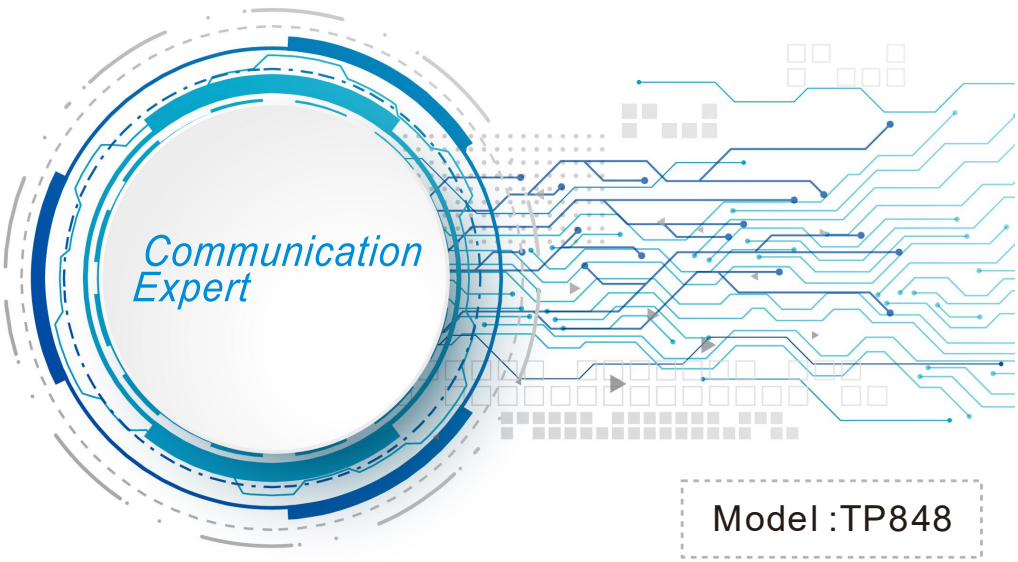
V2.1

PABX User Manuel

GROUP TELEPHONE EXCHANGE SYSTEM



Model :TP848

CONTENTS

1 PRODUCT INTRODUCTION.....6

1.1 SUMMARY..... 6

1.2 MAIN FEATURES..... 6

1.3 TECHNICAL PARAMETER..... 8

2 STRUCTURE AND INSTALLATION INSTRUCTION..... 9

2.1 PRODUCT VIEW.....9

2.2 ATTENTION BEFORE INSTALLATION.....9

3 GLOSSARY INTERPRETATION AND DEFAULT SETTING.....11

3.1 GLOSSARY INTERPRETATION.....11

3.2 SYSTEM INITIAL PARAMETER VALUE (DEFAULT SETTING)..... 11

3.3 NOTES.....12

4 SYSTEM PROGRAMMING & FUNCTION SETTING..... 13

4.1 PROGRAMMING SETTING NOTES..... 13

4.1.1 Programming Instruction:.....13

4.1.2 Batch setting code instruction.....14

4.1.3 Glossary.....14

4.2 OPERATION NOTES.....15

4.3 ENTER/EXIT SYSTEM PROGRAMMING STATUS..... 15

4.3.1 Enter programming status (for first time).....15

4.3.2 Exit programming status.....15

4.3.3 Change programming password..... 15

4.4 RESTORE DEFAULT SETTING.....15

4.5 SYSTEM SOFT RESET.....16

4.6 SYSTEM TIME SETTING..... 16

4.7 QUERY FUNCTION..... 16

4.7.1 Software version number query.....16

4.7.2 System time query.....16

4.7.3 Ext./System work status query.....16

4.8 MUSIC ON HOLD..... 17

4.9 ENABLE/DISABLE CO LINE..... 17

4.10 EXT NUMBER (FLEXIBLE CODING)..... 17

4.10.1 Set Ext. number..... 17

4.10.2 Extension number inquiry..... 18

4.10.3 Extension physical port number inquiry..... 18

4.11 EXT DIAL OUT MODE.....18

4.12 OPERATOR FUNCTION.....19

4.12.1 Set Operator..... 19
4.12.2 Enable/Disable Fast dial operator..... 19
4.12.3 Fast dial operator code setting.....19
4.13 DAY/NIGHT MODE.....19
4.13.1 Day/night switch mode..... 19
4.13.2 Set Day/Night mode switch date & time..... 19
4.13.3 Day/Night mode in manual mode.....20
4.13.4 The relevant parameters related to day/night mode.....20
4.14 INTERCOM CALL.....20
4.14.1 Ring time for intercom call..... 20
4.14.2 Permission setting for intercom call.....21
4.14.3 Intercom call..... 21
4.15 OUTGOING CALL (DIAL C.O LINE)..... 21
4.15.1 Set common outgoing code.....21
4.15.2 Outgoing call traffic mode.....21
4.15.3 Ext. access CO line authority..... 22
4.15.4 Outgoing call level function.....23
4.15.5 Outgoing call duration restriction..... 24
4.15.6 Outgoing call operation method..... 24
4.16 C.O LINE INCOMING CALL.....25
4.16.1 Set duty mode.....25
4.16.2 Set delay ring for C.O line incoming call.....25
4.16.3 Relevant setting for operator duty mode..... 26
4.16.4 Auto-attendant Setting.....27
4.16.5 Relevant setting for auto-attendant duty mode.....29
4.16.6 System CRBT Setting.....30
4.17 CALL PICKUP.....30
4.17.1 Pickup extension.....30
4.17.2 General Pickup.....30
4.18 CALL TRANSFER.....30
4.18.1 Call transfer parameter setting..... 30
4.18.2 Call transfer operation.....30
4.19 CALL FORWARD..... 31
4.19.1 Call forward parameter setting..... 31
4.19.2 Set call forward by operator.....31
4.19.3 Set call forward by any extension itself..... 32
4.20 C.O LINE RESERVATION.....33
4.21 CONFERENCE CALL..... 34
4.21.1 Three party conference (for 3 internal extension)..... 34
4.21.2 Three party conference (for 1 C.O line + 2 internal extension).....34

4.21.3 Three party conference (for 2 C.O line + 1 internal extension)..... 34
4.21.4 Conference call time setting (for 2 C.O line + 1 internal extension)..... 34
4.22 CALL MONITOR/DISCONNECT..... 34
4.23 GROUP CALL (EMERGENCY CALL)..... 34
4.24 OTHER OPERATION ON EXT..... 34
4.24.1 DND (Do Not Disturb)..... 34
4.24.2 Clear extension function..... 35
4.25 ALARM CLOCK..... 35
4.25.1 Alarm clock voice prompt..... 35
4.25.2 Alarm clock set by operator..... 35
4.25.3 Alarm clock clear by operator..... 35
4.25.4 Set alarm clock by extension itself..... 35
4.26 PAGING FUNCTION..... 35
4.26.1 Paging directly..... 35
4.26.2 Paging from call transfer of C.O line..... 35
4.27 CALLER ID FUNCTION..... 36
4.27.1 Caller ID receiving/transmitting mode..... 36
4.27.2 Add prefix for intercom caller ID..... 36
4.28 BILLING FUNCTION..... 36
5 PROGRAMMING INDEX..... 37
6 OPERATOR OPERATION CODE INDEX..... 42
7 EXT OPERATION CODE INDEX..... 43
8 APPENDIX..... 45
1 EXT GROUP..... 45
1.1 SINGLE SET EXT GROUP NUMBER..... 45
1.2 BATCH SET SOME EXT GROUP NUMBER..... 45
1.3 BATCH SET ALL EXT GROUP NUMBER..... 45
1.4 RESTORE EXT GROUP AS DEFAULT..... 45
1.5 SET MEMBER IN EXT GROUP..... 46
1.6 CLEAR MEMBER IN EXT GROUP..... 46
1.7 EXT. GROUP CALL MODE..... 46
1.8 DIAL EXT. GROUP..... 46
2 FAST DIAL EXT NO. IN DISA MODE..... 46
2.1 ENABLE/DISABLE FAST DIAL FUNCTION..... 46
2.2 SET INITIAL DIGIT FOR EXT..... 47
3 INTERNAL HOTLINE FUNCTION..... 47
3.1 ENABLE/DISABLE HOTLINE..... 47
3.2 SET HOTLINE WAITING TIME..... 47

4 LCR (LEAST COST ROUTING)..... 47
5 ABBREVIATED DIALING..... 49
6 PRIVATE PASSWORD..... 49
7 EXT. DYNAMIC LOCK..... 50
8 BUSY TONE DETECT..... 51
9 EMERGENCY WARNING..... 51

1 PRODUCT INTRODUCTION

Welcome to choose this telephone exchange system, please read this manual carefully before use. Should you have any query during installation or operation, please feel free to contact us.

1.1 SUMMARY

This system is a latest telephone exchange developed by our company who has accumulated in the field of telecommunication many years. On design, it was adopted for professional communication control theory. On quality, it was adopted for industrial electronic components. On production, it was adopted for standard of ISO9000. It has the characteristic like excellent call quality, reliable stability, strong expansibility, convenient maintenance, good compatibility etc.

This system support PC call billing software and simple hotel management facility. User can easily set and operate the system. The system provides the features like status monitor and call bill record, inquiry, statistic, management, print-out, deposit, alarm clock wakes up etc.

This system can be widely applicable in hotel, school, office, company etc.

1.2 MAIN FEATURES

- Extension number query: the extension number can be checked by caller ID. And it can be also checked version number, system time.
- Intercom and transfer caller ID: this system is adopted for the latest caller ID control technology. Intercom caller ID is available, and external line caller ID can be received accurately, compatible for FSK/DTMF dual mode.
- External music interface: user can freely choose whether use external music source as on hold/transfer music.
- Paging interface: by using this interface, user can choose external broadcasting system to search people. Or in optional configuration, this interface can be also recorded OGM message from PC.
- Flexible programming mode: this system can be programmed by either programming extension or PC management software.
- Operator function: operator has the authority as call hold, call pickup, call transfer, call forward, boss/secretary. This system can be set four operators. And operator can program the system, can make call barge in etc.
- Extension number flexible coding: this system can be setting 2 to 6 digits unequal extension numbers.
- Ext. Group: this system can be set up to 8 extension groups.
- Day/night mode: this system is built-in real-time clock, can auto switch to the outgoing call class in day and night, incoming intercom call, outgoing C.O line priority. And it is with lunch time and weekend mode setting.

- Incoming call multiple working mode: including ring simultaneously in operator mode, round robin ring in operator duty mode, ring queue in operator, system CRBT, auto-attendant duty mode. And different duty mode can be switched flexibly, i.e. When auto attendant is busy system can be switched into other operator duty mode.
- Multiple dial out mode: Except for direct dial out/indirect dial out mode, system can be set different mode like “select certain C.O line, booking certain C.O line, least cost routing, auto call forward” to dial external number. Redial feature is available in any mode.
- Multiple extension number dial mode: except direct dial extension number, system can be setting other mode like dial 0 for operator, extension (or Ext. Group) number fast dialing etc.
- Auto-attendant (DISA): this system include prerecorded voice and self-recording voice. The voice message maximum can be set in 7 section.
- Fast dialing: speed dialing is available for intercom call and Ext. dialing in auto attendant mode. That means dialing only one digit to reach the corresponding extension.
- Call transfer: both external call and intercom call can be transferred to either extension or ext. group.
- Call forward: when extension is busy or no answer, can set the incoming call to be forwarded to other extension or another Trunk line.
- Call pickup: any extension can pick up the call from other ringing extension.
- Call restriction: this system can be set the class assignment for all extension, call duration restriction, restrict certain extension accessing trunk line, restrict extension call pickup, restrict extension to dial certain intercom line. And can be also set Do Not Disturb (DND), dynamic locking etc.
- Ring Identify: different ringing pattern for intercom call, C.O line incoming call and door phone incoming call
- Three party conference, call conference, auto CO to CO transfer: the call among of two extension and one C.O line, or two C.O line and one extension is available.
- Multi-party conference: system is available for call conference between 2 C.O lines and 1 internal extension.
- Call switch: during the call with trunk line, if there is another C.O line or door phone or other extension call arriving, system can hold the call, and pickup another call.
- Memory dialing: System can store 96 groups C.O line number. And each C.O line can be setting an abbreviated short code; user can dial this code instead of full number.
- Private password: system can be set up to 96 password account. Corresponding to different level, user can dial external number at any extension by using private password.
- Internal hotline: any extension can be setting dial operator directly once off hook
- Alarm clock voice prompt: alarm clock can be setting by extension, operator or PC software. Meanwhile, the fifth paragraph OGM message can be set as alarm clock prompt message.

- Intercom call/Door phone function: All extension can be setting as intercom call mode. Extension is off hook, to call designated ringing extension, and the calling extension can be setting music on hold or ring back tone. When extension is setting as door phone, door lock opener is available by code.
- Least Cost Routing (LCR): system can be setting flexibly access certain C.O line at least cost routing, different number to access different operator C.O line, to save telephone rate. System can be setting 4 group special trunk and 1 common trunk.
- Prefix dialing: system can be set 4 groups different long-distance prefix number, to corresponding to different C.O line number (work in with LCR)
- PC OGM download: user can download the recorded voice message to system, to work as OGM.
- Multiple call billing mode: system has the function as incoming call billing, outgoing call billing, can set delayed billing or reverse polarity billing.
- PC management software: it can display the work status for each extension and each C.O line, including incoming and outgoing call. SMDR (Station Message Detail Recording)
- Call billing interface: system can be set different rate to make call billing and print out the call bill. When PC is power off, system can store 3000 billing data.
- Hotel Management: this system has simple hotel management function, like wake up, deposit, and call bill can be forwarding to professional hotel management software through 232 communication, network, text etc.
- Memory protect while power off: when power off, system can store all previous setting, no need to reset when power on.
- Remote maintenance: system support remote programming, detect and maintenance. Convenient for installation, debugging.

1.3 TECHNICAL PARAMETER

- Environment……temperature-10℃ ~ 40℃; humidity < 80%
- Power voltage ……AC110±10%/AC220V±10%
- Power Consumption……≤35W
- Exchange format …… analog switch matrix
- Telephone type……Dual Tone Multi-frequency
- Caller ID receiving format ……FSK/DTMF
- Caller ID transmitting format……FSK or DTMF
- Communication path……8
- Telephone feed……DC40V 25mA±15%
- Distortion……≤10%
- Ringing current……AC70V±10% 50HZ
- Tone of C.O line……Tone source from provider
- Dial tone of internal line…… 380HZ sequential square wave
- Ring back tone of internal line…… 380HZ sequential square wave 1s on, 4s of

- ✧ Busy tone of internal line…… 380HZ sequential square wave 0.3s on, 0.3s off
- ✧ Confirmation tone of internal line……380HZ sequential square wave 1s on
- ✧ Prompt tone of Trunk line……380HZ sequential square wave 2s on, 5s off
- ✧ External music interface …… input voltage range 0.5V-2.0V
- ✧ External paging interface……output voltage maximum 2.0V

2 STRUCTURE AND INSTALLATION INSTRUCTION

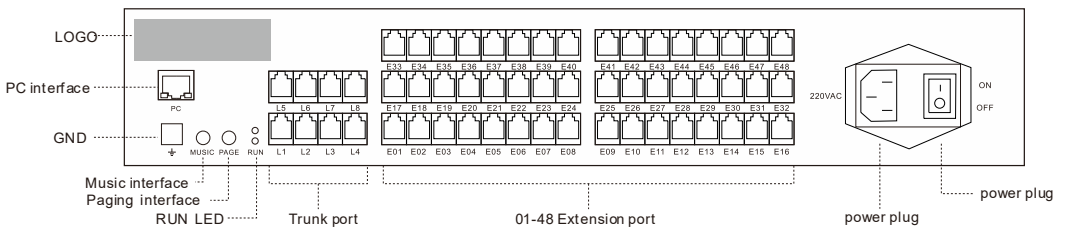
System capacity:

- 4 line CO card: each card can be connected with 4 CO line, can be expanded up to 8 CO line
- 8 line Extension card: each card can be connected with 8 telephone, can be expanded up to 48

System can connect with external device

- Regular analog single line telephone (SLT), cordless phone, fax machine, computer, modem, telephone transmitter

2.1 PRODUCT VIEW



2.2 ATTENTION BEFORE INSTALLATION

Please pay attention to the important items of installation:

1. The system should be installed at a stable indoor place with dry, ventilated environment. (Temperature Range: 0-45℃, Humidity Range :20%-80%. Avoid straight sun shine or in the environment of flammable or corrosive gas.) standard telephone wire is preferable.

2. A marginal space around the exchange should be remained for heat sink, inspection and maintenance of the system.

3. Wall installation and desk installation are allowed. But pay attention that the wall bolt does not contact with the circuit boards inside the main frame to avoid damage to the circuit boards.

4. Please keep the system away from other equipment producing large electromagnetic disturbance (such as motor and large transformer).

5. Telephone lines should not wire together with power supply cable or antenna cable. Neither should the extension be close to antenna for air broadcasting (including short-wave).

6. Avoid damage to the power-supply cable. Keep it away from water. Cut off the power immediately when water leakage happens.

7. Please don't strike or shake the system at any situation. Don't move the system in working status.

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

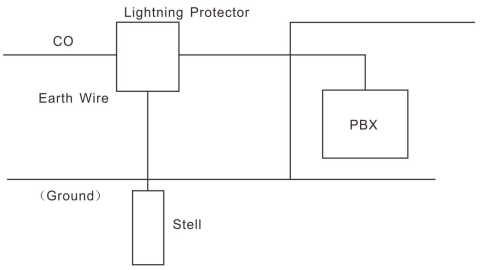
Warning:

- The wiring should not be done in lightning.
- Avoid using telephone in thundering.
- Please don't use the telephone in flammable and leaking gas environment.
- 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

1) External lightning protection device is strongly recommended on CO line port during installation. Moreover, wiring on grounding is very important on protection to the system during installation!

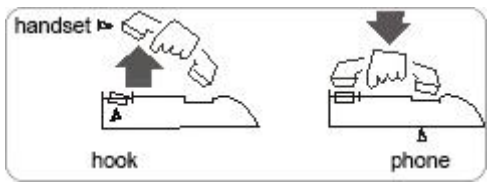
   Following is the wiring sketch diagram.



3 GLOSSARY INTERPRETATION AND DEFAULT SETTING

3.1 GLOSSARY INTERPRETATION

- Flash hook: it is an operation, generally it is used when doing call transfer, pat the hook of telephone around 1 second, then release it. If the operation is correct, system will give continuous beep confirmation tone. If not hear beep tone or hear three single beep tone, means operation is failed, need to redo it. This operation is corresponding to press R key (or Flash key) on telephone.
- Off-hook/On-hook: off hook means pick up the handset of telephone. On-hook, means hang up the handset of telephone. (if use handsfree, press HF key is also an operation of off-hook, press again is an operation of on-hook)



- C.O line: means the line from provider, also called trunk Line. Connect with CO port 1-8 of system.
- Internal line: means user line, connect with Ext port 01-48 of system. The telephone connected is called extension
- Direct dial out mode: extension connect with the exchanging network from provider directly, user hear the external dial tone, can dial external number directly, can also dial * to use indirect dial out mode.
- Indirect dial out mode: extension connect with internal exchanging network of system, user hear internal dial tone, can dial internal extension directly, or dial 9 to switch into direct dial out mode.
- Auto attendant: system is built in voice message, also called OGM. Play different voice to caller according to different situation (on default setting, system is with inbuilt prerecorded OGM).
- Operator: also called reception (or information) extension. When external caller calls in, dial 0 to call operator, or in internal line status, dial 0 to call operator. This system can be set 4 operators. When incoming call arrives, will ring the first operator firstly, if busy will ring the second operator. On default setting, the second Ext port (601) is the first operator, the first Ext port (602) is the second operator.

3.2 SYSTEM INITIAL PARAMETER VALUE (DEFAULT SETTING)

- System programming password is 0000
- The first operator is Ext.601, the second operator is Ext.602
- Ext dial 0 to call operator
- Extension number range from 601 to 648
- Ext group number is 801 to 808
- The members of Ext. Group: no setting

- C.O line port 1-8 are disabled.
- Ext. dial “9” for external outgoing call, all extension can dial any call (restriction level is 1)
- All extension in day/night mode allowed to access all C.O line.
- Internal hotline, IP prefix dialing, memory dialing, LCR, fax, dynamic locking is not enabled
- Day/night mode is manual mode, auto-attendant is available in both day and night mode
- Outgoing call is in average traffic mode. C.O line is in duty-cycle operation
- All C.O line is in auto-attendant duty mode. When C.O line incoming ,will hear OGM firstly
- When no dial in OGM mode, the system will ring the first operator； When busy or no answer, the system will play the traffice voice.
- Call forward (directly/busy/no answer) setting protect while power failure: no setting
- Caller ID receiving mode is auto detect mode
- Call billing is delayed mode, when incoming call arrives, no billing, delayed time is 5s.
- The ring time for intercom call is 30s, call transfer time is 25s, call forward (busy/no answer) time is 20s.
- C.O line reservation time is 120s.
- Weekend mode is not setting, day/night work time is not setting.
- Maximum flash time is 1000ms

3.3 NOTES

- **Programming:** it means the setting must be done through programming extension (Ext.601-604) under programming status (need to input *#*0000).
- **Operator operation:** it means the setting must be done through operator extension (default is Ext.601 & 602) or programming extension. But no need to enter programming status!
- **Ext. operation:** it means the setting can be done by any extension. And no need to enter programming status!

4 SYSTEM PROGRAMMING & FUNCTION SETTING

On default setting, system already been set in initial value. So, customer can use it after installation. If customer need to make some setting as per actual requirement, he needs to make programming or setting to system.

This system can be set by normal telephone or PC software.

There are following 3 mode for the setting by normal telephone:

- **System programming setting:** need to set by programming extension (601-604) under programming status. Need to input programming password to enter programming status. This is only used for administrator.
- **Operator operation:** Set system parameter with operator extension, such as system time, day/night mode, call forward setting, alarm clock setting, Ext dynamic lock setting/clearance etc. This is used for operator. This setting mode no need to enter programming status.
- **Ext. operation:** each extension can set itself parameter, like call forward, DND, alarm clock, dynamic lock etc. This setting mode no need to enter programming status.

4.1 PROGRAMMING SETTING NOTES

- Programming extension is any one of the first 4 extension (Ext 601-604)
- All the programming setting must be done in system programming status. And the programming extension should be used with dual tone multi-frequency (DTMF) telephone with the keys as “*”, “#”
- Operator (default is Ext.601 & 602) is also programming extension.
- Only one programming extension can be allowed to enter programming status at the same time.
- For all programming step, you will hear a single beep tone if the operation is correct. And you will hear three continuous beep tone if the operation is incorrect. Only after you hear a single beep tone (confirmation tone), you can do the further step programming. And you can do continuous setting but no need to on hook.
- During programming, for any mistake operation, you can on hook and redo programming or press *, after hear three beep tone, input correct code
- After all programming is finished, the setting will take effect immediately. No need to reboot the system.

4.1.1 Programming Instruction:

In this manual, the “**Programming**” means the command should be input after enter programming status, there are following two process mode:

Mode 1: The present setting has no influence to previous setting; hereafter is called repetitive code.

Mode 2: The present setting will clear previous setting; hereafter is called one-time code.

➢ **Note:** on this manual, except for special instruction, all code is one-time code.

4.1.2 Batch setting code instruction

The setting code of this system include single setting and batch setting. Single setting is only for single extension, batch setting is for the same setting of several extensions

Batch setting has following property:

- Both single & batch setting can be mixed set. And can be multiple input
- the code end with #
- For batch setting, firstly you should input a starting value to setting object (such as C.O line/Ext. Port starting number), then input * as batch operation, then next input end value to setting object. Thus, the same parameter is setting from starting value to ending value.

Let's take an example for setting outgoing call class in day mode (batch setting code is 320LN_1N_2*N_3…N_5#). Following is three setting mode. Note: this mode is repetitive code, will not clear previous setting

Example 1(batch setting): we want to set the outgoing call class as 6 for extension from 601-625 in day mode, input *#*0000→320 6 01*25 #, after hear a beep tone, setting is ok.

Example 2(hybrid setting): we want to set the outgoing call class as 3 for extension 601, 603, and from 608-618, and 620, and from 628-630 in day mode, input *#*0000→ 320 3 01 03 08*18 020 28*32 #, after hear a beep tone, setting is ok

Example 3(single setting): we want to set the outgoing call class as 2 for extension 602,604, 612 in day mode, input *#*0000→320 2 02 04 12#, after hear a beep tone, setting is ok.

4.1.3 Glossary

N (N_1/N_2…) ……Ext port number (2 digits) 01-48
M (M_1/M_2…) ……CO. port number (1 digit) 1-8
G ……Ext group number (2 digits) 01-08
QQ ……Prefix restrict group number (2 digits) 01-16
TT ……time parameter (2 digits)
U ……Memory dialing number (1 digit) 0-9
YY ……Year (2 digits) 00-99
MM……Month (2 digits)01-12
DD……Date (2 digits)01-31
SS……Second (2 digits)01-59
W ……Week (1 digit)1-7
L ……Outgoing call class (1 digit) 0-7
K ……Operator serial number 1-4
EFGH……programming password (4 digits), 0000-9999
ABCD……Ext number (2-6 digits)
abcd……prefix for restriction or permission (1-8 digits)
ab……prefix number for adding (2 digits)
abcdef……C.O line number (1-16 digits)

Special Note: For the convenience of description, hereafter the description of extension number is as per default 601,602,603...648 to corresponding to Ext port 01, 02,03...48.

4.2 OPERATION NOTES

The operation includes operator operation and common extension operation, both no need to enter programming status

"Operator Operation": in this manual: means it can be set only by operator extension. The operator members also including programming extension. Once the setting by operator is succeed, system will send a "beep" tone to operator extension.

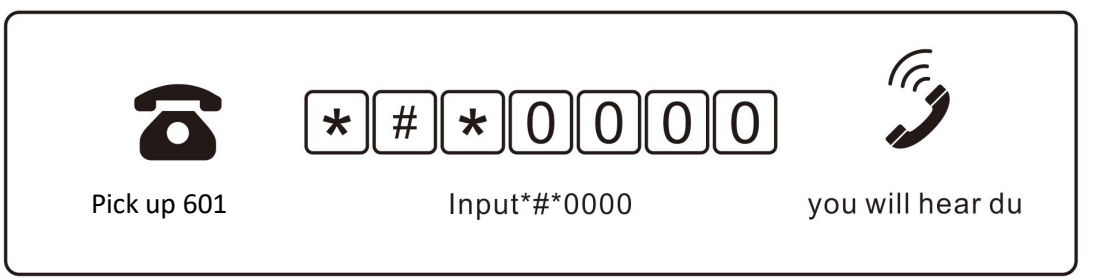
"Ext. Operation": in this manual: means it can be set by any extension. (also including operator).

Generally, when Ext is in indirect dial out mode, the code * could be not input, but if in direct dial out mode, the code * must be input.

4.3 ENTER/EXIT SYSTEM PROGRAMMING STATUS

4.3.1 Enter programming status (for first time)

At any one of the first 4 extension (Ext 601-604), pick up handset (off hook), input *#*0000, after hear a beep tone, means system is in programming status



Note: 0000 is the default programming password

4.3.2 Exit programming status

Hang up (on hook) handset, exit programming status

4.3.3 Change programming password

Programming: 09EFGH#

Instruction: EFGH is the new password, is the digits from 0-9 on keypad of telephone, on default setting, EFGH = 0000

Example: Pickup any programming extension(601-604), input *#*0000 to enter into programming status, input 091234#, after hear a beep tone, system programming password was changed as 1234.

4.4 RESTORE DEFAULT SETTING

Programming: 0000#

Instruction: This code will not restore the extension number and C.O line status, if you want to restore ext. number, use the code 9000#

4.5 SYSTEM SOFT RESET

Programming: 09999999#

Instruction: to reset the system when power is on.

4.6 SYSTEM TIME SETTING

Operator operation: off hook + (*) # 01YYMMDDW#

off hook + (*) # 02HHTTSS#

Instruction: YY: year, 00-99; MM: month, 01-12; DD: date, 01-31; W: week, 1-7, corresponding to Monday to Sunday. HH: hour, 00-23; TT: minute, 00-59; SS: second, 00-59

Note: ①system is built in battery, so real time clock is working when power off. In order to prevent deviation, please proofread system time every several days.

②system time is used for call log, alarm clock and day/night mode.

③If you need to check whether system time is correct, please refer to following chapter.

4.7 QUERY FUNCTION

4.7.1 Software version number query

Ext operation: off hook + (*) #64 + on hook

Instruction: check system software version number on display of telephone

4.7.2 System time query

Ext operation: off hook + (*) #66 + on hook check system year/month/date/week

off hook + (*) #63 + on hook check system hour/minute/second

4.7.3 Ext./System work status query

Ext operation: off hook +(*) #65 + on hook check Ext work status by caller ID

Instruction: the status value is in 12 digits

1st digit: outgoing mode, 0: direct, 1: indirect

2nd digit: forward authority, 0: prohibit, 1: allow

3rd digit: internal hotline, 0: enabled, 1: disabled

4th digit: IP prefix dialing, 0: allow, 1: prohibit

5th digit: Ext call Ext, 0: prohibit, 1: allow

6th digit: Memory dialing, 0: prohibit, 1: allow

7th digit: Forward to trunk line, 0: prohibit, 1: allow

8th digit: Internal incoming call, 0: prohibit, 1: allow

9th digit: Intercom extension, 0: yes, 1: no

10th digit: Dynamic locking, 0: enabled, 1: disabled

11th digit: Work mode, 0: day mode, 1: night mode

12th digit: work mode, 0: manual, 1: auto

4.8 MUSIC ON HOLD

System is built in internal music on hold, and also support external music. If need, please connect external music source (like MP3 player) with MUSIC port of system and play the music (at this moment the internal music will be disabled), if don't need external music, please remove the player.

Programming: 1420# Enable internal music on hold, this is default setting

1421# Enable external music on hold

Programming: 1400#

Ext operation: off hook + (*) #60

Instruction: preview system default internal music on hold

4.9 ENABLE/DISABLE CO LINE

If you connect C.O line with CO port on system, you have to enable the CO line as per following code:

Programming: 600#	Enable all CO line
600M#	Enable No.M CO line
600M_1M_2*M_3…M_n#	Batch enable CO line, this is repetitive code
601#	Disable all CO line
601M#	Disable No.M CO line
601M_1M_2*M_3…M_n#	Batch disable CO line, this is repetitive code

Instruction: M, M_1, M_2, M_3, M_n is for CO port number 01-16. If CO port is connected with C.O line, you have to enable as per above code, otherwise please disable it.

Example: If CO port 1,2 and 5-8 were connected with C.O line, you have to enable these 6 C.O line, and disable the rest 2 CO port. Setting way as below:

Enter into programming status, input 601#(disable all CO port at first), after hear a beep, input 600 1 2 5*8#, after hear a beep, setting is ok.

4.10 EXT NUMBER (FLEXIBLE CODING)

4.10.1 Set Ext. number

Programming: 90NABCD# Change No. N Ext new number as ABCD

Instruction: N is extension port number, N=01-48, the default extension number is 601-648, ABCD is the new extension number, 2-6 digits, end up with # if no enough 6 digits. Each extension number could be set as different digits.

①Ext number can not be set with prefix 0, 9 and LCR prefix code.

②If OGM fast dialing feature is enabled, please pay attention to the fast dialing code with prefix digit of extension number.

③Each Ext number can not be identical or duplicate (e.g.: 60 and 6001 are duplicate)

Example: We want to change the number on port 08 as 808, enter into programming status, input 90 08 808#, after hear a beep, the extension number was changed as 808.

Programming: 90N_1*N_n ABCD# Batch set the extension number of N_1*N_n auto add 1 from ABCD

Instruction: N_1 is the initial extension port number, N_n is the last extension port number, N=01-48

Example: we want to change the extension number from port 08-13 as 808-813, change the extension number from port 16-20 as 816-820, in programming status, input 90 08*12 808#, after hear a beep, input 90 16*20 816#

Programming: 91ABCD# Batch set all extension number auto add 1 from ABCD

Example: we want to change all the extension number(from port 01 to port 48) as 801-848, in programming status, input 91 801#

Programming: 9000# Reset extension number as default setting.

Instruction: this code will restore all extension as default setting 601-632

4.10.2 Extension number inquiry

Ext. operation: off hook + (*) #61 + on hook

Instruction: check extension number through caller ID display.

Example: pick up the No.07 port extension, input #61, after hear a ring back tone, hang up, wait several seconds, it will show 607 on display.

4.10.3 Extension physical port number inquiry

Ext. operation: off hook + (*) #62 + on hook

Instruction: check the extension physical port number and extension number. The port number is in 2 digits.

Example: pick up the No.07 port extension, input #62, it will show 07607 on display.

4.11 EXT DIAL OUT MODE

Programming: 200# Set all extension as direct dial out mode

200N_1N_2*N_3…N_n# Batch set extension as direct dial out mode, this is repetitive code

201# Set all extension as indirect dial out mode

201N_1N_2*N_3…N_n# Batch set extension as indirect dial out mode, this is repetitive code

Instruction: N_1N_2*N_3…N_n is extension port number, 01-48

Default setting: all extension is indirect dial out mode, need to dial code 9 for outgoing call.

4.12 OPERATOR FUNCTION

4.12.1 Set Operator

Programming: 04KN# Set No. N port extension as No. K operator

04K# Clear No. K operator

Instruction: N is extension port number, N=01-48, K is the sequence of operator, K=1-4. You can set any extension as no.1,2,3,4 operator. When no.1 operator is busy, will call forward no.2 operator, and so on.

Default setting: No.1 operator is Ext.601, No.2 operator is Ext.6002, No.3 & No.4 operator no setting.

4.12.2 Enable/Disable Fast dial operator

Programming: 0400# Enable fast dial operator function in internal status, this is default setting

0401# Disable fast dial operator function in internal status.

- This code has no influence to dial 0 for operator in DISA mode.

4.12.3 Fast dial operator code setting

Programming: 004X# **Default setting:** X=0

Instruction: change dial 0 for operator into X, X=0-9, that means in indirect dial out mode, extension dial X to ring operator. In direct dial out mode, dial * + X

① Fast dial operator code should be different with outgoing call code

② This setting has influence to dial 0 for operator in DISA mode.

4.13 DAY/NIGHT MODE

Day/night mode indicate the extension work status. There are manual mode and auto mode. Manual mode is operated by operator, auto mode is switched according to the time set. On default setting, system is in manual day/night mode

4.13.1 Day/night switch mode

Programming: 0300# Set system in manual day/night work mode

0301# Set system in auto day/night work mode

Operator operation: Off hook + (*) #22# Set system in auto day/night work mode

Off hook + (*) #23# Set system in manual day/night work mode

4.13.2 Set Day/Night mode switch date & time

Programming: 031$HHTT_1HHTT_2HHTT_3HHTT_4$# Set the time for work mode 1

032$HHTT_1HHTT_2HHTT_3HHTT_4$# Set the time for work mode 2

033$W_1W_2*W_3…W_5$# Set the date of full work (full day work mode)

034 $W_1W_2*W_3…W_5$# Set the date for full break (full night work mode)

035 $W_1W_2*W_3…W_5$# Set the date for work mode 1(normal work mode)

036 $W_1W_2*W_3…W_5$# Set the date for work mode 2(Saturday mode)

Instruction: HH – hour, 00-24, TT – minute, 00-59

$HHTT_1$ is the work time in the morning (also the starting time in day);

$HHTT_2$ is the closing time in the morning (also the starting time for lunch);

$HHTT_3$ is the work time in the afternoon (also the ending time for lunch);

$HHTT_4$ is the closing time in the afternoon (also the starting time in night)

2.W_1W_2, W_3, W_5 is the day of week 1-7, can set some date as one of the following 4 mode:

A. Full day mode: if system is set in this mode, will auto switch into full work mode, all the setting is as per day work time.

B. Full night mode: if system is set in this mode, will auto switch into full break mode, all the setting is as per night work mode

C. Work mode 1: if system is set in this mode, will auto switch different work mode(status). For example, Monday to Friday is work day, is suitable for this mode

D. Work mode 2: if system is set in this mode, will auto switch different work mode(status). For example, Monday to Saturday is work mode

Example: Set Monday to Friday 08:00-12:00, 14:00-17:30, Saturday 08:00-12:00 is work time, Saturday afternoon and Sunday is break time. Setting way is: in programming status, input 031 0800 1200 1400 1730#(set the timetable for work mode 1), after hear a beep tone, input 032 0800 1200 1200 1200#(set the timetable for work mode 2), after hear a beep tone, input 03407#(set Sunday is break time), after hear a beep tone, input 035 01*05#(set Monday to Friday is in work mode 1), after hear a beep tone, input 03606#(set Saturday is in work mode 2)

Note: Above setting is only valid in auto day/night work mode

4.13.3 Day/Night mode in manual mode

Operator operation: Off hook + (*) #20# Set system is in day work mode

Off hook + (*) #21# Set system is in night work mode

4.13.4 The relevant parameters related to day/night mode

There are following parameters which is related to day/night mode: incoming call work mode, outgoing call class setting, C.O line access authority, door phone ring extension etc. That means above parameter can be setting in either day mode or night mode.

4.14 INTERCOM CALL

4.14.1 Ring time for intercom call

Programming: 080TT# Set ring time for intercom call

Instruction: TT=00-99, unit is second, 00 means ring always

Note: this time should be more than the time of call forward (busy/no answer). Otherwise will cause the ring chaos

Default setting: TT=30s

4.14.2 Permission setting for intercom call

Programming: 240# Restrict intercom call for all extension

240N_1N_2*N_3…N_5# Batch restrict intercom call for some extension

241# Allow intercom call for all extension, this is default setting

241N_1N_2*N_3…N_5# Batch allow intercom call for some extension

Instruction: 1. When extension is restricted for intercom call, but can call operator only.

2.Programming extension (including operator) can make intercom call no matter be set above code or not.

4.14.3 Intercom call

4.14.3.1 Dial operator

Ext operation: Off hook + (*) + 0

Instruction: no need to dial * in indirect dial out mode.

Note: if the operator code is changed, please dial new operator code instead of default 0(refer to 4.12.3)

4.14.3.2 Dial extension

Ext. operation: Off hook + (*) + Ext number

Instruction: 1. No need to dial * in indirect dial out mode

2. Intercom call can be picked up as well

4.14.3.3 Ext. booking

Ext. operation: When Ext.A call Ext.B, if B is busy, A can press #, on hook after hear beep tone. When B is available, both of two extensions will ring simultaneously, they can talk each other if picked up.

Note: ①Booking is not available for Ext. Group calling or wrong number dialed.

②After booking, Ext can do other operation. But no save if power failure

4.15 OUTGOING CALL (DIAL C.O LINE)

Outgoing call is also called dial external number, it is related to dial out mode, When Ext is in direct dial out mode, for outgoing call, you can dial the external number directly, for intercom call, you need to dial *(back to internal status) + internal number. When Ext is in indirect dial out mode, for outgoing call, you need to dial 9 + external number.

4.15.1 Set common outgoing code

Programming: 002X# **Default setting**: X=9

Instruction: X=0-9, when Ext. make outgoing call in indirect dial out mode, need to access the line by dialing this code.

4.15.2 Outgoing call traffic mode

Programming: 0600# Circulating mode, this is default setting

Instruction: Set the outgoing call (dial outgoing code 9) traffic mode is circulating operation (average traffic), the circulating is from small to high CO port.

Programming: 0601# Sequence mode

Instruction: Set the outgoing call (dial outgoing code 9) traffic mode is accessing trunk always from the lowest CO port.

4.15.3 Ext. access CO line authority

Ext dial external number is related to Ext access CO line authority. It means Ext has the authority to use which of C.O line to make outgoing call. And different C.O line access authority can be set in day and night mode.

4.15.3.1 Ext access CO line authority in day mode

Programming:	300#	Allow all Ext accessing all C.O line
	301#	Prohibit all Ext accessing all C.O line
	300N#	Prohibit Ext. N accessing all C.O line
	30000M_1M_2*M_3…M_n#	Batch allow all Ext accessing some C.O line
	300NM_1M_2*M_3…M_n#	Batch allow Ext.N accessing some C.O line, this is repetitive code
	301M#	Prohibit all Ext accessing C.O line M
	3010N_1N_2*N_3…N_n#	Batch allow some Ext. accessing all C.O line.
	301MN_1N_2*N_3…N_n#	Batch allow some Ext. accessing C.O line M, this is repetitive code
	302MN#	Set Ext.N access C.O line M exclusively.

4.15.3.2 Ext access CO line authority in night mode

Programming:	310#	Allow all Ext accessing all C.O line
	311#	Prohibit all Ext accessing all C.O line
	310N#	Prohibit Ext. N accessing all C.O line
	31000M_1M_2*M_3…M_n#	Batch allow all Ext accessing some C.O line
	310NM_1M_2*M_3…M_n#	Batch allow Ext.N accessing some C.O line, this is repetitive code
	311M#	Prohibit all Ext accessing C.O line M
	3110N_1N_2*N_3…N_n#	Batch allow some Ext. accessing all C.O line.
	311MN_1N_2*N_3…N_n#	Batch allow some Ext. accessing C.O line M, this is repetitive code
	312MN#	Set Ext.N access C.O line M exclusively.

Instruction: N is extension port number, N=01-48, M is C.O line port number, M=1-8

Default setting: all extension is allowed to access all C.O line in both day and night mode.

4.15.3.3 Example

Requirement: all C.O line is enabled, Ext.603-648 is allowed to access C.O line 1-08, Ext.601 exclusively access C.O line 7, Ext.602 exclusively access C.O line 8. System is not set day/night mode, and in day work status.

Setting steps:

1. Pick up 601, input *#*0000, after hear a beep, enter into programming status;
2. Input 301#, prohibit all extension access all CO line
3. Input 300 00 1*6#, allow all extension access CO line1-6
4. Input 302 7 01#, allow Ext.6001 access CO line 07
5. Input 302 8 02#, allow Ext.6002 access CO line 08

4.15.4 Outgoing call level function

4.15.4.1 Instruction about the outgoing call level

This system can restrict the outgoing call number begin with some prefix, or only allow outgoing call number begin with some prefix. There are 8 level, from 0 to 7

L=0 Outgoing call can be made only for special prefix item E

L=1 Outgoing call no restriction

L=2 Outgoing call is restricted for international direct dialing (prefix 00)

L=3 Outgoing call is restricted for domestic direct dialing (prefix 0)

L=4 Outgoing call is restricted for prefix item C

L=5 Outgoing call is restricted for prefix item D

L=6 Outgoing call is restricted for both prefix item C and item D

L=7 Outgoing call is total restricted, can only dial intercom call

Each item prefix can be set 16 group numbers, and the number length for each group is 1-8 digits.

4.15.4.2 Set restriction prefix of item C and item D

Programming: 96 X QQ abcd # Set prefix number abcd for No.QQ group of item X

Instruction: 1. X is the item number, 3 is for item C, 4 is for item D.

2. QQ is group number of prefixes, 01-16
3. abcd is prefix number, can be 1-8 digit, end up with # if not enough 8 digits. Each digit can be set 0-9 or * (* is wildcard, can replace with any number)
4. This code is repetitive code

Default setting: item C and item D no setting.

4.15.4.3 Set permission prefix

Programming: 96 5 QQ abcd# Set the permission prefix in group QQ as abcd

Default setting: the first permission prefix is 110, the second permission prefix is 119, the third permission prefix is 120

4.15.4.4 Clear restriction/permission prefix

Programming: 9600#

Instruction: Clear all restriction prefix and all permission prefix in all item

Programming: 96X#

Instruction: Clear all prefix in item X (X=3,4 clear corresponding item C-D restriction prefix, when X=5, clear permission prefix)

Programming: 96XQQ#

Instruction: Clear group QQ prefix in item X (X=3-4, clear corresponding item C-D restriction prefix, when X=5, clear permission prefix)

4.15.4.5 Outgoing call level setting

After set restriction prefix and permission prefix as per above instruction, now set the outgoing call level, the requirement as restrict some extension call some CO line number is possible. The outgoing call level for each extension can be set in both day and night mode.

Default setting: all extension the outgoing call level in day mode is L=1, in night mode is L=1

4.15.4.5.1 Outgoing call level setting in day mode

Programming:	320L#	Set outgoing call level as L for all Ext
	320LN#	Set outgoing call level as L for Ext.N, this is repetitive code
	$320LN_1N_2*N_3…N_n$#	Batch set outgoing call level as L for Ext.(repetitive code)

4.15.4.5.2 Outgoing call level setting in night mode

Programming:	321L#	Set outgoing call level as L for all Ext
	321LN#	Set outgoing call level as L for Ext.N, this is repetitive code
	$321LN_1N_2*N_3…N_n$#	Batch set outgoing call level as L for Ext. (repetitive code)

Instruction: N is extension port number, N=01-48, L is outgoing call level, L=0-7

4.15.5 Outgoing call duration restriction

Programming:	33TT#	Restrict call duration for all Ext as TT
	33TTN#	Restrict call duration for Ext.N as TT (repetitive code)
	$33TTN_1N_2*N_3…N_n$#	Batch restrict call duration for Ext. as TT (repetitive code)

Instruction: TT is the call duration control time, TT=00-99(unit is minute), when TT=00, no setting

4.15.6 Outgoing call operation method

4.15.6.1 Outgoing call dialing directly

When extension is in direct dial out mode, you can pick up extension and dial CO line number directly

4.15.6.2 Outgoing call by dialing outgoing code firstly

Ext. operation: Off hook + outgoing code + C.O line number

Instruction: The default outgoing code is 9, Ext is in indirect dialing out mode

4.15.6.3 Outgoing call by selecting C.O line

Ext. operation: Off hook + (*) #1 M

Instruction: M: C.O line port number (M = 1-8). When C.O line M is occupied, the operation will be not succeeding.

Note: When Ext is in direct dial out mode, no need to dial *

Example: you want to use C.O line 3 to make outgoing call, pick up handset, dial (*) # 13 + C.O line number

4.15.6.4 C.O line booking

Ext. operation: In the process of selecting a C.O line to make outgoing call, if the C.O line is occupied(busy), you can dial # after hear engaged tone (busy tone), after hear a beep tone, hang up. When this C.O line is released(free), system will ring back Ext. for 10s, you can pick up handset to access this C.O line directly.

4.16 C.O LINE INCOMING CALL

This system support 3 duty mode for C.O line incoming call:

- Operator duty mode: When C.O line incoming call arrives, system ring operator extension.
- Auto-attendant duty mode: when C.O line incoming call arrives, system is in DISA (Direct Inward System Access) status, caller will hear the OGM message recorded, caller can dial Ext number or dial operator code (default is 0)
- System CRBT (Color Ring Back Tone) mode: when C.O line incoming call arrives, in auto-attendant mode, caller hear OGM, meanwhile system ring internal extension as operator duty mode

4.16.1 Set duty mode

On default setting, all C.O line is in operator duty mode, ring extension is operator, that is system will ring the first operator 6002, if 6002 is busy, will ring the second operator 6001

4.16.1.1 Set operator duty mode

Programming:	620#	Set all C.O line in operator duty mode
	620M#	Set C.O line M in operator duty mode
	$620M_1M_2*M_3…M_n$#	Batch set some C.O line in operator duty mode. This is repetitive code

4.16.1.2 Set auto-attendant duty mode

Programming:	621#	Set all C.O line in auto-attendant duty mode
	621M#	Set C.O line M in auto-attendant duty mode
	$621M_1M_2*M_3…M_n$#	Batch set some C.O line in auto-attendant duty mode. This is repetitive code

4.16.1.3 Set CRBT mode

Programming:	622#	Set all CO line in CRBT mode
	622M#	Set CO line M in CRBT mode
	$622M_1M_2*M_3…M_n$#	Batch set C.O line in CRBT mode

4.16.2 Set delay ring for C.O line incoming call

Programming: 61X# C.O line incoming call delay ring

Instruction: X = 0-3, on default setting X =1

When system is in operator duty mode, if X=0,1, internal Ext will ring when caller hear the first ring back tone, if X =2, will delay one ring, that is internal Ext will ring when caller hear the second ring back tone.

When system is in auto-attendant duty mode(including CRBT), if X=0, auto-attendant will work when caller hear the first ring back tone, if X=1, auto-attendant will work when receive the caller ID and hear the first ring back tone, if X=2, auto-attendant will work when hear the second ring back tone.

☞ This setting has influence to caller ID, so it is recommended to use cautiously.

4.16.3 Relevant setting for operator duty mode

4.16.3.1 Set ring Ext in day mode

Programming:	7000#	Set operator as ring extension for all C.O line
	7000N_1N_2*N_3…N_n#	Batch set ring extension for all C.O line.
	70M#	Set operator as ring extension for C.O line M
	70MN_1N_2*N_3…N_n#	Batch set ring extension for C.O line M. This is repetitive code

4.16.3.2 Set ring Ext in night mode

Programming:	7100#	Set operator as ring extension for all C.O line
	7100N_1N_2*N_3…N_n#	Batch set ring extension for all C.O line.
	71M#	Set operator as ring extension for C.O line M
	71MN_1N_2*N_3…N_n#	Batch set ring extension for C.O line M. This is repetitive code

On Default setting: the ring extension is always operator no matter day mode or night mode for all C.O line incoming call.

Instruction: M is C.O line port number, M=1-8, N_1N_2*N_3…N_n is extension port number, 01-48

Example: we want to set Ext.606 ring for C.O line 1 in day mode, Ext.607 & 609 & 610 & 611 & 612 ring for C.O line 2 in day mode, setting steps: in programming status, input 70 1 06#, after hear beep, input 70 2 07 09*12#, after hear beep, setting is ok.

4.16.3.3 Set ring mode

In operator duty mode, if the ring extension is over one, there are four ring mode: one is ring simultaneously, one is ring round robin mode 1(stop ring the last Ext, and ring the next Ext), one is ring round robin mode 2(ring last Ext, meanwhile ring the next Ext), one is ring queue(ring any free extension)

Programming:	630#	Set ring simultaneously mode, this is default setting
	631#	Set ring round robin mode 1
	632#	Set ring round robin mode 2
	633#	Set ring queue mode

4.16.3.4 Ring extension busy process

Programming:	6350#	System not send prompt tone if all ring Ext. busy. **default setting**
	6351#	System send prompt tone if all ring Ext. busy

Note: if set prompt tone, busy ring extension will hear "beep-beep" tone every 5 seconds, reminder there is new incoming call.

Programming: 636# When all ring Ext is busy, caller hear ring back tone. in waiting status
63600# When all ring Ext is busy, incoming call will be forward to operator

4.16.4 Auto-attendant Setting

Auto-attendant duty, CRBT both use voice message. This system is built in 1 channel auto-attendant, each channel including prerecorded voice and self-recording voice:

- **Prerecorded voice**: system inbuilt voice message (**notes**: it is fixed, can not be changed), the first 7 section are traffic voice message, the 8th section is alarm clock voice message, the rest are voice report message.
- **Self-recording voice**: customer can record the OGM by themselves, the total time length is 270s, can be divided into 7 section (the first section maximum time length is 90s, the others maximum is 30s)

4.16.4.1 Set auto-attendant in day/night mode

Programming: 6510# Auto-attendant is enabled in both day and night mode, this is default setting
6511# Auto-attendant is enabled in day mode, but disabled in night mode
6512# Auto-attendant is enabled in night mode, but disabled in day mode

➢ If day/night mode is not enabled, then no need to use above code

4.16.4.2 Prerecorded voice message content

Section 1: "Hello, welcome to call our company, please dial extension number or dial 0 for inquiry"

Section 2: "Sorry, now it's lunch time, please call again during our work time, thank you!"

Section 3: "Sorry, now it's off duty time, please call again during our work time, thank you!"

Section 4: "Sorry, the extension you dialed is busy, please dial other extension number or call later, thank you!"

Section 5: "Sorry, the extension you dialed is not answered, please dial other extension number or call later, thank you!"

Section 6: "Sorry, the extension number you dialed is not existed, please dial other extension number, thank you!"

Section 7: "Your call is under transfer, hold on please"

Section 8: "Hello, this is alarm clock reminder"

4.16.4.3 Voice mode setting

Programming: 1000# Enable all the traffic voice This is default setting
100K# Allow to use No.K section traffic voice
101K# Do not allow to use No.K section traffic voice
1020# All the traffic voice uses prerecorded voice. This is default setting
102K# No.K section traffic voice use prerecorded voice
1030# All the traffic voice uses self-recording voice
103K# No.K section traffic voice use self-recording voice

Instruction: K=1-7, it is the section value of voice message. Please refer to 4.16.4.2

Example: If customer don't like the section 1 prerecorded voice, but the others is ok, then in programming status, input 1031#

4.16.4.4 OGM recording

There are three methods to recording the OGM (for self-recording)

- Recording OGM through PC software, detailed steps please refer to PC software manual
- Download the prepared OGM message through music player
- Recording OGM message through programming extension

Ⅰ. Recording OGM message through programming extension

Note: Please use high quality DTMF telephone to recording, ensure the firmness of cable connection, prevent noise.

Programming: 111K#

Instruction: recording section K OGM message

Note: K=1-7

Ⅱ. Download the prepared OGM message through music player

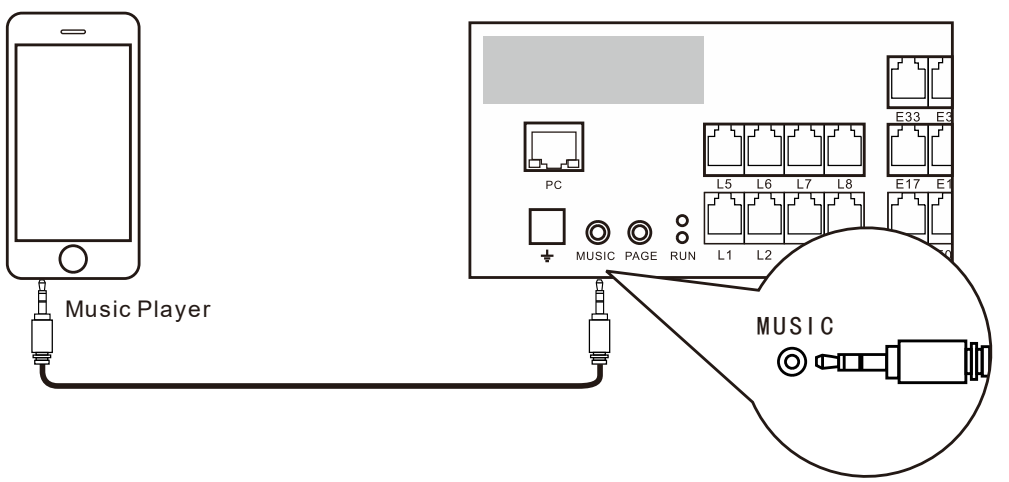
Prepare well the message file at first, then connect music player with MUSIC port of system, turn on the player to play the voice message:

Programming: 111K9#

Instruction: download section K OGM message

Input above code in programming status, after hear a beep, the voice message will be started for downloading.

Note: K=1-7, means the section of message



4.16.4.5 Preview the OGM and set volume

Programming: 121K# Preview section K self-recording OGM

121010# Preview the prerecorded OGM

12111P# Set the volume to level P and check the voice quality

Instruction: K=1-7, P=1-6 is the volume level, 6 is the minimum level. On default setting, P =4

4.16.5 Relevant setting for auto-attendant duty mode

4.16.5.1 OGM busy process

Programming: 6520# waiting status when OGM busy, this is default setting.

6521# forward to operator when OGM busy

Instruction: In the condition of multiple incoming call arrives, as OGM is 2 channels maximum, some caller have to be in waiting status (hear ring back tone) when OGM busy. By above setting, system will forward the waiting call to operator ring extension, to avoid missing any call

4.16.5.2 No dial process

Programming: 654TT#

Instruction: TT is dial time on waiting, TT=00-99, unit is second, default setting is 5s, after OGM finish playing, the time that system wait for dialing

Programming: 6540# in auto-attendant mode, if caller doesn't dial within waiting time, the call will be disconnected, this is default setting

6541# in auto-attendant mode, if caller doesn't dial within waiting time, the call will be forwarded to operator.

4.16.5.3 Dialed Ext busy process

Programming: 6522# System not send prompt tone when dialed extension is busy

6523# System send prompt tone when dialed extension is busy, this is default setting.

Instruction: when the dialed extension is on working, the extension user will hear three beep prompt tone.

Programming: 656TT# Set the waiting process time when dialed extension busy, default value is 00

Instruction: TT = 00-99, unit is second. In auto-attendant work mode, when dialed extension is busy, the waiting time for next processing, during this time, caller will hear music on hold, when the dialed extension is free system will ring it again.

Programming: 6560# release C.O line when dialed extension busy

6561# forward the call to operator when dialed extension busy

4.16.5.4 Ring time setting

Programming: 081TT# Set the ring time for dialed extension in auto-attendant mode

Instruction: TT=01-99, unit is second, on default setting, TT=25s, that is in auto attendant mode, caller dial extension after hear OGM, the dialed extension will ring till 25s. During this moment, caller will hear music on hold.

4.16.5.5 Dialed Ext no answer process

Programming: 6570# release C.O line when dialed extension no answer

6571# forward the call to operator when dialed extension no answer

4.16.6 System CRBT Setting

System CRBT (Color Ring Back Tone) mode: when C.O incoming call arrives, in auto-attendant mode, caller hear OGM, meanwhile system ring internal extension as operator duty mode. This function is good for playing advertising message for caller.

Notes:

- Auto-attendant should be set and enabled if use CRBT mode.
- The corresponding operator work mode parameter (including operator ring extension, ring mode) should be set if use CRBT mode.
- The playing message is the first section for CRBT, so one section OGM is preferred for best result.
- In CRBT mode, after playing the message, system will auto play music on hold.

4.17 CALL PICKUP

4.17.1 Pickup extension

Ext operation: Off hook + (*) #3 + ringing Ext number

Instruction: any non-ring extension can pick up the ringing extension. (both external and intercom call)

4.17.2 General Pickup

Ext operation: off hook + (*) #9

Instruction: any non-ring extension can pick up all ringing extension.

4.18 CALL TRANSFER

4.18.1 Call transfer parameter setting

4.18.1.1 Flash time setting

Programming: 150TT#

Instruction: TT=01-20, unit is 0.1s, default setting TT=10

4.18.1.2 Call transfer ring time setting

Programming: 082TT#

Instruction: TT=01-99, unit is second, this time is ring time after call transfer, default is 25s, that is after call transfer, the extension will ring till 25s.

4.18.1.3 Call transfer no answer process

Programming: 1530# Not ring back if transfer call no answer, this is default setting

1531# Ring back if transfer call no answer

4.18.2 Call transfer operation

4.18.2.1 Call transfer for external/intercom call

Ext. operation: Call transfer for external call: flash hook + Ext. number

Call transfer for intercom call: flash hook + Ext. Number

Call transfer to operator: flash hook + 0

Instruction: During outgoing call or incoming call, if Ext. A need to transfer the call to another Ext. B, just flashing hook (or press "FLASH" button), then dial the number of Ext.B, and then the called extension(B) start ringing, after off hook, can join the call or transfer again. Ext.A has following three operation mode:

- **Temporarily hold the call**: when system is set delay not reconnected with call(1550#), after Ext.A flashing hook, but neither dial number nor hang up, will hold the C.O line, and CO line caller will hear music, Ext A can flashing hook again to reconnect with C.O line, or hang up to cut the connection with C.O line directly.
- **Call transfer after inquiry**: Ext.A transfer a call to Ext.B, after flashing hook, if A not hang up, now A hear ring back tone, and B start ringing, C.O line hear music on hold, if B not answer the call within call transfer time(default is 25s), then A will reconnect with C.O line. If B answer the call, then A & B will take intercom call, once any party hang up(on hook), the other party will reconnect with C.O line.
- **Call transfer directly**: Ext.A transfer call to Ext.B, after hear ring back tone, hang up. Now Ext.B start ringing, after off hook, can join the call or transfer again. If Ext.B not answer the call within 25s, system will call back Ext.A again, if A not answer within 25s, system will disconnect the call.

4.18.2.2 Outgoing call transfer (boss/secretary function)

Ext. operation: Flash hook + Ext number

Instruction: Ext 602 make an outgoing call and then transfer the call to Ext 608

Operation step: when finish dialing the C.O line number, after 5 seconds, Ext 602 flash hook, dial 608, Ext.602 on hook after hear internal ring back tone (608 start ringing). Ext.608 off hook to talk with the external line.

4.19 CALL FORWARD

4.19.1 Call forward parameter setting

4.19.1.1 Call forward (no answer) time setting

Programming: 083TT#

Instruction: TT = 01-99, unit is second, default setting TT=20. This time is the ring time for the extension which is set call forward function, after this time, the extension will stop ringing, and the call will be forwarded to another extension.

Note: this time should be less than intercom call ring time(080TT#) and auto-attendant ring time(081TT#), and call transfer ring time(082TT#).

4.19.2 Set call forward by operator

4.19.2.1 Cancel call forward for all extension

Operator operation: Off-hook + (*) #26# cancel call forward(leave) for all extension
Off-hook + (*) #27# cancel call forward(busy) for all extension

4.19.2.2 Cancel call forward for certain extension

Operator operation: Off-hook + (*) #26N# cancel call forward(leave) for Ext.N
Off-hook + (*) #27N# cancel call forward(busy) for Ext.N

4.19.2.3 Set call forward to certain extension/C.O line

Operator operation: off-hook + (*) #26N + Ext number

Instruction: Set call forward for Ext. N to another extension

Operator operation: off-hook + (*) #26N* + C.O line number

Instruction: Set call forward for Ext. N to another C.O line

Operator operation: off-hook + (*) #27N + Ext number

Instruction: Set call forward for Ext. N to another extension

Operator operation: off-hook + (*) # 27N* + C.O line number

Instruction: Set call forward for Ext. N to another C.O line

Note: N is extension port number, N=001-152

4.19.2.4 Set call forward talking time

Operator operation: off-hook + (*) #28TT#

Instruction: Set call forward talking time as TT, TT=01-99, unit is 15s, default setting TT=10, that is 150s, among of it the call duration is 120s, the rest 30s system will send prompt tone every 5 seconds

4.19.2.5 Set call forward voice prompt message

Programming: 105# Cancel voice prompt message when call forward

1050# Set section 7 prerecorded OGM as call forward prompt message

105K# Set section K self-recording OGM as call forward prompt message

Instruction: K = 1-7, means certain section self-recording OGM.

4.19.3 Set call forward by any extension itself

4.19.3.1 Cancel call forward for extension itself

Ext. operation: Off-hook + (*) # 81# Cancel call forward(leave) for extension itself

Off-hook + (*) # 82# Cancel call forward(busy) for extension itself

Off-hook + (*) #80# Cancel all forward parameter, DND, alarm clock

4.19.3.2 Set call forward directly to another extension

Ext. operation: Off-hook + (*) #81 + Ext number

Instruction: Ext.602 need to forward all incoming call (external or intercom call) to Ext.608, then pick up 602 input (*) #81 608, after hear a beep tone, on hook

4.19.3.3 Set call forward directly to C.O line automatically

Ext operation: Off-hook + (*) #81 + * + C.O line number

Instruction: By this setting, all the incoming call to the Ext will be forwarded to another C.O line automatically, and the setting Ext will not ring. The maximum digit for C.O line number is 30 digits, end with # or on hook.

Instruction: Supposing Ext.A is set call forward directly to C.O line number “abcdefg”(when call forward, system will auto select a free C.O line port to call, for the convenient of explanation, the free C.O line is described as C.O line M)

- When Ext.C call Ext.A, system will forward the call directly to external number “abcdefg”through CO line M, and system process it as per normal outgoing call for Ext.C

- When C.O line K call Ext.A, system will forward the call directly to number “abcdefg” through CO line M. If K drop the call during waiting pickup, then C.O line M will be released after 150s. Once get connected, both C.O line can talk together, when the conversation time is over 120s, system will send beep tone as prompt every 5s in 30s cycle. At this moment, any CO line user can press * to prolong the conversation till another 150s, otherwise system will cut off the conversation. Any of C.O line user can press # to end the call immediately.
- When C.O line K is on conversation with Ext.C, now C transfer the call to Ext.A, but A is set call froward to number “abcdefg”through C.O line M, once get connected, if C not hang up, will talk with C.O line M firstly, if C hang up, C.O line M will on conversation with C.O line K directly.
- When C.O line K is on conversation with C.O line M, Ext.C or Ext.A can press ##(or #9) to join the conversation, and the call time is unlimited. But once any extension hang up, will end the conversation of both CO line.

4.19.3.4 Set call forward (busy/no answer) to another extension

Ext operation: Off-hook + (*) #82 + Ext number

Instruction: By this setting, when Ext is busy or no answer (over 20s, default setting), the call will be forwarded to another Ext.

4.19.3.5 Set call forward (busy/no answer) to C.O line

Ext operation: Off-hook + (*) #82 + * + C.O line number

Instruction: By this setting, when extension is busy or no answer over 20s, all the incoming call to this Ext will be forwarded to another C.O line.

4.20 C.O LINE RESERVATION

Ext. operation: during the call with C.O line, flashing hook and press # # (Reserve the C.O line)

Ext. operation: pick up the extension, press # # (Reconnect the C.O line)

Instruction: When extension is on call with C.O line, flashing hook(or press “Flash” key), and press # # to hold the call, at this moment, C.O line user will hear music on hold, wait 180s, during the C.O line reservation, extension user can make other operation, like call transfer, call pick up , internal call etc. If want to reconnect with the C.O line, press (*) ##

Operator Operation: during the call with C.O line, flashing hook and press # 9 (quick call reservation switch)

Instruction: 1. In the process of call with C.O line, extension can make call pickup. For example, operator is on call with C.O line, and another C.O line call in, system send prompt to operator. Now operator can reserve(hold) the first C.O line, and switch into another C.O line, furthermore it can make switch any times.

2. Operator flashing hook, after hear dial tone, press #9 to switch into any new C.O line incoming call (hold the previous call), and it can also switch into door phone incoming call.

4.21 CONFERENCE CALL

4.21.1 Three party conference (for 3 internal extension)

Ext. operation: during intercom call, flash hook + * + Ext number

4.21.2 Three party conference (for 1 C.O line + 2 internal extension)

Ext. operation: during call with C.O line, flash hook + * + Ext number

4.21.3 Three party conference (for 2 C.O line + 1 internal extension)

Ext. operation: after hold the first C.O line, during call with second C.O line, flash hook + #6

Instruction: Firstly when Ext. A is on call with C.O line B, A can flash hook and press # #(hold the call), at this moment, A will hear internal dial tone, A can dial another C.O line C, once the call is get connected, A can flash hook, after hear dial tone, press #, then press 6, now A, B, C will be in 3 party conference status. If A hang up, will cut off the conference call; If A press * then hang up, B and C keep on conference call. When the call is over 120s, system will send beep prompt tone every 5s, either B or C can press * to prolong the conference till another 150s, otherwise the call will be cut off.

4.21.4 Conference call time setting (for 2 C.O line + 1 internal extension)

Programming: 086TT#

Instruction: TT=01-99, unit =15s.

Default setting: TT=12, that means conference time is 180s

4.22 CALL MONITOR/DISCONNECT

Operator operation: Off hook + (*) # + 71 +M

Instruction: Monitor the call for C.O line M. M=C.O line port number, 1-8

Operator operation: Off hook +(*) # + 72 + Ext. number

Instruction: Monitor the call for certain extension

Force disconnect: in the process of call monitor, operator can input # to force disconnect the call.

Note: this function is only valid for programming extension

4.23 GROUP CALL (EMERGENCY CALL)

Operator operation: Off hook + (*) # 88

Instruction: by this operation, all extension will ring simultaneously and can talk each other.

Note: this function is only for programming extension

4.24 OTHER OPERATION ON EXT.

4.24.1 DND (Do Not Disturb)

Ext. operation: Off hook + (*) # 83#

Instruction: After set this function, extension will not ring for any call

Note: This setting will be canceled once extension is picked up.

4.24.2 Clear extension function

Ext. operation: Off hook +(*) #80#

Instruction: after input above code, the following function on extension will be cleared:

- Call forward setting
- C.O line booking setting
- DND setting
- Alarm clock setting

4.25 ALARM CLOCK

The alarm clock for all extension can be set by operator, and each extension can set alarm clock for itself.

4.25.1 Alarm clock voice prompt

Programming: 104# Cancel alarm clock voice prompt, this is default setting

1040# Set section 8 prerecorded OGM as alarm clock voice prompt

104K# Set section K self-recording OGM as alarm clock voice prompt

Instruction: K=1-7, means the self-recording OGM.

4.25.2 Alarm clock set by operator

Operator operation: off hook + (*) #03HHTT + $ABCD_1$ + $ABCD_2$ +…+ $ABCD_n$

Instruction: HH: hour, 00-23; TT: minute, 00-59; $ABCD_1$ $ABCD_{2...}$ $ABCD_N$: extension number

Example: We want to set alarm clock for Ext.603,608,620 as 06:30am, then pick up operator 601, input *#03 0630 603, after beep, input 608, after beep, input 620.

4.25.3 Alarm clock clear by operator

Operator operation: off hook +(*) #04# Clear all extension alarm

off hook +(*) # $ABCD_1$+$ABCD_2$+…+ $ABCD_N$ Clear alarm for extension $ABCD_1$, $ABCD_2$, $ABCD_N$

4.25.4 Set alarm clock by extension itself

Ext. operation: Off hook + (*) #4 HHTT# Set the time of alarm clock as HHTT

Off hook + (*) #4# clear alarm clock

4.26 PAGING FUNCTION

4.26.1 Paging directly

Operator operation: off hook + (*) #86#

Instruction: This function is only for programming extension or operator

4.26.2 Paging from call transfer of C.O line

Ext Operation: During the call with C.O line + flash the hook + #5

Instruction: during the paging, the extension can not be on hook until finish.

4.27 CALLER ID FUNCTION

4.27.1 Caller ID receiving/transmitting mode

Programming: 1810# Set caller ID transmitting mode as FSK

1811# Set caller ID transmitting mode as DTMF

1814# Set caller ID receiving mode in auto detect (default setting)

1815# Set caller ID receiving mode in dual mode always

Instruction: When power on PBX, system will auto detect the caller ID signal format, and default as DTMF detection. If the caller ID signal is FSK, when system detect it, will fixed as FSK detection. If there is both DTMF and FSK for C.O line, please use 1815#.

4.27.2 Add prefix for intercom caller ID

Programming: 180#, not add prefix for intercom Caller ID, this is default setting.

Programming: 180KK#, add prefix KK for intercom caller ID

Instruction: some telephone can only display the number more than 4 digits, so if the extension number is 3 digits, telephone can not display the intercom caller ID. Now we can add prefix in front of extension number.

4.28 BILLING FUNCTION

Programming: 4000# Clear all data for call billing

Instruction: the system can store 3000 data for call billing even not connect PC software. System will not clear call billing data when reset, so if you need to clear all billing data please input 4000# in programming status.

5 PROGRAMMING INDEX

Note: All programming should be input by programming extension (port 01-04 and operator) in programming status (on default setting, input *#* 0000 by programming extension)

No	System function		Programming	Default value	Page
1.	Change programming password		09EFGH#	EFGH=0000	15
2.	System soft reset		09999999#		16
3.	Restore default setting		0000#		15
4.	Set common outgoing code		002X#	X=9	21
5.	Set speed dial operator code		004X#	X=0	19
6.	Day/night mode	Set manual switch mode	0300#	Manual switch mode	19
		Set auto switch mode	0301#		
		Set auto switch mode 1	031$HHTT_1HHTT_2$ $HHTT_3HHTT_4$#	$HHTT_1$ = 0800 $HHTT_2$ = 1200 $HHTT_3$ = 1400 $HHTT_4$ = 1800	
		Set auto switch mode 2	032$HHTT_1HHTT_2$ $HHTT_3HHTT_4$#	$HHTT_1$ = 0800 $HHTT_2$ = 1200 $HHTT_3$ = 1200 $HHTT_4$ = 1200	
		Full day mode	033W_1W_2*W_3...W_5#	Monday to Sunday is day mode	
		Full night mode	034W_1W_2*W_3...W_5#		
		Set the date of mode 1	035W_1W_2*W_3...W_5#		
		Set the date of mode 2	036W_1W_2*W_3...W_5#		
7.	Operator(K=1-4)	Enable fast dial operator	0400#	enabled	19
		Disable fast dial operator	0401#		
		Clear no.K operator	04K#	The first operator is 601, the second operator is 602	19
		Set Ext.N as no.K operator	04KN#		
8.	System parameter	Outgoing call in C.O line circulating mode	0600#	Circulating mode	21
		Outgoing call in C.O line sequence mode	0601#		
9.	System time parameter	Set ring time for intercom call	080TT#	TT=30 unit: s	20
		Set ring time for DISA mode	081TT#	TT=25 unit: s	29
		Set ring time for call transfer	082TT#	TT=25 unit: s	30
		Set call forward (no answer) time	083TT#	TT=20 unit: s	31
		Conference call time	086TT#	TT=12 unit: s	34
10.		Enable all the traffic voice	1000#	default	

	Voice mode setting for OGM mode	Allow to use No.K traffice voice	100K#		27
		Do not allow to use No.K traffice voice	101K#		
		All the traffic use prerecorded voice	1020#	All the traffic use prerecorded voice	
		No.K section use prerecorded voice	102K#		
		All the traffic use self-recording voice	1030#		
		No.K section use self-recording voice	103K#		
11.	OGM recording	recording section K OGM message	111K#	K=1-7	28
		Download section K OGM	111K9#		
		Preview section K OGM message	121K#	P=4	28
		Preview the prerecorded OGM	121010#		
		Set the volume to level P (P=1-6)	12111P#		
12.	Alarm clock prompt voice	Cancel alarm clock prompt voice	104#	104#	35
		Set section 8 prerecorded OGM	1040#		
		Set section K self-recording OGM	104K#		
13.	Call forward prompt voice	Cancel call forward prompt voice	105#	105#	32
		Set section 7 prerecorded OGM	1050#		
		Set section K self-recording OGM	105K#		
14.	Music on hold	Preview internal music on hold	1400#	1420#	17
		Enable internal music on hold	1420#		
		Enable external music on hold	1421#		
15.	Call transfer parameter	Flash time setting (TT=0-20)	150TT#	TT=10, unit: 0.1s	30
		Not ring back if transfer call no answer	1530#	Ring back	30
		ring back if transfer call no answer	1531#		
16.	Caller ID parameter	Not Add prefix for intercom CID	180#	Not add prefix	36
		Add KK prefix for intercom CID	180KK#		
		Transmitting mode as FSK	1810#	FSK	
		Transmitting mode as DTMF	1811#		
		Receiving mode as auto detect	1814#	Auto detect mode	
		Receiving mode as dual mode	1815#		
17.	Dial out mode	Set all Ext. in direct dial out	200#	Indirect dial out mode	18
		Batch set Ext. in direct dial out mode	200N_1N_2*N_3...N_5#		
		Set all Ext. in indirect dial out	201#		
		Batch set Ext. in indirect dial out mode	201N_1N_2*N_3...N_5#		
18.	Ext. access C.O line authority	Allow all Ext access all C.O line in day mode	300#	All extension can access all C.O line	22
		Prohibit all Ext. access all C.O line in day mode	301#		
		Prohibit Ext. N access all C.O line in day mode	300N#		

		Batch allow all Ext access C.O line in day mode	30000M_1M_2*$M_{3...}M_n$ #		
		Batch allow Ext. N access C.O line in day mode	300NM_1M_2*$M_{3...}M_n$ #		
		Prohibit all ext. accessing C.O line M in day mode	301M#		
		Batch allow ext. accessing all C.O line in day mode	3010N_1N_2*$N_{3...}N_n$#		
		Batch allow ext. accessing C.O line M in day mode	301MN_1N_2*$N_{3...}N_n$#		
		Set ext. N access C.O line M exclusively in day mode	302MN#		
		Allow all Ext access all C.O line in night mode	310#		
		Prohibit all Ext. access all C.O line in night mode	311#		
		Prohibit Ext. N access all C.O line in night mode	310N#		
		Batch allow all Ext access C.O line in night mode	31000M_1M_2*$M_{3...}M_n$ #		
		Batch allow Ext. N access C.O lineM_1M_2*M_3M_n in night mode	310NM_1M_2*$M_{3...}M_n$ #		
		Prohibit all Ext access C.O line M in night mode	311M#		
		Batch allow ext. accessing all C.O line in night mode	3110N_1N_2*$N_{3...}N_n$#		
		Batch allow Ext. N_1N_2*$N_{3...}N_n$ access CO line M in night mode	311MN_1N_2*$N_{3...}N_n$#		
		Set ext. N access C.O line M exclusively in night mode	312MN#		
19.	Outgoing call Level	Set outgoing call level as L for all Ext in day mode	320L#	All level is 1	24
		Set outgoing call level as L for Ext.N in day mode	320LN#		
		Batch set outgoing call level as L for Ext.in day mode	320LN_1N_2*N_3...N_5#		
		Set outgoing call level as L for all Ext in night mode	321L#		
		Set outgoing call level as L for Ext.N in night mode	321LN#		
		Batch set outgoing call level as L for Ext.in night mode	321LN_1N_2*N_3...N_5#		
20.	Call duration restriction	Restrict call duration for all Ext as TT	33TT#	TT=00, no restriction for all Ext	24
		Restrict call duration for Ext. N as TT	33TTN#		
		Batch restrict call duration for Ext. as	33TTN_1N_2*N_3...N_5#		

		TT			
21.	Call billing	Clear all call billing data	4000#		36
22.	Enable/ Disable C.O line	Enable all CO line	600#	All C.O line is disabled	17
		Enable CO line M	600M#		
		Batch enable C.O line	600M_1M_2*M_3...M_5#		
		Disable all CO line	601#		
		Disable C.O line M	601M#		
		Batch disable C.O line	601M_1M_2*M_3...M_5#		
23.	Delay ring setting	Set delay ring for C.O line incoming call	61X#	X=1	25
24.	C.O line duty mode	Set all C.O line in operator duty mode	620#	auto-attendant duty mode	25
		Set C.O line M in operator duty mode	620M#		
		Batch set C.O line in operator duty mode	620M_1M_2*M_3...M_5#		
		Set all C.O line in DISA mode	621#		
		Set C.O line M in DISA mode	621M#		
		Batch set C.O line in DISA mode	621M_1M_2*M_3...M_5#		
		Set all CO line in CRBT mode	622#		
		Set CO line M in CRBT mode	622M#		
		Batch set C.O line in CRBT mode	622M_1M_2*M_3...M_5#		
25.	Ring mode	Set ring simultaneously mode	630#	ring simultaneously	26
		Set ring round robin mode 1	631#		
		Set ring round robin mode 2	632#		
		Set ring queue mode	633#		
		Round robin switch time	634TT#	TT=10, unit: s	
		not send prompt tone	6350#	Not send prompt	
		send prompt tone	6351#		
		Waiting status if busy	636#	Waiting status	
		Ring operator if busy	63600#		
26.	DISA parameter	DISA work in both day and night mode	6510#	6510#	27
		DISA only work in day mode	6511#		
		DISA only work in night mode	6512#		
		Waiting status when DISA busy	6520#	Waiting status	29
		Transfer to operator when DISA busy	6521#		
		System not send prompt tone when dialed extension is busy	6522#	Send prompt tone	29
		System send prompt tone when dialed extension is busy	6523#		
27.	No dial	No dial process time	654TT#	TT=05 unit: s	29

	process in DISA mode	Release C.O line	6540#	Release C.O line	
		Transfer to operator ring extension	6541#		
28.	Ring Ext busy process in DISA mode	Release C.O line when busy	6560#	forward to operator	29
		forward to operator when dialed extension busy	6561#		
		Waiting time TT	656TT#		
29.	Ring Ext no answer process in DISA mode	Release C.O line if no answer	6570#	forward to operator	29
		forward to operator when dialed extension no answer	6571#		
30.	Ring Ext. setting in operator duty mode	Set operator as ring ext. for all CO line in day mode	7000#	Operator is ring extension in both day and night mode	26
		Batch set Ext. as ring ext. for all CO line in day mode	7000N_1N_2*$N_{3...}N_n$#		
		Set operator as ring ext. for CO line M in day mode	70M#		
		Batch set Ext. as ring ext. for CO line M in day mode	70MN_1N_2*$N_{3...}N_n$#		
		Set operator as ring ext. for all CO line in night mode	7100#		
		Batch set Ext. as ring ext. for all CO line in night mode	7100N_1N_2*$N_{3...}N_n$#		
		Set operator as ring ext. for CO line M in night mode	71M#		
		Batch set Ext. as ring ext. for CO line M in night mode	71MN_1N_2*$N_{3...}N_n$#		
31.	Ext. number	Single set Ext. number	90NABCD #	Default Ext number: 601-648	17
		Batch set the Ext. number of N1*N_n auto add 1 from ABCD	90N_1*N_n ABCD#		
		Batch set all the Ext. number auto add 1 from ABCD	91ABCD#		
		Restore Ext. Number as default	9000#		
32.	Restriction prefix	Clear all prefix	9600#		23
		Clear item X	96X#		
		Clear prefix QQ in group X	96XQQ#		
		Clear prefix QQ in group X	96XQQabc#		

6 OPERATOR OPERATION CODE INDEX

Note: all the operator operation code, no need to enter programming status. If operator is in indirect dial mode, no need to input *, if operator is in direct dial out mode, need to input *

No	Function	Code	Page
1.	Set system year/month/date/week	Off hook+(*) #01YYMMDDW#	16
2.	Set system hour/minute/second	Off hook+(*) #02HHTTSS#	16
3.	Set alarm clock time as HHTT; $ABCD_1$, $ABCD_2$, ABCD is ext. number	Off hook +(*) #03HHTT+$ABCD_1$+$ABCD_2$+…+ $ABCD_N$	35
4.	Clear alarm clock for all ext.	Off hook +(*) #04#	35
5.	Clear alarm clock for certain ext.	Off hook +(*) #04+$ABCD_1$+$ABCD_2$+…+ $ABCD_N$	35
6.	Clear dynamic lock for all ext.	Off hook+(*) #05#	50
7.	Clear dynamic lock for certain ext.	Off hook+(*) #05+$ABCD_1$+$ABCD_2$+…+ $ABCD_N$	50
8.	Switch into day mode	Off hook+(*) #20#	20
9.	Switch into night mode	Off hook+(*) #21#	20
10.	Set auto switch mode	Off hook+(*) #22#	19
11.	Set manual switch mode	Off hook+(*) #23#	19
12.	Clear call forward for all ext.	Off hook+(*) #26# or Off hook+(*) #27#	31
13.	Clear call forward for ext. N （N=01-48）	Off hook+(*) #26+N# or Off hook+(*) #27+N#	31
14.	Set Ext. N call forward directly to another extension （N=01-48）	Off hook+(*) #26+N+ Ext number	32
15.	Set Ext. N call forward directly to another C.O line(N=01-48)	Off hook+(*) #26+N*+ C.O line number + #	32
16.	Set call forward(busy) to another extension(N=01-48)	Off hook+(*) #27+N+ Ext number	32
17.	Set call forward(busy) to another C.O line(N=01-48)	Off hook+(*) #27+N*+ C.O line number + #	32
18.	Set call forward talking time for all extension	Off hook+(*) #28+TT#	32
	Set call forward talking time for certain extension	Off hook+(*) #28TT+$ABCD_1$+$ABCD_2$+…+$ABCD_N$	32

7 EXT OPERATION CODE INDEX

Note: all the Ext. Operation code, no need to enter programming status. If extension is in indirect dial out mode, no need to input *, if extension is in direct dial out mode, need to input *

No	Function		Code	Page
1.	Dial C.O line		Off hook+（9）+ CO line number	24
2.	Outgoing call transfer		Off hook+（9）+C.O line number + flash hook + Ext number	31
3.	Select C.O line to access		Off hook+（*）+#+1+M	24
4.	Dial extension		Off hook+（*）+ Ext number	21
5.	Dial Ext. group		Off hook+（*）+ Ext group number	46
6.	Dial operator		Off hook+（*）0	21
7.	C.O line/Ext booking		Press # when hear busy tone	21
8.	General pickup		Off hook+（*）# 9	30
9.	Pickup certain extension		Off hook+（*）# 3 + Ext. number	30
10.	Use private password（U=01-48）		Off hook+（*）# 5 +UVWWWW+(9)	50
11.	Use memory dialing		Off hook+（*）# 70 + memory number	49
12.	Call transfer		During call + flash hook + Ext. number	30
13.	Three party conference (2 Ext,1 C.O line)		During call + flash hook + * + Ext. number	34
14.	C.O line reservation		During call + flash hook + # #	33
15.	Reconnect C.O line reserved		Off hook + # #	33
16.	Switch between C.O reservation and C.O line pickup		During call + flash hook+ #9 During call + flash hook+#3 + Ext. number	33
17.	Three party conference (2 C.O line and 1 Ext) and C.O line transfer to C.O line		Hold the first C.O line and talk with second C.O line, flash hook + #6 (three party conference), press * then hang up (CO line transfer to C.O line)	34
18.	During call of CO to CO transfer		Press * to preserve the call, press # to cut the call	34
19.	Call monitor	Monitor CO line M	Off hook +（*）#71 + M	34
		Monitor Ext/ Disconnect	Off hook +(*) #72 + Ext number Press # to disconnect	
20.	Group call		Off hook+(*) #88	34
21.	Paging directly		Off hook+(*) #86#	35
22.	Paging from call transfer of C.O line		During call + flash hook + # + 5	35
23.	Clear Ext parameter (call forward, alarm clock etc.)		Off hook+(*) # 80 #	35
24.	DND		Off hook+(*) # 83 #	34

25.	Clear alarm clock		Off hook+(*) # 4 #	35
26.	Set alarm clock		Off hook+(*) # 4 HHTT#	35
27.	Call forward (directly)	To extension	Off hook+(*) # 81 + Ext number	32
		To C.O line	Off hook+(*) # 81* + C.O line number	32
28.	Call forward (busy)	To extension	Off hook+(*) # 82 + Ext. number	33
		To C.O line	Off hook+(*) # 82* + C.O line number	33
29.	Cancel call forward		Off hook+(*) # 81 # or (*) # 82 #	32
30.	Ext dynamic lock	Set password	Off hook+(*) # 5 *$abcd_1$ + $abcd_2$ # ($abcd_1$ is old password, $abcd_2$ is new password)	50
		Lock Ext	Off hook+(*) # 5 * abcd #	50
		Unlock Ext	Off hook+(*) # 5 # abcd #	50
31.	Preview music on hold		Off hook+(*) # 60	17
32.	System version number query		Off hook+(*) # 64, on hook	16
33.	Ext. Number query		Off hook+(*) # 61, on hook	18
34.	Ext. Port number query		Off hook+(*) # 62, on hook	18
35.	Ext. Parameter query		Off hook+(*) # 65, on hook	16
36.	System time query		Off hook+(*) # 63, on hook	16
	System date query		Off hook+(*) # 66, on hook	16
37.	emergency warning		Off hook + (*) #89X， on hook	51

8 APPENDIX

1 Ext Group

- This system can be set maximum 8 Ext group, group number from 01-08, and each group can include any extension member from 601-648.
- The member in Ext group can be duplicated, that means same extension can be set in different group.
- When calls Ext. Group, all members in this group will ring together.
- The first time when set member of Ext group, please use 9400# to clear all member, then make setting

1.1 SINGLE SET EXT GROUP NUMBER

Programming: 92GABCD#

Instruction: change No. G Ext group into new number ABCD, ABCD is new Ext group number, 2-6 digits. G is group number 01-08

Example: we want to change Ext. Group 01 as 21, c, in programming status, input 92 01 21#, after hear a beep, change is ok.

1. 2 BATCH SET SOME EXT GROUP NUMBER

Programming: 92G_1*G_2ABCD#

Instruction: Batch set the number in No.G_1*G_2 Ext group (from ABCD auto add 1 digit), this is repetitive code

Example: we want to change the group number in No.3-8 Ext group as 303-308, in programming status, input 92 03*08 303#, after hear a beep, change is ok.

1.3 BATCH SET ALL EXT GROUP NUMBER

Programming: 93ABCD#

Instruction: Batch set all Ext group number (from ABCD auto add 1 digit)

Example: We want to change the group number as 8301-8308, in programming status, input 93 8301#, after hear a beep, change is ok.

1.4 RESTORE EXT GROUP AS DEFAULT

Programming: 9200#

Instruction: in programming status, input 9200#, all Ext group number will be restored to 801-808

1.5 SET MEMBER IN EXT GROUP

Programming: 94GN_1N_2*N_3…N_5#

Instruction: Set the members in No. G Ext group. G is Ext group 01-08, N_1N_2*N_3…N_5 are Ext port number 01-32, this is one-time code.

Example: We want to set the members in No.1 Ext group as 601,602,609-618, total 12 Ext, in programming status, input 94 01 01 02 09*18#, after hear a beep, setting is ok.

1. 6 CLEAR MEMBER IN EXT GROUP

Programming: 94G# Clear the members in No. G Ext group

9400# Clear all Ext group members

Note: for initial setting, we suggest use 9400# to clear all members.

1.7 EXT. GROUP CALL MODE

Programming: 0630# Set Ext group in conference mode

Instruction: In this mode, when call Ext. group, all member in Ext group will ring simultaneously, and each Ext can talk with the call Ext if off hook, the other Ext keep ringing

Programming: 0631# Set Ext group in common call mode, this is default setting

Instruction: In this mode, when call Ext group, all members Ext will ring simultaneously, and when any Ext off hook to talk with call Ext, the other extension stop ringing.

1.8 DIAL EXT. GROUP

Ext. operation: Off hook + (*) + Ext group number

Instruction: this operation is only valid when Ext group number & members are set

2 Fast dial Ext No. In DISA Mode

Speed dialing, also called fixed dialing number (FDN), is one mode for dialing extension (or Ext group). For example, in auto-attendant mode, caller just dial one digit to ring certain extension.

2.1 ENABLE/DISABLE FAST DIAL FUNCTION

Programming: 0501#

Instruction: Enable fast dialing function, available for both C.O line incoming call and intercom call. For example, for intercom call, extension can just dial one digit(0-9), system will ring the corresponding extension

Programming: 0502#

Instruction: Enable fast dialing function, only for **auto-attendant mode**, caller can just dial one digit (0-9), system will ring the corresponding extension. For example, dial 1 to ring Ext.601, dial 2 to ring Ext.602...dial 9 to ring Ext.609.

Programming: 0500# Disable speed dialing function, this is default setting

2. 2 SET INITIAL DIGIT FOR EXT.

Programming: 051# After enable fast dialing function, can not dial extension number

051X# Set X as initial digit of Ext number

Instruction: X are the digit among of 0-9, in order to avoid conflict between fast dialing number and initial digit of Ext number, we can use this setting, when we make fast dialing, system will auto detect whether it is initial digit of Ext number or not, if yes, will process as extension number dialing, if not, will process as fast dialing. On default setting, X=6

3 Internal Hotline Function

3. 1 ENABLE/DISABLE HOTLINE

Programming: 220# Enable hotline function for all extension

220N_1N_2*N_3…N_5# Batch enable hotline function for extension

221# Disable hotline function for all extension

221N_1N_2*N_3…N_5# Batch disable hotline function for extension

3.2 SET HOTLINE WAITING TIME

Programming: 085TT#

Instruction: TT=00-99, Unit =0.1s, hotline waiting time (allow dial number)

Default setting: TT=10.That means 1s. Disable hotline function for all extension.

Example: Set Ext.619-632 internal hotline function. In programming status, input 08500# 220 19*32#. By this setting, when you pick up any extension among of 619-632, will auto ring operator directly.

4 LCR (Least cost routing)

Manual LCR: when the extension dials out, the system will select the least-cost routing C.O line according to the outgoing code.

Auto LCR: When the user dial out, the system will select the least-cost routing according to the routing numbers which is set in the system. (no need to dial any special access code, system will select routing C.O line intelligently).

4.1 C.O line group setting

The C.O(trunk) can be divided into five group (two class). One common C.O line group and four special C.O line group

Programming: 51Y# Set all C.O line in No.Y group

51YM$_1$M$_2$*M$_3$…M$_5$# Batch set C.O line M$_1$M$_2$*M$_3$…M$_5$ in No.Y group

Instruction: Y=0-5, when Y=0, means common C.O line group. When Y=1-4, means special C.O line group. M$_1$M$_2$*M$_3$…M$_5$=1-8, is CO line port number

Default setting: all C.O line is common C.O line

4.2 LCR parameter setting

Programming: 5010# Disable LCR function (default setting)

5011# Enable auto LCR function

5012# Enable manual LCR function

5013# Enable manual LCR function and auto LCR

5020# Allow use common C.O line when special C.O line busy (default setting)

5021# Don't allow use common C.O line when special C.O line busy

5030# Allow use special C.O line when common C.O line busy

5031# Don't allow use special C.O line when common C.O line busy

4.3 Special C.O line outgoing code setting (only for manual LCR)

Programming: 003X# (default X=7)

Instruction: X=0-9

4.4 Special prefix setting (compulsory for auto LCR)

Special prefix is also called special number. System define the prefix of outgoing call as 5 different numbers. System will auto select certain trunk to make outgoing call according to the prefix in the process of auto LCR

Programming: 5200# Clear all special prefix

Instruction: please use this code to clear all parameter before set the prefix

Programming: 52Y# Clear item Y special prefix

Instruction: Y=1-4, please use this code if single set certain prefix.

Programming: 52YPP# Clear group PP, item Y special prefix

52YPP abcd# Set special prefix abcd in group PP, item Y

Instruction: PP is the prefix group number, 01-16, each item has 16 groups, abcd is a special prefix, no limit digits, 1 to 8 digits, less than 8 digits end with #, each digit can be set to 0-9, *, # can not be set.

5 Abbreviated dialing

Abbreviated dialing, also called memory dialing, it is a feature that system stores some frequent dialing numbers, and just dial a short serial number in 1-2 digit if need.

5.1 Memory number setting

Programming: 43Kabcdef + off hook

Instruction: Set No. K group memory number. It can be with *, #

Programming: 43Kabcdef#

Instruction: Set No. K group memory number. It can not be with *, #

Note: K is group number, 01-96, abcdef is C.O line number, 1-30 digits, no limit, end with # or on hook

Programming:	43#	Clear all memory number
	43K#	Clear No. K group memory number

5.2 Enable/disable memory dialing

Programming:	250#	Disable memory dialing for all Ext
	250 $N_1N_2*N_3...N_5$#	Batch disable memory dialing for Ext.
	251#	Enable memory dialing for all Ext
	251 $N_1N_2*N_3...N_5$#	Batch enable memory dialing for Ext.

Default: Enable memory dialing for all extension

5.3 How to use memory dialing

Ext operation: Off hook + (*) #70+ K

Instruction: K is the group number, 01-96.

Example: No. 8 group memory number is 13302818996. On Ext. 601, on hook, input 43 08 13302818996# + 251#. After setting, pick up Ext.601, dial *#70 08, system will call the number 13302818996 automatically.

6 Private Password

6.1 Private password setting

Programming:	45#	Clear all private password
	45U#	Clear No. U private password
	45ULWWW#	Clear No. U private password and set level L

Instruction: U= two-digit account, 01-96. L= outgoing call level ,0-7. WWWW=four-digit password

6.2 How to use private password

The password is assigned by programming extension to other extension user. The password controls the C.O line access and outgoing call level.

Ext. operation: off hook +(*) #5 + U + WWWW +9+ C.O line number.

Example: The outgoing call level for Ext. 6006 is L=9, that means can only make intercom call. Another extension user has the outgoing call level L=1, and the account is 05, password is 9530. Then this user 05 can pick up Ext. 6006, input *# 5+ 05 9530 + 9 + C.O line number

7 Ext. Dynamic Lock

If extension user temporarily leave the seat and does not want others to use the phone, you can use the dynamic lock feature to lock the extension. After setting, the extension cannot be allowed to make outgoing call. If the user forgets the password, operator can help him to unlock this extension.

7.1 Ext. lock /unlock status

Programming:	290#	Lock all extension
	290N_1N_2*N_3…N_5#	Batch lock the extension
	291#	Unlock all extensions
	291N_1N_2*N_3…N_5#	Batch unlock the extensions

7.2 Clear dynamic lock by operator

Operator operation: off hook + (*) #05#

Instruction: clear lock for all extension

Operator operation: off hook + (*) #05+ $ABCD_1$+ $ABCD_2$+… + $ABCD_n$

Instruction: clear some extension dynamic lock

7.3 Change dynamic lock by extension

Ext operation: off hook + (*) #5 * $abcd_1$ + $abcd_2$ #

Instruction: $abcd_1$= old password $abcd_1$ = new password

7.4 How to use dynamic lock

Ext operation: off hook +(*) #5 * abcd # (lock)

Ext operation: off hook +(*) #5# abcd # (unlock)

Instruction: abcd is the extension dynamic lock. If forget, it can be cleared by operator

8 Busy tone detect

In auto attendant duty mode, when CO line hang up before extension answer the call, but extension will continue with ring for some time. If system is with busy tone detect, will stop ring immediately and release C.O line.

Programming: 422# Enable busy tone detect for all C.O line

423# Disable busy tone detect for all C.O line

9 Emergency warning

Programming: 106# Disable emergency warning function

106K# Enable emergency warning function and use section K OGM as warning message

Instruction: K=1-7, means certain section OGM in self-recording area.

Operator operation: Off hook + (*) #89X

Instruction: X=0-8, X=0, means ring all extension . X=1-8 ,corresponding to Ext. Group 01-08

Example: We want to use section 2 OGM in self-recording area as emergency warning message, in programming status, input 1062#, then 1102#, start recording the warning message after hear a beep tone, like “This is an emergency alert, all personnel shall be evacuated safely”, then add the extension which need to be playing emergency warning message in Ext. Group 1. After setting is ok, pick up operator, dial #891, all the members in Ext group 1 will ring simultaneously, they will hear the emergency message if pick up the call. Once operator hang up, will end the emergency warning.