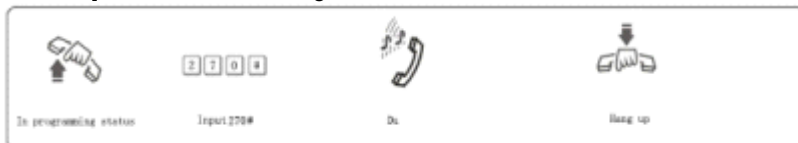
☞ 1. In Direct-Dialing-Out mode, extension make intercom call should dial *first, then dial the extension number.
2. No need dial 9 before outgoing call.

3.12 Call Restriction-Class Assignment

3.12.1 Class Assignmen 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.

In programming status	Input 4O3#	Du	Hang up

☞ 1. In default setting, the class for all extensions is 4
　　 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 13 to class 3 and extension 18 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 13 and 4 for 18

3.12.2 Class Assignmen 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.16

In programming status	Input 4063#	Du	Hang up

3.13 Setting Restriction Item (A/B)

3.13.1 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.18 is be assigned dialing-out class 4, now you want Ext.18 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.

3.13.2 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,

3.13.3 Clear All Restriction of Item A

Format: 4 1 #
Description: to clear all the call-out restriction of certain numbers of item A

3.13.4 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.16 is be assigned dialing-out class 5, now you want Ext.16

25

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.

3.13.5 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.

3.13.6 Clear All Restriction of Item B

Format: 4 2 #
Description: to clear all the call-out restriction of certain numbers of item B

3.14 Assign Special Calling-out Number

3.14.1 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.15 is be assigned dialing-out class 0, now you want Ext.15 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.

3.14.2 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

Format: 4 3 #
Description: to cancel all the permission of special calling-out numbers.

3.15 Calling Time Restriction Setting / Clear

3.15.1 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.14 outgoing call duration to 8 minutes

3.15.2 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.14 outgoing call duration restriction.

3.16 Exts. Using C.O.Lines Access

3.16.1 Assign Exts. Outgoing to Certain C.O. Line / to Clear in day mode

Format: 70MN0#   Assign the extensions N outgoing to use the certain C.O. line (M) in daytime.
    70M0#   All extensions can use co line M in day mode.
    70M1#   All extensions can not use co line M in day mode.
    70MN1#   to restrict the EXT.N to use C.O line M in day mode
    70N2#   Allow extension N use all C.O.lines in day mode.
    70N3#   to restrict EXT.N use all C.O.lines in day mode.

3.16.2 Assign Exts. Outgoing to Certain C.O.Line / to Clear in night mode

Note: If you not use day/night function, you needn't to set these settings.

Format: 71MN0#   Assign the extensions N outgoing to use the
                       certain C.O. line (M) in night .
            71M0#   All extensions can use co line M in night mode.
            71M1#   All extensions can not use co line M in night mode
            71MN1#   to restrict the EXT.N to use C.O line M in night
                       mode.
            71N2#   Allow extension N use all C.O.lines in night mode.
            71N3#   to restrict EXT.N use all C.O.lines in night mode.
Explanation: M: C.O. line No, M =1-3 N: the Ext. series No., N =1–8
Description: This functions allow you to assign certain CO line exclusively
            be accessed by certain extensions for outgoing calls and
            other extensions can't use it for outgoing calls.
☞1. This function is for the outgoing call and can't change the function of
       C.O line Ringing Assignment. .
   2. Eg1: EXT13 can't use C.O line 2,   Ext.16 & Ext.18 can use C.O line
         1 in daytime , you can set as follows: 702031# ,
         701060# ,701080#.
   3. Eg2: C.O line 1 can use   at   night   mode by   Ext 11, C.O line 2
         can use   by Ext 16. Ext 17 .Ext 18 in night , you can set as
         follows: 7111#、7121#、711010#、712060#、712070#、
         712080#。

3.17 Setting Fax Ext and Enable/disable Fax Detecting function （Optionnal）

Format: 470#   disable fax detecting function
         470N#   setting ext.N is fax and disable fax detecting function
         471K#   setting detected fax signal number, that is the system
                    will maintain the signal when detected number K
Description: In auto-attendant mode, when the calling from outside fax,
the system will ring the fax extension.
       ☞ **This function only available when the system is in
       auto-attendant mode.**

3.18 Flexible coding

3.18.1 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 16 to 806

          In programming status   Input 988008   Du   Hung up

     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, and can't use same numbers of two Exts.Group.

     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.

3.18.2 Restoring Original Extensior Numbers

Format: 9000#
Description: return to the Exts number of the default setting, that is: from 11 to 12 13… 16… 18 one by one, etc.

3.19 Ringing/Transfer/Reservation time

3.19.1 Internal Call Ringing Time

Format: 4 9 4 TT#
Explanation: TT: seconds 01-99, 00 means not stop ringing, default setting is 30seconds
Description: When one extension call another extension, and the called extension is not pick up , the system will continue to ring another extension for this setting time and follow by busy tones.

    ☞ This time must be more than the Call forward time and the tranfer ringing time.

3.19.2 Operator Dialing/Transfer Ringing Time

Format : 4 9 6 TT#
Explanation: TT=seconds 01-99 default setting is 25seconds
Description: When transfer a call or somebody call in with OGM mode and dial a extension, then the system will ringing the called extension for the setting times .

    ☞ This time must be more than the Call forward time .

3.19.3 No Answer Transfer Time/ Call forwarding Time

Format :   1 8 4 TT#

Explanation: TT=seconds   01-99   default setting is 20 seconds

Description: When one extension setting Call forwarding when Ext is busy or nobody available when the system call it ,after TT seconds it is not pick up, then the call will transfer to the setting extensions automatic.

◆   This time must be less than the transfer ringing time and internal call ringing time.

3.19.4 External Line Reservation Time

Format : 1 8 6 TT#

Explanation: TT = 01-99 reserved time is TT * 10 s

Description: Setting C.O. line reserved time when Ext. hold the call.

☞ In default setting, TT=12, reserved time are 120s.

3.20 Enable/disable Call Forwarding Settings reserved when Power Failure

Format: 1 7 0 #

Description: The Call forwarding settings (refer 4.2&4.12) will lose when the system power off.

Format: 1 7 1 #

Description: The Call forwarding settings will be stored if power failure (system default setting)

3.21   Ext. groups function setting

3.21.1 Assign the Exts. groups number

The extensions can be set to 4 groups, each group is from 01 to 96 and have a programmed number. Setting methods is as below(similar to flexible code).

Format: 9 9 0 abcd #

Description: to set the first groups' number and   enable the first Exts Group

☞   1、The length of Exts groups number should be same to the first extension number, and the Exts   group numbers   should be different to the other extensions number.

2、Default setting is 20 .

Format: 9 9 1 abcd #

Description: to set the second groups' number and enable the second Exts Group.

☞ Default setting is 21 .

Format: 3 9 0 #
Description: to delete all extension members in the first Exts group.
Format: 3 9 0 N_1 N_2 … N_R * N_S .. N_T #
Explanation: N_1、 N_2 、 N_R、 N_S、 N_T: the Ext. series No , = 1-8 (not 01-08) means ext 11-18
Description: In the first Exts group join in Ext. N_1 、 No.N Ext.$_2$、 No.N Ext.$_{T,...}$ and from Ext. N_R to No.N Ext.$_S$ in sequence members.
Example: to jion Ext.11、Ext.12、and Ext.15 …to Ext.18(include Ext.18) in sequence to be the first Exts.group member,then input 290 1 2 5 * 8 #.
After setting,when you dial the first Exts group number (such as 20 refer 3.21.1),the Ext.11 Ext.12、Ext.15 and Ext.18 will ringing at the same time.
Format: 3 9 1 #
Description: to delete all extension members in the second Exts group.
Format: 3 9 1 N_1 N_2 … N_R * N_S .. N_T #
Description: In the second Exts group join in Ext. N_1 、 No.N Ext.$_2$、 No.N Ext.$_{T,...}$ and from Ext. N_R to No.N Ext.$_S$ in sequence members.

☞ 1、 The first Exts group members is join by the extensions from 11-18 in default setting.

2、The second Exts group members is not setting.

Format: 1 6 8 #
Description: to define the Exts. groups are in meeting mode.
Explanation: when Extension groups are in meeting mode; If one extension call one extension group, the members in this group will ring at the same time, each extension can pick up the handset and talk with the caller, while the other extension keep ringing . This function is also a conference function.
Instruction: 1 6 9 #
Description: to define the Exts groups are in normal calling mode.
Explanation: when Extension groups are in normal calling mode;If call one extension group, the members in this group will ring at the same time, each extension can pick up the handset and talk with the sender, if someone pick up the handset, the other extension will stop ring.

◆ Default setting is normal calling mode.

Chap 4 Operating Instruction

4.1 Day/Night Mode Setting

4.1.1 Manua Setting

In manual mode, you can input the following command:

Format: # 2 0#   Switch the system to day mode.
   # 2 1#   Switch the system to night mode.

☞   1、The default mode is day mode.
   2、The command can be inputted only by Programming Extensions
   (Ext. 11, 12, 13, 14) , not in programming mode.
   3、If the Ext. is in direct-dialing-out mode, you need to dial *#20# or
   *# 21# .

4.1.2   Automatic Mode Setting

when the called extension is no answer, the C.O. line will be cut off;

Format: # 2 2 #   Switch the day/night mode to auto mode (Same as
   040# in programming mode).
   # 2 3#   Switch the day/night mode to manual mode(Same
   as 041# in programming mode).

◆   The command can be inputted only in Programming Extensions, not
   in programming mode。

NOTE: There are two ways to switch Day/Night mode, Manual mode and
Auto mode. Auto mode is optional function.

   In Manual mode, you are needed to switch Day/Night mode through
setting manually, that means every day you must set manually if you want
switch Day/Night mode. The system will be in Day mode always (or Night
mode) if you don't set manually.

   In Auto mode, the system will switch the day/night mode
automatically according the start and end time you have set in 3.4.1.

   In Auto mode, the system also will switch the day/night mode
automatically according the Weekend mode you have set in in 3.4.2

4.2 Set & Clear other Ext. Call forwarding through Programming Extensions

You can set other Ext. call forwarding through Programming Extensions

Format: #26Nabcd   to set No.N Ext. transfer incoming calls automatically
   to desired Ext.abcd
   # 2 6 N # :   Clear directly forwarding setting for No.N Ext.
   # 2 6 # :   Clear directly forwarding setting for all Ext.
   # 2 7 N abcd : to set No.N Ext. transfer incoming calls to desired
   Ext.abcd when No.N Ext. is busy or nobody
   available after 30 seconds(call forward time,refer
   to 3.19.3)

# 2 7 N # :	Clear busy (or nobody available) forwarding setting for No.N Ext.
# 2 7 # :	Clear busy (or nobody available) forwarding setting for all Ext.
# 2 5 # :	Clear any settings of call forwarding for all Ext. whether directly forwarding setting or busy (nobody available) forwarding setting.

Explanation: <abcd> is desired Ext number to be transferred, abcd=11 – 18(default number) N: Ext. series No ,N=1-8 (N=1 means Ext.11… N=8 means Ext.18)

◆ 1.When power failure, refer to 3.20, this setting will be stored or not.

2.Tranfer to external number setting is not available in this setting.

3. The settings can be inputted only for Programming Extensions

4. If the Ext is at Direct-Dialing-Out mode, you should input one more * key before you setting.

4.3 Outward Call

This system provides **5** dialing modes to meet the different need of customers.

4.3.1 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

| Pick up Ext. | Input 9 | Hear CO line dialing tone | Input 80129876 | Talking |

☞ 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.

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

Pick up EXT　　　Input #13　　　Hear C.O. line dialing tone
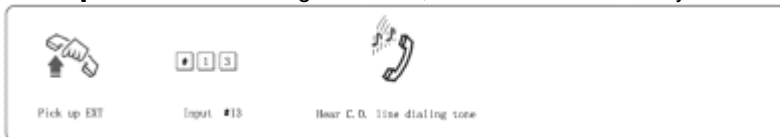
☞ If the Ext is at Direct-Dialing-Out mode, you should input: * # 1M.

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

Pick up EXT　　　Input #0　　　Hang up——— WAITING

☞ 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.

Format: Pat the hook (or press the FLASH button) 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 12 makes an outward call then transfer the call to Ext. 16.,then Then Ext.12 pick up hook and make a outward call, then he can transfer the outgoing call to Ext .18 by by patting the hook (or pressing the FLASH) and dialing 18.
◆ 1.Only after 5 seconds(delay time refer 3.2.5)when you dial the last number ,you can making　Secretary transfer,otherwise when you pat the hook, the outward call will be cut off.
2.You should input the Ext number within 10 seconds after patting the hook (or press　FLASH button) and hearing the internal dialing tone, otherwise you'll have to pat the hook came back to the C.O. line　.

3. 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.

4.3.5 Automatically Redial （excep 108）

Format: # 5 (Optional)

Description: Indirect-Dialing-Out mode, allows you to redial the outward number automatically,

◆　If the Ext is at Direct-Dialing-Out mode, you should input : * # 5.

4.4 Intercom Call

4.4.1 Intercom Call at Indirect-Dialing-Out Mode

Format: If Ext. is at Direct-Dialing-Out mode, Pick up the handset and dial 9 first after hearing the internal dialing tone, then Dial the Ext. number directly.

Description: When the Ext is in Indirect-Dialing-Out mode, you'll hear the internal dialing tone after pick up the handset, Dial the Ext. number directly.

Example: Call the Ext.18

Pick up Ext.　　Hear internal dialing tone　　Input 18　　Talking

Intercom calling is free of charge.Intercom ringing time can be set(refer 3.19.1)

4.4.2 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.18,then you should input * 18 when you in Direct-Dialing-Out mode.

4.4.3 Calling to Exts.group at Direct-Dialing-Out Mode(except 108)

Format: Exts. Group number

Description: to call Exts. Group, the member of the Exts. Group will ringing when they are idle;

◆　1、You should assigned Exts.Group number and enable extension group function first(refer 3.21.1),then join the extension members to the Exts.Group

2、In intercom call the Exts. Group,Refer to 3.21.2 when the Exts.Group is in meeting mode,then each ringing extension can pick up to talk with the caller, while   the other extension keep ringing . This function is also a conference function.

3 、 In intercom call the Exts. Group,Refer to 3.21.2 when the Exts.Group is in normal calling mode,when one of the ringing extensions pick up to talk with the caller, the other extension will stop ringing . This is default setting.

4、In external call, When the system in at auto-attendant mode, the external caller can dial the Exts.Group number to ringing all the members of the Exts.Group , while one of them pick up ,the other stop ringing.

5. If the Ext is at Direct-Dialing-Out mode, you should input: *.+ Exts. Group number

4.5 Answering call

4.5.1 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.11 and Ext.12 will ring.

4.5.2 Answering Calls at Auto-attendant Mode（except 108）

The system use three paragraph of OGM messages, the relevant messages will be heard automatically in the follows situations:

A. when a exterior caller call the C.O. line

B. when the extension dialed is busy

C. when the extension no answer.

Before you use auto-attendant function ,you must follow below step:

1.   Set the CO.line to be auto-attendant mode (Refer 3.5);
2.   Enable auto-attendant in day/night (Refer 3.4.1);
3.   Setting the OGM pragraph mode;then Record the OGM and   Monitor the OGM (Refer 3.6).
4.   Setting system day/night mode.(refer 3.4 or 4.1,optional)
5.   Enable\disable OGM fast dialing function(refer 3.5.5).

☞   1. You can set different DISA mode.

2. When the system is disable OGM fast dialing function,then when a caller dials "0" for inquiry, the operator extension will ring when it is idle.

3、when the system enable OGM fast dialing function,you can dial Dial 1 to call ext. 11、Dial 2 to call ext. 12,... dial 8 to 18, dial 0   to available ext;   and dial 9 to group 20. (refer 3.5.5) ,

4、 In auto attendant mode Co. line can make direct call to one member of Exts. group, but only the first pick up extension can talk with this Co. line not only in meeting mode but also in normal calling.

Operation1:

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

Description: Allows you to answer an incoming call (direct or transferred) that is ringing at another Ext. using this way you will pick up a call according to follow sequence: 1th、 External call in 2th、 C.O.line call transfer 3th、 Receiver calling(Call on holding) 4th、 Doorphone calling 5th、Intercom calling

Pick up the hangset of non-ringing extension   hearing the dialing tone   Input#9   Pick up the call

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

Operation2:

Format: # 3 + Ext . number (Indirect-Dialing-Out mode)

Description: Allows you to answer the calling that is ringing at the certain Ext.

◆ 1. If the Ext is at Direct-Dialing-Out mode, you should input: * # 3+. Ext . number

4.6 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

◆ 1.The default setting of caller on holding's duration time is in 120 sec(refer to 3.13.4).
   2. A extension can holding several calling,

4.7 Call Transfer(External Call)

4.7.1 Transfer to one certain Extension

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.

3.In the process of the transfer, the C.O. line will hear holding music.

Example: Ext.15 is talking to C.O. line and want to transfer the C.O. line to Ext .17. Then Ext .15 can transfer the incoming call to Ext .17 by patting the hook (or pressing the FLASH) and dialing 17.

| Extension 15 is talking | Patting hook | Hearing the internal dialing tone | Input 17 |
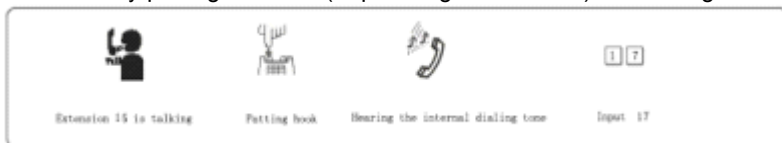
There may be following 8 cases after a call is transferred from Ext. A to Ext. B:

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 massage, that means the system is busy, A can continue to pat the hook (or press the FLASH button) until the error massage 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), then the Co.line will be holding status (hearing   music) until the Ext. dial the right Ext. number or pat the hook again to back to him again.

4.7.2 Transfer to one certain Exts.Group

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

Description: 1. Allow you to transfer an incoming call to a Exts. Group ,after success operate ,the members of the Exts. Group will ringing. When   one of the ringing Ext. pick up, other ringing Extensions will stop ringing.

2、The other case of Exts. Group transfer is same as 4.7.1

4.8 Call switch (call pick during conversation) (for 208/308)

While   a Exts talking with a CO.line , a Exts or a doorphone, the

other CO.line calling in or the other doorphone call in and should ring this Exts, you will hear prompts beep tone(the beep for doorphone calling and CO.line calling is different). Then you can:

Operation1: Pat the hook (or press the FLASH button) ;then you will hear dial tone, press "# 9" to switch another Co.line, also you can switch to receive the call from door phone. The first conversation now is be holded(for CO.line talking), for the conversion with doorphone will be ended , when you talking with the second call,you also can Pat the hook and press # 9 to take back the first holding call.

☞ 1、when there are some calling at the same time ,CO.line calling is the prior grade to be switch, and door phone calling is second , the Co. line hold is in the third grade.

2、Answer incoming waiting call by # 9 and take back the first one by # 9 again can be repeatable as long as the you like for CO.line, but for doorphone you can only switch one time.

3、The waiting incoming call beep(prompt beep) are different for the door phone call

4、and the CO.line call ; The doorphone calling prompt beep is two beep(du du),and the CO.line calling prompt beep is three brief beep(du du du).

4.9 R key function(optional)

Format: Pat the hook and press # 8
Description: Use this to make a R key operation(As telephone's R key) in C.O.Line, this is always used for switching the call waiting.

4.10 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 .15 makes an outward call then transfers the call to Ext. 11.

| Extension 15 is talking | Patting hook | Hearing the internal dialing tone | Input 11 |

☞ 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.

4.11 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. 15 is talking to C.O. line caller and he want to transfer the call to 17. Then 15, 17 and C.O. line can talk at the same time.

Extension 15 is talking to CO line   Putting hook   Hearing the dialing tone   Input *17   3-party conference

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 (pat the hook), then the Co.line will be holding status (hearing music) until the Ext. dial the right Ext. number or pat thehook again to back to him again.

4.12 Call Forwarding (except 108)

4.12.1 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. Also this is Manager/Secretary function ;Use manager's Ext. to make this operation, abcd is the Secretary Ext. number. Allow the manager Ext user to transfer incoming calls automatically to Secretary Ext.
Format: # 81 * ABCDEF # (Optional)
Explanation: ABCDEF is a 1-16 bit number, if no enough digits, press # to supplement it. A=0-9. This is at Indirect-Dialing-Out mode.
Description: Allows the Ext user to transfer incoming calls automatically to the desired outside ABCDEF number.
Example: The user of ext. 15 wants to go to 17 for work then he can forward all the incoming calls of 15 to 17

40

| Pick up Ext.15 | Input *8117 | Du | Hang up |

☞ 1. In Direct-Dialing-Out mode, you should set with * # 81 abcd(or *#81ABCDED#) and clear with*# 81#.

2. Before setting, use #81#(or#80) to clear other settings.

3. If you setting # 81 * ABCDEF #,then the setting # 81abcd is disable automatically.

4. When power failure, refer to 3.20, this setting will be stored or not.

4.12.2 Clear Setting Call Forwarding Directly

Format: # 81 # then hang up
Description: Clear setting call forwarding directly of this extension.
Note: 1.If the Ext is at Direct-Dialing-Out mode, you should input: * # 81.
2.Allow you to cancel this function with format #80 (refer to 4.17.)

4.12.3 Call Forwarding When Ext is Busy or Nobody Available

Before you can setting this function,you must use #81# and #82# (or #80)to cancel all the function of call forwarding setting .
Format: # 82 abcd then hang up
Explanation: <abcd>is desiredExt number.This is at Indirect-Dialing-Out mode.
Description: If a Ext is busy or nobody available after 20 seconds (refer 3.19.3), the incoming call will be transferred to desired Ext. automatically.
Format: # 82 * ABCDEF #
Explanation: ABCDEF is a 1-16 bit number, if no enough digits, press # to supplement it. A=0-9. This is at Indirect-Dialing-Out mode.
Description: If a Ext is busy or nobody available after 20 seconds (refer 3.19.3), the incoming call will be transferred to the desired outside ABCDEF number.
Example: When the ext. 15 is busy or no answer, then he wants to transfer the incoming calls to external user(Number is 0757-86228930),then can pickup Ext.15 input #82*075786228930#,then hear du tone and hanp up.
Note: 1. At Direct-Dialing-Out mode, you should set with * # 82 abcd (or #82*ABCDEF#) and clear with * # 82#.
2.If you setting # 82 * ABCDEF #,then the setting # 82abcd is disable automatically.
3.The two functions of Call Forwarding When Ext is Busy or Nobody Available and Call Forwarding Directly can only available in one time. and the priority function is Call Forwarding Directly.
4. When power failure, refer to 3.20, this setting will be stored or not.

4.12.4 Clear Call Forwarding When Ext is Busy or Nobody Available

Format: # 82 # then hang up
Description: Clear setting of call forwarding when Ext is busy or nobody available .

4.12.5 Setting Call Forwarding (to external number)talking time (Optional)

Format: # 84TT
Description: Call transfer to external number talking time (TT = 01-99, units: 10 seconds)   The default setting is TT=09, total 90s(80s talking time,10s alarm time)
Note: Each extension has different talking time.
Example: When set to extension A to transfer to external number M
I、When extension C call extension A, the system will transfer the call to the set external number(directly/ busy/nobody available). The operation is the same as extension C to call the external number. And Extension A stop ringing.

II、When External user K to call extension A, the system will forward to (directly/ busy /nobody available) external number M, after connected, 2 external numbers   user can talk.   When the talking time is beyond the setting time (#84TT setting,default is 80s) ,then the system will send 10 seconds time DUDUDU alarm , at that time each external can press # to proceed the conversation(90s). If no operation, the system will cut off the call. Also when the conversation is over the call can be ended to press * at any time.

III、When external user K is talking with extension C, extension C tranfer the talking to extension A, at that time the system will forward to (directly/ busy /nobody available) external M, after connected (if extension C doesn't hang up, it will connect to external M first, if extension C hang up, the external M will talk with external K), the operation is same to item II.

IV、 when the external user K is talking with the external number M , Extension C or Extension A can pick up and key #9 to talk with two external users, talking time is not restrict ,when the Extension hang up, the system will cut off the call.
Note: While forward to external number, the system will select one CO line to proceed automatically

Note: If the Ext is at Direct-Dialing-Out mode, you should input: * # 84TT.

4.13 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. 13 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 13

Pick up Ext. 13   Input *61   1 du   3 continuous du

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

4.13.1 Reporting of Ext number for Caller ID phone (Optional)

Format: # 62
Example: Pick-up Ext.15 (caller ID phone), Input # 62, after hear a du then hang up, the extension will ringing one second ,and you can see the extension's physical number & current number from the telephone:　00 05 15

☞ 1、If the Ext is at Direct-Dialing-Out mode, you should input: * # 62
　　2、The front two digit 00 is the adding CID number(refer 3.10)

4.14 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.

Pick up Exr. 11   Input #73   Du   Extension11 priorityaccess

☞ 1. Only Ext.11 has priority acces
　　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.

4.15 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.

4.16 Setting Don't Disturb / Clear (except 108)

4.16.1 Setting Don't Disturb

Format: # 83
Description: If "Don't Disturb" is set for the extension, then this extension will not ring.

Pick-up Ext.	Input #83	On	Hang up

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

4.16.2 Clear Don't Disturb

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

4.17 Clear Extension Function Setting
Format: # 8 0
Description: This command will clear all function that extension set, such as No disturbing/Call divert/Call forwarding/C.O. line booking etc. This command has no effect to other extension.

☞ If the Ext is at Direct-Dialing-Out mode, you should input: * # 80

4.18 Call All Extension (except 108)

Format: #88

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

Chap5 Maintenance&Troubleshooting
5.1 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.

5.2 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.

5.3 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
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 6 Glossaries

Programming extension------Extension No.11, 12, 13, 14

EFGH------------------------4 digits of programming password

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; 208---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 7 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,

● Dialing out mode: 108 is in Direct-Dialing-Out mode; 206/208/308 is in Indirect-Dialing-Out mode, dialing "9" for outgoing

● Original EXT number: 11 to 18   and Operator: Ext. 12

●   Add two digits 00 in intercom CID number

● Day/night mode ext access C.O. line: all extensions

● Day/night operator mode Ring Ext.: Ext.11 and Ext.12 ring.

● Day/night mode Extension service class assignment: 1

● Time Restriction: No

● Flash time: 1.0s

● Outgoing Exts. Assign to Certain C.O. lines: No

● Restrict Item A / Item B: No setting

● Special Calling-out Number: No setting

● The first Exts.Group number:20

    The second Exts.Group number:21

● The member of the first Exts.Group: 11-18

    The member of the second Exts.Group: No

● Auto-attendant Mode no Dial/Answer Process: cut off the calling.

●Day/night mode:mannul switching,day mode.

●Exts. Groups working mode: normal calling mode

●Fax Detecting function is Disable(optional)

Chap 8 System Programming & Operation Instruction

8.1Index of Basic Operation

No.	Description	Indirect-Dialing-Out mode Command	Direct-Dialing-Out mode
1	Set to day status in manual mode	＃2 0＃	*＃2 0＃
2	Set to Night status in manual mode	＃2 1＃	*＃2 1＃
3	Outward Dialing	9 + desired number	desired number
4	Outward Dialing by a Exclusive Line(except 108)	＃1 M	*＃1 M
5	Outward Redialing	＃5	*＃5
6	Intercom calling extension	Ext. number	*+Ext . number
7	Intercom calling Exts.Group (except 108)	Exts. Group number	* + Exts.Group number
8	Call Transfer	Pat hook + Ext number(or Exts.Group number)	
9	Secretary Function	Pat hook + Ext number	
10	3-Party Conference Call	Pat hook + ＊ + Ext number	
11	Caller on holding（except 108）	Pat hook + ##	
12	Call Pickup for certain Ext.	＃3+ Ext number	*＃3 + Ext number

13	Call Pickup for all calling	# 9	*# 9
14	Call switch	Pat hook + # 9	
15	R key(for waiting call function on the same line)	Pat hook + # 8	
16	Call Forwarding Directly（except 108）	setting: #81 +Ext .number setting:#81+*+External. number	*# 81+Ext. Number *#81+*+External. number
		clear：# 81#	*# 81#
17	Call Forwarding when Ext is busy or nobody available （except 108）	Setting: #82 +Ext. number setting:　#82+*+External. number	*# 82+Ext. number *#82+*+External. number
		clear：# 82#	*# 82#
18	Automatically Call back Busy-come on （except 108）	# 0	*# 0
19	Automatic Reporting of Ext number (voice) （except 108）	# 61	*# 61
20	Reporting of Ext number for caller ID phone	# 62	*# 62
21	Connect with Operator Directly （except 108）	0	* 0
22	Priority Access and Monitoring (only Ext.11)	# 7 M	* # 7 M
23	Setting Don't disturb （except 108）	# 8 3	*#83
24	Call all extensions（except 108）	#88	*#88
25	Clear extention function setting	#80	*#80
26	Call all extensions(in default setting call EXT.group 1)	#20	*#20
27	Function code & Office code setting	Function code *, office code #	000010#
		Function code #, office code *	000011#

8.2 Index of system programming

| No.	Description		Command
1	Start the System Programming		(*) # * EFGH
2	Change the System Password		09 EFGH#
3	Return to Default Setting		0000 #
4	Enable all C.O. lines		0600 #
5	Disable all C.O. lines		0610 #
6	Enable No. M C.O. line（except 108）		060M #
7	Disable No. M C.O. line（except 108）		061M#
8	Using the OGM day & night		0440#
9	Using the OGM in day mode		0441#
10	Using the OGM at night mode		0442#
11	All C.O. lines in Auto-attendant Mode（except 108）		10 #
12	C.O. line M in Auto-attendant Mode （except 108）		10 M #
13	All C.O. lines in Operator Mode（except 108）		11 #
14	C.O. line M in Operator Mode （except 108）		11 M #
15	OGM Recording（except 108）		12#
16	OGM Play（except 108）		13#
17	Monitor Holding Music（except 108）		14#
18	Setting Operator（except 108）		15 N #
19	No dialing in The DISA----Cut off C.O. line（except 108）		160#
20	No dialing in The DISA----Transfer to Operator （except 108）		161#
21	OGM busy in auto-attendant	Waiting	1540#
		Transfer to operator	1541#
22	No dial in auto-attendant	Release C.O. line	160#
		Transfer to operator	161#或 1610#
		Transfer to operator mode ringing extension	1616#
23	System option for transfer to a no answer Ext	Call back the extension	162#
		Don't call back	163#
24	Dialing Extension Busy process in auto-attendant	Line break when busy	165#
		Transfer to operator	1650#

		send prompt tone to the extension	1655#
		transferred to the operator mode ringing extension	1656#
25	No Answer process in auto-attendant	Cut off C.O.Line	166#
		Transfer to operator	1660#
		transferred to the operator mode ringing extension	1666#
26	System CRBT in auto-attendant	Disable CRBT function	167#
		Call the operator directly	1670#
		call the operator mode Ringing Extensions	1676#
27	Power Failure Conservation	Not conservation	170#
		Conservation	171#
28	Set Exts groups in the meeting work mode		168#
29	Set Exts groups in the normal work mode		169#
30	Disable add digits for intercom CID		180#
31	Add KK in intercom CID number		180 KK #
32	Setting duration of swtich signal（for 208）		185TT#
33	Direct-Dialing-Out mode for Ext.N		2 N 0 #
34	Indirect-Dialing-Out mode for Ext.N		2N1#
35	Direct-Dialing-Out mode for all the Exts.		20#
36	Indirect-Dialing-Out mode for all the Exts		21#
37	Del all member in the first Exts. Group（except 108）		390#
38	Add member in the first Exts.Group（except 108）		390 $N_1 N_2 \ldots N_R$ * $N_S .. N_T$ #
39	Del all member in the second Exts. Group（except 108）		391#
40	Add member in the second Exts.Group（except 108）		391 $N_1 N_2 \ldots N_R$ * $N_S .. N_T$ #
41	Enable Exts N ring When No.M C.O line calling(in day mode)		30MN0#
42	Disable Exts N ring When No.M C.O line calling(in day mode)		30MN1#
43	Disable all Exts ring When No.M C.O line calling(in day		30M#

	mode)	
44	Enable Exts N ring When No.M C.O line calling(in night mode)	31MN0#
45	Disable Exts N ring When No.M C.O line calling(in night mode)	31MN1#
46	Disable all Exts ring When No.M C.O line calling(in night mode)	31M#
47	Assign dialing-out class L for certain Ext. N	40NL#
48	Assign dialing-out class L for all Exts	40L#
49	Restrict the Certain Numbers from item A	41 Q ABCD #
50	To cancel the restriction of item A	41#
51	To clear group Q of restriction item A	41Q#
52	Restrict the Certain Numbers from item B	42 Q ABCD #
53	To cancel the restriction of item B	42#
54	To clear group Q of restriction item B	42Q#
55	Assign Special Calling-out Numbers	43 P ABCD #
56	To cancel the permission of special calling-out numbers	43#
57	To cancel group P of special calling-out numbers.	43 P #
58	Time Restrict Setting	6N TT #
59	To cancel time restrict	6N00 #
60	assign NO.N EXT. to use C.O.line M in day mode(except108).	70MN0#
61	To restrict the NO.N EXT. to use C.O line M in day mode	70MN1#
62	Allow all Exts. to use C.O line M in day mode	70M0#
63	To restrict all Exts. to use C.O line M in day mode	70M1#
64	Assign the No.N Ext. to use t C.O.line M in night mode.	71MN0#
65	To restrict the No.N Ext. to use C.O line M in night mode.	71MN1#
66	Allow all Exts. to use C.O line M in night mode	71M0#
67	To restrict all Exts. to use C.O line M in night mode	71M1#
68	The Exts number return to the default setting	9000 #
69	To change the first Exts.Group number to new number "abcd"	990abcd#
70	To change the second Exts.Group number to new number "abcd"	991 abcd#
71	To change the Ext.N to new number "abcd"	9Nabcd #

Chap 9 Door-phone Functions (Optional for 208/308)

9.1 Connections instruction:

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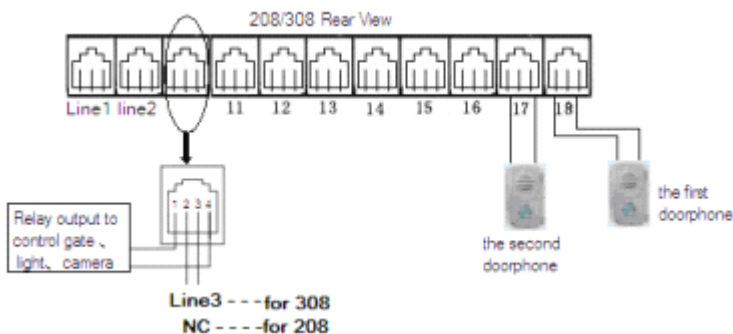
The system offer up to door opener(door-open switch, connect with the wire of electron -controlled   lock.) interfaces,and the system can define two extensions to be doorphone.

9.2 Setting Door-phone function

Below setting must in programming status,use program extension(11-14), refer 3.1 and 3.2.1

9.2.1Setting 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

9.22 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.11 &Ext.12 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.

9.2.3 Setting Duration of switch Signal(for Type 208)

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).

Description: If you press * 1 to open the door, the unlock signal will be kept in a few seconds. You can set the duration of unlock signal to match your electron-controlled lock.

In default setting, TT=4,means 0.4s.

9.3 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-phonewill 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...).