# **PABX**

# Telephone switch



**Evolio AC Series Model:** 

208AC

308AC

416AC

432AC

**Instruction Manual** 

## **Precautions**

- 1. Keep the unit away from heating appliances and electrical noise generating devices such as motors and televisions. These noise sources can interfere with the performance of machine.
- 2. Keep away from AC power source when install the telephone cables.
- 3. Avoid using the same power supply outlet for computers and other office equipments, otherwise, the system operation may be interrupted by the induction noise.
- 4. Unplug during install or remove the expansion boards, and the boards should be installed or removed vertically to avoid short circuit.
- 5. After system is started, if it does not operate properly, please restart it. If it is still works improperly, please contact with your dealer.
- 6. This unit should be kept free of dust, moisture, high temperature and vibration, and should not be exposed to direct sunlight.
- 7. Never attempt to insert wires, pins, etc. Into the vents or other holes of this unit.
- 8. Do not use benzine, thinner, or the like, or any abrasive powder to clean the cabinet. Wipe it with a soft cloth.

## **WARNING**

THIS UNIT MAY ONLY BE INSTALLED AND SERVED BY QUALIFIED SERVICE PERSONNEL.

WHEN A FAILURE OCCURS, DISCONNECT THE POWER SUPPLY CORD IMMEDIATELY AND ASK FOR HELP FROM YOUR DEALER.

MODEL HC,BC,VC AND DC ARE REQUIRED EQUIPPED WITH AN EARTHING CONTACT PLUG. FOR SAFETY REASONS THIS PLUG MUST ONLY BE CONNECTED TO AN EARTHING CONTACT SOCKET WHICH HAS BEEN INSTALLED ACCORDING TO REGULATIONS.

THE POWER SUPPLY CORD IS USED AS THE MAIN DISCONNECT DEVICE, ENSURE THAT THE SOCKET-OUTLET IS LOCATED NEAR THE EQUIPMENT AND IS EASILY ACCESSIBLE.

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

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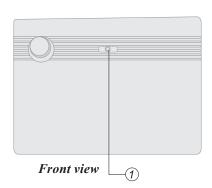
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Thank you for choosing our products TC-2000AC series PABX, this system is include following models:

No	Model	Structure	CO line	Extension
1	208AC	Not expandable	2	8
2	308AC	Not expandable	3	8
3	416AC	Not expandable	4	16
4	432AC	Not expandable	4	32

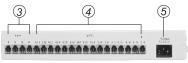
No	Main Functions
1	Flexible coding - Extension Number Assignable
2	Extension ring by turns when has outside call is access ( programmable)
3	Enable/ disable outside caller reaches extension by one touch dialing
4	Auto adapt FSK and DTMF caller ID signal, caller ID transferred
5	Station lock (personal password, allows lock your extension)
6	Multi-classes restricted of outgoing call
7	Outward code dialing ( least cost route, can save call fee)
8	Auto add IP code when dial long-distance call
9	Ringing extension assignable (allows 8 extensions are ringing at that same time)
10	Twin route 3-OGM for auto-attendant (OGM 1= 30s; OGM 2= 15s; OGM 3= 15s)
11	One touch dialing, allows call to operator by one key
12	Make outside call by code ( speed dialing, increase your work efficiency)
13	Busy Transfer; Unconditional Transfer; Do Not Disturb(DND)
14	Extension or CO line groups assignable can realize call fee calculated separately
15	Party conference with caller ID transferred
16	PC management software can manage call fee and function programmed by PC, etc.
17	Support polarity reverse detection
18	High-capacity call bill memory can save call bill in any time
19	Remote program supply more convenient and easy after service
20	Extension free notice ( when ever called ext. is becomes free, will send ring to inform you)
21	Allows user input his fond music as holding music

## 1.1 Names





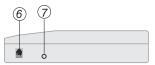
Model 208AC, 308AC back view



Model 416AC back view



Left view



Right view

## Part Names:

- ① LED
- 2 Power switch
- 3 CO line jack
- Extension jack
- ⑤ Power socket
- (6) Rj11 for connect with PC COM port
- 7 External music inputted port

## 1.2 Technical Index

No	Names	Specifications
1	Capacity	Extension: 8,16,32; CO lines: 2,3,4
2	Exterior Jack	* Standard jack: CO/ Extension jack, Rj11 for connect with PC COM port, external music jack.
3	Communicate Channel	* 7 channels
4	Transmission Attributes:	* Extension to extension ≤ 1.5dB * Extension to trunk line ≤ 2.0dB
5	Ringing current	* Ac65v / 50Hz
6	Degree of Unbalance about earth	* 300Hz 600Hz≤40dB * 600Hz 3400Hz ≤ 46dB
7	Dial mode	DTMF
8	Signal tone	* CO line: Tone from local telecom office;  * Internal dial tone: 450Hz, continuous sine wave;  * Internal ringback tone: 450Hz, sine wave, 1s on / 4s off;  * Internal busy tone: 450Hz, sine wave, 0.3s on / 0.3s off;  * Internal confirmation tone: 450Hz, sine wave, 1s on;  * Internal error tone: 450Hz, sine wave, 0.3s on / 0.3s off.
9	Caller ID	* Receive: Auto adapt DTMF, FSK (Bell .202); * Send: FSK (Bell. 202);
10	Power supply	* AC220V ± 10%/12W;

## 2.1 Intercom Calling

Description: Allows an extension user to make a call to another extension.

Format 1: ABCD (When extension is at non-direct access CO line mode)

Format 2: \* ABCD (When extension is at direct access CO line mode)

ABCD = Extension number

Example 1: Non-direct outgoing mode extension 8008 calls extension 8065.

Operating: 1) Lifts extension 8008, hear internal dial tone;

2) Input 8065;

3) Ringback tone (1s:4s) is sent indicates call made successfully.

Example 2: Direct outgoing mode extension 8011 calls extension 8083.

Operating: 1) Lifts extension 8011, hear external dial tone;

- 2) Input \* first, then input 8083 after hear internal dial tone;
- 3) Ringback tone (1s:4s) is sent indicates call made successfully.



- 1. Intercom calling is not via telecom provider, it is free charge.
- 2. Internal dial tone sounds more reedy than external dial tone.

## 2.2 Outside (CO) Line Access Mode Selection

Description: Allows an extension user to make a call to an external party by use one of the following line access methods.

## 2.2.1 Access Outside (CO)Line by Press 0 or 9

Example: Non-direct outgoing mode extension 8008 make an outside call.

Operating: 1) Lifts extension 8008, hear internal dial tone;

- 2) Press 0 to get external dial tone;
- 3) Dial outside call number.



Refer page 32 to learn related setting.

# 2.2.2 Access Outside (CO) Line by Second or Third Outward Code (Least Cost Route)

*Example:* Non-direct outgoing mode extension 8008 make an outside call via VOIP line that is correspond to outward code 3.

Operating: 1) Lifts extension 8008, hear internal dial tone;

2) Press 3 to access VOIP line;



3) Dial outside call number.

This function is applies to place where has several telecom providers, allows user access designated CO line that can supply least call fee, please refer 3.20

## Chapter Two Operating

#### 2.2.3 Access Outside (CO)Line Directly

Example: Direct outgoing mode extension 8008 make an outside call.

Operating: 1) Lifts extension 8008;

2) Dial outside call number when hear external dial tone.



Extension will enter CO line when lifts handset if has idle CO line (refer 3.50).

## 2.2.4 Access Outside (CO)Line by Preferred CO Line

Format: # MN

MN = CO line port number = 01 ~04

Example: Extension 8008 is wants to make an outside call via CO line 3.

Operating: 1) Lifts extension 8008;

- 2) Dial #3 when hear internal dial tone;
- 3) Dial outside call number when hear external dial tone.



- 1. When user need to use \* or # key to program some functions that supplied by telecom provider, in order to avoid conflict with some functions of PABX that need to use same key at beginning, please access CO line by this program (select CO line) first, then program functions supplied by telecom provider.
- 2. User can select CO line by use #M, example, select CO 3 by input # 3 can access CO line 3, it is as same as press #03;
- 3. Busy tone will be sent when selected CO line is busy.

## 2.2.5 Personal Speed Dialing

Format : # # MN

MN =Speed dialing number = 01  $\sim 80$ 

Description: Allows an extension user to store up to 80 speed dialing numbers (01 through 80) with a maximum of 24 digits per number. For example, 01 =

through 80) with a maximum of 24 digits per number. For example, 01 - 008675786692066, 02 = 008675786692033. Here 01, 02 are speed dialing number, to make a call, dial # # MN ( MN is the speed dialing number),

*Example:* Extension 8008 wants to call CO number 008675786692066 that is correspond to speed dialing number 12.

Operating: 1) Lifts extension 8008, hear internal dial tone;

2) Input ## 12, then will call 008675786692066 automatically.



- 1. Only allows authorized user to use this function.
- 2. Related program: Please refer 2.3 and 3.53.

## Chapter Two Operating

## 2.3 Assign Speed Dialing Number for Outside (CO) Line Number

Format: # \*\* MN abcdefgh #

 $MN = Speed dialing number = 01 \sim 80$ 

abcdefgh = Outside (CO) line number (maximum of 24 digits)

Description: Allows authorized extension add or change speed dialing number, the assigned speed dialing numbers can be shared with all extension users.

Refer 3.53 to learn enable or disable extension use speed dialing function.

*Example:* Extension 8003 wants to assign outside number 008675786692066 is correspond to speed dialing number 12.

Operating: 1) Lifts extension 8003, hear internal dial tone;

2) Dial # \* \* 1 2 008675786692066 #;



Last number setting will replace previous assigned number.

## 2.4 Cancel Certain Speed Dialing Number

Format : # \*\* MN#

 $MN = Speed dialing number = 01 \sim 80$ 

Description: This program will cancel certain speed dialing number and its CO line

number.

## 2.5 Receiving Outside Call by Ringing Extension

Description: When system is at operator attendant mode, the designated extension will ring when has outside call is received, lifts ringing extension can answer outside call. When at auto-attendant (DISA) mode, non of extension will ring when has outside call is received, caller is hear outgoing message (OGM), the called extension will ring after caller input extension number, lifts ringing extension can answer outside call.

## 2.6 Receiving Outside Call by Non-Ringing Extension (Call Pick Up)

## 2.6.1 Group Call Pickup

Format : #7

Description: Allows an extension user to answer a call ringing at another extension, if the call is ringing within his extension group, he can pickup call by #7.

#### 2.6.2 Directed Call Pickup

Format: #9

Description: Allows an extension user to answer a call ringing at any other extension. If the call is ringing within his extension group, he can pickup call by #7.

If the call is ringing in different extension group, he must to pickup by #9. Example, extension A and B are ringing at the same time, they are in different group, at this time, extension C wants to pickup calls, if C and A are in same group, C can pickup call ringing at A by #7; however, when C is input #9, he will pickup call ringing on extension that is connect with anterior extension jack first, the extension in after jack will keep ringing.

## 2.7 Transfer Outside Call to Extension

Format: Tap hook-switch + ABCD

ABCD = Extension number

Description: Allows an extension user transfer an outside call to another extension.

When has outside call is received at extension A, user A is transfers this call to extension B, music is sent to outside caller while being transferred, when B is lifts handset, communicate between A and B is established, whoever A or B is hangup, the remain party will get through to outside caller.

Example: Has outside call is received at 8002, user wants to transfer this call to 8015.

- Operating: 1) Extension 8002 is talking with outside caller;
  - 2) User 8002 taps hook-switch rapidly get internal dial tone, input 8015;
  - 3) 8015 is ringing, music is sent to outside caller while being transferred;
  - 4) 8015 lifts handset, communicate between 8015 and 8002 is established, outside caller is keep holding with music;
  - 5) 8002 hangup, 8015 will get through to outside call.



- 1. User must to tap hook-switch rapidly which time should not over assigned hook-switch flash time(refer 3.61), otherwise, the line will be disconnected;
- 2. After user A has inputted extension number of B, when B is busy, three Beep busy tone is sent to A, and A will reconnect with outside caller.

## When extension B is idle, have follow cases:

- a) B is ringing, A is not hangup, if B answer within 25seconds can build internal talk with A, whoever A or B hangup, the remain party will get through to
- b) B is ringing, A is not hangup, if B does not answer within 25seconds, A will get through to outside caller;
- c) B is ringing, A hangup, if B answer within 25 seconds he can get through to outside caller;
- d) B is ringing, A hangup, if B does not answer within 25seconds, B will stop ringing, here A will ring if it is free( if A is busy, operator extension will ring), if A (or operator) answer within 25seconds, it will get through to outside caller; if nobody answer within 25 seconds, the line will be released.

## 2.8 Conference (3-party, 1 CO and 2 Extensions)

Format: Tap hook-switch + \* + ABCD

ABCD = Extension number

Description: During a 2-party conversation, an extension user can add a third party to make a 3-party conference.

Example: Extension 8002 is answering an outside call, 8002 wants to add 8015 to build a 3-party conference.

Operating: 1) Extension 8002 is answering an outside call;

- 2) 8002 taps hook-switch rapidly to get internal dial tone, input \* 8015;
- 3) 8015 is ringing, music is sent to outside caller while being transferred;
- 5) 8015 lifts handset can get through to outside caller and 8002, here 3-party conference is established.



- 1. When two extensions are making internal call, their conversation cannot be heard by outside caller; when in 3-party conference, outside caller and two extensions are involved.
- 2. No matter when it is ready to transfer or when at 3-party conference, user will hear internal dial tone after he tap hook-switch, here user must to input destination extension number within 10 seconds, otherwise, this extension will be get through to outside caller again.

## 2.9 Internal Call Transfer (Between Extensions)

Format: Tap hook-switch + ABCD

ABCD = Extension number

Description: Allows an extension user transfer an internal call to another extension. Example: Extension 8002 is making internal talk with extension 8032, 8002 wants to transfer call to 8015.

Operating: 1) Extension 8002 is making internal talk with 8032;

- 2) 8002 taps hook-switch rapidly, then dial 8015;
- 3) 8015 is ringing, 8032 is listening ring tone;
- 4) 8015 lifts handset can build internal talk with 8002, 8032 is keep listening ring tone;
- 5) 8002 hangup, 8015 will get through to 8032.



- 1. User must to tap hook-switch rapidly which time should not over assigned hook-switch flash time(refer 3.61), otherwise, the line will be disconnected;
- 2. After user A has inputted extension number of C, when C is busy, three Beep busy tone is sent to A, and A will reconnect with extension B.
- 3. If extension C is idle, will have follow cases:
  - a). C is ringing, A does not hangup, when C lifts handset can get through to A, whoever A or C is hangup, the remain party will connect with B;
  - b). C is ringing, A does not hangup, when C lifts handset can get through to A, here if B hangup, A and C will hear busy tone;
  - c). C is ringing, A hangup, when C lifts handset can get through to B;
  - d). C is ringing, B hangup, A will hear busy tone, C will stop ringing.

## 2.10 Conference (Intercom 3-party)

Format: Tap hook-switch + \* + ABCD

ABCD = Extension number

Description: During a 2-party internal conversation, an extension user can add third extension party to build a 3-party conference.

*Example:* Extension 8002 is making internal talk with 8005, 8002 user wants to add 8015 to build internal 3-party conference.

Operating: 1) Extension 8002 is making internal talk with 8005;

- 2) 8002 taps hook-switch rapidly to get internal dial tone, then input \* 8015;
- 3) 8015 is ringing, 8005 is listening ring tone;
- 4) 8015 lifts handset can get through to 8002 and 8005, here 3-party internal conference is established



When extension A and B are making internal talk, if A is transfers this call to C, no matter at any condition, as long as B is hangup will make transfer failure, A and C will hear busy tone.

## 2.11 Operator Call

Format: Dial 9 or 0

Description: Every extension user can reach operator by dial 9 directly.

Example: In hotel, guest whose extension number is 6013 can get through to hotel restaurant with the help of operator when he does not know restaurant number.

Operating: 1) Guest (6013) lifts handset, hear internal dial tone, input 9 to call operator;

- 2) Operator lifts handset to answer 6013, and then transfer call to restaurant;
- 3) Guest (6013) can get through to restaurant.



- 1. System default setting is dial 9 for operator, but allows user change setting to dial 0 for operator, please refer page 35 for related setting.
  - 2. This system supports two operators (refer 3.15), when extension dial 9 (or 0), the call will go to No.1 operator when it is free, otherwise, call will be forwarded to No.2 operator automatically.
    - When both of them are busy, the call will be failure.
  - 3. The direct-outgoing mode extension must to dial \* 9 ( or \* 0) to call operator.

# 2.12 Make Your Telephone Ringback Automatically When an Extension Line Becomes Free (Automatic Callback Busy)

Format: Tap hook-swtich + # # 00

Description: Allows assign send callback ringing to notify an extension user automatically, when the ever called extension becomes available.

Example: You called extension 8008, but it is busy.

Operating: 1) Lift your handset, dial 8008 when hear internal dial tone;

- 2) Busy tone is sent when 8008 is busy;
- 3) Tap hook-switch and input ##00, hangup when music tone is heard;
- 4) When 8008 is becomes free, your phone will ring with display number 8008;
- 5) Lift your handset, 8008 will ring automatically and with display of your extension number, you can get through to 8008 when it is lifted.

## 2.13 Busy Transferred

Format: # \* 1 ABCD

ABCD = Destination extension number

Description: Allows an extension user assign automatic transfer outside calls to another designated extension when the called extension is busy.

Example: Manager (whose extension is 8016) can assign all outside calls to his extension will be transferred to his secretary (whose extension is 8015) automatically when his extension is busy,

Operating: 1) Lifts 8016, hear internal dial tone;

2) Input # \* 1 8015;



- 1. When extension A has been assigned busy transferred to extension B, outside calls will be transferred to B automatically when A is busy; when B is busy, if B has been assigned busy transferred to C, then, this outside call will be transferred to C automatically, allows busy transferred ten times, otherwise, outside caller will hear busy tone;
  - 2. The last setting will replace previous one.

## 2.14 Cancel Busy Transferred

Format: # \* 1 00

## 2.15 Unconditional Transferred

Format: # \* 2 ABCD

ABCD = Destination extension number

Description: Allows an extension user assign automatic transfer any calls to another designated extension unconditionally.

Example: Manager (whose extension is 8016) can assign all outside calls to his extension will be transferred to his secretary (whose extension is 8015) automatically when

he is in busy trip.

Operating: 1) Lifts 8016, hear internal dial tone;

2) Input # \* 2 8015;



The last setting will replace previous one.

## 2.16 Cancel Unconditional Transferred

Format: # \* 2 00

## 2.17 Call Transferred to Secretary

Format: # \* 6 ABCD

ABCD = Secretary extension number

Description: All calls (except secretary) to superior will be transferred to secretary first, the call will be transferred to superior only after filtrated by secretary.

Example: Superior (whose extension is 8008) can assign all calls will be transferred to his secretary (whose extension is 8012) first automatically.

Operating: 1) Lifts 8008, hear internal dial tone;

2) Input # \* 6 8012;



- 1. The last setting will replace previous one.
- 2. Only allow secretary extension can call superior extension directly;
- 3. Support maximum of eight extensions use this function in same time.

## 2.18 Cancel Call Transferred to Secretary

Format: # \* 6 00



1. Allows use extension 8001 to cancel by batch way (refer 3.57)

## 2.19 Do Not Disturb (DND)

Format: # \* 71

Description: Allows an extension user to prevent other parties from disturbing them. The extension will not receive intercom or outside calls, and it will not ring when has calls and send busy tone to outside caller, but the assigned extension can make calls as normal.

Example: A guest in hotel does not want to be disturbed in his rest time, he can use this function to make his telephone will not ring when has calls.

Operating: 1) Guest lifts his extension, hear internal dial tone;

2) Input # \* 71;



- 1. After assigned DND function, any calls can not call that extension;
- 2. Do not disturb function will not invalid until it is cancelled.

#### 2.20 Cancel Do Not Disturb

Format: # \* 70

## 2.21 Station Lock (personal password)

Format: # \* 3 ABCD

ABCD = Personal password

Description: Allows extension user to lock his station so that other users cannot make outside calls until it is unlocked. Any 4-digits code can be used to lock and

unlock an extension.

Example: Manager extension 8008 can make any calls, he can lock his phone by password (suppose password is 2589) when he leaves office, his phone will disable to make outside calls after locked.

Operating: 1) Manager lifts his extension 8008, hear internal dial tone; 2) Input # \* 3 2589;



1. Non of extension is locked at default mode;

2. Default personal password is 1234.

## 2.22 Unlock Personal Password

Format: # \* 4 ABCD

ABCD = Personal password

Description: Allows user to unlock his extension by password.

## 2.23 Change Personal Password

Format: # \* 5 abcd ABCD

abcd = current password ABCD = new password



- 1. Default personal password is 1234;
- 2. Suggest user change password before using;
- 3. In the case of forget password, please contact with administrator to restore your password to default password 1234, then re-set password (refer 3.58)

## 2.24 Report Extension number

Format: # \* 9

Description: User can confirm their extension jack and extension number by this way. Example: User input "# \* 9" on extension 8001, he will hear "Your port number is 01, extension number is 8001".

## 2.25 Executive Busy Override

Format: # \*0 MN

MN = CO line port number = 01 ~16

Description: Enable or disables using this feature at each extension, if enabled, authorized user can monitor or interrupt an established call (refer 3.54).

Example: Extension 8003 is enabled to use executive busy override function, he wants to interrupt CO line 4.

Operating: 1) Lifts 8003, hear internal dial tone, input # \* 0 04;

2) 8003 user can interrupt CO line 4 after two seconds.

This function is supplied to superior for management purpose, we are irresponsible for any result from use this function.

## 2.26 Personal Account

#### 2.26.1 Personal Account Assignment

Format 1: \* 86 MN A# (For certain account)

Format 2: \* 86 A # ( For all accounts)

 $MN = account = 01\sim99 \text{ (total 99 accounts)}$ 

A = 0 = Disable account

A = 1 = Enable account

Description: Enable or disable make outgoing call by any extension after enter an assigned account to override restriction, but spend will be under individual account. This function is suits occasion that call fee is independent accounting.

## 2.26.2 Change Password of Certain Account

Format: # \* # MN abcd \* ABCD

MN = account

abcd = original password

ABCD = new password

Description: Allows change password by any extension, in the case of forget password, please contact with administrator to restore default password by follow programming (operate by extension 1):



Input format \* 86 MN 0 # to disable account, then input \* 86 MN 1 # to enable same account can restore password to default 1234.

## 2.26.3 Make outgoing call by personal account

Format: # \* # MN abcd #

MN = account

abcd = password of account (default is 1234)

Description: Allows use any extension to make outgoing call by input this format.

## 2.27 Call on Holding

Format: Tap hookswitch + # # #

Description: Allows extension user can put an external call is on holding.

Example: When an extension is talking with outside caller, he can tap hook-switch and input # # to put call is on holding, he can make other call or do other operating at this time.

He can input # # to retake call within 4minutes, otherwise, line will be released. Allows other extension retake this call by input # #.

## 2.28 Remote Program

Format: Tap hookswitch + # \* # \*

Description: Allows an extension user to program a PABX system that is using in different place, it can supply a convenient and high-efficiency service for PABX end user.

*Example:* When you encountered puzzle on system programming, you can solve it with the help of PABX dealer or manufacturer ( herein after named service center ) by their remote program operating.

Operating: 1) Lift your extension 8001, make a call to service center;

- 2) When your call is get through to service center, please tap hook-switch, here service center technician is under holding music, you hear internal dial tone;
- 3) You should input # \* # \* on your phone can restore talk with technician;
- 4) You can ask technician to assign functions according your necessary by phone, he can program your PABX by his telephone at the same time.
- 5) Please hangup your extension after complete setting.



- 1. You must to call service center by your extension 8001;
- 2. When your call is get through to service center, technician can start program for your machine need not input system password;
- 3. Also allows technician call you if necessary (at any attendant mode), when his call is received at your side, please transfer this call to extension 8001, remote program can be performed when communicate is established.

## 3.1 Before System Programming

This system has factory default settings (refer 3.4). If any of programming needs to be changed, you can change the setting by system programming.

Default setting shows you the factory default setting.

- 1. System programming can only be performed from extension 8001;
- 2. Required Telephone Set: DTMF dial mode;
- 3. Start with \* key, and end with # key, allows use \* key to re-program if any error occur during programming, need not hangup;
- 4. "Your instructions are successful" informs you that setting is successfully, on contrary, "You have entered an incorrect instruction, try again later" informs you that the entry is invalid.

## 3.2 Unlock System Password

Format: \* \* 01 ABCD #

ABCD = System password

Description: Password is required for entering the system programming mode.

*Example:* Unlock system by password before system program.

Operating: 1) Lifts extension 8001;

2) Input \*\* 01 1234 #, hear "System unlocked is successful, you can start operating ". Keep off-hook and start programming;



- 1. Password is 1234 at factory default mode;
- 2. Please keep extension 8001 is off-hook, you can continue programming by entering program format.
- 3. If extension 8001 is hangup during programming, you need to input password to unlock system before new programming;
- 4. Herein after, all programming is after unlock system by password.

## 3.3 Change System Password

Format: \* 02 ABCD #

ABCD = System new password.

Example: Change password to 5678.

Operating: 1) Lifts extension 8001, unlock system by default password 1234;

2) Input \* 02 5678 #;



- 1. Password is 1234 at factory default mode, suggest administrator change system password first before using;
- 2. In the case of forget password, please contact with service center.

#### Chapter Three System Program

## 3.4 System Data Default Set

Format: \* 6 000 #

Description: This system can initialize system-programmed data.



All data can be restored to default setting except data of the follow 3 parameters.

- 1. Outside line connection assignment (CO parameters);
- 2. Extension number parameters;
- 3. Call bill memory.

## Default Values

No	Function	Default value
1	Attendant Mode	Operator attendant
2	Outside (CO) Line Ringing Extension	8001, 8002, 8003,8004;
3	Operator Extension at DISA mode	8002,8003
4	Outside( CO ) Line Access Mode	Dial 0 or select CO line
5	Outside (CO) Line Caller ID signal	Adapt with FSK, DTMF
6	Trunk group	Not set
7	Extension, CO Line Group	0
8	Extension outside call class	Not set
9	Head-digits assignment	Not set
10	Monitor voice record	Not set
11	Call duration time limit	Not set
12	Hookswitch flash time	760ms

## 3.5 Outside (CO) Line Connection Assignment

Description: Assigns which CO line(s) is connected to the system or not.

## 3.5.1 Assign CO Line Connection

Format: \*31 ABCDEF#

ABCDEF = CO line jack need to be connected

Example: Connect CO lines with jack 1,2,3,4, namely, it is enable CO1,2,3,4.

Operating: 1) Lifts extension 8001 unlock system;

2) Input \* 31 1234 #;

## 3.6 Disable CO Lines

Format: \* 31 #

#### 3.6.1 Disable All CO Lines

Format: \* 3 #

Description: When CO line card is not installed or no CO line is connected, allows make

PABX becomes a intercom system by close all CO lines

Example: Assign PABX is a intercom system when no CO line is connected.

Operating: 1) Lifts extension 8001 and unlock, input \* 3 #;

## 3.7 Outside Call Answered Mode Management

## 3.7.1 Operator Answer All Received Outside Calls (Operator Answer Mode)

Format: \* 21 #

Description: The designated extension will ring when has outside call is received at

operator mode, lifts ringing extension can answer call, also allows transfer

this call to another extension.

Operator answer mode is suits for the place where has operator to answer calls, therefore, outside caller can talk with operator directly.

Example: Assign all outside calls are answered by operator.

Operating: 1) Lifts extension 8001 and unlock;

2) Input \* 21 #;

## 3.7.2 Auto-Attendant Answer All Received Outside Calls (DISA)

Format: \* 20 #

Description: When a caller reaches a DISA line, non of extension will ring until caller

input extension number, a message will greet caller, allows an outside caller to access specific extension directly, the caller can dial destination extension number during the message or after tone. In the case of caller does not know extension number, he can dial 0 to reach operator, his call can be transferred to another extension with the help of operator.

Auto-attendant mode is suits for the place where has not operator on duty.

Example: Assign all outside calls are answered by outgoing message (OGM).

Operating: 1) Lifts extension 8001 and unlock;

2) Input \* 20 #;

## 3.7.3 Operator Answer Call that Received via Designated CO Line

Format: \* 21 MN #

Example: Assign CO line 3 is at operator answer mode and others at auto-attendant mode.

Operating: 1) Lifts extension 8001 and unlock;

2) Input \* 20 # ==> \* 21 03 #;



When need to assign some CO lines are at operator answer mode, please assign all CO lines at auto-attendant answer mode first, then assign certain CO line at operator answer mode.

## 3.7.4 Auto-Attendant Answer Call that Received via Designated CO Line

Format: \* 20 MN #

Example: Assign CO line 2 is at auto-attendant mode and others at operator answer mode.

Operating: 1) Lifts extension 8001 and unlock;

2) Input \* 21 # ==> \* 20 02 #;



When need to assign some CO lines are at auto-attedant answer mode, please assign all CO lines at operator answer mode first, then assign certain CO line at auto-attendant answer mode.

## 3.8 Time (Day/Night) Service Changing Mode

Format: \*87 AB CD EF GH M # (Period 1)

\* 88 AB CD EF GH M # ( Period 2)

AB CD = Time service start time

EF GH = Time service end time

M = 1 = Auto-attendant service

M = 0 = Operator service

Example: Assign system is at operator service mode in  $8:30 \text{am} \sim 12:00 \text{am}$ , and  $13:30 \text{ pm} \sim 17:30 \text{pm}$ , other times at auto-attendant service mode.

Operating: 1) Lifts extension 8001, unlock system;

2) Input \*87 08 30 12 00 0 # ==> \* 88 13 30 17 30 0 #;



- 1. Use 24 hours to denote the time;
- 2. Allows assign different service time in a day or extend to next day.

Example: Assign system is at auto-attedant service mode in

 $22{:}00pm \sim 8{:}00am,$  other times at operator service.

Input format: \* 87 22 00 08 00 1 #

- 3. Here attendant extension is as same as pre-assigned (refer3.7)
- 4. Please ensure system time is correct in order time service changing is works normal (refer 3.59).

## 3.9 Cancel Time (Day/Night) Service Changing Mode

Format: \*87 # (Cancel Period 1)

\* 88 # ( Cancel Period 2)



After cancel this assignment, system attendant mode will be restored to previous mode.

## 3.10 Day Service Changing Mode

Format: \*891AM # (Day 1) \*892AM # (Day 2)

A = Day = Monday to Sunday = 1 to 7

M = 1 = Auto-attendant service

M = 0 = Operator service

Example: Assign system is at auto-attendant service mode on Sat. and Sun, other days at operator service mode.

Operating: 1) Lifts extension 8001, unlock system;

2) Input \*89 1 6 1 #==> \* 89 2 7 1 #;



1. This program will assign attendant mode for whole day, as long as if this program is assigned for certain day, the Time Service Changing Mode assignment will be disabled in that day. Allows combine function of 3.8 and 3.10 in practice, example:

**Saturday and Sunday:** Assign auto-attendant service mode; **Monday to Friday:** Assign operator service mode in 8:00am to 12:00am, and 13:30pm to 17:30 pm, other times at auto-attendant service mode.

2. Here attendant extension is as same as pre-assigned.

## 3.11 Cancel Day Service Changing Mode

Format: \* 89 1 # ( Cancel Day 1)

\* 89 2 # ( Cancel Day 2)



System attendant mode will be restored to previous mode by this program.

## 3.12 Cancel All Service Changing Mode

Format: \*893#



This program will cancel programming of 3.8 and 3.10, system attendant mode will be restored to previous mode.

## 3.13 Outside (CO)Line Ringing Extension Cleared (at Operator mode)

Format: \* 11 MN #

M N = CO line port number =  $01 \sim 16$ 

Example: Clear ringing extension when has outside calls on CO line 3 and 15.

Operating: 1) Lifts extension 8001, unlock system, input \* 11 03 # ==> \* 11 15 #;



- 1. Input number by two digits 01~16, example, CO line 3 is denoted as 03.
  - 2. Allows assign maximum of 8 extensions are ringing at the same time when has outside call on per CO line. To avoid confusion, please use this program to clear current ringing extension first before change ringing extension.
  - 3. After cleared, if do not assign ringing extension by below program 3.14, then, the default operator extension will ring.

## 3.14 Outside (CO) Line Ringing Selection (at Operator mode)

Description: When an outside call is received at certain CO line, the user can select which extension will ring.

Format: \* 12 MN ABCD #

M N = CO line port number =  $01 \sim 16$ 

ABCD = Ringing extension number

*Example:* At operator service mode, assign extension 8003 and 8013 will ring when has outside call is on CO line 02.

Operating: 1) Lifts extension 8001, unlock system;

2) Input \* 12 02 8003 # ==> \* 12 02 8013 #;



- Allows assign maximum of 8 extensions are ringing at the same time for each CO line, when you are ready to assign ringing extension, please clear previous setting first by program of 3.13.
- 2. Any extension can be assigned as ringing extension.

## 3.15 Attendant 1 Assignment (at Auto-attendant mode)

Format: \* 25 ABCD #

ABCD = No.1 attendant extension number

Example: Assign 8006 as No.1 attendant extension at auto-attendant service mode.

Operating: 1) Lifts extension 8001, unlock system;

2) Input \*25 8006 #;

## 3.16 Attendant 2 Assignment (at Auto-attendant mode)

Format: \* 26 ABCD #

ABCD = No.2 attendant extension number

Example: Assign 8026 as No.2 attendant extension. at auto-attendant service mode.

Operating: 1) Lifts extension 8001, unlock system;

2) Input \*26 8026 #



- 1. Allows any extension is assigned as attendant extension.
- 2. At auto-attendant mode, when outside caller dial 0, the line will reach to attendant 1, when 1 is busy, the call will be auto-forwarded to attendant 2, when both are busy, system will send suggestive message to outside caller;
- 3. At any service mode, when extension dial 9, the call will reach to attendant 1 first, if it is busy, the call will auto-forwarded to attendant 2, if both are busy, system will send busy tone.
- 4. At default mode, Ext 8002 and 8003 are performed as attendant 1 and 2.
- 5. If you need more attendant extensions, allows assign Busy Transferred for more extensions, when the called extension is busy, the call will be autotransferred to next assigned extension, allows extend to ten extensions.

## 3.17 Outgoing Message (OGM)

Format: \* 22 N #

N = 1 = OGM 1 = 30seconds

N = 2 = OGM 2 = 15 seconds

N = 3 = OGM 3 = 15 seconds

Description: Allows to record up to 3 outgoing voice message (total 60 seconds),

this message is played when a caller accesses the DISA feature.

Example: Record first outgoing message (OGM 1).

Operating: 1) Lifts extension 8001, unlock system, input \* 22 1 #,

2) A beep tone informs recording is start, record up to 30 seconds message;

## The following are some examples of OGM.

*OGM 1:* "This is A company, for the sales division, press 8003; for the service division, press 8006; for fax, press 8008; to call operator, press 0".

Description: System will greet outside caller by first message, the caller can dial extension number directly or dial 0 for the operator.

OGM 2: "Sorry the Extension you dialed is busy, please dial another extension or dial 0 for operator, or dial 9 to leave a message".

Description: System will send suggestive message to outside caller in the case of called extension is busy. If outside caller does not dial any right extension number within a certain time, the call will be released.

**OGM 3:** "Sorry the Extension you dialed is not answering, please dial another extension, or dial 0 for the operator or dial 9 to leave a message".

Description: System will send suggestive message to outside caller in the case of called extension is no answer. If outside caller does not dial any extension number within a certain time, the call will be released.



- 1. Suggest record message in quiet environment, use high quality telephone, use handset to do recording in order to get high quality timbre.
- 2. Has pre-recorded message OGM 2 and OGM 3, user can override them if he wants to record by himself, however, original message cannot be restore as soon as it is overrided.

## 3.18 Listening a Recorded Message

Format: \* 23 N #

N = 1 = Listen OGM 1

N = 2 = Listen OGM 2

N = 3 = Listen OGM 3

Description: Allows to play back a recorded message to verify its performance.

Example: Play the first outgoing message (OGM 1).

Operating: 1) Lifts extension 8001, unlock system;

2) Input \* 23 1 #;

3) User can verify the recorded message.



1. When the recorded message is not satisfied, allows record again, the last recording will replace the previous one (refer 3.17)

## 3.19 Verify External Inputted Holding Music

Format: \* 24 #

Description: Allows user to input fond music to system as holding music, he can verify the holding music performance by this program.



1. Verifying just for reference, the real timber should be verified in practise;

## 3.20 Assign Outward Code (Least Cost Route)

Format: \* 97 1 A MN # (Assign second outward code)

\* 97 2 A MN # (Assign third outward code)

 $A = Outward code = 1 \sim 8$ 

MN = CO line jack number =  $01 \sim 16$ 

Description: Allows extension user make outside calls by input outward code to enter special CO line ( least cost route), this function is suits for place where use CO lines supplied by different telecom providers.

*Example,* dial 3 to enter telecom provider A lines, dial 4 to enter provider B lines, here 3 is regarded as second outward code, and 4 is regarded as third outward code.

Example: User has total 12 CO lines, 7 ordinary lines are connected with CO line jack from 1 to 7, and 5 VOIP lines are connected with CO line jack from 8 to 12, here assign when dial 3 will auto-search idle VOIP lines which start from CO line jack 8.

Operating: 1) Lifts extension 8001, unlock system;

2) Input \* 971 3 08 #;



- The head digits of extension number should not same as outward code, otherwise, that extension number will be invalid;
- 2. The special CO lines (least cost lines) must be follow connected with ordinary CO lines, when extension user dial 0 or 9 to make a outgoing call, system will priority access idle ordinary CO line first, if all of ordinary CO lines are busy, system will auto-search idle special CO line.

  When user use outward code to access CO line (refer 2.2.2), system will priority auto-search idle special CO line start from special CO line port;
- 3. When user access special CO line by outward code, he can use special CO lines only within himself group.
- 4. The direct-outgoing mode extension user is required to dial \* first, then dial outward code.
- 5. User can select CO line by format # MN (refer 2.2.4 we regard it as the first outward code), however, when the selected CO line is busy, user has to select CO line again. In order to more convenient for user, allows assign second and third outward code, when dial outward code, system will search idle CO line start from assigned CO line automatically.

#### 3.21 Cancel Outward Code

Format: \* 97 1 # (Cancel second outward code)
 \* 97 2 # (Cancel third outward code)

## 3.22 Clear Outside Line Ring by Turns

Format: \* 11 MN #



Allows assign maximum of 8 extensions (same or different) are ring by turns for each CO line when has call is received, when you are ready to do setting (3.23), please use this program to clear previous setting first

## 3.23 Assign Outside Line Ring by Turns

Format: \* 13 MN ABCD #

 $MN = CO line = 01 \sim 16$ 

ABCD = Extension number

Description: Allows assign extension ring by turns when has outside call is access at operator service mode, this function can supply a equal answering chance for each extension user.

Example: Assign extension 8002, 8003, 8004 and 8005 will ring by turns when has outside call is access on CO line 03.

Operating: 1) Lifts extension 8001 and unlock;

- 2) Input \* 11 03 # first to clear previous setting of CO line 03;
- 3) Input \* 13 03 8002 # ==> input \* 13 03 8003 #; input \* 13 03 8004 # ==> input \* 13 03 8005 #;



- 1. Allows assign maximum of 8 extensions (same or different) are ring by turns for each CO line when has call is access;
- 2. When the assigned extension is busy, system will search idle extension start from next extension automatically, in the case of all extensions are busy, outside caller has to wait.

# 3.24 Enable or Disable Outside Call Reaches to Extension by One-Touch Dialing (at DISA mode)

Format: \* 29 M #

M = 0 = Disable one touch dialing

M = 1 = Enable one touch dialing

Description: The outside caller will hear outgoing message when system is at auto-attendant mode ( DISA).

Example, a greet message is play: "This is A company, for the sales Dept. press 1; for the service Dept. press2; or input extension number directly ". Outside caller can dial 1 to reach sales Dept. And extensions in sales Dept. will ring by turn at this time.



Required to assign extension numbers for numeric button  $1\sim9$  first, (related setting please refer 3.25 and 3.26)

#### 3.25 Clear Extension Numbers Assigned for a Numeric Button

Format: \* 140 N #

 $N = Numeric button = 1 \sim 9$ 

Description: Allows clear extension numbers that assigned for a numeric button ( $1 \sim 9$ ), suggest to use this program to clear previous setting before program 3.26.

#### 3.26 Assign Extension Numbers for a Numeric Button

Format: \* 150 N ABCD #

 $N = Numeric button = 1 \sim 9$ 

ABCD = Extension number

Description: Allows assign extension numbers belong to numeric buttons  $(1 \sim 9)$ , here each button is regarded as an extension group, outside caller can reaches extension in accordant group by dial digits  $1\sim 9$ , the extensions within group will ring by turns.

Example: Assign when outside caller dial 1 will reaches group that including 8002, 8003, 8004 and 8005, these extensions will ring by turns.

Operating: 1) Lifts extension 8001 and unlocked;

2) Input \* 150 1 8002 # ==> input \* 150 1 8003 #; input \* 150 1 8004 # ==> input \* 150 1 8005 #;



- 1. Allows assign maximum of 8 extensions are ring by turns for each numeric button when outside caller is press a button.
- 2. Allows assign same or different extension number for each numeric button;
- 3. When the assigned extension is busy, system will search idle extension start from next extension, in the case of all extensions are busy, outside caller can listen a message played informs him that extension is busy, please dial later.
- 4. When enable function of 3.24, the assigned numeric button digit is not allowed use as head digit of extension number, otherwise, that extension number will be invalid.

## 3.27 Extension is Allowed Access Only Designated CO Line

Format: \* 41 MN ABCD #

MN = CO line port number =  $01 \sim 16$ 

ABCD = Extension number

Description: The assigned extension is allowed to access only designated CO line to make outside calls.

Example: Assign extension 8013 is allowed to access only CO line 4.

Operating: 1) Lifts extension 8001 and unlocked;

2) Input \* 41 04 8013 #;



- 2 1. Outside call from any CO line can be transferred to this assigned extension, as well as allows user to pick up any outside call;
  - 2. Only one CO line can be programmed belong to an extension, the last setting will replace the previous one

## 3.28 Cancel Extension is Allowed Access Only Designated CO Line

Format: \* 43 ABCD #

ABCD = Extension number

Description: Cancel assigned extension is allowed to access only designated CO line.

## 3.29 Exclusive CO Line of Designated Superior Extension

Format: \* 42 MN ABCD#

MN = CO line port number =  $01 \sim 16$ 

ABCD = Extension number

Description: Assign specific CO line is exclusive used by designated extension. Other extensions are not allowed to use this exclusive CO line, but the superior extension can use other CO lines also.

Example: Assign CO line 04 is exclusive used by extension 8008 user.

Operating: 1) Lifts extension 8001 and unlocked;

2) Input \* 42 04 8008 #;



Each exclusive CO line can be shared by maximum of 4 extensions.

## 3.30 Cancel Exclusive CO Line of Designated Superior Extension

Format: \* 44 MN #

MN = CO line port number =  $01 \sim 16$ 

## 3.31 Cancel All Extensions Allowed Access Only Designated CO Line

Format: \* 43 #



Please use this program to clear previous setting before a new program.

## 3.32 Cancel All Exclusive Used CO Lines of Superior Extension

Format: \* 44 #



Please use this program to clear previous setting before a new program.

## 3.33 Assign Designated Extension is Belong to a Group

Format: \* 47 ABCD G #

ABCD = Extension number

 $G = Group number = 0 \sim 9$ 

Example: Assign extension 8006, 8007, 8008 are belong to group 1, assign extension 8009, 8010 are belong to group 2.

Operating: 1) Lifts extension 8001, unlock system;

2) Input \* 47 8006 1 # ==> 8007 1 # ==> 8008 1 # ==> 8009 2 # ==>8010 2 #;

## Chapter Three System Program



- 1. Allows assign same extension to different group, G1 and G2, the format is: \* 47 ABCD G1 G2 #;
- 2. Allows program by batch way when extensions have same format, please refer above operating, when first time input format \*47, allows continue behind programming. Only when has any error occur during programming, then, can use \* to start a new setting;
- 3. Different group member can make intercom call with each other, but they can only use CO line belong to their group (refer 3.35)
- 4. Call can be transferred between different group, but call pickup code is different when pick up call between self-group or in other-group ( refer 2.6)
- 5. At factory default mode, the group is 0.

## 3.34 Assign All Extensions are Belong to a Group

Format: \* 47 G #

 $G = Group number = 0 \sim 9$ 

Example: Allows to clear previous setting by assign all extensions are belong to group 0.

Operating: 1) Lifts extension 8001, unlock system;

2) Input \* 47 0 #,

## 3.35 Assign Designated CO Line is Belong to a Group

Format: \* 48 MN G #

MN = CO line port number =  $01 \sim 16$ 

G = Group number =  $0 \sim 9$ 

Example: Assign CO line 08, 09, 10 and 11 are belong to group 2.

Operating: 1) Lifts extension 8001, unlock system;

2) Input \* 48 08 2 # ==> 09 2 # ==> 10 2 # ==> 11 2 #



- 1. Different group member can only use CO lines that belong to their group, but the call can be transferred between different groups.
- 5. At factory default mode, the group is 0.

## 3.36 Assign All CO Lines are Belong to a Group

Format: \* 48 G #

 $G = Group \ number = 0 \sim 9$ 

Example: Allows to clear previous setting by assign all CO lines are belong to group 0.

Operating: 1) Lifts extension 8001, unlock system;

2) Input \* 48 0 #,

## 3.37 Extension and CO Line Grouping Application

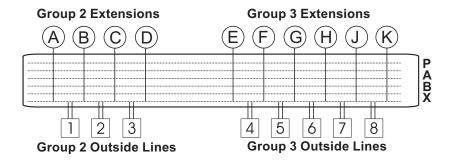
*Description:* Use these functions [3.27],[3.29],[3.33] and [3.35], extensions and CO lines can be grouped flexible.

Example 1: Extension A, B, C, D and CO line 1, 2, 3 are belong to group 2; extension E, F, G, H, J, K and CO line 4, 5, 6, 7, 8 are belong to group 3.

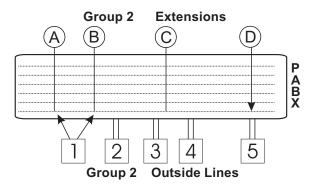
Therefore, extension A, B, C, D can only use CO line 1, 2, 3 to make outside calls, and extension E, F, G, H, J, K can only use CO line 4, 5, 6, 7, 8.

But they can make intercom call and the calls can be transferred between different groups.

(See below chart)



Example 2: Extension A, B, C, D and CO line 1, 2, 3, 4, 5 are belong to group 2, allows assign CO line 1 as exclusive used line of extension A and B, other extensions are not allowed to use CO line 1 even it is idle; assign extension D can only access CO line 5 to make outside call, extension D is not allowed to use other CO lines.



## 3.38 Head-Digits of Restricted Dial CO Line Number

Format: \* 57 M ABCD #

 $M = Group = 1 \sim 6$ 

ABCD = Head-digits of restricted dial CO line number

Description: Allows assign head-digits (maximum of 4 digits) of any restricted CO line number, the CO line numbers that with these assigned head-digits are restricted to dial.

*Example:* Assign head-digits 0 and 168 belong to group 1, assign 13 and 9 belong to group 2. *Operating:* 1) Lifts extension 8001, unlock system;

2) Input \* 57 1 0 # ==> 16 8 # ==> \* 57 2 13 # ==> 9 #;



- 1. Allows assign maximum of twenty restricted head-digits for each group, when the head-digits is less than 4 digits, please end by #.
- 2. Groups of restricted dial head-digits (M=  $1 \sim 6$ ) are accord to extension class  $1 \sim 6$  (refer 3.41);
- 3. When needs to restrict certain extension to make long-distance call, you can assign 0 to a group and assign extension class is as same as that group. *Example*, assign 0 to group 3, assign extension class is 3, therefore, the assigned extension is restricted to dial long-distance call.

When needs to restrict certain extension to make international call, you can assign 00 to a group and assign extension class is as same as that group, so the assigned extension is restricted to dial international call, but the user can make national call if head-digit 0 is not restricted.

Above just example, actual assignment must be accord to your local situation.

## 3.39 Head-Digits of Special (Allowed) Dial CO Line Number

Format: \* 57 M ABCD #

M = Group (head-digits of special CO line numbers) =  $7 \sim 9$ 

ABCD = Head-digits of allowed dial CO line number

Description: Assign head-digits (max.of 4 digits) of special CO line number, allows to only dial outside calls with these assigned head-digits, other calls without these head-digits are restricted.

Example: Assign head-digits 0757 and 010 belong to group 7 ( M=7 ),therefore, the extension belong to class 7 is allowed only dial outside calls with head-digits of 0757 and 010. Assign head-digits 200 belong to group 8 ( M=8 ), therefore, extension belong to class 8 is allowed only dial outside calls with head-digits 200.

Operating: 1) Lifts extension 8001, unlock system;

2) Input \* 57 7 0757 #==> 010 #==> \* 57 8 200 #;



- 1. Allows assign maximum of twenty special head-digits for each group, when the head-digits is less than 4 digits, please end by #.
- 2. Groups of special head-digits (M=  $7 \sim 9$ ) are accord to extension class  $7 \sim 9$  (refer 3.41);

## 3.40 Clear Head-Digits Group

Format: \* 57 M #

 $M = Group = 1 \sim 9$ 

## 3.41 Certain Extension Outgoing Call Class

Format: \* 51 ABCD M # (First Class)

\* 52 ABCD M # (Second Class)

ABCD = Extension number

M is Outgoing Call Class:

M = 0 = Only make intercom call

 $M = 1 \sim 6 = Restrict$  to dial CO calls with head-digits in group 1 to 6;

 $M = 7 \sim 9 = \text{Allows to only dial CO calls with head-digits in group } 7 \sim 9$ ;

M = 91 = Hot line ( call to operator by lifts handset without any dial)

M = 92 = Allows dial numbers in speed dial memories only (refer 2.2.5)

Example: Assign first outgoing call class is 2 for extension 8011 and class 3 for 8016.

Operating: 1) Lifts extension 8001, unlock system;

2) Input \* 51 8011 2 # ==> input 8016 3 #;

## 3.42 Extension Outgoing Call Class Application



- 1. Allows assign maximum of two outgoing call class for each extension, but both of class must be same type, namely, it is not allowed to assign one class is belong to class 1~6, and the other is belong to class 7~9.
- 2. When both of class are belong to class 1~6, then, the extension is restricted to dial outside calls that with head-digits assigned in corresponding group.
- 3. When both of class are belong to class  $7 \sim 9$ , then, the extension is allowed to only dial outside calls that with these head-digits;

Example: Assign head-digits 0, 168 and 13 are belong to group 2;

Assign head-digits 9500 and 193 are belong to group 3;

Assign head-digits 0757, 020 and 010 are belong to group 7;

Assign head-digits 133 and 130 are belong to group 8;

Allows assign various combination accord to necessary, examples:

- a. Suppose first class of extension A is 2, second class has not set, then, extension A is restricted to make outside calls with head digits 0, 168 and 13;
- b. Suppose first class of extension B is 2, second class is 3, then, this extension is restricted to make outside calls with head-digits 0, 168, 13, 9500 and 193;
- c. Suppose first class of extension C is 7, second class has not set, then, this extension is allowed only dial outside calls with head-digits 0757, 020 and 010;
- d. Suppose first class of extension D is 7, second class is 8, then, this extension is allowed only dial outside calls with head-digits 0757, 020, 010, 133 and 130.

## 3.43 All Extensions Outgoing Call Class

Format: \* 54 M # (First Class)

\* 55 M # (Second Class)

M is Outgoing Call Class:

M = 0 = Only make intercom call

 $M = 1 \sim 6 = Restrict$  to dial CO calls with head-digits in group 1 to 6;

 $M = 7 \sim 9$  = Allows to only dial CO calls with head-digits in group  $7 \sim 9$ ;

*Example:* Assign first outgoing call class is 3 for all extensions.

Operating: 1) Lifts extension 8001, unlock system;

2) Input \* 54 3 #;



1. When needs assign same class for the most of extensions, this program can help you complete setting quickly.

Example: When needs to assign class 1 for extension 8008, 8012, assign class 7 for extension 8015, 8016 and 8018, other extensions class is 2, therefore, please assign all extensions class is 2 first, then change class of extension 8008 and 8012 to class 1, change class of extension 8015, 8016 and 8018 to class 7.

Operating: 1) Lifts extension 8001, unlock system;

2) Input \* 54 2 # to assign all extensions class to 2;

3) Input \* 518008 1 # => \* 518012 1 # => \* 518015 7 # => 8016 7 # => 8018 7 #.

## 3.44 Cancel Extension Outgoing Call Class

Format 1: \* 53 ABCD # (Cancel for certain extension)

Format 2: \* 53 # (Cancel for all extensions)

ABCD = Extension number.

Example: Cancel outgoing call class for extension 8015.

Operating: 1) Lifts extension 8001, unlock system;

2) Input \* 53 8015 #;

## 3.45 Restore All Extension Numbers

Format: \* 7 000 #

Example: Restore all extension numbers to factory default mode.

Operating: 1) Lifts extension 8001, unlock system;

2) Input \* 7 000 #;



The default extension numbers of AC are 8001~8016.

## 3.46 Clear All Extension Numbers

Format: \* 71 00 #

Description: It is not allow existing same extension numbers in a system.

Sometimes, user needs to change extension numbers by batch way, the new extension number may same as original numbers, to avoid conflict, allows use this program to clear all extension numbers before program 3.49.

## 3.47 Assign All Extension Numbers to Four Digits

Format: \* 7 2 00 #

Description: When a system existing two digits, three digits and four digits extension number, this program will make two digits and three digits extension numbers are invalid but will remain four digits extension numbers.

When user needs to change all extension numbers to four digits, he can use this program to clear two or three digits numbers first.

Example: Assign all extension numbers to four digits.

Operating: 1) Lifts extension 8001, unlock system;

2) Input \* 7 200 #;

## 3.48 Assign Extension Number Length (Digits)

Format: \* 72 A M #

A =The head-digit of extension number

M = Extension length (digits) = 2,3,4

Description: This system is support existing two, three, four digits extension number at the same time, but need to declare length of extension number that with assigned head-digits 1~8.

Example: Assign head-digit is 3 for the two digits extension number, assign head-digit is 6 for the three digits extension number.

Operating: 1) Lifts extension 8001, unlock system;

2) Input \* 72 3 2 # ==> beep ==> input \* 72 6 3 #;



- 1. At factory default mode, all extension numbers are four digits;
- 2. Different head-digits extension number can have same length, example, extension numbers with head-digits 4, 5, 7 can be assigned as two digits.

#### 3.49 Extension Number Assignment

Format: \* 7 ABC abcd #

ABC = Extension jack number =  $001 \sim 128$ 

abcd = Extension new number

Description: Allows change extension number for certain jack.

Example: Change jack 004 extension number to 638, change jack 015 extension number to 33, change jack 109 extension number to 8168.

Operating: 1) Lifts extension 8001, unlock system;

2) Input \* 7 004 638 # ==> \* 015 33 # ==> 109 8168 #;



- 1. Same extension number is unallowable;
  - 2. Select extension number among  $10 \sim 8999$  freewill, but when extension head-digit is 0, 9 or the second and third outward code are unallowable;
  - 3. Needs to use extension jack number when change extension number, when user input #\*9 on telephone, he can see 7 digits number is display, the three ahead digits are extension port number (refer 2.25)

## 3.50 Assign Outside (CO) Line Access Mode

Format 1: \* 82 ABCD N #

ABCD = Extension number

N is outside (CO) line access mode:

N = 0 = Access CO line by dial 0 (here N can be 9 also)

N = 1 = Access CO line directly

Format 2: \*800 # ( Assign all extensions access CO line by dial 0)

Format 3: \*810 # ( Assign all extensions access CO line directly )

Description: When N = 0, extension will be at intercom state as soon as lifts handset, he can input extension number directly to make internal call; but when make outside call, he must to dial 0 to get external dial tone before input outside call number.

When N = 1, extension will enter an idle CO line as soon as lifts handset, user can make outside call directly; but when make internal call, he needs to dial \* to get internal dial tone before input extension number.

Example: Assign extension 8008 is at direct access CO line mode.

Operating: 1) Lifts extension 8001, unlock system;

2) Input \* 82 8008 1 #;



- 1. At factory default mode, all extensions are access CO line by dial 0, user can change it to access CO line by 9 if necessary, refer 3.50.1 for related setting. When use 9 for CO line, user must to input N = 9 in above setting.
- 2. We are suggest to assign direct access CO line mode for the extension that is contact outside frequently;
- 3. When N = 1, if all CO lines are busy, this extension will enter intercom state as soon as lifts handset, here allows user dial extension number directly ( no need \* ahead extension number);
- 4. At any access mode, extension must to input at least 3 digits within 10 seconds, otherwise, the line will be released.

## 3.50.1 Access CO Line Code & One-Touch Calling Operator Assignment

Format: \* 0408 MN #

M = Access CO Line Code

( Default is M = 0)

N = Code for operator

When M = N means disable one-touch calling for operator.

Description: System default setting is access CO Line by press 0 and press 9 for operator, however, to meet different using habit, allows user change it to access CO line by 9 and 0 for operator, as well as allows disable one-touch calling operator in some case.

Example 1: Original setting is press 0 to access CO line and 9 for opeator, here user wants to change setting to press 9 for CO line and 0 for opeator.

Operating 1: 1) Unlock extension 8001 by format \* 01 1234 # (1234 is system password) 2) Input \* 04 08 9 0 #

## Chapter Three System Program

Example 2: Original setting is press 0 to access CO line and 9 for opeator, here user wants to change setting to press 0 for CO line but disable 9 for opeator.

Operating 2: 1) Unlock extension 8001 by format \* 01 1234 # (1234 is system password) 2) Input \* 04 08 0 0 #

## 3.51 Outside (CO) Line Duration Time Limit

Format 1: \* 91 ABCD MN # (Assignment for certain extension)

Format 2: \* 93 MN # (Assignment for all extensions)

ABCD = Extension number

 $MN = Line duration = 01 \sim 60 minutes$ 

*Description:* Sets an maximum time allowed for a conversation with an external party. *Example:* Assign 8012 call duration is 5 minutes, and 8016 call duration is 13 minutes.

Operating: 1) Lifts extension 8001, unlock system;

2) Input \* 91 8012 05 # ==> input 8016 13 #;



- 1. Duration time limit is among 1~60 minutes, input time by two digits, *example*, 1minute is denoted as 01.
  - 2. This program is only effective for an outside call, the actual duration time may has a little different from the assigned duration time.
  - 3. System will send beep sounds at 15 seconds intervals in the last 60 seconds, then, line will be disconnected when programmed time is expires.

## 3.52 Cancel Outside (CO) Line Duration Time Limit

Format 1: \* 92 ABCD # (Cancel for certain extension)

Format 2: \* 93 # (Cancel for all extensions)

ABCD = Extension number

## 3.53 Enable / Disable Extension User Use Speed Dialing Function

Format 1: \* 4 0 ABCD N #

ABCD = Extension number

N = 0 = Disable use speed dialing

N = 1 = Enable use speed dialing

Description: Assigns if extension has authority to use speed dialing function.



The authorized extension can make outside call by input ## MN, here MN is speed dialing number that is accord to a CO line number, therefore, user can store often use outside number in system. ( allows assign up to Ninetynine speed dialing numbers for outside numbers with max.of 24 digits per number), refer (2.2.5 and 2.3)

## 3.54 Fax Received Automatically

## 3.54.1 Assign Fax Extension

Format: \* 27 ABCD #

ABCD = Fax extension number

Description: When system is at auto-attendant mode, it can detect fax signal automatically when has fax is access on CO line, and fax will be transferred to fax machine as soon as fax signal is detected.

Needs to assign fax extension number to system by this program before use auto-receive fax function.

Example: If extension 8009 is fax machine, please program as below:

Operating: 1) Lifts extension 8001, unlock system;

2) Input \* 27 8009 #;



1. When fax machine has been assigned at auto-receive mode, outside caller can dial fax extension number first or only press START button on his fax machine no need input any other numbers.

When fax machine is assigned at manual-receive mode, outside caller must to dial fax extension number first.

2. This function is only effective on at auto-attendant mode.

## 3.54.2 Cancel Fax Received Automatically

Format: \* 27 #

Description: When fax extension is cancelled, system will cancel fax received automatically function.

## 3.55 IP Code of CO Line

```
Format 1: * 34 MN ABCDEF# (Assignment for certain CO line)
Format 2: * 35 ABCDEF# (Assignment for all CO lines)
```

MN = CO line port number =  $01 \sim 16$ 

ABCDEF is IP code (Less 6 digits)

Description: Assigns IP code for CO line to meet place where using various CO lines from different telecom providers.

When IP code has been assigned, the code will be added automatically when user make long distance call, you can increase work efficiency and save call charge with the help of this function.

Example: Assign IP code is 17909 for CO line 1, and code 193 for CO line 2.

Operating: 1) Lifts extension 8001, unlock system;

2) Input \* 34 01 17909 # ==> Input \* 34 02 193 #;

## 3.56 Cancel IP Code of CO Line

```
Format 1: * 34 MN # (Cancelling for certain CO line)
Format 2: * 35 # (Cancelling for all CO lines)
MN = CO line port number = 01 \sim 16
```

## 3.57 Cancel Call Transferred to Secretary

```
Format 1: * 98 ABCD # (Cancel for certain CO line)
Format 2: * 98 # (Cancel for all CO lines)
```

ABCD = Secretary extension number

Description: All calls (except secretary) to manager extension is transferred to secretary first, the call can be transferred to manager only after filtrated by secretary. When extension has been assigned Call Transferred to Secretary, allows to cancel this function by input # \* 600 on assigned extension ( refer 2.17 ), also allows to cancel this function by this program.

Suggest cancel for all CO lines before assign function of 2.17

## 3.58 Restore Personal Password

```
Format 1: * 94 ABCD # (Restore for certain CO line)
Format 2: * 94 # (Restore for all CO lines)
```

ABCD = Extension number

*Example:* Extension 8027 user is forget his personal password, he can restore his password to default 1234.

Operating: 1) Lifts extension 8001 and unlock;

2) Input \* 94 8027 #;



- 1. The default personal password is 1234. ( Refer 2.22 )
- 2. Normally, restore password with the help of administrator.

## 3.59 Change System Time

Format 1: \* 95 1 YY MM DD W # ( Change Year, Date, Week) Format 2: \* 95 2 HH NN # ( Change Hour, Minute) YY = YearMM = MonthDD = Date $W = Week = Monday \sim Sunday = 1 \sim 7$ 

HH = HourNN = Minute

Description: This system is supports PC call management software can manager CO line and extension calls, when use PC bill software, in order call bill memory of system can store call bills normally when computer is closed, please adjust system time properly.

Example: Assign system time is at 15:20pm on Aug 13, 2006 (Sunday).

Operating: 1) Lifts extension 8001 and unlock;

2) Input \* 95 1 06 08 13 7 # ==> \* 95 2 15 20 #



- 1. Denotes date and time by two digits, such as June denotes as 06;
- 2. Use 24 hours to denote time, i.g, at 4 o'clock afternoon is denoted as 16;
- 3. Monday to Saturday is denoted as  $1 \sim 6$ , Sunday is denoted as 7;
- 4. When power failure over 24 hours, system time may becomes inaccurate, we are suggest to re-set system time when power is restore.

## 3.60 Call Charge Mode

Format 1: \* 85 0 MN # ( Delay Detection Charge Mode ) Format 2: \* 85 1 # ( Polarity Reverse Detection Charge Mode )

MN = Delay duration = 10 seconds to 60 seconds

Description: Delay Detection Charge Mode: System will start charge when the assigned time is expires even called party is not answer.

> Polarity Reverse Detection Charge Mode: System will start charge only when called party is answer.



Normally, user needs to apply Polarity Reverse Detection signal from telecom office first, details please inquire your local telecom office.

#### 3.61 Flash Time

Format 1: \* 83 ABCD #

ABCD = Flash time = 500ms to 2000ms

Description: FLASH here means user taps hook-switch fleetly, it is function is as lifts handset rapidly after hangup. FLASH TIME is the time length between hangup and re-lifts handset, if user does not lifts handset when flash time is expires, system will regard it as hangup; if user is lifts handset within assigned flash time, system will regard user is ready to transfer a call (2.7). Example, the assigned FLASH TIME is 1200ms, user does not lifts handset after 1200ms, system will regard it is hangup; when user lifts handset after 1200ms since hangup, system will regard user is ready to make a new call; when user lifts handset within 1200ms since hangup, system will regard user is ready to transfer a call.

Example: Assign flash time is 1000ms.

Operating: 1) Lifts extension 8001 and unlock;

2) Input \* 83 1000 #;



We are suggest assign flash time as 760ms normally.

## 3.62 Call Bill Memory Cleared

Format 1: \* 96 00 #

Description: Call Bill Memory is use for store call bill when computer is closed, the recorded bill will be transferred to computer when PC Bill Software is running.

Normally, use this function to clear call bills created by system debugging.



- 1. The call bill can not be restored once it is cleared;
- 2. Allows store maximum about 2,500 pieces call bill when computer is closed (the storage is related with length of number).

We are suggest upload bill to computer regularly, otherwise, memory cannot store bill when it is full.

## 3.63 Pulse and Tone Mode Setting

Format 1: \* 28 M #

M = 0 = Tone mode

M = 1 = Pulse mode

Description: Allows assign Pulse or Tone mode for CO line.



At factory default is Tone Mode.

## 4.1 Programming Table (1)

4.1	PI	ogi	ram	min	ig I	able (1)								
ο.	-   8	7.7	22	23		23	24	25	26	28	29	29	29	29
Format	# 97 1 A MN # (Assign	second outward code )	# 97 2 A MN # (Assign third outward code)	* 13 MN ABCD #	* 29 M #		*41 MN ABCD#	* 42 MN ABCD#	* 47 ABCD G #	*48 MN G #	* 57 M ABCD #	* 57 M #	* 51 ABCD M # ( First Class)	* 52 ABCD M # ( Second Class)
Function		Assign Outside Line Ring by Turns		Assign Outward Code (Least Cost Code)	Enable or Disable Outside Call Reaches	to Extension by One-Touch Dialing ( at DISA mode)	Extension is Allowed Access Only Designated CO Line	Exclusive CO Line of Designated Superior Extension	Assign Designated Extension is Belong to a Group	Assign Designated CO Line is Belong to a Group	Head-Digits of Restricted Dial CO Line Number	Clear Head-Digits Group		Certain Extension Outgoing Call Class
Z	2	12		13		14	15	16	17	18	19	20	2	7
٥	15	15	16		9	19	20	20	20	20	21		21	
Format	* * 01 ABCD #	* 02 ABCD #	# 000 9 *		*21#	* 20 #	* 11 MN #	*12 MNABCD #	*25ABCD #	*26ABCD #	* 22 N #	4	# N 02	
Finestion	Unlock System Password	Change System Password	System Data Default Set	C II A sound of A sold of A	Operator Answer All Received Outside Calls Auto-Attendant Answer All Received Outside Calls (DISA)		Outside (CO)Line Ringing Extension Cleared (at Operator mode)	Outside ( CO ) Line Ringing Selection ( at Operator mode)	Attendant 1 Assignment ( at Auto-attendant mode)	Attendant 2 Assignment ( at Auto-attendant mode)	Outgoing Message ( OGM )		Listening a Recorded Message	
Z	-	2	က		4	5	9	7	80	6	10		<u></u>	

## Programming Table (2)

1108	<del></del>	<i></i>	<del>,</del>		( 2	<del>/</del>	1	-		+				
p.	35	35		35	36	36		36	36	37	37	37		
Format	* 27 ABCD #	*34 MNABCDEF# (Assignment for	*35 ABCDFF#	(Assignment for all CO lines)	* 95 1 YY MM DD W # ( Change Year, Date, Week)	* 95 2 HH NN # ( Change Hour. Minute	* 85 0 MN #	Charge Mode )	*851#( Polarity Reverse Detection Charge Mode )	*83ABCD#	* 96 00 #	ent *84ABCDM#		
Function	Assign Fax Extension		IP Code of CO Line			Change System Time		Call Charge Mode		Flash Time	Call Bill Memory Cleared	Telephone Type Assignment		
No	31		32			33		34	5	35	36	37		
р. _	29	29	30	30	3	31	31	(	32	33	33	34		
Format	*53 ABCD # (Cancelling for certain extension)	* 53 # ( Cancelling for all extensions )	# 000 2 *	* 7 2 00 #		*72 A M #	*7 ABC abcd#	* 82 ABCD N #	ŧ	* 91 ABCD MN # (Assignmentfor certain extension)	* 92 ABCD # (Cancelling for certain extension)	* 4 0 ABCD N #		
Function	Cancel Extension Outgoing	Call Class	Restore All Extension Numbers	Assign All Extension Numbers to	Four Digits	Assign Extension Number Length ( Digits )	Extension Number Assignment	Assign Outside ( CO ) Line	Access Mode	Outside ( CO ) Line Duration Time Limit	Cancel Outside ( CO ) Line Duration Time Limit	Enable / Disable Extension User Use Speed Dialing Function		
No	0	22	23	24	1	25	26	1	27	28	29	30		

## 4.2 Operating Table

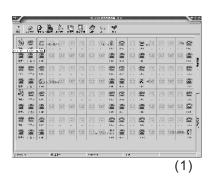
No	Function	Operating	р.	No	Function	Operating	ъ.
_	Outside (CO) Line Access Mode Selection	Dial 0, dial second or third outward code	4	19	Call Transferred to Secretary	#*6ABCD	11
2	Access Outside ( CO)Line by Preferred CO Line	NW#	2	20	Cancel Call Transferred to Secretary	00 9 * #	7
3	Assign Speed Dialing Number for	# ** MN abcdefgh #	9	21	Do Not Disturb ( DND )	#*71	1
4	Personal Speed Dialing	NW ##	2	22	Cancel Do Not Disturb	# * 70	7
5	Operator Call	Dial 9	6	23	Self-Extension Number Confirmation	6 * #	12
9	Intercom Calling	ABCD or * ABCD	4	24	Executive Busy Override	ZW 0*	13
7	Call Transfer (Between outside call and extension)	Tap hookswitch + ABCD	8				
8	Conference (3-party, 1 CO and 2 Extensions)	Tap hookswitch + * + ABCD	- 00				
6	Automatic Callback Busy	Tap hook-swtich + # # 00	6				
10	Group Call Pickup	2 #	9				
11	Directed Call Pickup	6#	7				
12	Busy Transferred	#*1ABCD	10				
13	Cancel Busy Transferred	#*100	10				
14	Unconditional Transferred	#*2ABCD	10				
15	Cancel Unconditional Transferred	#*2 00	10				
16	Station Lock (personal password)	#*3ABCD	12				
17	Unlock Personal Password	#*4ABCD	12				
18	Change Personal Password	#*5abcdABCD	12				

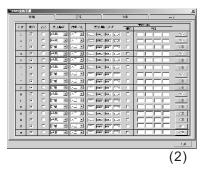
## 4.3 PC Call Management Software Introduction

This system is supports our PC Call Management Software, allows manage system call, function programmed by PC, etc, make system management and maintenance more convenient.

#### 4.3.1 PC Call Management Software Installation

- Put in supplied CD to CD-ROM, open TC-2000C Call Management System, click SETUP.EXE to start installation.
- 2. Please install accord to system guidance;
- 3. After install is completed, click START, select PROGRAM, then, you can find the Call Management System, click it to enter call charge system, please refer chart 1 of call monitor interface 1.





## 4.3.2 System Parameters Assignment

Click UNLOCK from menu, you can input administrator password ( default password is 1234) or operator password ( default is 4321), click CONFIRM can enter programming, please refer chart 2.

#### 4.3.3 Other Components Introduction

- PABX Setting: Assign functions (described in this manual) of PABX, also allows programmed by extension 8001;
- 2. *Charge Setting:* Parameters that related with call fee, such as call rate, charge mode, etc;
- 3. Accessorial Setting: Assign some functions about PABX and computer, such as COM port parameters, etc;
- 4. *Hotel Management:* Hotel manager can inquire call bill with the help of this function (extension number should be accord to room number).
- 5. Call Bill Inquired: Allows inquire received call, outgoing call, etc;
- 6. Address List: Use for add, delete or edit address list;
- 7. User Management: Use for change login password;
- 8. Help: Call management system brief introduction;
- 9. About: Verify software version number for future upgrade or maintenance.