

# User's Manual CDX-CS/CS+/TS/TS+ Group Telephone System Plsease read this manual before using

# Table of Contents

CHAI	P 1 BRIEF INTRODUCTION & FEATURES	. 1
1.1	System Overview	1
1.2	Features	1
	2 INSTALLATION & CONNECTION	
	SYSTEM CONFIGURATION	
	System Appearance	
	2.2.1 CS /CS+ Plastic Series	
	2.2.2 TS/TS+ Metal Series	_
	INSTALLATION PROCEDURE.	
	INSTALLATION WARNING	
	DIRECT ACCESS WHEN POWER FAILURE	
	External Music Input on Holding	
	P 3 SYSTEM PROGRAMMING	
	BEFORE PROGRAMMING	
	BASIC COMMAND	
	3.2.1 Enter into System Programming Status	
	3.2.2 Change the Password	
	2.2.3 System Soft-Reset	
	2.4 Flash time setting	
	2.5 System return to default setting	
	2.6 Setting Delay time for outgoing call transfer	
	ENABLE/DISABLE C. O. LINES	
	3.3.2 Disable C.O. Lines	
	3.3.3 Trunk lines (C.O. lines) working assignment (UCD)	
	SETTING OPERATING MODE	
3	3.4.1 Setting Auto-attendant Mode (OGM) for C.O. Lines	12
	3.4.2 OGM busy Process in Auto-attendant Mode	
	.4.3 Setting Operator Mode for C.O. line	
	.4.4 CRBT (Directly ringing while play OGM Process in Auto-attendant Mode)	
3.5	OGM RECORDING/MONITORING	13
3	5.1 OGM Recording (For CS/TS Series)	13
	3.5.2 OGM Monitoring (For CS/TS Series)	
3	3.5.3 System Music Monitoring (For CS/TS Series)	13
	3.5.4 OGM Recording(For CS+/TS+ Series)	
	3.5.5 Monitoring the recorded OGM (For CS+/TS+ Series)	
	3.5.6 One paragraph OGM Mode (For CS+/TS+ Series)	
	PROCESS IN AUTO-ATTENDANT MODE	
	.6.1 No Dial Process	
-	8.6.2 Called Extension Busy Process	
	6.3 Called extension No Answer Process	
3.7	OPERATOR SETTING	16
3	7.1 Operator Setting	16
	7.2 Fast Dialing Operator	
	OPERATOR ATTENDANT RINGING SETTING	
	.8.1 Ringing mode when all the ringing extensions is busy	
	.8.2 Ringing Extensions Assignment/ to Cancel in Day mode	
	8.3 Ringing Extensions Assignment/ to Cancel in Night Mode	
	DIALING-OUT MODE SETTING	
	O CALLING RESTRICTION SETTING	
3	3.10.1 Calling Duration Restriction Setting / Clear	18

3.10.2 Calling Restriction-Class Setting	
3.10.3 Calling Restriction Item	19
3.10.4 Assign Special Calling-out Number for class 0	
3. 11 Exts. Using C. O. Lines Access	
3.10.4 Assign Exts. Outgoing to Certain C.O. Line / to Clear in day mode	21
3.10.4 Assign Exts. Outgoing to Certain C.O.Line / to Clear in night mode	21
3. 13 RINGING/TRANSFER/RESERVATION TIME	
3.13 RINGING/ TRANSFER/ RESERVATION TIME	
3.13.2 Operator Dialing/Transfer Ringing Time	
3.13.3 No Answer Transfer Time	
3.13.4 External Line Reservation Time	
3. 14 Transfer Operation Parameter.	
3.14.1 External Transfer Mode	
3.14.2 External Transfer to a no answer Extension Process	
3.14.3 Enable/disable Call Forwarding Settings reserved when Power Failure	
3.15 CID FUNCTIONS SETTING (FOR CS+/TS+ SERIES)	. 24
3.15.1 Add digits for intercom CID	
3.15.2 Internal CID mode(transmit mode) setting	24
CHAP 4 OPERATING INSTRUCTION	25
4.1 Answering calls at operator mode	. 25
4.2 Answering calls at auto-attendant mode	
4.3 Day/Night Mode Manual Setting	
4.4 Set & Clear other Ext. Call forwarding through Programming Extensions	
4.5 Outward Dialing	
4.5.1Outward Dialing Directly	
4.5.2 Outward Dialing by dialing outgoing code(9) first.	
4.6 AUTOMATICALLY CALLBACK BUSY (BOOKING C.O. LINE)	
4.7 Outward dialing by an exclusive line	
4.8 Outgoing Call Transfer (Secretary Function)	
4.9 Call Pickup	
4.9.1 Pick up a certain ringing Extension	
4.9.2 General Call Pickup	
4.10 Call Transfer (External Call)	
4.11 Three Way Conference	. 29
4.12 C.O. LINE RESERVATION.	. 30
4.13 C.O. LINE TRANSFER TO C.O. LINE.	. 30
4.14 CALL SWITCH (CALL PICK DURING CONVERSATION)	. 30
4.15 CALL WAITING (R-KEY FUNCTION) (OPTIONAL)	. 31
4.16 INTERCOM CALLING	
4.16.1 Intercom calling at direct-dialing-out mode	31
4.16.2 Intercom calling at indirect-dialing-out mode	31
4.17 CONNECT WITH OPERATOR DIRECTLY (FAST DIALING OPERATOR)	. 32
4.18 INQUIRY FUNCTIONS (AUTOMATIC REPORTING)	. 32
4.18.1 Reporting of Physics Number	
4.18.2 Automatic reporting of Ext number	
4.19 PRIORITY ACCESS AND MONITORING	
4.20 MANAGER/SECRETARY FUNCTION( CALL FORWARDING DIRECTLY)	
4.21 CALL FORWARDING WHEN EXT IS BUSY OR NOBODY AVAILABLE	
4.22 Setting Don't Disturb / Clear	
4.23 CALL ALL EXTENSION (EMERGENCY CALLING)	. 33
4.24 CLEAR EXTENSION FUNCTION SETTING	. 33
CHAP 5 MAINTENANCE & TROUBLESHOOTING	34
1. Outgoing calls can't be made	

	side calls can't dial in rcom can't be made	
CHAP 6	GLOSSARY	. 36
CHAP 7	DEFAULT SETTINGS	. 37
CHAP 8	PROGRAMMING & OPERATION INSTRUCTION	. 38
	OF SYSTEM PROGRAMMING	

## 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

- Normal phone programming: use normal phone programming, not need the specialized key phone.
- System CRBT Function: except for operator and auto-attendant mode, the system can play the OGM without dialing any number. Connect with the computer, can record the promote information of the and play it to customers. (same as the CRBT of ISP)
- Operator Day/Night Mode: can switch the calling out class, calling in extension and calling out C.O.line authority by user's requirement.
- Mutiple Dial-Out Mode: Can choose dial-out number 9 or direct dial CO line.
- **Coming Call Prompt:** When all the extensions are busy, if external line calling (including door phone), the system will prompt the set ringing extension.
- **Difference of the ringing:** internal call, external call and door phone call have different ringing.
- Transfer Caller ID (CS+/TS+ Series): when CO.Line call in or other Extension call ,you can see Cid number in telephone; also the incoming CID number will follow while call transferred.
- Auto-attendant/Operator Mode: the incoming calls from C.O. lines can be set up the operator mode or the auto-attendant mode freely.
- **Dial in/out Setting:** can set any ringing extension and the using access of CO lines.
- **CO Line Booking:** when the CO lines are busy but urgently to call, the system will prompt the extension when CO line available.
- **CO Line Reservation:** any extension can reserve the CO line and do others operations.
- Three Way Conference and External transfer Function: allows 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. And can make an outgoing call from one Ext then divert and connect other Ext

to C.O.line.

- Call Transfer and Pickup: all external and internal calling can be transferred, other ext. ringring can be picked up and not need answer the ringring ext. This system have many kind of pickup ways, including exts. pickup, CO line pickup and reservation, etc.
- **Operator Function:** This system can be set two operator for reservation, call forwarding, call transfer and manager secretary.
- External Call Switch (call pickup during conversation): during the conversation with CO line, if other CO lines or door phone calling, just easy reserve the answering CO line and pickup the calling call.
- External Music interface: allow you to change the system holding music freely.(optional)
- Flexible extension number: The number of extension can be set up one to four digits.
- **Power Failure Memory:** when power failure, the system can remain all the settings and just use all the functions when power again.
- Remote control programming: It can sustain remote maintenance, process remote control programming, detect and maintain, which facilitate the users to install and test, and provide quick and effective service to users.

# 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 Configuration

This system capacity smallest is 208, biggest is 416.

This series PABX including basical series CS (plastic covers) and TS (metal covers), and enhancement series CS+ (plastic covers) and TS+ (metal covers); CS and TS same functions, CS+ and TS+ same functions. And TS+ series can be expanded wireless terminal board.

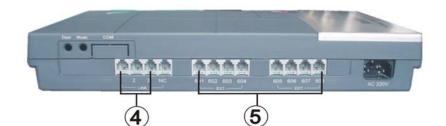
		CS	/TS			CS+	/TS+	
Model	CS208	CS308	CS312	CS416	CS+208	CS+308	CS+312	CS+416
	TS208	TS308	TS312	TS416	TS+208	TS+312	TS+312	TS+416
CO Line Ports	2	3	3	4	2	3	3	4
Exts. Ports	8	8	12	16	8	8	12	16
DISA	10s one paragraph			20s three paragraphs				
Music On Holding	Piano music, external music input on holding is optional		11 chord melody music, external music input on holding is optional			al music		
Caller ID	External line caller ID			Transfer&internal caller ID				

Please according to the capacity and functions of your machine when install and program the system.

## 2.2 System Appearance

## 2.2.1 CS /CS+ Plastic Series



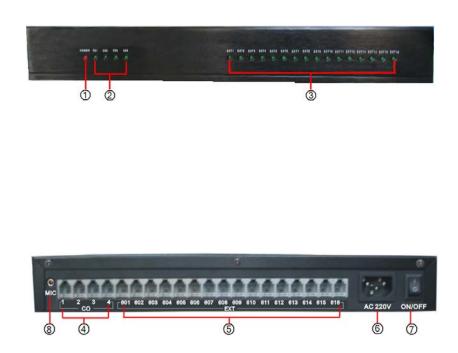




①Power Indicator Light②C.O.Line Indicator Light③Ground Port④308 C.O.Line Port⑤308 Exts. Port⑥416 C.O.Line Port

7416 Exts. Port

2.2.2 TS/TS+ Metal Series



1 Power Indicator Light	②C.O.Line Indicator Light	③Exts. Indicator Light
<b>(4)</b> C.O.Line Port	<b>5</b> Exts. Port	<b>6</b> Power Socket
⑦Power Switch	<b>®External Music Interface</b>	

⑨Door Lock Interface(optional)

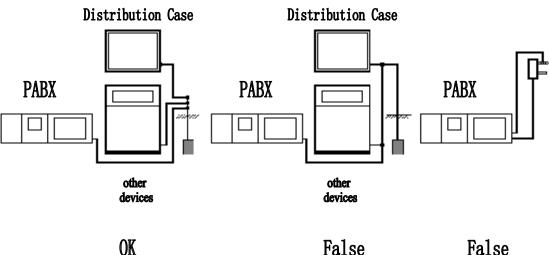
## 2.3 Installation procedure

- Before installation, please check all the parts if have any looseness, take care the supply power switch if is shut down.
- ➤ 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.

- 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.
- 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).
- For the sake of personal safety and communication quality, grounding of PABX should be reliable. Or else, the lightning-proof device inside would fail to work.

Resistance to ground should be less than 10 ohm.



Grounding as follows:

- Connect the monomer-crystal with EXT. line and C.O. line separately, use the normal telephone to test the C.O.line if is ok.
- Connecting extensions according to the in-dilated extension positions and C.O. lines to the corresponding line ports on the unit.
- Test the function of power failure transfer. Before power on, off hook the extension to test if the telephone can dial out and check the wire again if can not dial.
- Connected all the wires, take the power on and to see if the indicator light twinkling, if yes that mean the system working.
- > Test the system according to the default settings.
- > Test the whole system to see if can be worked well, if not and then reset the system.

## 2.4 Installation Warning

- 1. Please keep the exchange away from other equipment producing large electromagnetic disturbance (such as motor and large transformer).
- 2. 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).
- 3. Avoid damaging the power-supply cable. Keep it away from water. Encountering the leakage of water cut off the power immediately.
- 4. Please don't impact or shake the exchange at any situation. Don't remove the exchange in working status.
- 5. Avoid using telephone in thundering.
- 6. Please don't use the telephone in flammable and leaking gas environment.
- 7. 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 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, No. 4 to Ext.604. So you only can use the four Exts as normal phone with direct C.O. line.

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.

## 2.6 External Music Input on Holding

As the diagram on right, connect the external music with

the system music interface.



Note: when connected with the external music, system switch to the external music automatically. If want to use internal music, should disconnect with the external music, otherwise will be no music.

## Chap 3 System programming

The system has the initialize settings when left factory, user can use it normally when installed and connected well, don't need refer this chapter; if user want to change some settings, that should be refer this chapter.

## 3.1 Before programming

•Trunks mean telephone line from local ISP, connect with the PABX port C01-C04, also called C.O.Lines; User Lines mean the line which connect with the PABX port 601-616, also called internal line, the connected telephone called extension.

•All the extensions must be of dual tone multi-frequency phone. All the programming must be carried out on the extension 601, 602, 603, 604; all the programming must be into system programming status.

•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 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.

•You must use "enable C.O. lines" command according 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.

• The functions which is optional in this user manual, that mean just some models have the function, please be sure your model and then can know if your machine has that functions.

●CS308/TS308 are the same programming format with CS416/TS416, just the C.O.line port and extensions port are different.

Now 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, the default password is 0000, heard "DU" into the programming status, if input wrong password, you can input the password again when heard the wrong indicate voice (don't need input # \*)

Example: For programming the system, you should enter the password first, now the password is 5678



When the extension is in direct-dial-out mode, should be input \* # \* EFGH into system programming status; default setting the extension is in indirect-dial-out mode, if extension dial out, should dial the dial-out number 9 and then can dial out, so you also can set the extension into direct-dial-out mode and then don't need the dial-out number.

#### 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"



1. We suggest changing the password before using.

## 3.2.3 System Soft-Reset

Format: 09999999#

Description: to reset the system when the system power on.

#### 3.2.4 Flash time setting

Format: 00L #

L=1 ------0.8s L=2 ------1.0sL=3 ------1.2sL=4 -----1.5sL=5 ------1.8s

Explanation: L means the flash time grade.

Description: For active the hold and divert operating use.

In default setting: L=2 (1.0s)

Example: Set the flash time to 1.2S, then in programming status input 003#, hear du is ok.

#### 3.2.5 System return to default setting

Format: 0000#

Description: when returning to default setting, please wait and hear the confirm sound that means ok. Default setting please see the Chapter 8. This action will not effect the data of the charging.

№ 1. this format can not return the flexible code extension number, also can not effect the C.O. lines opening and shutting (refer to 3.3).

2. If want to return the extension number default setting, input 9000#

#### 3.2.6 Setting Delay time for outgoing call transfer

Format: 03TT#

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 charge. The system restriction time also from this time, and also allow system transfer function.

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 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 C.O. Lines

Format: 0600#

Description: Enable all C.O. lines



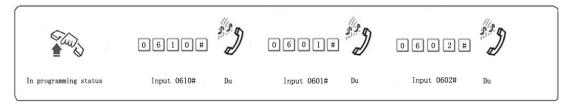
Sand Sand Sand Sand Sand Sand Sand Sand	0600#	n's D	eme	
In programming status	Input 0600#	Du	Hang up	

#### Format: 060M#

Explanation: M: C.O. line No. M = 1 - 4

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.



#### 3.3.2 Disable C.O. Lines

Format: 0610#

Description: Disable all C.O. lines

Format: 061M#

Description: Disable the M C.O. line

#### 3.3.3 Trunk lines (C.O.lines) working assignment (UCD)

Format: 0 6 2 0 #

Description: This setting make the system assign the different trunk lines working averagely, it means the system will use the trunk lines circulating. (For example: the system will use trunk line 1, then line2...line4 circulating). This setting can avoid the user always use some trunk lines, this is default setting.

Format: 0621#

Description: This setting make the system use trunk lines in sequence, it means the system always choose the trunk line of lower number if available. (line1 is the lowest number)

## 3.4 Setting Operating mode

NOTE: All the C.O. lines are in operator mode is the default setting, the operator ringing Extension is 601 and 602.

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

Format: 10#:

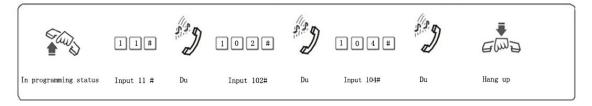
Description: allows all the C.O. lines in Auto-attendant Mode (DISA --Direct Inward System Access status). In this mode, Caller will hear the OGM recorded message, while all extensions are in MUTE mode

Format: 10 M #

Explanation: M: C.O. line No.1-No.4

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 4 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.

#### 3.4.2 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, 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.

#### 3.4.3 Setting Operator Mode for C.O. line

Format: 11# allows all the C.O. lines in Operator mode, this is default setting.

11M# allows the No.M C.O. lines in Operator mode.

Description: 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.

NOTE: 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.

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

- NOTE: 1、This is a new mode; allow you to call in form outside and hear OGM while the system directly to ringing the Assignment extensions without dialing any extension numbers.
  - 2、You should set the C.O. line in Auto-attendant mode first.
  - 3. In the mode we suggest you record the OGM into one paragraph.

#### Format: 1 67 # this is default setting

Description: disable directly ringing extensions while playing OGM in auto-attendant mode.

Format: 1670#

Description: enable directly ringing extensions while playing OGM in auto-attendant mode, and the ringing extensions is the first& the second operators

Format: 1676#

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

## 3.5 OGM Recording/Monitoring

#### 3.5.1 OGM Recording (For CS/TS Series)

Format: 1 2 #

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

#### 3.5.2 OGM Monitoring (For CS/TS Series)

Format: 1 3 #

Description: Play and monitor the recorded OGM.

## 3.5.3 System Music Monitoring (For CS/TS Series)

Format: 14 #

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

#### 3.5.4 OGM Recording(For CS+/TS+ Series)

Format: 12 M #

Explanation: M=1,2,3 the paragraph of the OGM

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

OGM 1 recording (8 seconds), this is the first OGM, usually it is for company greeting, for example, you may record "This is ABC company, PIs dial extension number or dial "0" for operator. Thanks you for calling."

OGM 2 recording (6 seconds), 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 (6 seconds), 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."

- Example: Recording the first paragraph of the OGM, then in programming status you can input 121#, after hear "du", you can speak in telephone and will be recorded into OGM.
- 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;

#### 3.5.5 Monitoring the recorded OGM (For CS+/TS+ Series)

Format: 13 M # (M=1,2,3) (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.

#### 3.5.6 One paragraph OGM Mode (For CS+/TS+ Series)

Format:: 1 2 0 0 #

Description: to recording one paragraph OGM(20s total)

Format:: 1 3 0 0 #

Description: to play and minitor one paragraph OGM(20s)

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.

## 3.6 Process in Auto-attendant Mode

#### 3.6.1 No Dial Process

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 hung up.

Default setting: The C.O. line will be hung up if no dialing.

Format: 161# 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.

Format: 1616#

Description: The system will call the operator mode Ringing Extensions.(setting refer to 3.8.2&3.8.3)

#### 3.6.2 Called Extension Busy Process

Format: 165#

Description: when the outside caller calling the extension in auto-attendant mode, and the 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: 1656#

Description: when the called extension is busy, the call transferred to the operator mode ringing extension.

Format: 1655# when the called extension is busy, system send prompt tone to the extension

Be Above setting just for one paragraph OGM mode.

#### 3.6.3 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: 1666#

Description: when the called extension is no answer, the calling transferred to the operator mode ringing extension.

See Above setting just for one paragraph OGM mode.

## 3.7 Operator Setting

## 3.7.1 Operator Setting

Format: 15N #

Explanation: N: the Ext. line No., N=01-16

Description: To assign any Ext as the operator. In the default setting, EXT602 is the operator.

Example: Setting Ext.12 as operator

## 3.7.2 Fast Dialing Operator

Format: 1520# default setting

Description: enable the extensions dialing call-operator code to call the operator quickly.

Format: 1521#

Description: disable the extensions to dialing call-operator code to call the operator quickly.

## 3.8 Operator Attendant Ringing Setting

## 3.8.1 Ringing mode when all the ringing extensions is busy

Format: 1880#

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: 1881#

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. 601 to Ext. 696 in sequence then ringing it.

Me These setting will take effect only when the system in operator mode

#### 3.8.2 Ringing Extensions Assignment/ to Cancel in Day mode

Format: 3 0 M N 0 #

Explanation: M: the C.O. line No. M=1-8

P16

N: the Ext. series No. N= 01 –16 (N=01 means Ext.601 ..... N=16 means Ext.616)

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 Ext601, 602 will ring.

- Format: 30 M N 1 #
- Description: Disable No. N Ext. ring when calling of No. M C.O. line come in while system in day mode.
- Format: 3 0 M #
- Description: Disable all Exts ring when calling of No. M C.O. line come in while system in day mode.
- Example: Setting Ext.605 and Ext.612 and EXT.616 ringing when the C.O. line 6 come in while the system in day mode, then input 306#,306050#,306120#,306160#.

#### 3.8.3 Ringing Extensions Assignment/ to Cancel 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 Ext601, 602 will ring.
- Format: 31MN1#
- Description: Disable No. N Ext. ring when calling of No.M C.O. line come in while system in night mode.
- Format: 31M#
- Description: Disable all Exts ring when calling of No.M C.O. line come in while system in night mode.
- Example: Setting Ext.603 and Ext.611 ringing when the C.O. line 2 come in while the system in night mode, then input 312#, 312030#, 312110#.
- 1. Up to 16 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 16 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.

## 3.9 Dialing-out Mode Setting

Format: 21#:

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

Format: 2N1#

Explanation: N: the Ext. line No., N = 01 - 16

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

Example: Set Indirect-Dialing-Out mode for Ext.605, then input 2051#

Is default setting, all extensions are in Indirect-Dialing-Out mode.

Format: 20#

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

Format: 2N0#

Explanation: N: the Ext. line No., N = 01 - 16

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

Example: Set Direct-Dialing-Out mode for Ext.602, just input 2020#

<sup>1</sup>In Direct-Dialing-Out mode, extension make intercom call should dial \*first, then dial the extension number. and no need dial 9 before outgoing call.

## 3.10 Calling Restriction Setting

Calling restriction setting only effect when the extension making outgoing call.

## 3.10.1 Calling Duration Restriction Setting / Clear

Format: 6NTT#

Explanation: N: the EXT No. (N = 01 - 16)

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.611 outgoing call duration to 8 minutes, just input 61108#

Format: 6N00#

Explanation: N : the EXT No. (N = 01 - 16)

Description: Clear the Ext N outgoing call duration restriction.

Example: Clear the Ext.611 outgoing call duration restriction, just input 61100#.

#### 3.10.2 Calling Restriction-Class Setting

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 (

Format: 40 N L#

Explanation: N: the Ext. line No., N = 01 - 16

L : class number, L= 0 - 6

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

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

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 just input 405#,40033#,40084#.

#### 3.10.3 Calling Restriction Item

#### Calling 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 – 07,168 ,just input 410107#,4102168#

1. Item A can lock 16 groups of initial digits.

2. Restrict Item A only work for dialing-out class 4.

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—07 of group 01, ,just input 4101#

Format: 41#

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

#### • Calling 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.609 is be assigned dialing-out class 5, now you want Ext.609 can't dial the numbers with initial digits – 575,1790, ,just input 4201575#,42021790#

1. Item B can lock 16 groups of initial digits.

2. Restrict Item B only works for dialing-out class 5.

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.

Format: 4 2 #

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

#### 3.10.4 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.610 is be assigned dialing-out class 0,now you want Ext.610 can dial the numbers with initial digits – 0592,179 ,just input 43010757#,4302179#

1. 16 groups of initial digits can be set.

2. This function only work for dialing-out class 0.

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.

## 3.11 Exts. Using C.O.Lines Access

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

04044-	alam Easta	Outrains to Contain C. O. Line / to Olean in sight model
	70N3#	to restrict EXT.N use all C.O.lines in day mode.
	70N2#	Allow extension N use all C.O.lines in day mode.
	70MN1#	to restrict the EXT.N to use C.O line M in day mode
	70M1#	All extensions can not use co line M in day mode.
	70M0#	All extensions can use co line M in day mode.
Format:	70MN0#	Assign the extensions N outgoing to use the certain C.O. line (M) in daytime.

#### 3.10.4 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 = 1-4 N: the Ext. series No., N = 01 - 16

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: EXT603 can't use C.O line 2, Ext.606 & Ext.608 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 601, C.O line 2 can use by Ext 607. Ext 608 .Ext 616 in night , you can set as follows: 7111#、7121#、711010#、712070#、712080#、712160#。

## 3.12 Flexible coding

Format: 9000#

Description: return to the Exts number of the default setting, that is: from 601 to 602 603... 616 one by one, etc.

Format: 9Nabcd#

Explanation: N : the extension series number, N = 01 - 16, 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, just input 906806#

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 (8001-8016), the user should dial 9018001# at first , then dial 9028002#, 9038003#...one by one, up to 8328016.

## 3.13 Ringing/Transfer/Reservation time

## 3.13.1 Internal Call Ringing Time

Format: 494 TT#

Explanation: TT: seconds 01-99, 00 means not stop ringing, default setting is 30 seconds

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.

## 3.13.2 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 .

First time must be more than the Call forward time .

## 3.13.3 No Answer Transfer 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.

#### 3.13.4 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.

## 3.14 Transfer Operation Parameter

#### 3.14.1 External Transfer Mode

Format: 1530#

Description: After 3 busy tone, can connect the C.O.line in 5 seconds, this is the transfer mode 1.

Format: 1531#

Description: After 10 secs busy tone, can connect the C.O.line again without off-hook, this is the transfer mode 2.

#### 3.14.2 External Transfer to a no answer Extension Process

Format: 1 6 2 # Call back the extension, this is default setting

163# Can not call back

Description: If the call back extension is busy, the system will release the C.O. line.

### 3.14.3 Enable/disable Call Forwarding Settings reserved when Power Failure

Format: 170#

Description: The Call forwarding settings (refer 4.4&4.20&4.21) will lose when the system power off.

Format: 171#

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

## 3.15 CID functions Setting (For CS+/TS+ Series)

## 3.15.1 Add digits for intercom CID

Format: 1 8 0 #

Description: Disable add digits for intercom Caller ID, this is default setting.

Format: 1 8 0 kk #

Description: Add kk in intercom Caller ID number

Some CID telephone can't display the CID number less than 4 digits, so we must add more digits for intercom CID.

#### 3.15.2 Internal CID mode(transmit mode) setting

Format: 1 8 1 0 #	FSK mode(Default setting)
1811#	DTMF mode
Format: 1 8 1 2 #	FSK mode
1813#	DTMF mode
1 8 1 4#	Auto mode(Default setting)
1 8 1 5#	always FSK&DTMF mode

The system can auto select C.O. line CID mode. Sometimes if system can't display CID correctly and you know the CID mode, you can use 1812# or 1813# to set CID mode compulsively.

# Chap 4 Operating Instruction

Important Note : 1、 If the Ext. is in indirect-dialing-out mode(refer 3.9), no need to dial \* which is in [] in following operation.

In examples we suppose the Ext. is in indirect-dialing-out mode if don't explain specially.

2 Programming Extensions include Ext. 601, 602, 603, 604 .

## 4.1 Answering calls at operator mode

The Extensions which is set to be operator mode ringing extension will ring when an incoming call is received, and pick up the handset you may answer the call directly. Under the default mode, Ext601 and Ext602 will ring.

## 4.2 Answering calls at auto-attendant mode

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.

## 4.3 Day/Night Mode Manual Setting

- This system has one way to switch Day/Night mode: 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.
  - The command can be inputted only by Programming Extensions (Ext. 601, 602, 603, 604 and the operator), not in programming mode.
  - 3、[\*] means If the Ext. is in indirect-dialing-out mode, no need to dial \*( only dial #20# or #21#), while the Ext. is in direct-dialing-out mode, need to dial \*(should dial \*#20# or \*#21#).

**NOTE:** 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.

## 4.4 Set & Clear other Ext. Call forwarding through Programming Extensions

You can set other Ext. call forwarding through Programming Extensions

Format: [\*] # 2 6 N abcd 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 4.16.3)
- [\*] # 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.

When power failure, refer to 4.14.3, this setting will be stored or not.

Explanation: <abcd> is desired Ext number to be transferred, abcd=601 - 616(default number)

N: Ext. series No ,N=01-16 (N=01 means Ext.601 ..... N=16 means Ext.616)

## 4.5 Outward Dialing

#### 4.5.1Outward Dialing Directly

Format: Pick up the handset and dial desired number directly after hearing the C.O. line tone.

Description: Making outgoing calls from Exts with direct-dialing-out mode(refer 4.11),

Example: You call out with number 0757-86228930 ,then you pickup telephone which in direct-dialing-out, hear the C.O. line tone, then dial 0757-86228930.

Allows you to redial the last telephone number

#### 4.5.2 Outward Dialing by dialing outgoing code(9) first.

- 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.

The user should dial outgoing code (9) within 10 seconds after hearing the internal dialing tone.

## 4.6 Automatically Callback Busy (Booking C.O. line)

Format: [\*] # 0 then hang up.

Description: Allows you to make the Ext. ring back automatically when any C.O. line become free

Example: At indirect-dialing-out mode, the user want make the Ext. ring back automatically when any C.O. line become free

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.

## 4.7 Outward dialing by an exclusive line.

Format: [\*] # 1 M

Explanation: M: C.O. line port number M=01-16

Description: In some occasion, the user may place an outward call by an exclusive line and we definite it as chosen line dialing.

Example: At indirect-dialing-out mode, the user want call out by C.O. line 5 to dial \*57\*8622373#, then he will pick up and dial #15 and hear dialing tone then he can press \*57\*8622373#.

I, when the user want to dial some special number in the C.O. line such as \* or # ,then he can use this operation;

2, when the user want to check the C.O. line connecting is ok, then he can use this operation;

## 4.8 Outgoing Call Transfer (Secretary Function)

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 .602 makes an outward call then transfer the call to Ext. 612.,then Then Ext.602 pick up hook and make a outward call, then he can transfer the outgoing call to Ext .612 by by patting the hook ( or pressing the FLASH ) and dialing 612.

I.Only after 5 seconds(delay time refer 3.2.6)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.

## 4.9 Call Pickup

#### 4.9.1 Pick up a certain ringing Extension

Format: (\*) # 3 + ext. number

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

Internal call also can be picked up.

#### 4.9.2 General Call Pickup

Format: (\*) # 9 (General call pickup)

Description: Allows you to answer an incoming call (direct or transferred ) that is ringing at another Ext. When several Ext. ringing at the same time, using this way you will pick up a call according to follow sequence:

1<sup>th</sup>、External call in  $2^{th}$ 、C.O.line call transfer 3th、Receiver calling(Call on holding)  $4^{th}$ 、Doorphone calling  $5^{th}$ 、Intercom calling

Example: A is on seat of the Ext.602, B is on the seat the Ext.618. Ext.617 is ringing and B is out

of room, A pick up hangset of Ext.602, press #9 to pick up the incoming call.

We suggest prudence to use this operation , because it is easy to pick up a call that you are not expected.

## 4.10 Call Transfer (External Call)

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. transfer operator have two modes, please refer to 3.14.1
- 4. In the process of the transfer, the C.O. line will hear holding music.
- $5_{\circ}$  when the Ext. number is 0 ,then you will transfer to the operator.

Example: Ext.607 is talking to C.O. line and want to transfer the C.O. line to Ext.612. Then Ext.605 can transfer the incoming call to Ext .612 by patting the hook ( or pressing the FLASH ) and dialing 612.

There may be following 8 cases after a call is transferred from A to 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 or cut off, if A never pick up the call in 25 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 until the error massage is disappear.

6. A make invalid operation or B is busy, After System indicate with "du-du-du" for 10 seconds then A should pat the hook to restore the call and repeat the transfer 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 A, which transfer the call pat the hook, has 10 seconds to dial the Ext. number. Otherwise the Ext A will be silence, and system will continue to holding the C.O. line ,and C.O. line hear holding music; if the ext want back to the call, he can pat the hook, this can let the user to holding the C.O. line freely.

## 4.11 Three Way Conference

Format: Pat the hook (or press the FLASH button) dial \* and the 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 Ext.615. then Ext.605, Ext.615 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 10 seconds to dial the Ext number required otherwise you should pat the hook to return the incoming call to repeat the operation.

3. If dialing wrong number, you can pat the hook to return the incoming call.

## 4.12 C.O. line Reservation

- Format: Pat the hook (or press the FLASH button) dial # # (Reservation) while talking with C.O. line.
- 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 can make Call Pick Up, Call Transfer, Dialing Out etc....
  - 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,

3. You also can pat the hook (not dialing) to hold the C.O. line you are talking with ,refer 4.10 when you pat the hook again, you can restore the C.O. line ,but if you hang up ,the C.O. line will cut off.

## 4.13 C.O. line transfer to C.O. line

- Description: Ext. N is talking with the C.O. line A, at this moment Ext. N holding this C.O. line A (pat the hook and input # #), then Ext .N can hear the internal dialing tone, now he can dial '9' to C.O. line C and use it to call desired number ( at this moment if invalid operation or line is busy ,he can hang up and dial again) ,after Ext. N is talking with C.O. line C, Ext. N can operate the follows to make two function:
- 1. **3 party-Conferences (2C.O. line and 1 Exts)**: Ext. N pats the hook and input # \*Then communication amount Ext. N, C.O. line A and C.O. line C is established, the 3-party can talk, if Ext. N hang up, the C.O. line A and C.O. line C will be cut off, the talking will be ended.
- 2. C.O. line transfer to C.O. line : Ext. N pat the hook and input # 6 ,and Then communication amount Ext. N ,C.O. line A and C.O. line C is established ,The 3-party can talk ,but now Ext. N can hang up ,and C.O. line A can keep talking with C.O. line C; and system will indicate C.O. line A and C.O. line C every 2 mins, if C.O. line A and C.O. line C input \* # within 10secs, the system will be continue to connect the 2 mins, otherwise the conversation will be end off and then release the C.O. line A and C.O. line C.
- If input \*\* at that time, the system will hand up the C.O. line and end off this operation.

## 4.14 Call Switch (call pick during conversation)

While an Ext. talking with a CO. line , an Ext. or a doorphone, the other CO. line calling in or the other doorphone call in and should ring this Ext., you will hear prompts beep tone( the beep for

doorphone calling and CO. line calling is different). Then you can:

**Operation:** for normal phone, 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 ,the holding time can be set in chapter 4, but 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.

Note:

- 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. For key phone you should press transfer key instead of Pat the hook.
- 3. 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.
- 4. The waiting incoming call beep(prompt beep) are different for the door phone call 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)

## 4.15 Call waiting(R-Key function)(optional)

Format: Pat the hook (or press the FLASH button) dial # 8 while talking with C.O. line

Description: During communications between extension and C.O. line, use this command on extension as a flash action, as telephone' R key in CO line, this is always used for switching the call waiting.

## This function must be applied from your telecom service provider before using.

## 4.16 Intercom Calling

#### 4.16.1 Intercom calling at direct-dialing-out mode

Format: \* + Ext number

Description: Make internal call from Ext. with direct-dialing-out mode. And the system allow you

to redial.

#### 4.16.2 Intercom calling at indirect-dialing-out mode

Format: Dial the Ext. number directly.

- 1、Intercom calling is free of charge,
  - 2、Allow you to redial

## 4.17 Connect with Operator Directly (Fast Dialing Operator)

Format: [\*] 0

Description: Extensions will connect with operator directly

1. The first operator will ringing first ,and while it is busy the second operator is ringing.

2. To cancel this function, you can input 1520# in programing mode. (refer 3.7.2)

## 4.18 Inquiry Functions (Automatic Reporting)

## 4.18.1 Reporting of Physics Number

Format: [\*] # 60 to report Ext. port Number, 01 ... 16 etc

- 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. 606 you may you may hear 10 continuous "du", and after 1.5 seconds you will hear 6 "du"; that indicate 06 is port number.

10 continuous du stands for "0"

## 4.18.2 Automatic reporting of Ext number

Format: [\*] # 61 to report Extension Number, 601... 616etc

Example: After input # 61 on Ext. 606 you may you may hear 6 continuous "du", and after 1.5 seconds you will hear 10 "du"; finally you will hear 6 "du" at about 1.5 seconds later, that mean the Ext number is 606

10 continuous du stands for "0"

## 4.19 Priority Access and Monitoring

Format: #7 M

Explanation: M: the C.O. line port number. M = 1 - 4

Description: Establish direct connection with C.O. line when this line is occupied. This feature ensures the director or owner of a company monitor the C.O. line conversation.

[\*] # 7 2 abcd Establish direct connection with desired Ext. while it is used

Explanation: M: C.O. line port number <a bcd> is desired Ext number.

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.

## 4.20 Manager/Secretary function( call forwarding directly)

Format: [\*] # 81 abcd then hang up

Description: 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 # then hang up to clear this function

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

Format: [\*] # 82 abcd then hang up: If a Ext is busy or nobody available after 20 seconds (refer 3.13.3), the incoming call will be transferred to desired Ext. automatically.

[\*] # 82 # then hung up: to clear this function.

Explanation: <abcd> is desired Ext number.

Example: When the Ext.602 is busy or no answer, then he want to transfer the incoming calls to the operator Ext.606 ,just to pick up Ext. 602 ,input #82606 after hear Du you can hang up.

When power failure, refer to 3.14.3, this setting will be stored or not.

## 4.22 Setting Don't Disturb / Clear

Format: [\*] # 8 3 setting Don't disturb

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

Format: Pick-up the handset to clear this function

## 4.23 Call All Extension(Emergency calling)

Format: [\*] # 8 8

Description: after this operation, all extension ringing and can hear the calling.

The command can be inputted only by Programming Extensions.

## 4.24 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/Alarm clock etc. This command has no effect to other extension.

# Chap 5 Maintenance & Troubleshooting

#### 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.

#### 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.

#### 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
	Bad connection	Screw down the joint
Cacophony	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	Devoid function of incoming telephone display	Write application to telecommunication office
telephone display	Wrong setting of No-disturbing and it status.	Rescind the No-disturbing and set incoming telephone display
	Exterior line disconnected	Connect to the exterior line
Dial-out malfunction	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 Glossary

Programming extension	Extension No.601, 602, 603, 604
N	Series number of the extensions (01-32 with corresponding input ports 601-632) (two 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.1-8 with corresponding input ports of Line 1-8)
P	Licensed Group Number (01-16)
Q	First-digit restrict group number (01-16)
ABCD	Licensed or restricted number of first 1-4 digits
EFGH	4 digits of programming password
L	Service grade(Grade of private passwords or outgoing call),grade 0-6
тт	Time in minute for call duration control, ranges from (01 to 99)
F	Flash time class.
YYMMDD	YY: Year, two-digit number, from 00 to 99, MM: Month, two-digit number, from 01 to 12, DD: Date, two-digit number, from 01 to 31
hhtt	hh: hour, two-digit number, from 00 to 23, tt: minute, two-digit number, from 00 to 59

# Chap 7 Default Settings

- •The system programming password: 0000
- •Operating mode: All C.O. line in Operator mode
- •Dialing out mode: Indirect-Dialing-Out mode, dialing "9" for outgoing
- •All CO. lines is disable, the system use internal music.
- •Operator: Ext 602
- •Operator mode Ringing Exts.: Ext 601 and Ext 602
- •Day/night mode Extension service class assignment: 1
- •Time Restriction: No
- •Day/night mode: manual switching, day mode
- •Flash time: 1.0s
- •Day/night mode ext access C.O. line: all extensions
- •Call Forwarding Settings will be reserved when Power Failure
- •Original EXT number: 601 to 616
- •Restrict Item A / Item B: No setting
- •Special Calling-out Number: No setting
- •The system programming password: 0000

# Chap 8 Programming & Operation Instruction

# 8.1 Index of System Programming

No.		Description	Format
1.	Into the system p	rogramming	(*) #* EFGH
2.	Return to default	setting	0000#
3.	Flash Time Settir	ıg	00 L #
4.	Change the pass	word	09 EFGH #
5.	System Soft-Res	et	09999999#
6.	Delaying Mode S	etting	03TT#
		Auto-attendant Day/Night	0440#
7.	Day/Night Mode	Auto-attendant Day	0441#
		Auto-attendant Night	0442#
	Enable/disable C.O. Lines	Enable C.O. Lines	0600#
8.		Disable C.O. Lines	0610#
0.		Enable M C.O. Line	060M#
		Disable M C.O. Line(M=1-4)	061M#
9.	C.O. Lines Working Assignment	assign the different trunk lines working averagely	0620#
		use trunk lines in sequence	0621#
		Operator mode for all CO lines	11#
10.	Attendant Mode	Operator mode for M CO line	11M#
10.		Auto-attendant for all CO lines	10#
		Auto-attendant for M CO line	10M#
11.	OGM Recording		12#
12.	OGM Monitoring		13#

13.	Music Monitoring		14#
14.	Operator Setting		15N#
15.	Fast Dialing Operator	Enable	1520#
		Disable	1521#
16.	External line Transfer Mode	Mode 1	1530#
10.		Mode 2	1531#
17.	OGM busy in auto-attendant	Waiting	1540#
17.		Transfer to operator	1541#
18.	No dial in auto-attendant	Release C.O. line	160#
		Transfer to operator	161#或
			1610#
		Transfer to operator mode ringing extension	1616#
19.	System option for transfer to a no answer Ext	Call back the extension	162#
19.		Don't call back	163#
	Dialing Extension Busy process	Line break when busy	165#
		Transfer to operator	1650#
20.		send prompt tone to the extension	1655#
		transferred to the operator mode ringing extension	1656#
21.	No Answer process	Cut off C.O.Line	166#
		Transfer to operator	1660#
		transferred to the operator mode ringing extension	1666#
22.	System CRBT	Disable CRBT function	167#
		Call the operator directly	1670#



		call the operator mode Ringing Extensions	1676#
23.	Power Failure Conservation	Not conservation	170#
		Conservation	171#
24.	No answer transfer time	No answer transfer time setting	184TT#
25.	External Line Reservation Time		186TT#
	Prompt and in line ringing	Prompt type	1880#
26.		In line ringing	1881#
	Extension Dial-out Mode	Single direct dialing out	2N0#
27.		Single indirect dialing out	2N1#
21.		All direct dialing out	20#
		All indirect dialing out	21#
	Ringing Ext. Setting in Day Mode	Add single ext.	30MN0#
28.		Clear single ext.	30MN1#
		Clear all exts.	30M#
	Ringing Ext. Setting in Night Mode	Add single ext.	31MN0#
29.		Clear single ext.	31MN1#
		Clear all exts.	31M#
	Call out class	Set single ext.	40NL#
30.		Set as exts.	40L#
31.	Restriction Item A	Add restriction	41 QQABCD #
		Clear all restriction item A	41 #
		Clear group QQ	41 QQ #
32.	Restriction Item B	Add restriction	42 QQABCD#
	D	Clear all restriction item B	42 #



		Clear group QQ	42 QQ #
33.	Special Initial digits of number	Add initial digits	43PP ABCD#
		Clear all initial digits	43 #
		Clear group PP	43 PP #
34.	Ringing Time Setting	Internal call ringing time	494TT#
		Operator dialing/transfer ringing time	496TT#
35.	Outgoing restriction Time	Setting ext. N restriction time	6N TT #
		Clear ext. N restriction time	6N 00 #
	C.O. Line Access In Day Mode	Allow ext.N use C.O. line M	70 M N 0 #
		Restrict ext.N use C.O. M	70 M N 1 #
36.		Allow all exts. use C.O. M	70 M 0 #
50.		Restrict all exts. use C.O. M	70 M 1 #
		Allow ext.N use all C.O. line	70 N 2 #
		Restrict ext.N use all C.O. lines	70 N 3 #
	C.O. Line Access In Night Mode	Allow ext.N use C.O. line M	71 M N 0 #
		Restrict ext.N use C.O. M	71 M N 1 #
37.		Allow all exts. use C.O. M	71 M 0 #
		Restrict all exts. use C.O. M	71 M 1 #
		Allow ext.N use all C.O. line	71 N 2 #
		Restrict ext.N use all C.O. lines	71 N 3 #
38.	Flexible Exts. Code	Single Ext. setting	9 N ABCD #
50.		Restore default setting	9000#

## 8.2 Index of Operations

Note: following operations in the status of the extension is in indirect-dial-out mode, don't need input " \* "; if the extension is in direct-dial-out mode, that should input " \* ".

No.	Description		Format
1.	Outward Dialing		Off-hook + (9) + phone number
2.	Outgoing Call Transfer		Off-hook + (9) + phone number +conversation+ pat hook + ext.No
3.	Intercom (	Calling	Off-hook+( * ) + ext.No.
4.	Coming C	all Pickup	Off-hook+( * ) + # + 9
5.	Dialing Operator		Off-hook+( * ) + 0
6.	C.O. Line Booking		Off-hook+( * ) + # + 0
7.	Call Pickup C.O. Line		Off-hook+( * ) + # + 1+M
8.	Day Mode setting		Off-hook+( * ) +#20#
9.	Night Mode setting		Off-hook+( * ) +#21#
10.	Call Pickup Exts.		Off-hook+( * ) + # + 3+ext. No.
11.	Inquiry of ports		Off-hook+( * ) + # + 6 0
11.	Inquiry of	Ext.	Off-hook+( * ) + # + 6 1
12.	Priority Access and Monitoring	Monitoring C.O. Line	Off-hook+( * ) +# + 71+M
		Monitoring	Off-hook+( * ) +# + 72+Ext.No.
13.	Clear Exts. Function		Off-hook+( * ) +# +80
	Manager Function	Setting	Off-hook+( * ) + # + 81 + Ext.No
14.		Clearing	Off-hook+( * ) + # + 81 + #
45	Busy Transfer	Setting	Off-hook+( * ) + # + 82 + Ext.No.
15.		Clearing	Off-hook+( * ) + # + 82 + #

16.	Don't Disturb	Off-hook+( * ) + # + 83
17.	Call All Exts. No.	Off-hook+( * ) + # + 88
18.	External Call Transfer	Conversation+ pat hook + Ext. No.
19.	Three Way Conference	Conversation+ pat hook + * + Ext.No.
20.	C.O. Line Reservation	Conversation+ pat hook + # + #
21.		Conversation+pat hook + # + * (three way conference mode)
	C.O. Line Transfer to C.O.Line	Conversation+pat hook + # + 6 (C.O.line transfer mode)
22.	Call Pickup During Conversation	Conversation+pat hook + # + 9