

CONTENTS OF HI-TECH EPABX

PROGRAMMING

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EPABX can be programmed to meet a large variety of communication needs. These programme settings remain intact even after power failure.

The programming section is divided into 5 major Sections :-

Section One : To Programme CO/P & T Status.

Section Two : To Programme Extension Status.

Section Three : To Programme System Status.

Section Four : To Set Printing option.

Section Five : Remote Facilities

- ✓ To Program your EPABX you need to enter a security/supervisory code. The Code is set to 1234 initially from the works. You may change it to any four digit number by rereferring to system status.
- ✓ You may use either Tone or pulse dialing telephones as the system is 100% tone-pulse switchable.
- ✓ Contact the nearest dealer or our branch office, if you are not sure or satisfied.

Dial 10 + PASSCODE [SUPERVISORY CODE] to come in SUPERVISORY MODE from any Extension, you will get service confirmation tone, Hook flash to get the confirmation tone off. Now can proceed for programming.

After each programming step get service confirmation tone, for further initial setting 101234 HF and follows.

All programming can be done only in supervisory mode

The range of EPABX system is multifeatured and user-friendly. Certain features are non-programmable (fixed) and common to all extensions while some feature are programmable and vary from extension to extension. These feature can be set using any one of the extension at the site, in a short duration through a four digit password only. This eliminate possibility of unauthorised alteration and subsequent misuse of features and facilities. The system's initial password is 1234 and can be changed as described in systems status.

Note : The passowrd should be kept confidential to prevent misuse. One or two responsible persons only shoud be aware of the password and be allowed to reprogram, if the need arises. The initial programming should be done by an authorised personnel at the time of installation. As soon as new programme is entered the earlier programme automatically get earased.

Programmer while programming should take care of the following points:-

1. A four digit password should be keyed in before going for programming. from any extension.
 - ✓ Lift hand set & hear dial tone.
 - ✓ Dial 10 + passcode (4 digit). (initially 1234)
 - ✓ Get service confirmation tone.
2. After correct password is keyed in, a continuous tone is returned called the service confirmation tone. your extension now comes in supervisory mode.
3. Hook flash to get the service confirmation tone off.
4. Key in the required programming digit for different facilities and features.

5. Continuous service confirmation tone is returned if correct programming digits are entered otherwise a NU tone or dial tone is returned and you come out of supervisory mode.
6. repeat the above procedure for further programming from step 3 and thus you can keep on programming without keying in the passcode for supervisory mode again and again, alternatively to finish up with the programming simply disconnect.

SECTION ONE : PROGRAMMING THE CO STATUS

(A) CO LINE GROUPING :-

The Co lines can be divided in two groups if required and different extensions can be allowed to access different groups of CO lines, though one extension can be allowed to access both Co groups. The CO lines of different groups are accessed by 0 and 9 respectively. Direct CO access code also works as per the status of CO group as well as the extension status to access the particular group. BOTH GROUPS CAN HAVE ANY NUMBER OF CO LINES HOWEVER ONE CO LINE CAN BE ONLY IN ONE CO GROUP.

To programme the CO line grouping proceed as under :-

- ✓ 93 + CO + (0 or 1)
- ✓ Get service confirmation tone

Where CO is direct access code for a particular CO line. (71, 72, 73....).

0 for CO group 0

1 for CO group 9

Example : To programme CO 1 in group 0 and CO 2 in group 9,

Dial 93 + 91 + 0 & 93 + 72 + 1

Initial : All CO lines and in group 0.

(B) SETTING OF CO TYPE :

A CO line can be set for DECADIC mode/DTMF mode / One way working mode/Make out of service.

In DECADIC MODE the outward dialing is of PULSE type while the extension may be DECADIC or DTMF.

In DTMS MODE the outward dialing is of TONE type while extension may be DECADIC or DTMF.

In ONE WAY WORKING MODE the outward dialing is barred/restricted on the CO line and only incoming calls are allowed.

In OUT OF SERVICE MODE the CO line which is temporarily out of order can be made out of service.

To programme the type of CO line.

Dial - 94 + CO + (0 or 1 or 2 or 4)

where CO stands for direct access code for a particular CO line (71, 72, 73...)

0 stands for DECADIC dialing on the CO line.

1 stands for DTMF dialing on the CO line.

2 stands for one way working of the CO line.

4 stands for to make CO line out of service.

Note : IF YOU ARE USING LESSER NUMBER OF CO LINES THAN OFFERED BY THE SYSTEM THEN ALSO YOU SHOULD MAKE UNUSED CO LINES FOR ONE WAY WORKING SO THAT THESE LINES CANNOT BE ACCESSED IN ANY WAY

Example : To Programme CO 1 in DECADIC MODE, CO 2 and CO 3 in DTMF MODE

- Dial (94 + 71 + 0), (94 + 72 + 1), (94 + 73 + 1)

Initial setting : All CO lines set for DECADIC MODE.

Note : DO NOT SET THE CO LINE TYPE DECADIC IF THE CORRESPONDING CO LINE IS DTMF.

(C) COMBINATION OF OPTION FOR AN INCOMING CO LINE :

You can set different modes of incoming CO calls for each CO line independently, Moreover each CO line can have one mode in daytime and same/other mode in night. Incoming calls on a CO line can land on one of the following options :

Option 1 :-

The incoming CO call can ring in round robin sequence at upto four preprogrammed extensions. Each CO line has its own group upto four extensions named as self service group. If first programmed extension automatically.

Option 2 :-

The incoming call ring simultaneously (all preprogrammed extensions ring together) on Preprogrammed extensions maximum 4. All CO lines have a common set of extension called common service group of the CO line and can have 1 to 4 extension.

Option 3 :-

The incoming call ring at one programmed extensions only and each CO line has its own one extension which receive ring under this option. Call coming in this option will ring at only one extension and will not be diverted to any other extension.

Option 4 :-

The incoming call ring simultaneously at self service group of the CO line comprising of 1 to 4 terminating extensions.

Option 5 :-

The incoming call ring in this mode land on a central ringer (speaker provided in the exchange) of the exchange.

Option 6 :-

The incoming call in this option comes through DID MODE and in case of DID failure it simultaneously rings on self service group of the CO line for maximum 20Sec.

Option 7 :-

The incoming call in this option comes through DID mode and in case of DID failure it simultaneously rings on common service group of the CO line for maximum 20 Sec.

Option 8 :-

The incoming call in this option comes through DID mode and in case of DID failure it rings in round robin mode on self service group of the CO line for maximum 40 Sec.

Each CO line can have different options in day and night mode. Thus you can set each CO line in the

OPTION 1/OPTION 2/OPTION 3/OPTION 4/OPTION 5/OPTION 6/OPTION 7/OPTION 8 in day mode

OPTION 1/OPTION 2/OPTION 3/OPTION 4/OPTION 5/OPTION 6/OPTION 7/OPTION 8 in night mode

This way you can have upto 64 combinations of incoming CO ring options in conjunction with day/night mode.

To programme the combination of options for a CO line proceed as under

Dial - (98 + CO + X + Y)

- get service confirmation tone.

where CO is direct access code for a particular CO line (71, 72, 73...)

X = 1/2/3/4/5/6/7/8 (applicable in day mode)

Y = 1/2/3/4/5/6/7/8 (applicable in night mode)

1 = Option 1 (Round robin ring on self service group)

2 = Option 2 (Simultaneous ring on common service group)

3 = Option 3 (Ring at one termination only of a CO line)

4 = Option 4 (Simultaneous ring on self service group)

5 = Option 5 (Ring at central ringer of the exchange)

6 = Option 6 (D.I.D. MODE and in case of D.I.D. failure simultaneous ring at self service group)

7 = Option 7 (D.I.D. MODE and in case of D.I.D. failure Simultaneous ring at common service group)

8 = Option 8 (D.I.D. MODE and in case of D.I.D. failure round robin ring at self service group)

Example : To programme ring at central ringer in day mode and at one termination in night mode for CO line 1

Dial - (98 + 71 + 5 + 3)

Initial setting : All CO line in option 1 and option 2 for day and night mode respectively.

(D) TO PROGRAMME SELF SERVICE GROUP OF A CO LINE :

Maximum 4 terminating extensions can be programmed for self service group of a CO line (for option 1, option 4 option 6 and option 8).

To programme proceed as under

Dial - (95 + CO + EXTN - 1 + EXTN - 2 + up to max. 4 extensions)

- Get service confirmation tone

- Hook flash (only when you press less than 4 extensions or you don't get confirmation tone).

Where CO is direct access code for a particular CO line (71, 72, 73....)

EXTN - 1 are the extension numbers

Note : When ever you programme less than 4 extensions in the above programming then you have to hook flash to get the service confirmation tone.

Example: to programme 23, 24, 25 as the self service group for CO 1

Dial - (95 + 71 + 23 + 24 + HF)

Initial Setting : Extension 20, 21, 22, 23, for all CO line.

(E) TO PROGRAMME COMMON SERVICE GROUP OF THE CO LINE :

Maximum 4 terminating extensions can be programmed for common service group of all the CO line (for option 2 and option 7)

To programme proceed as under

Dial - (97 + EXTN - 1 + EXTN - 2 up to max. 4 extensions)

- Get service confirmation tone
- Hook flash (only when you press less than 4 extensions or you don't get confirmation tone).

where EXTN - 1.... are the extension numbers

Note : When ever you programme less than 4 extensions in the above programming then you have to hook flash to get the service confirmation tone.

Example : To programme 23, 24, 25 as the common service group for all CO lines.

Dial - (97 + 23 + 24 + 25 + HF)

Initial Setting : Extension 20, 21, 22, 23 for all CO lines.

(F) TO PROGRAMME ONE TERMINATION FOR A CO LINE :

One terminating extension can be programmed for each CO line to ring under option 3 (for option 3)

To programme this proceed as under

Dial - (96 + CO +EXTN)

Get service confirmation tone

Where CO is direct access code for as particular CO line
(71, 72, 73....) EXTN. is the extension number

Example: To programme 23 as one termination for CO 1

Dial - (96 + 71 + 23)

Initial Setting : Extension 20 for all CO line.

SECTION TWO : TO PROGRAMME EXTENSION STATUS

(A) TOLL CALL CONTROL (LOCAL/STD/ISD CALL RESTRICTION):

The status of an extension for direct outward dialing can be programmed in following options

Option 1-

All off (intercom status only)

Option 2-

Local on with level 1 off (local no. Are Allowed but nos. starting with 1 are not allowed. e.g. nos like 1999, 180, 181 etc. are not allowed).

Option 3-

Local on with level 1 on (local nos. and nos. starting with 1 are allowed)

Option 4-

STD on (all STD and local nos. are allowed but ISD is not allowed)

Option 5 –

All on (ISD, STD & Local calls are allowed)

Each extension can have different OPTIONS in day and night modes. Thus you can set each extension in the

OPTION 1/OPTION 2//OPTION 3//OPTION 4//OPTION 5

In day mode

OPTION 1/OPTION 2//OPTION 3//OPTION 4//OPTION 5

In night mode

This way you can have upto 25 combinations of extension status option in conjunction with day/night mode.

To programme class of service for extension

An extension's class of service for direct outward dialing can be programmed in five options in day and night mode.

To programme for extension EXTN proceed as under

Dial - (80 + EXTN + X + Y)
- Get service confirmation tone

where EXTN is the extension number

X = 1/2/3/4/5 (applicable in day mode)

Y = 1/2/3/4/5 (applicable in night mode)

1 = Option 1 (all off - intercom status only)

2 = Option 2 (local on - level 1 off e.g. nos. like 199, 180 etc. are not allowed)

3 = Option 3 (local on - level allowed)

4 = Option 4 (STD on - all STD/local nos. are allowed but ISD not allowed)

5 = Option 4 (STD on - all STD/local/ISD allowed)

Initial setting : Extension 20 in option 5 for Day and night mode and rest extension in option 1 for Day and night mode

Note : If an extension's CO access is opened then its group '0' or group '9' access or both should be allowed also.

Example : To programme Extension number 22 to have STD facility in Day mode and no dialing facility in night mode

Dial - (80 + 22 + 4 + 1)

(B) OPERATOR CONSOLE MODE :

Any number of extension can be set in operator console mode. In this mode the extension can pick the incoming CO lines call at central ringer just by lifting the hand set while extensions which are not in operator console mode can pick the calls at central ringer by dialing 13 only.

To programme proceed as under

Dial - (67 + EXTN + 0 or 1)

Get service confirmation tone

where EXTN is the extension number

0= Operator console mode facility is not allowed

1= Operator console mode facility is allowed

Example : To programme extension 20 in operator console mode

Dial - (67 + 20 + 1)

(C) CALL PRIVACY

The extension having this facility can keep his/her conversation secret and prevent any other extension to barge in during his/her conversation.

To programme proceed as under:

Dial - (67 + EXTN + 2 or 3)

- Get service confirmation tone

Where - EXTN is the extension number

2= Call privacy facility is not allowed

3= Call privacy facility is allowed

Example : To programme extension 20 or call privacy

Dial - (67 + 20 + 3)

(D) BARGE IN WITH WARNING TONE :

The extension having this facility can barge in during a conversation of any other extension but with a warning tone.

TO Programme this facility proceed as under

Dial - (67 + EXTN + 4 or 5)

where EXTN is the extension number

4= Barge in with warning tone facility is not allowed

5= Barge in with warning tone facility is allowed

Example : To programme extension 20 for barge in with warning tone

Dial - (67 + 20 + 5)

(E) AUTO BARGE IN :

Auto barge in is a programmable feature which can be availed by the extension in two types as explained in SYSTEM OPERATION. By using this feature extension holder can even consult to busy extension.

To programme this facility proceed as under

Dial - (67 + EXTN + 6/7/8)

Where EXTN is the extension number

6= Auto barge in facility is not allowed

7= Auto barge in facility is allowed in type 1

8= Auto barge in facility is allowed in type 2

Example: To programme extension 22 for auto barge in type 1

Dial - (67 + 22 + 7)

Note : In case an extension is provided with auto barge in facility one will get different type of engage tone.

Initial setting : Not available to any extension.

(F) TO RESET EXTENSION S SELF PASSCODE :

If extension user forget its self passcode then it can be initialized through master supervisory mode. To initialize proceed as under

Dial - (67 + EXTN + 9)

- Get service confirmation tone

Now the self passcode of the extension EXTN become 777

Example : Initialize the self passcode of extension 23

Dial - (67 + 23 + 9)

(G) TO SET TERMINATIONS FOR EMERGENCY LANDING :

You can have simultaneous ringing even upto four extensions (programmed) in case of emergency just by dialing a two digit code from your extension phone.

To Programme terminations for this facility proceed as under

Dial - (70 + EXTN - 1 + EXTN - 2..... Max 4 extensions)

- Get service confirmation tone
- Hook flash (when you press less than four extensions or when you don't get service confirmation tone)

Example : To programme extension 20, 24 & 25 for emergency reporting

Dial - (70 + 20 + 24 + 25 + HF)

Initial setting : Extension 21, 22, 23, 24 are assigned for emergency reporting

(H) TO SET FLASH TIMING OF AN EXTENSION :

You can set the extensions phone flash timing ranging from 300 MS to 1000 MS in multiples of 100 MS

To programme this facility proceed as under

Dial - (71 + EXTN + F)

- Get service confirmation tone.

where EXTN is extension number

F= 3, 4.....8, 9, 0 (where 0 stands for 10)

The effective flash timing = 100 ms X F

Initial setting : 600 ms for all extensions

(I) EXTENSION DO NOT DISTURB:

This facility can be provided to any extension.

To programme this facility proceed as under

Dial - (85 + EXTN + 0 or 1)

- Get service confirmation tone

where - EXTN is the extension number

0= Extension do not disturb facility is not allowed

1= Extension do not disturb facility is allowed

The extension having this facility can avail the facility by dialing 115.

Initial setting : Available to extension 20 only

Example : To Program extension 23 also for do not disturb facility.

Dial - (85 + 23 + 1)

(J) ACCESS TO EXTENSION DO NOT DISTURB:

If this facility is provided to an extension then it can access (disturb or call) those extensions which are in do not disturb mode.

To programme this proceed as under

Dial - (86 + EXTN + 0 or 1)

- Get service confirmation tone

where EXTN. is the extension number

0 = Access to do not disturb facility is not allowed

1 = Access to do not disturb facility is allowed

Initial setting : Available to extension 20 only

Example : To programme extension 23 also for access to do not disturb facility

Dial - (86 + 23 + 1)

(K) TO PROGRAMME THE EXTENSION FOR EMERGENCY REPORTING :

The extensions having this facility can call 4 preprogrammed extensions simultaneously by dialing a two digit code 15 in case of emergencies. When dialed, all the four preset to the caller and ring on other extensions will stop.

To programme this proceed as under

Dial - (87 + EXTN. + 0 or 1)

- Get service confirmation tone

where - EXTN.is the extension number

0 = Emergency reporting facility is not allowed

1 = Emergency reporting facility is allowed

Initial setting : Available to extension 20 only

Example :To programme extension 23 also for emergency reporting facility

Dial - (87 + 23 + 1)

(L) PAGING:

This extension having this facility can use the paging for the announcement purposes by accessing the code of paging.

To programme this proceed as under

Dial - (87 + EXTN + 2 or 3)

- Get service confirmation tone.

where EXTN is extension number

2 = Paging facility is not allowed

3 = Paging facility is allowed

Example : To program extension 23 also for paging facility.

Dial - (87 + 23 + 9)

(M) TO OPEN THE SELF DYNAMIC LOCK OF AN EXTENSION

If an extension holder forgets to open its self dynamic locking then it can be opened through supervisory mode also

To open the self locking proceed as under

Dial - (87 + EXTN + 9)
- Get service confirmation tone

where EXTN.is the extension number

Example : To open self locking of an extension 23.

Dial - (87 + 23 + 9)

(N) PICK UP GROUP :

The system has the facility to provide different pick up group for incoming calls. The extensions can be put into 10 groups. An extension can be put in one group only though all extension can be put in the same group.

To programme this proceed as under

Dial - (89 + EXTN. + 0 to 9)
- Get service confirmation tone

where - EXTN.is the extension number

0 to 0 = The possible 10 groups

Initial setting : All extension in group 0

Note : A ring on an extension can be answered by another extension, if in the same group, just by dialing, 4. If the pick group is different then it can be answered by dialing (14 + EXTN. No.)

(O) BARGE IN WITHOUT WARNING TONE :

This extension having this facility can intercept in a conversation without giving any warning tone to the conversating parties (silently)

To programme this proceed as under

Dial - (90 + EXTN + 0 or 1)
- Get service confirmation tone.

where EXTN is extension number

0 = Barge in without warning tone facility is not allowed

1 = Barge in without warning tone facility is allowed

Initial setting : Available to none.

Example : To program extension 23 also for barge in without warning tone facility.

Dial - (90 + 23 + 1)

(P) CO/P&T GROUP 0 ACCESS (ON/OFF) :

The extension can be allowed/disallowed to access (use) CO lines of group 0.

To Programme this proceed as under.

Dial - (91 + EXTN + 0 or 1)
- Get service confirmation tone

where EXTN.is the extension number

0 = CO group 0 access facility is not allowed

1 = CO group 0 access facility is allowed

Initial setting : Available to extension 20.

Example : To program extension 23 also for CO group 0 access facility
Dial - (91 + 23 + 1)

Example : To program extension 24 not to access CO group 0
Dial - (91 + 24 + 0)

(Q) CO/p&t GROUP 9 ACCESS (ON/OFF) :

The extension can be allowed/disallowed to access (use) CO lines of group 9.

To programme this proceed as under

Dial - (92 + EXTN + 0 or 1)
- Get service confirmation tone

where EXTN. is the extension number

0 = CO group 9 access facility is not allowed

1 = CO group 9 access facility is allowed

Initial setting : Available to none.

Example : To program extension 23 also for CO group 9 access facility.
Dial - (92 + 23 + 1)

Example : To program extension 24 for not to access CO group 9
Dial - (92 + 24 + 0)

(R) TYPE OF CALL FOR STORING/PRINTING :

An extension can be programmed to store all calls or only STD/ISD calls in the call buffer. To store all calls or STD/ISD calls proceed as under.

Dial - (87 + EXTN. + 6 to 7)
- Get service confirmation tone

where - EXTN = Extension number

6 = Storage of all call

7 = Storage of STD/ISD calls only

Example : To programme Extension 20 for STD/ISD calls and Extension 21 for storage of all calls.

Dial - 87 + 20 + 7
- 87 + 21 + 6

Initial setting : All extension for storgae of all calls.

SECTION THREE : TO PROGRAMME SYSTEM STATUS

(A) TO CHANGE THE PASSWORD/SUPERVISORY CODE :

The password can be changed to restrict (prohibit) unauthorised access to supervisory mode.

To programme the new password proceed as under.

Dial - (99 + ABCD + ABCD)
- Get service confirmation tone

where ABCD is the four digit new password

Once the password is changed, supervisory mode can be accessed next time by this new password only.

Example : The password to be changed to 4321

Dial - (99 + 4321 + 4321)

Initial setting : 1234

(B) TO PROGRAMME THE NITE CODE :

The NITE CODE is a 2 digit code used for setting day/night mode of the system. The nite code can be set from 00 to 99

To programme this proceed as under

Dial - (88 + AB)

- Get service confirmation tone

where AB is a 2 digit code from 00 to 99

Example : To program the NITE code as 50

Initial Setting : 99

(C) TO FEED GLOBAL MEMORY BANK (POOL MEMORY BANK) :

The feature enable to create a pool of external number which can be dialed from any extension whether it has dialing out facility or not. This pool has 2 portions of 50/100 calls each. First can be accessed by any extension irrespective of its class of service, while second part can be accessed by extension with proper class of service.

For EPABX of capacity 206 & 308 (50 memories)

Dial - (6 + (800 to 849) + CO + External number)

where CO = Trunk access code (0 or 9 or 71, 72, 72... etc.)

TN = Tel. No. to be stored. (Max. 16 digit)

- Hook flash (if you don't get service confirmation tone)
- Get service confirmation tone

Where memory bank 1 consists of location form 800 to 824 and memory bank 2 consists of locations from 825 to 849. Repeat the above procedure for storing more the. numbers in other memory locations.

To clear the memory bank 1 :

All 25 memory locations of memory bank 1 (800 to 824) can be cleared by following codes.

Dial - 6931.

- Get service confirmation tone

To clear the memory bank 2 :

All 25 memory locations of memory bank 2 (825 to 849) can be cleared by following codes.

- Dial 6932.
- Get service confirmation tone.

For EPABX of capacity 412, & 616 (100 memories)

Dial - (6 + (800 to 899) + CO_External number)

where CO = Trunk access code (0 or 9 or 71, 72... etc.)

TN = Tel. No. to be stored (Max 16 digits)

- Hook flash (if you don't get confirmation tone)

- Get service confirmation tone

Where memory bank 1 consists of location from 800 to 849 and memory bank 2 consists of locations from 850 to 899. Repeat the above procedure for storing more tel. numbers in other memory locations.

Example : To feed a telephone number 510743 in memory location 825

Dial - (6 + 825 + 0 + 510743 + Hook flash)

To clear the memory bank 1 :

All 50 memory locations of memory bank 1 (800 to 849) can be cleared by following codes.

Dial - 6931,

- Get service confirmation tone.

To clear the memory bank 2

All 50 memory locations of memory bank 2 (850 to 899) can be cleared by following codes.

Dial - 6932,

- Get service confirmation tone.

(D) TO SET TIME :

The system has a REAL TIME CLOCK which can be set at the time of the installation to match the clock of the customer.

To set the time of the system proceed as under

Dial - (60 + HH + MM)

- Get service confirmation tone.

where HH are the hours in the 24 hours format

MM are in minutes

The seconds will set to zero as soon as you get the service confirmation tone.

Example : To set the time at 2:30 PM

Dial - (60 + 14 + 30)

(E) TO SET DATE :

To set the date of the system's clock proceed as under

Dial - (60 + DD + MM + YY + W)

- Get service confirmation tone

where - DD is the Date 01 to 31

MM is the Month 01 to 12

YY is the Year 00 to 99

W is a week day 1 to 7

.e. Sunday : 1 Monday : 2

Tuesday : 3 Wednesday : 4

Thursday : 5 Friday : 6

Saturday : 7

Example : To set the date as 4th Feb., 1995 day Saturday

Dial - (61 + 04 + 02 + 95 + 7)

(F) SETTING TIMING FOR AUTO DAY / NIGHT MODE :

The system can be programmed to switch between day mode and night mode automatically depending upon the actual time which can be set independently for all week days.

Dial - (62 + W + HHm + MMm + HHe + MMe)

- Get service confirmation tone

Where - W : Week days 1 to 7 (Sunday = 1, Saturday = 7)

HHm : Morning time hours in 24 hours format

MMm : Morning time minutes

HHe : Evening time hours in 24 hours format

MMe : Evening time minutes

Thus, "morning time" for coming in day mode and "evening time" for coming in night mode can be set for different week days independently. When the system comes in night mode, the night mode L.E.D. provided on the top of the system starts glowing.

(G) SETTING OPTIONS FOR AUTO OR MANUAL DAY NIGHT MODE :

The class of service for outgoing CO calls of extensions and modes for incoming CO calls, can be switched to different setting through DAY/NIGHT MODE. This DAY/NIGHT MODE of the system can be switched in following modes:

- (1) Auto day/night mode : If you want to have Auto Day Night mode option then set the timings as explained in S.No. (F) above, then set the system as under:

Dial - 642

- Get service confirmation tone

- (2) Manual day/night mode : If you want to set day night mode manually i.e. as and when required the system can be set in day/night mode (for detail refer feature explanation, then set the system as under

Dial - 641

- Get service conformation tone

Now the system can be switch between day/night mode through night code (refer to feature explanation).

(H) CENTRAL ALARM :

You can set upto 4 central alarm in the system which gives beep sound for 20 seconds continuously at the speaker provided in the system. The alarm ring daily at the desired time thus controlling your office/lunch timings effectively.

To set the central alarm proceed as under :

Dial - (65 + (1 to 4) + HH + MM)

- Get service conformation tone

where 1 to 4 stands for 1st, 2nd, 3rd, 4th alarm

HH are hours in 24 hour format

MM are the minutes

Note : You will have to set all the alarm separately

Example : To set the alarms for 9.00 AM, 1.00 PM, 1.30 PM, 5.30 PM

- Dial - (65 + 1 + 09 + 00)
(for first alarm)
- (65 + 2 + 13 + 00)
(for second alarm)
- (65 + 3 + 13 + 30)
(for third alarm)
- (65 + 4 + 17 + 30)

Cancellation of central alarms

To cancel all the central alarms proceed as under

- Dial - 645
- Get service confirmation tone.

(I) TO SET DEFAULT STATUS OF EXTENSION AND CO LINES :

To set in default status of extension and CO lines means to set the extensions and CO line status at factory programmed conditions.

To set default status of extension and CO lines proceed as under

- Dial - 6949
- Get service confirmation tone.

Then switch OFF the system once and switch ON the system again. Default status will be set

(J) TO CLEAR RAM COMPLETELY (To set the complete system in default condition) :

By using this, the complete memory of the RAM is cleared and the system comes in factory programmed condition.

To clear RAM completely proceed as under

- Dial - 6919, get service confirmation tone
- hook flash
- Dial - 6919 get service confirmation tone
- hook flash
- Dial - 6919.

Now the system resets automatically and the complete memory is cleared bringing the system to default condition.

(K) TO RESET THE SUPERVISORY CODE (Master Passcode):

If one forgets the master passcode then it can be initialized by using the following steps. Strictly follow the steps :

- (1) Switch OFF the system.
- (2) Pull out the PAL IC of following codes :
 - 616-2 for system 616
 - -616-2 for system 412
 - -308-2 for system 308
 - -308-2 for system 206

- (3) Now switch ON the system for 10 seconds.
- (4) Now switch OFF the system
- (5) Replace the PAL IC correctly in proper direction.
- (6) Switch ON the system.

Now your master passcode in initial condition i.e. 1234.

(L) VOICE GUIDED DID/DISA

Through voice guided, the problems faced by the customers in operating the conventional DID/DISA are eliminated. In voice guided DID/DISA the customer can feed 14 secs message of any type, proper guidance to his caller. The prime features of

voice guided DID/DISA are :-

- (a) The message is of 14 secs duration and can be fed or changed any simple extension phone but through supervisory mode only.
- (b) It answers incoming calls and direct the caller to the appropriate person.
- (c) Helps to improve existing operator's efficiency by off-loading incoming calls during peak hours.
- (d) A regular caller is not compelled to listen the complete 14 secs message every time since he has the option to instantly by pass the recorded message. The recorded message stops as soon as the caller dials the extension numbers from tone phone.

Note : It is possible to extend the duration from 14 secs, but at the cost of voice distortion in the message.

To Programme or to change the message for voice guided DID/DISA kindly follow the following steps :-

1. Enter into the supervisory mode.
2. Get the service confirmation tone.
3. Hook flash and dial 6985.
4. Get BEEP tone for 2 Seconds.
5. In that silence period record the desired message.
6. Message should be of 14 sec. period
7. Set the trunk line in DID mode in which you want to play the message

NOTE : If the used wants to adjust the silence gap after the message then there are two options.

- (i) for ' 0 Sec (no silence gap)

Steps:-

- Enter into supervisory mode
- Get service confirmation tone
- Hook Flash and dial 643

- (ii) For 6 Sec (gap of 6 Sec)

Steps:-

- Enter into supervisory mode
- Get service confirmation ton
- Hook Flash and dial 644

(M) AUTO FAX HOMING (FAX/TEL SWITCH) :

With this facility, the EPABX listens to distinguish between a Fax call or telephone call and transfers it automatically to the fax or to the right extension in voice DID/DISA mode. You can even have two fax extensions so that if one is busy, the other fax message can be received on other i.e. simultaneously you can receive two fax-message.

The fax termination from works (idefault condition) are

- (a) Extension number 22, 22 for 308 to 616
- (b) Extension number 21, 21 for 206

To change the fax termination proceed as below :

- (1) Enter into supervisory mode
- (2) Hook flash
- (3) Dial - 73 + EXTN. 1 + EXTN. 2

where EXTN. 1, EXTN. 2 is fax termination

(N) HOT OUTWARD DIALING :

This facility can be provided to any extension by following procedure.

To programme this feature.

- Enter into the supervisory mode
- Get service confirmation tone
- Hook flash
- Dial 87 + EXTN. + (4 or 5)
- Get service confirmation tone

where- EXTN. is the extension numbers
5 for allowing this facility
4 for not allowing this facility

SECTION FOUR : TO SET PRINTING OPTIONS

The system has got in built storage & subsequent printing facility through parallel Dot matrix printer. The 1500 out going CO call (ISD, STD & Local) can be stored in buffer memory by virtue of this buffer memory you do not require serial printer.

(A) SETTING OF PRINTING MODE

You can have 2 types of printing options in your system.

(1) **On line printing** : In this option a parallel printer is to be kept connected dedicatedly. To set this mode proceed as under :

Dial - 648.

- Get service confirmation tone

(2) **Off line printing** : In this option outgoing CO lines call detail are stored in the memory buffer (up to 1500 calls) and printing can be taken out as and when required. Thus there is no need to connect a dedicated printer.

To set this mode proceed as under :

Dial - 649.

- Get service confirmation tone

(B) SETTING OF MATURED CALLS/ALL CALLS PRINTING/STORAGE FOR A CO LINE

If you are getting reversal on a trunk at the maturity of outgoing calls then you should set the CO line in matured call print mode as below :

Dial - 66 + CO + 0
- Get service confirmation tone

Where CO is the number 71, 72...

Logging of calls in memory can be accurate only if one gets reversal on the CO lines from central exchange, as in almost all cases it is not possible. Without getting a reversal an EPABX cannot know when precisely the outgoing calls have matured. So, a time out type approach is adopted which gives approximate duration of the calls. The maturity delay time is set for non reversal CO lines and the call is considered matured and stored in the buffer after the lapse of the maturity time.

We Approximately judge the starting time of the call by programming a "Time Gap" after the last digit dialed. This time gap can be adjusted from 8 Secs to 32 Secs. (after the last digit have been dialled) and can be programmed for individual CO lines as und -

Dial - (66 + CO + G)
- Get service confirmation tone

Where CO is the line number 71, 72....
G is to 9.

time gap is 3 times the value of G.

Thus the effective delay will be

$(5 + 3 \times n)$ Secs. where $n = 1$ to 9.

Note : If reversal is not available then some unsuccessful attempted call may also be stored and this generally happen when you get no reply for a call. Even if the maturity time value is very large then calls of smaller duration may not be stored in the buffer. Hence choose the maturity time accordingly to the suitability of your organisation.

(C) PRINTING PROCEDURE FOR STORED CALLS (from master supervisory mode only):

To take printout of call details stored in the memory connect a parallel printer and keep it at On-Line status. Adjust the top of page properly and then choose following printing options.

(1) Take printout from start of the buffer :

This will give printout from 1st call stored in the buffer to last call stored by the time. Printing of calls will be in chronological order.

Dial - 6911.
- Get service confirmation tone.

Now printing of call details will start from top of the buffer.

Note : If there is no call stored then N.U. tone is returned.

(2) Resume printing :

This option gives printout of all calls made after the last printout already taken. For this option proceed as under :

- Dial - 6955.
- Get service confirmation tone.

Now printing of call details will start.

Note : If no calls have been made since last printout then you will get N.U. tone.

(3) Stop printing :

During printing if sometimes you want to abort the printing then you should proceed as under :

- Dial - 6922.
- Get service confirmation tone.

Now the printing is stopped.

Further printing will be stopped while data already fed to the printer's buffer will be printed.

(4) Clear buffer :

You can clear the buffer whenever you want to do so. This may be required if the buffer becomes nearly full or due to any other reason. The LED named BUFFER FULL provided at the top of the system will start blinking after 13 hundred calls are stored in the buffer, the blinking frequency becomes faster after 1400 hundred calls are stored in the buffer, it continuously glows after 15 hundred calls are stored in the buffer. Now you can take the print out as required and clear the buffer.

To clear the buffer proceed as under

- Dial - 6969

SECTION FIVE : REMOTE FACILITIES

(A) REMOTE MAINTENANCE (TELE PROGRAMMING) :

This is the simplest way to attend the service calls if customer is facing some problem in programming then without going there, you can program over phone line also (even from one city to other).

It is possible if you are having tone dialing phone at your end. Procedure for remote programming is as follows :

- (1) Establish a conversation with the customer at any extension of his/her EPABX.
- (2) Ask his/her requirement and system's pass code (if you are not aware of it)
- (3) Now customer will put on hold by hook flash
 - You get music on hold as usual.
- (4) After hook flash he should dial 90.
 - He will listen service confirmation tone.
 - Your music will be off.
- (5) Now command is in your hand. Dial all digits in tone dialing mode only.
- (6) Dial ABCD (Customer's system passcode)
- (7) Get service confirmation tone
- (8) Start programming

- (9) If programming is valid get service confirmation tone for 2-3 secs. and then silence after each programming. For further programming, repeat from step 8.
- (10) If programming is wrong, get engage tone for 3-4 secs. and then silence. For further programming repeat from step 8.
- (11) To Disconnect the line dial “**#” else will be automatically disconnected if no digit is dialed in next 15 seconds.

Note :You are not required to Hook flash after each programming step to put the confirmation tone off since it comes for only 2-3 seconds. In case you hook flash then your line will be disconnected.

(B) REMOTE EXTENSION FACILITY :

In remote programming mode you can directly call any of the extension number by just dialing the extension number. There are there possible cases in case you dial the extension number.

Case 1 :

If you get engage tone then after 3 secs. you come in remote programming mode.

Case 2 :

You get ring back and the extension is no reply then press “#” key Then

You come in remote programming mode and ring to the called extension stops.

Case 3 :

You are conversating with some extension.

As the extension user hangs up, again you come in remote programming mode. Thus you can call any extension any number of times.

The above facility can be used by one who knows the passcode of the system. After talking with an extension, can all any extension without help of call transferring procedure even from othe city. And thus one can act as an extension of an EPABX sitting at any remote station.

Note : **The called extension cannot transfer the call to any other extension.**

SYSTEM PROGRAMMING SUMMARY

Dial 10 + Pass code (Supervisory code) to come in supervisory mode from any extension; you will get an assurance tone, Hook flash to get the assurance tone, for further programming again HOOK FLASH to get assurance tone OFF.

All programming can be done only in supervisory mode.

(1) TO PROGRAMME CO/P&T STATUS :-

-93 + TRK + 0/1 TRUNK GROUPING GROUP 0/GROUP 9

-94 + TRK + 0/1/2/4 CO TYPE

DECADIC/DTMF/ONE WAY WORKING/OUT OF ORDER

-98 + TRK +XY INCOMING P&T CALLS

X = 1/2/3/4/5/6/7/8 and Y = 1/2/3/4/5/6/7/8

- 1. : Ring in Round Robin on self service group.
- 2. : Simultaneous Ring on common service group.
- 3. : Ring on one termination of a trunk.
- 4. : Simultaneous Ring on self service group.

5. : Ring at Central Ringer.
6. : DID (In case of failure simultaneous ring on self service group)
7. : DID (In case of failure simultaneous ring on common service group)
8. : DID (In case of failure Round robin on self service group)

Where X for Day mode and Y for Night mode.

-95 + TRK + EXT.1 + EXT.2 +(upto max 4 extns) (Self service group for a Trunk)

-96 + TRK + EXTN. (ONE Termination of trunk)

-97 + EXTN.1 + EXTN.2 +(upto max. 4 extns) (Common service group for all trunks)

(2) TO PROGRAMME EXTENSION STATUS :-

80 + EXTN. + XY Class of service of extn. for Direct outward dialing.

X = 1/2/3/4/5/ & Y = 1/2/3/4/5

1. : ALL OFF [INTERCOM ONLY]
2. : LOCAL ON [LEVEL 1 OFF]
3. : LOCAL ON [ALL LEVELS ON]
4. : STD ON [ISD OFF]
5. : ALL ON [ISD/STD ON]

Where X for Day Mode and Y for Night Mode.

- 67 + EXTN. + 0/1 : Operator Console Mode (OFF/ON).

- 67 + EXTN. + 2/3 : Call Privacy (OFF/ON).

- 67 + EXTN. + 4/5 : Barge in with Tone (OFF/ON).

- 67 + EXTN. + 6/7/8 : Auto Barge in (OFF/ON TYPE 1/ON TYPE 2)

- 67 + EXTN. + 9 : To reset Extension's Self Pass Code.

- 70 + EXTN.1 + EXTN. 2...(upto max 4 extns.) : Termination for Emergency Reporting.

- 71 + EXTN.3 to 9 & 0 : Flash time setting.

- 73 + EXTN.1 + EXTN.2 : Fax terminations

- 85 + EXTN. + 0/1 : Extension do not disturb (OFF/ON).

- 87 + EXTN. + 0/1 : Emergency Reporting (OFF/ON).

-87 + EXTN. + 2/3 : Paging (OFF/ON)

-87 + + EXTN. + 6/7 : Types of call for storing/printing

-87 + EXTN. + 9 : To open the self looking of extn.

-89 + EXTN. + (0 to 9) : Pick up group of extn. is set from 0 to 9.

-90 + EXTN. + 0/1 : Barge in without tone (OFF/ON)

-91 + EXTN. + 0/1 : CO/P&T Group 0 Access (OFF/ON)

-92 + EXTN. + 0/1 : CO/P&T Group 9 Access (OFF/ON)

(3) TO PROGRAMME SYSTEM STATUS :

-99 + NEW PASSCODE + NEW PASSCODE :To change supervisory code.

(a 4 digit code is loaded)

-88 + ZZ : To programme night code (2 digit code is loaded)

-6 + (800..899) + TRK+EXTERNAL NO.: To store a number in Global memory.

-6931 : To clear Global Memory Bank 1

- 6932 : To clear Global Memory Bank 2
- 60+HH+MM : To set time
- 61+HH+MM+YY+W : To set date
- 65+(1TO4)+HH+MM : To set central alarms
- 645 : To cancel central alarms
- 62+W+HHm+MMm+HHe+MMe : Setting time for auto day/night mode.
- 642 : Auto day/night mode
- 641 : Manual day/night mode.
- 6949 : To set default status of extn. & co lines.
- 6919+HOOK FLASH+6919+HOOK FLASH+6919 : To clear the memory of the system completely (Works programme condition)

(4) TO SET PRINTING OPTIONS :-

- 648 : For on line printing
- 649 : For off line printing
- 6911 : To printing the buffer in chronological order.
- 6922 : To stop printing.
- 6955 : For resume printing
- 6969 : To clear the call Buffer.
- 66+TRK+(0-9) : Setting of matured Calls/All Calls printing or storage for a trunk.
- 6985 : To Record voice message for voice DISA.