

DataLabsUSA PBX-424



Users Manual

*-----Telephone
----Switching ---
--System-----*

*A Product of Data Labs
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DataLabsUSA PBX-DL-424 Warranty and Addendum to Installation and Operation Manual:

WARNING: This unit plugs directly into an AC power outlet. The proper voltage is 110-120VAC 60 hz. It must not be connected to 220V as stated in the manual. Connecting the unit to the wrong power source will result in immediate damage to the PBX and possible fire.

HOLD FEATURE:

When operating an extension phone on the PBX, the flash button may be pressed or the switch-hook may be momentarily pressed to put an incoming call from any CO line on hold. Once the flash is pressed, the caller placed on hold will hear the internal Music On Hold melody. The caller may hear any external source plugged into the mini 3.5 mm. jack on the side of the PBX. DataLabsUSA DP-2000 Music On Hold Player is recommended to use as a Music / Announcing On hold external source. Once placed on hold the call may be retrieved (taken off of hold) by again pressing the flash key on the extension phone. A CO caller (call coming in from any telephone line connected to the PBX) can be placed on hold indefinitely until the flash key is pressed. There is no time limit. It should be noted that once a call is placed on hold, you must not hang up or the call will be lost. Simply place the receiver of the extension phone aside. **DO NOT PLACE IT ON ITS CRADLE**, or the call will be lost. If you desire to hang up the phone after flash is pressed, you must have a hold button built in to the phone. If you have a Hold button connected to the phone, you may press flash, then press the hold button, and then hang up the phone. To retrieve the call, simply pick up the phone, select the correct line if on a multi-line phone, and then press the flash key again to take the call off hold and be talking again to the CO caller.

Warranty:

DataLabs warrants the PBX-DL-424 from manufacturer defects for 1 year from the date of purchase. Data Labs will repair or replace the unit at Data Labs option. The user must ship back the defective unit with a RA (return authorization) number issued by contacting Data Labs before shipping. The customer must pay shipping to and from Data Labs. This warranty does not include damage to the PBX from power surges, misuse, breakage, water or other liquid touching or entering the unit. This warranty does not cover damage due to lightning or Acts of God. For warranty service or Customer support Call 215-698-2933 or email

support@webbuy.biz

EX 2

Disclaimer:

Data Labs can not be responsible for the operation of the PBX or any malfunction causing any direct or indirect loss of business, Revenue, or any other losses that may be incurred by the user. There are no implications and Data Labs will assume no liability as to fitness or merchantability of the PBX-DL-424 caused by any statements written, or in any form whatsoever or by any typographical errors or omissions in any document(s) associated with the PBX.

Precaution

- Keep the unit from heating appliances and electrical noise generating devices such as fluorescent lamps, motors and televisions. These noise sources may interfere with the performance of the Telephone Switching System.
- This unit should be kept free of dust, moisture, high temperature and vibration, and should not be exposed to direct sunlight.
- Never attempt to insert wires, pins, etc. into the vents or other holes of this unit .
- If there is any trouble, disconnect the unit from the telephone line. Plug the telephone directly to the telephone line. If the telephone operates properly, do not reconnect the unit to the line until it has been repaired. If the telephone does not operate properly, the trouble is from the telephone set and not from the unit.
- Do not use benzine, thinner, or the like, or any abrasive powder to clean the cabinet. Wipe it with a soft cloth.

WARNING

WHEN A FAILURE OCCURS WHICH RESULTS IN THE INTERNAL PARTS BECOMING ACCESSIBLE, DISCONNECT THE POWER SUPPLY CORD IMMEDIATELY AND RETURN THIS UNIT TO YOUR DEALER.

DISCONNECT THE TELECOM CONNECTION BEFORE DISCONNECTING THE POWER CONNECTION PRIOR TO RELOCATING THE EQUIPMENT, AND RECONNECT THE POWER FIRST.

THE POWER SOCKET WALL OUTLET SHOULD BE LOCATED NEAR THIS EQUIPMENT AND BE EASILY ACCESSIBLE.

TO PREVENT FIRE OR SHOCK HAZARD. DO NOT EXPOSE THIS PRODUCT TO RAIN OR ANY TYPE OF MOISTURE.

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◆ Feature Instruction

- * Programming through password
- * Two methods of access CO line
- * Specific number screening
- * Reserve (book) CO line
- * Outgoing Call Restriction
- * Call Duration Control
- * Caller ID
- * Auto Attendant / Operator Assistant
- * Do Not Disturb
- * Assign the ringing extension
- * Call Transfer
- * 3-Party Conference
- * Call Pick-up
- * Secretary Call
- * Call Parking
- * Incoming Call Hasten
- * Call Forwarding
- * Flexible Coding
- * CO Line Group Assignment
- * Override or monitor
- * Builtin DISA with OGM recordable
- * PNP CO Line Connection
- * Conversation without block
- * System memory while power failure

◆ Method Of Access CO line

Each extension can be set to "direct dial-out mode" (Auto access CO line) "indirect dial-out mode" (Access CO line by dialing 9). Each extension can be freely switched between CO line state and intercom state.

◆ Specific Number Screening (select designed CO line)

The authorized extension can select any CO line to operate, and realize specific number screening through this function. Namely any specific number has relation to PSTN could be operated smoothly without cutting off power.

◆ Reserve (book) CO Line

When an extension needs to dial an urgent call in the case of busy system (all CO lines are busy), this function will reserve a CO line and will prompt user.

◆ Outgoing Call Management

It is to restrict outgoing call. This unit has three classes assignment for all extensions, plus setting and release restriction group with leading digits, and CO line group assignment as well; It's convenient for you to manage you telephone using.

◆ Call Duration Control

Since many extensions use 1-4 CO lines in common, there is need controlling the outgoing call duration so that it can improve work efficiency.

◆ **Caller ID**

This unit can display caller ID on extension needed and even allow user to set enable and disable caller ID for a designed CO line or all CO lines. Caller ID is also active when system is in the state of auto attendant.

◆ **Auto Attendant / Operator Assistant**

This unit has built-in DISA with recorderable OGM. When there is incoming call in the mode of Auto Attendant, system will play greeting (OGM recorded) and tell CO line party how to put through a needed extension or other communication way. While in the mode of Operator Assistant, user can set several extensions ring at the same time or ring in sequence.

◆ **Do Not Disturb**

When there is incoming call in the mode of Operator Assistant, system can set many extensions to the state of "Do Not Disturb" (no ring), but no-ring extension will ring when there is intercom call or transferred call. So it can avoid disturbance of unimportant call as well as do not influence the receiving important incoming call.

◆ **Assign The Ringing Extension**

Each CO line can assign up to 8 extensions as the ringing extension.

◆ **Call Transfer**

No restriction for transfer times; even transfer to an extension by wrong or no answer from the transferred extension, the transferor extension can keep on conversation with CO line party or re-transfer.

◆ **3-Party Conference**

It realizes the conversation between two extensions and one CO line party at the same time. And this function is active for either incoming call or outgoing call.

◆ **Call Pick-up**

The no-ring extension can also receive the incoming call without going to the location of the ringing extension, which make receiving a call more convenient.

◆ **Secretary Call**

Secretary (one extension) puts through the CO line call first, and transfer this call to the other extension; The transferred extension can talk to CO line.



◆ **OGM Record And Reviewing**

User can record the message in this system according to the actual requirement and check (review) the record quality. No restriction for the recording times.

◆ **PNP CO Line Connection**

This unit adopts PNP CO line connection theory; CO line can connect to any CO line port. No need setting, which make installation very convenient.

◆ **Conversation Without Block**

This unit has 7 loops conversation. It will not cause line block.

◆ **Suitable For Any General Communication Equipment**

Each extension port can be freely arranged to standard telephone, cordless telephone, caller ID telephone, computer modern, fax or answering machine, video telephone etc.

◆ **Different Ringing Tone**

Incoming call from CO line	ring once and continue once
Incoming call from intercom	ring twice shortly

◆ **System Memory And CO Connection While Power Failure**

During power failure, CO 1 automatically connects to extension 801, CO 2 automatically connects to extension 802, CO 3 automatically connects to extension 803, and CO 4 automatically connects to extension 804. All the function setting would remain effective after power failure and when the power is on, all the function will revert to as before.

◆ **Perfect Signal System**

This unit has dialing tone, ringback tone, busy tone, hastening tone, error tone and onhold music etc.

◆ **Remote Programming And Maintenance:**

To better serve our customers, our company can provide consulting, testing and maintenance through remote programming. The customer sends any encountered problems to our company first, then we will provide you the best, fast and most direct service.



■ Before Installation

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

■ Safety Installation Instructions

When installing telephone wiring, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury to persons.

Including the following:

- 1) Never install telephone wiring during a lightning storm.
- 2) Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
- 3) Never touch un-insulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
- 4) Use caution when installing or modifying telephone lines.

■ Installation precautions

This set is exclusively made for wall mounting or set on desk; avoid installing in the following places: (Doing so may result in malfunction, noise, or discoloration.)

- 1) In direct sunlight, hot, cold, or humid places.
- 2) Places in which shocks or vibrations are frequent or strong.
- 3) Dusty places, or places where water or oil may come into contact with the unit.
- 4) Near highfrequency generating devices such as sewing machines or electric welders.
- 5) On or near computers, telexes, or other office equipment, as well as microwave ovens or air conditioners (It is preferable not to install in the same room with the above equipment).
- 6) Install at least 6 feet from radios and televisions.
- 7) Do not obstruct area around the main unit (for reasons of maintenance and inspection be especially careful to allow space for cooling above and at the sides of the main unit).

■ Name of parts


- ① Power indicator
- ② CO line operation indicator
- ③ Extension port
- ④ CO line port
- ⑤ Power supply line
- ⑥ Extension port
- ⑦ CO line port
- ⑧ Power supply line

■ Connecting procedures

Connecting CO lines & extensions to the unit:

- 1) Make sure to avoid short circuit;
- 2) Connecting extensions according to the indicated extension positions and CO lines to the corresponding line ports on the unit.

Zero-load poweron inspection:

- 1) The operation voltage of this product is $AC220V \pm 10\%$. Check out the voltage of local power supply. A UPS backup is highly recommended.
 - 2) Plug in the power supply line and turn on the switch; at this moment, the power indicator light should blink, indicating normal power supply and working state of the machine.
 - 3) Pick up the handset of extension 801. A sharp internal dial tone indicates that the system is working normally. You can start setup operate now.
- 

"Du" indicates the ending of the recording. If your recording is less 20 seconds, please dial "#" to end it. Please use high quality telephone to ensure the high quality of recording. No restriction for the recording times and the new message will cover the old one.

■ OGM Reviewing [10-01]

 **Format:** 0 1 4 0 #


Description: Input 0 1 4 0# in the System Programming State to check whether the recording is right and clear; record it again if you don not satisfy with the recording.

■ Play On-hold Music [10-02]

 **Format:** 0 1 3 0 #

Description: Input 0 1 3 0# in the System Programming State, two "Du" will be heard, the first one means the starting of playing and the second one means the ending of playing.

■ Caller ID State [10-03]


 **Format:**

0 2 1 0 #	Enable Caller ID for all CO lines
0 2 0 0 #	Disable Caller ID for all CO lines
0 2 0 M #	Disable Caller ID for CO line M (M means the CO line number 1-4)

Description: In the state of Caller ID (enable), the ringing extension will have the caller ID; the default setting of this unit is enable caller ID for all CO lines.

■ Change System Programming Password [10-04]

Remarks: On the Programming Extension (extension 801), you can change system programming password and the programming password of the extension 802. On extension 802, you can change the password of itself only. The password must be 4 digits. Do not forget the password.

 **Format:**

0 9 E F G H #	On extension 801, change extension 801 password
0 9 e f g h 0 #	On extension 801, change extension 802 password
0 9 0 0 0 0 0 #	On extension 801, disable programming via extension 802
0 9 c f g h #	On extension 802, change extension 802 password

■ Enable Outgoing Call Restriction Group [12-01]

 **Format:** 4 NN P A B C D #

NN means the extension port number (01-32)


P means the restriction group number (1-8)

ABCD means 4 digits of leading digit that need to restrict dialing

Description: Each extension can restrict 8 groups of restriction leading digits (4 digits), if the leading digits is less than 4 digits, add "#" to end.

For example: Restrict extension 806 to dial the call number starting with 1680, 130, 22, 5 etc. And entitle the restriction group number as: 1 for 1680; 2 for 130; 3 for 22; 4 for 5, then you need input the following setting in the system programming state: 40611680 ("Du"); 4062130# ("Du"); 406322# ("Du"); 40645# ("Du").


■ Disable Outgoing Call Restriction Group [12-02]

 **Format:** 4 NN # Disable all outgoing call restriction for extension NN
4 NN P # Disable call restriction group No.P for extension NN

NN means the extension port number 01-32

P means the restriction group number 1-8

■ Assign Specific Calling Number [12-03]

 **Format:** 5 NN P A B C D #

NN means the extension port number 01-32

P means the specific calling group number 1-4

ABCD means the specific calling number

Description: Each extension can release (open) 4 groups of leading character with 4 digits in the state of outgoing call restriction. If the leading character is less than 4 digits, add "#" to end.

Assign specific calling number is to release some call number with specific leading digits in the state of setting restriction group.

For example: Extension 806 has restricted to dial call number starting with 5. But it is to release the number starting with 52 you just need to input 506152#.



M means the CO line number 1-4,

NN means the extension port number 01-32

Each CO line can assign several designed extensions ring at the same time.

Description: This function is a method to disable Do Not Disturb. The extension assigned by this programming has prior to ring.

For example: Ring extension 802 when there is incoming call from CO line 1 and ring extension 803 for CO line 2, just need to input 81020#, 82030#.

Remarks: It is allowed to freely arrange up to 8 ringing extensions between extension 801 and extension 808.

■ Disable Assign the ringing extension [14-01]



Format:

8 M #

Disable all the ringing extensions for CO line M

8 M NN 1#

Disable the ringing extension NN for CO line M

M means the CO line number 1-4

NN means extension port number 01-32

■ Flexible Coding [14-02]

It is to rename the extension number.



Format:

9 NN ABCD#

Change extension NN to the new number ABCD

9 000 #

Restore to the default extension number (801-832)

NN means the extension port number 01-32

ABCD means the new extension. Its' length is from 1 to 4 digits, if the number length is less than 4 digits, add "#" to end. New number should not begin its leading digit with 9, or it may has conflict with "Access CO line by dialing 9".

Remarks: The length of new extension number is based on the length of extension 801 changed. So when coding, you should rename the extension 801 first, and then rename all the others extension number if the length of the new extension number is not equal to the length of the old number. New numbers could not be duplicated; or it will result in abnormality.

For example: Rename extension port 01-08 to 81-88 (2 digits), you should input 90181#;90282;.....90888#.

For example: Just rename extension 804 to extension 888.

The length of new extension number is the same as the old number (3 digits), so you only need input 904888#.



■ Brief Operation

- * Intercom dialing: Dial extension number directly (In intercom dialing state)
Dial * →dial extension number (In CO line state)
- * Call Transfer: Pat the hook(or flash key),and dial the extension number transferred.
- * Secretary Call: Put through the CO line first ,then pat the hook (or flash key),
and dial the extension number transferred.
- * 3-Party Conference: Pat the hook (or flash key), Dial * →dial extension number
- * Call Parking: Extension 802 pats the hook and dial ##.
- * Call Pick-up: Dial # 9 (In intercom dialing state)
Dial *#9 (In CO line state)
- * Call Forwarding: Dial##→dial extension number forwarded(In intercom dialing state)
Dial *## →dial extension number forwarded (In CO line state)

■ Make CO line call

In the method of auto access CO line:

Lift handset →hear the CO line dialing tone from PSTN →dial the phone number.
(The re-dial key in the telephone is active)

In the method of access CO line by dialing 9:

Lift handset → hear the intercom dialing tone →dial 9 to access CO line →dial
the phone number.

■ Make CO line call by accessing designated CO line (Specific number screening)

In the method of auto access CO line:

Lift handset →dial*#M (M means the CO line number 1-4) to occupy CO line
M →dial phone number.

In the method of access CO line by dialing 9:

Lift handset →dial#M (M means the CO line number 1-4) to occupy CO
line M →dial phone number.

■ Reserve (book) CO line

In the method of auto access CO line:

Lift handset →dial*#0 →hang up. (There is vacant CO line)
Lift handset →dial#0 →hang up. (There is no vacant CO line)

if B does not wish to talk to CO line, B hangs up and A connect back to the on-hold party (CO line) again.

If B does not answer the call within 25 seconds, A will connect back to the CO line. During the consultation, CO line party hears the on-hold music all through and won't hear the consultation between A and B.

Transfer directly (without consultation):

A is talking to outside line party; A dials the extension B and then hangs up directly. B hears the ringing and lifts the handset; B can talk to CO line party. If B does not answer the call after 25 seconds, system will recall A; if A does not answer after 30 seconds, system will automatically cut off.

Remarks: 1. The error tone heard after patting the hook indicates busy system.

A can pat the hook several times till no error tone heard and A can go on with the transfer operation.

2. If error number is been input during the transferring or B is busy, system will give out "Du Du Du" error tone, and A can repeat the call transfer.

3. Between the time A has hang up and B does not lift handset, A can dial *#9 to pick up the call or re-transfer.

■ **3-Party Conference**

The talking extension pats the hook (or flash key) →dial *→dial the called extensions number within 5 seconds→3 party conference begins after the called extension lift handset.

The other extension can continue to talk with CO line if one extension hangs up.

■ **Call Pick-up**

The no-ringing extension can also receive the call when there is incoming call or transferred CO line.

In the method of auto access CO line:

Lift handset →dial*#9

In the method of access CO line by dialing 9:

Lift handset →dial#9

■ **Secretary Call**

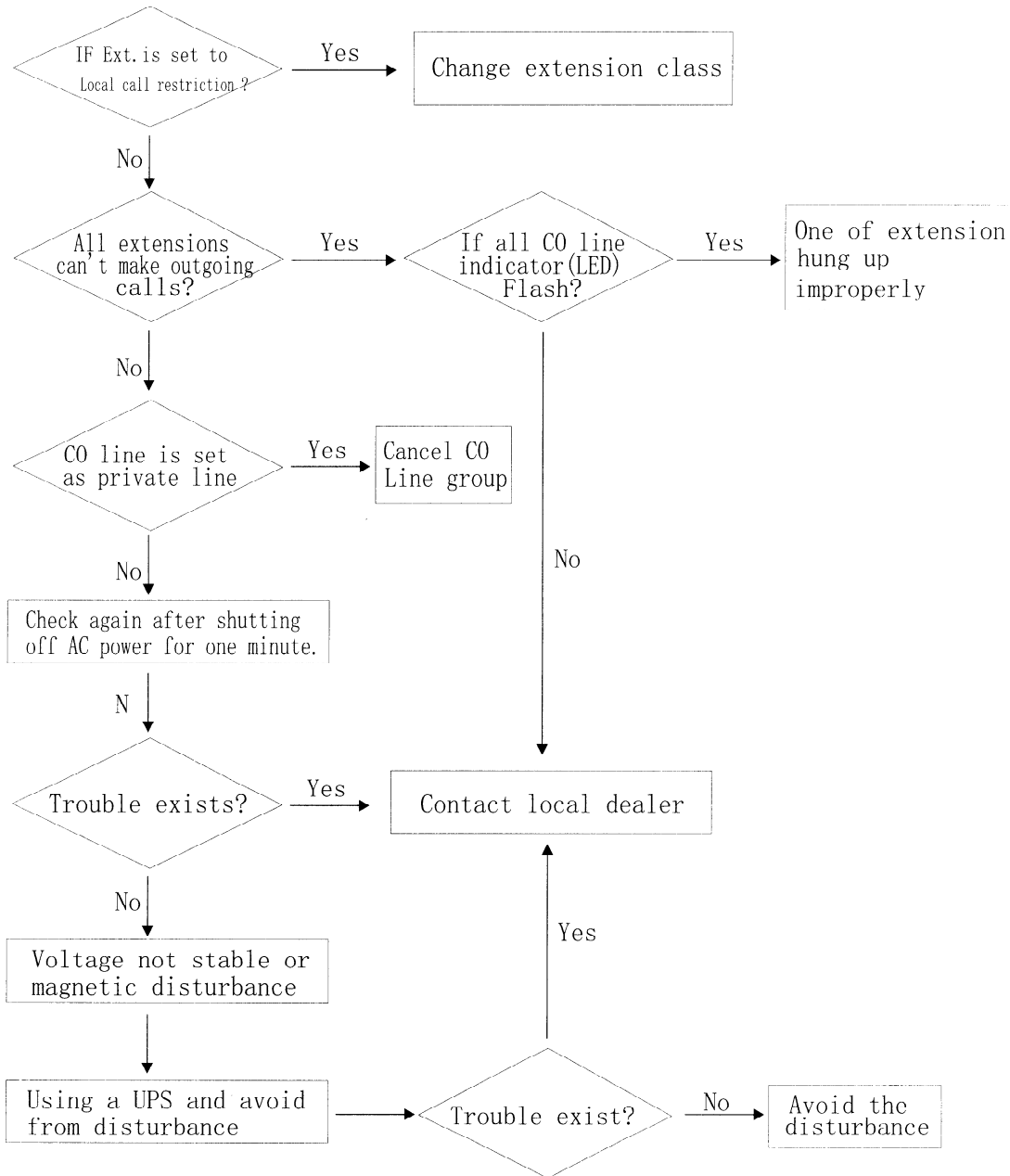
An extension put through the CO line first, then pats the hook (or flash key) and dial the extension number that needs to transfer.

■ **Call Parking (only for extension 802)**

When extension 802 is talking to CO line (include incoming call, outgoing call or call transferred), he pats the hook (or flash key) and dial ## can park the call; CO line will hear on-hold music, the time is up to 2 minutes. During the parking,

■ 6. 1 Outgoing calls can't be made.

- 1) Programmed to be in no CO line mode;
- 2) Local call restriction;
- 3) CO line is set to as private line;
- 4) Extension hung up improperly;
- 5) CPU and internal data is disorder caused by unstable power.



Index of operation instruction

Function	Auto access CO line	Access CO line by dialing 9
Make CO line	Dial phone number	Dial 9+ phone number
Select designed CO line	"*"+"#"+"M"	"#"+"M"
Book CO line	"*"+"#"+"0"	"#"+"0"
Call transfer	Pat the hook (or flash key)+extension number	
3-Party conference	Pat the hook (or flash key)+"*" + extension number	
Secretary call	Pat the hook (or flash key)+extension number	
Call pick-up	"*"+"#"+"9"	"#"+"9"
Intercom	"*" + Extension number	Extension number
Call forwarding	*## + extension number	## + extension number
DISA (check number)	"0" (Ext. 802 will ring)	
Call parking (extension 802)	Pat the hook (or flash key)+"#"+"#"	
Override (extension 801)	"*"+"#"+"7"+"M"	"#"+"7"+"M"

Programming Item		Command code	Page number
Enter in system programming state		(*) ## E F G H	9-01
Auto attendant		0100# (for all) 010M# (for line M)	9-02
Operator assistant		0110#	9-02
OGM Recording		0120#	9-03
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Caller ID	Enable	0210#	10-03
	Disable	0200# (for all) 020M# (for line M)	10-03
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Change Ext. 802 programming password		09efgh0# 09efgh#	10-04
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Do not disturb		2NN00#	11-02
Disable Do Not disturb	Ring at the same time	2NN10#	11-03
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Setting restriction group		4NNMABCD# (A#--ABCD#)	12-01
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Assign special calling number		5NNPABCD# (A#--ABCD#)	12-03
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Call duration Control	Enable	6NNJK#	13-02
	Disable	6NN00#	13-03
CO line Group	Enable	7MNN1#	13-04
	Disable for all	7M#	13-05
	Disable for extension XX	7MNN0#	13-05
Assign the Ring extension	Enable	8MNN0#	13-06
	Disable	8M#	14-01
	Disable for extension XX	8MNN1#	14-01
Flexible coding	Re-name	9NNabcd# (a#--abcd#0)	14-02
	Reset default	9000#	14-02
Reset default setting		0000#	15-01