Programming Manual
COX- DG 120 / 248

We extend a warm welcome to you on becoming a part of the CCL Epabx family.
Our service support Engineers shall be working hard through our channel partners to ensure your satisfaction with the product and after sales services. We welcome your feedback / query at info@cclepabx.com

Contents

Note:
- CCL Epabx reserves the right to alter equipment specifications and descriptions contained hereinand make no commitment to update or keep current the information herein.
  All information herein is subject to change at any time without notice. No part of this publication shall be deemed to be part of any contract or commitment whatsoever.
- Product specifications and features are subject to changes without prior notice due to our constant endeavor to improve the product.
- All features mentioned in this manual are not part of standard systems. Some features need optional hardware/software up-gradation.
- Not every feature in this manual is likely to have been installed in your system or extension.

Abbreviations Used

Junction Line / PNT	- Telephone Lines provided by the Department of Telecommunication
SLT	- Single Line Telephone (Normal Telephone Set)
KTS	- Key Telephone Set
DSS	- Direct Station Selection (Every KTS has DSS keys
Flash	- Pressing 'FLASH' key on SLT or depressing Hook switch for fraction of a second

COS   -   Class of Service

Programming Method & Passwords
The PBX has altogether 2 type of Passwords:

        PBX Password & Extension Password.
PBX Password
    It is for PBX programming. In default it is `1234'.
    In case of Office version, PBX Programming can be done from KTS as well as
    SLT.
    In case of Hotel version, PBX Programming is possible only from Operator's
    KTS.
PBX Programming from KTS
    Press [prog] key
    KTS will display `PASSWORD'
    Enter the PBX Password.
            (By default PBX Password is `1234').
    Now `MODE' will be displayed.
    Proceed with the desired programming.
    On successfully accepting the command, display will show `PASS' else `ERROR'
    For next command, press [HOLD] key.
    KTS will display `MODE'. Now proceed with the next command without any
    password.
    To come out from the programming mode, press [RLS] key.
PBX Programming from SLT
    The PBX can be programmed from the SLT at first 32 extensions.
    Lift handset and hear the system dial tone
    Press `#' + PBX Password
            (By default PBX Password is `1234')
    Now proceed with the desired programming command
    If the command is accepted, confirmation tone will be heard else engage tone.
    To come out from the PBX Programming, put the handset on the cradle
Bulk Programming
    To do a similar programming for more than one Extension/Junctions, a single
    command can be given.
    However, all the extensions or Junctions numbers should be in series to affect such
    programming.
    Press 'prog' key + 1234 (PBX Password) + 00 CC S E ..
            Where CC = Programming code.
                        S = 3 Digit Starting parameter, which denotes starting Extension,
                            Junction, group, etc.
                        E = 3 Digit Ending parameter, which stands for last Extension.,
                            Junction, group, etc.
    Example: To program extensions 210 to 220 to have class of services 3 and 1 for
                day and night mode respectively, the command would be
            Press 'prog' key + 1234 (PBX Password) + 00 42 210 220 3 1 1
Changing the PBX Password
    PBX Password can be changed through the following command:
        Press 'prog' key + 1234 (PBX Password) + 81 NNNN NNNN 1
                Where, NNNN is the new password entered twice.
        Note: Once password is forgotten there is no way to retrieve it or change it. The

password can be set back to its default setting of 1234 only by disconnecting the power supply to the RAM chip of the system.

Extension Password

Every extension has its own Password to control Extension features like Local/STD/ISD dialing, Barge-In to its own extension allow/Disallow, etc.

The default Extension Password of all Extensions is 777 in Office Version and 77 in Hotel Version..

Extension feature programming is done from its own respective KTS / SLT.

Extension Features Programming through Extension Password

Extension Features are programmed by the Extension user through its own "Extension Password".

From KTS or SLT, dial 55+777 followed by the feature programming.

Extension Password Reset

To reset the Extension Password of an Extension to its default value of 777,

Press 'prog' key + 1234 (PBX Password)

Dial 38 EX 1

Where, Ex = 200, 201...etc.

Note:

DG 240 cannot be compiled in Hotel version because of memory space limitations. For Hotel applications with extensions greater than 120 lines use COX-DG 504.

In default, in Hotel version, the 2nd KTS port is assigned as DSS port. To use this port as KTS, reset the port.

DIP SWITCH DETAILS

DG CPU 120

This card has 4 DIP Switches.

SWITCH No	OFF	ON
1	Office Version	Hotel Version
2	Do not keep in this position	Always keep in this position
3	Do not keep in this position	Always keep in this position
4	**Cannot** do Programming but cards Reloading can be done.	Can do Programming but not Reloading of cards.

Reloading of cards

Switch number 4 is used for altering cards location or adding new cards.

Keep it in ON position and press SW2.

Note**:** Some of the programming will get erased in this process depending on the structural changes done.

DG CPU 248

This card has 4 DIP Switches.

SWITCH No	OFF	ON
1	Office Version	Hotel Version
2	Do not keep in this position	Always keep in this position
3	Do not keep in this position	Always keep in this position
4	**Cannot** do Programming but cards Reloading can be done.	Can do Programming but not Reloading of cards.

Reloading of cards

Keep Switch number 4 in OFF position and press SW1.

Note**:** Some of the programming will get erased in this process depending on the structural changes done.

Office Version

To run the PBX in Office version, keep DIP switches as explained above and Jumper JP3 should be OPEN.

Hotel Version

To run the PBX in Hotel version, keep DIP switches as explained above and short the Jumper JP3.

Auto Attendant with Voice Message

A DID Card is to be installed with the system for availing this feature.
To set extension where call should land in case of Auto Attendant failure, program as below:

Press 'prog' key + 1234 (PBX Password) + 31 EX 7

Where, EX = Extension number where call will land, in case of Auto Attendant failure. In case Flexible numbering this programming is to be done before the flexible numbering. Else delete the flexible number, do this programming & then the flexible numbering.

Voice messages

Press 'prog' key + 1234 (PBX Password) + 11X

OFFICE VERSION

Level 1	113	Operator Message	Maximum message time is 9 seconds
Level 2	114	Night Message.	Maximum message time is 9 seconds
Level 3	115	Successful storing of Numeric Msg.	Maximum message time is 5 seconds
Level 4	116	Welcome Message	Maximum message time is 9 seconds
Level 5	117	Extension busy Message	Maximum message time is 9seconds
Level 6	118	Invalid number dialed Message	Maximum message time is 9 seconds
Level 7	119	No answer from Extension Message	Maximum message time is 9 seconds

NOTE: Please see the Operating Manual for the details of this programming.

HOTEL VERSION

Level 1	113	Wake up Alarm	Maximum message time is 10 sec.
Level 2	114	Guests Intimation MSG	Maximum message time is 10 sec.
Level 3	116	Welcome Message	Maximum message time is 10 sec.

Level 1 is the 'Wake up Alarm message'.
Level 2 is the 'MSG waiting message'. This level is used to inform the guest that there is a message for him. The message of this level will be like "There is a MSG for you Pls. Dial "9".
Level 3 is for the 'Welcome message' that will be played on an incoming Junction.

NOTE:

1. One DID Card provides Auto Attendant Messages on two trunks simultaneously.
   With DG 248 CPU, only 1 DID card can be installed, so maximum two trunk lines can get voice messages simultaneously.
   With DG 120 CPU & 504 CPU, up to 4 DID cards can be installed, so voice message can be played on eight trunks simultaneously.

2. All three levels are recorded on both the VOICE ports. If both the VOICE ports are busy and any third DID call lands then the third caller will hear the ring back tone for 10 sec and after 10 sec if still no VOICE port is free, it land at the Auto Attendant Answer extension (which is operator in default) without hearing the welcome message.

Auto Call Disconnection

An extension can be programmed to auto disconnect Junction calls after a defined time.
Programming:

Press 'prog' key + 1234 (PBX Password) + 35 Ex Y

Where, Ex = Extension Number.

    If, Y= 2 then both incoming and outgoing calls get disconnected.

        = 3 then only outgoing calls are disconnected.

        = 4 then only incoming calls are disconnected.

        = 5 then no calls are disconnected.

Note: If commands '35 Ex 3' and '35 Ex 4' are used simultaneously for an extension, then it becomes equivalent to command '35 Ex 2'.

Default: This feature is not set for any extension.

Auto Call Disconnection Time

The time after which the Junction call should disconnect can be set as described below:

    Press 'prog' key + 1234 (PBX Password) + 16 X

        Where, X = 2 to 8 minutes.

Default: 3 Minutes.

Auto Call Disconnection with a Warning Tone

To give a warning tone before disconnection, program as below:

    Press 'prog' key + 1234 (PBX Password) + 35 EX Y

        Where, Y = 6, for warning tone OFF

            = 7, for warning tone ON

Default: Not available to any extension.

Auto Redial settings

Auto redial settings are to be done Junction wise as explained below:

    Press 'prog' key + 1234 (PBX Password) + 38 TRK Y

        Where, TRK = Junction numbers 700, 701... etc.

            Y = 0 for no Auto Redial facility on the Junction

              = 1 for Auto Redial facility of local calls only

              = 2 for Auto Redial facility of STD calls only

              = 3 for Auto Redial facility of ISD calls only

              = 4 for Auto Redial facility of all types of calls

Default: Auto redial of all types are allowed to all the Junctions.

Back Ground Music on KTS

Hold Music of the PBX can be played as Back Ground music from any KTS. All operations of the KTS will normal. The music will play only when the KTS is idle.

To activate Dial 82 – Lift Handset – Keep Back the Handset

To deactivate Dial 82 – Lift Handset – Keep Back the Handset

Barge-In

Enabling Barge-In Feature in the PBX

To enabled or disabled the Barge-In feature, following is the command:

    Press 'prog' key + 1234 (PBX Password) + 24 2 X

        Where, X= 1 to disable the feature.

            = 0 to enable the feature.

Default: The feature is enabled.

Allowing an Extension to Barge-In

Barge-In facility can be given to extensions through the following programming:

    Press 'prog' key + 1234 (PBX Password) + 35 Ex Y

        Where Ex = Extension numbers 200,201...etc.

            If, Y= 0 then Barge-in is not allowed to extension Ex.

              = 1 then Barge-in is allowed to extension Ex.

Note: An extension can barge-into a conversation but cannot participate in the

conversation.

Default: Available to Operator Console only.

Barge-In Disallow
(Only with Office Version)

Some of the Extensions can be given the authority whereby their extensions can or cannot be Barged into.

Programming:

Press 'prog' key + 1234 (PBX Password) + 34 Ex Y

Where Ex = Extension Number.

If,Y=1 then extension can block other extensions to Barge-in to its conversations.

= 0 then extension cannot block Barge-in feature.

Thereafter the Extension user can allow or disallow others to Barge-into its conversations through the following programming:

PROCEDURE

To allow others to Barge-In

Dial Extension Pass Word + 42 + Press [rls] key

To disallow other extensions to Barge-In

Dial Extension Pass Word + 50 + Press [rls] key

Example: If, Ext 205 is given this authority (through programming 34+EX Y) then it can

allow / disallow other extensions to Barge-Into its conversations through its

own Extension Password.

Boss Secretary Feature

To set this feature, program an extension as a BOSS Extension and another extension as a SECRETARY Extension.

Programming:

Press 'prog' key + 1234 (PBX Password) + 39 EX Y

Where, EX= Extension Number.

If, Y= 1 then Extension Ex is set as a BOSS Extension.

= 0 then BOSS Extension Ex gets reset as a normal Extension.

Press 'prog' key + 1234 (PBX Password) + 41 EX EY

Where, EX= The Extension which is already set as BOSS Extension.

EY= The Extension which has be made SECRETARY Extension to the

Boss extension EX.

Note**:** One Boss can have only one secretary.

: One Secretary can have multiple Bosses.

Default: No extension is set as Secretary extension**.**

Billing for Room Rent, Food, Laundry
In Hotel Version

Following command sets the field for entering and printing of the other expenses (Like Room Rent, Food, Laundry etc) along with the Call charges billing:

51 C D E F G H I 000

Where, C = Serial number

D = Room rent

E = Food bill

F = Laundry bill

G = Miscellaneous

H = Tax
I = Advance
1 = is to enable
0 = is to disable
Default: All fields are disabled.

Call Billing Structuring

Call charges are calculated based on Cost table and Codes entered. If no codes are entered then calculation is done through Cost Table only.

The Cost table is used for defining the pulse rate for each time zone and the charges for one unit and the service charge for one call.

Besides, up to 100 Codes can be defined for calculating rates from specific row of the Cost Table.

Cost Table

Default entries of the cost table is shown below:

row no:	column no:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ZONE	600	700	800	1100	1800	1900	2030	2200	2300	2400	2400	2400	800	1900	0	0
2	LOCAL	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	0	1800	200	0
3	STD	80	70	50	25	25	25	50	70	70	80	25	25	0	50	126	0
4	ISD	14	14	14	12	12	12	14	14	14	14	12	12	0	14	126	0
5	CELL	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	0	1800	200	0
6	ISD1	30	30	30	25	25	25	30	30	30	30	25	25	0	30	126	0
7	ISD2	18	18	18	15	15	15	18	18	18	18	15	15	0	18	126	0
8	ISD3	14	12	12	12	14	12	12	12	12	12	12	12	0	14	126	0
9	ISD4	18	18	18	18	15	15	15	15	18	18	15	15	0	18	126	0
10	STD1	80	70	50	25	25	25	50	70	70	80	25	25	1	50	126	0
11	STD2	120	100	70	35	35	35	70	100	100	120	35	35	1	70	126	0
12	STD3	160	140	100	50	50	50	100	140	140	160	50	50	1	100	126	0
13	STD4	480	360	280	140	140	140	280	360	360	480	140	140	1	280	126	0
14	G1	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1	1800	126	0
15	G2	900	900	900	900	900	900	900	900	900	900	900	900	1	900	126	0
16	BLANK	80	70	50	25	25	25	50	70	70	80	25	25	1	50	126	0
17	BLANK	80	70	50	25	25	25	50	70	70	80	25	25	1	50	126	0
18	BLANK	80	70	50	25	25	25	50	70	70	80	25	25	1	50	126	0
19	BLANK	80	70	50	25	25	25	50	70	70	80	25	25	1	50	126	0
20	BLANK	80	70	50	25	25	25	50	70	70	80	25	25	1	50	126	0
21	BLANK	80	70	50	25	25	25	50	70	70	80	25	25	1	50	126	0
22	BLANK	80	70	50	25	25	25	50	70	70	80	25	25	1	50	126	0
23	BLANK	80	70	50	25	25	25	50	70	70	80	25	25	1	50	126	0
24	BLANK	80	70	50	25	25	25	50	70	70	80	25	25	1	50	126	0
25	BLANK	80	70	50	25	25	25	50	70	70	80	25	25	1	50	126	0

Any field of the above table can be programmed through the following command:

Press 'prog' key + 1234 (PBX Password)

71 RR CC XXXX

Where, RR = Row number in two digits.

CC = Column number in two digits.

XXXX = Time in 24 hours format for zone setting.

Or Time in seconds for call duration.

<div align="center">Or 0 /1 For Holiday Disable / Enable.</div>
<div align="center">Or Call charges in Paise in 4 digits.</div>

Any entry in the Cost Table can be altered including the various time zones. There is no fixed criteria as full rate, half rate, one third rate etc. You can enter any pulse rate in any column. As explained above, you are actually entering the duration of one unit in each time zone. System will not check for the validity of the pulse rate entered by you in any column.

Col 1 to 10 refers to Pulse rates corresponding to the Time Zones entered in Row number 1.

Col 11 & 12 are not in use.

Col 13 is used for enabling Pulse rates of Col 14 for 24 hours in place of Col 1 to 10.

When billing is through Col 14, there are fixed Holidays defined in the PBX as below:

EVERY SUNDAY + 26 JANUARY + 15 AUGUST + 2 ND OCTOBER.

Column 14 is for Pulse rates for "HOLIDAY BILLING". If Col 13 VALUE = 1 then corresponding Pulse rate under Col 14 will get activated for Holiday Billing.

If it is = 0 then the Pulse rates of Col 1 to 10 shall be applicable.

Col 15 is for Unit Cost per Pulse.

Col 16 is not in use.

The first row contains various time zones. In default, following are the time zones:

Zone 1 -   00:00 to   06:00
Zone 2 -   06:00 to   07:00
Zone 3 -   07:00 to   08:00
Zone 4 -   08:00 to   11:00
Zone 5 -   11:00 to   18:00
Zone 6 -   18:00 to   19:00
Zone 7 -   19:00 to   20:30
Zone 8 -   20:30 to   22:00
Zone 9 -   22:00 to   23:00
Zone 10   - 23:00 to   24:00

There are no separate zones for STD & ISD. However, these zones are programmable and they can be altered. The entries for various zones are to be made in the first row. The first column of the first row is for zone 1 and the default entry is 06:00, which is the end time for the first zone. There is provision to create 2 more zones, if required. In default, these 2 zones are not utilized and the entries in these columns are 24:00.

1st Row

13th and the 14th column of row 1 are used for entering the start time and end time for holiday rate calculation (Applicable only if Holiday rates are enabled). The default Holiday rate start time is 08:00 and end time is 19:00.

15th & 16th column in the first row are not used and the default entries in these columns are 0.

2nd Row

Second row is used for default cost table for local calls. As explained earlier, the columns 1 to 10 contain the various time zones. Now starting from the second row and upto the 25th row, the entries in the columns 1 to 10 must contain the pulse rate for the corresponding time zone. In case of local calls, there are no concessional rates. Hence in the second row, all the entries from column 1 to column 10 will be 1800, which corresponds to 180 seconds i.e. 3 minutes.

If it is required to change the pulse rate of a local call to 5 minutes then columns 1 to 10 of second row should be = 3000.

If, zone 11 and 12 are not used, then there is no need to enter any value in these columns. The default entry in these columns is 1800.

13th column of row 2 is used for enabling or disabling Holiday rates. '1' in this column enables holiday rates for local calls and '0' disables holiday rates. The default entry in this column is '0'.

14th column is used for entering the pulse rate for holiday. In default 1800 is entered.

15th column is used for entering the charge of one unit. In default 200 is entered, corresponding to Rs. 2 for one unit of local call.

16th column is used for entering service charge for one local call. The default entry is 0.

3rd Row

3rd row is used for entering the default cost table for STD calls. As explained earlier, the columns 1 to 10 contain the various time zones. The entries made in these columns must correspond to the pulse rate in the corresponding time zone. The default entries are as given below:

1st column of 3rd row -80 (corresponding to 8 sec)
2nd column of 3rd row -70 (corresponding to 7 sec)
3rd column of 3rd row - 50 (corresponding to 5 sec)
4th column of 3rd row - 25 (corresponding to 2.5 sec)
5th column of 3rd row - 25 (corresponding to 2.5sec)
6th column of 3rd row - 25 (corresponding to 2.5sec)
7th column of 3rd row - 50 (corresponding to 5 sec)
8th column of 3rd row - 50 (corresponding to 5 sec)
9th column of 3rd row   - 70 (corresponding to 7 sec)
10th column of 3rd row - 80 (corresponding to 8 sec)

Example: If it is required to have a pulse rate of 2.5 secs. from 06:00 hrs to 23:00 hrs and 5 secs. From 23:00 hrs to 06:00 hrs, the entries in the third row must be 50 for 1st column, 25 for columns 2 to 9 and 50 for column 10.

Note: These pulse rates are used only for those STD codes, which do not match any of the
    Codes entered.

If zone 11 & 12 are not used, then there is no need to enter any value in these columns. The default entries in these columns are 25.

13th column of row 3 is used for enabling or disabling holiday rates for STD calls. 1 in this column enables holiday rates for STD calls and '0' disables holiday rates. The default entry in this column is '0'.

14th column is used for entering the pulse rate for holiday. The default entry is 50 corresponding to 5 secs.

15th column is used for entering the charge of one unit. The default entry is 126 corresponding to Rs. 1.26 for one unit of STD call.

16th column is used for entering the service charge for one STD call. The default entry is 0.

4th Row

The fourth row is used for entering the default cost table for ISD calls. As explained earlier, the columns 1 to 10 contain the various time zones. The entries made in these columns must correspond to the pulse rate in the corresponding time zone. The default entries are as given below:

1st column of 4th row - 14 (corresponding to 1.4 secs.)
2nd column of 4th row - 14 (corresponding to 1.4 secs.)
3rd column of 4th row - 14 (corresponding to 1.4 secs.)
4th column of 4th row - 12 (corresponding to 1.2 secs.)
5th column of 4th row - 12 (corresponding to 1.2 secs.)
6th column of 4th row - 12 (corresponding to 1.2 secs.)
7th column of 4th row - 14 (corresponding to 1.4 secs.)
8th column of 4th row - 14 (corresponding to 1.4 secs.)
9th column of 4th row - 14 (corresponding to 1.4 secs.)
10th column of 4th row - 14 (corresponding to 1.4 secs.)

Example: If it is required to have a pulse rate of 1 sec. from 06:00 hrs to 23:00 hrs and 2 secs. From 23:00 hrs to 06:00 hrs, the entries in the fourth row must be 20 for 1st column, 10 for columns 2 to 9 and 20 for column 10.

Note: These pulse rates are used only for those ISD codes, which do not match any of the
    Codes entered.

If zone 11 & 12 are not used, then there is no need to enter any value in these columns. The default entries in these columns are 12.

13th column of row 4 is used for enabling or disabling holiday rates for ISD calls. A '1' in this column enables holiday rates for ISD calls and a '0' disables holiday rates. The default entry in this column is 0 (i.e) holiday rate is disabled for ISD calls

The 14th column is used for entering the pulse rate for holiday. The default entry is 12 corresponding to 1.2 secs.

The 15th column is used for entering the charge of one unit. The default entry is 126 corresponding to Rs. 1.26 for one unit of ISD call.

The 16th column is used for entering the service charge for one ISD call. The def. entry is 0.

5th Row

The fifth row is used for entering the default Cost table for cellular calls. As explained earlier, the columns 1 to 10 contain the various time zones. In the case of Cellular calls, there is no Concessional rates. Hence in the fifth row, all the entries from column 1 to column 10 will be 1800, which corresponds to 180 seconds (i.e) 3 minutes.

If it is required to change the pulse rate of a cellular call as 5 minutes then the entries in columns 1 to 10 of fifth row must be 3000.

If zone 11 & 12 are not used, then there is no need to enter any value in these columns. The default entries in these columns are 1800.

13th column of row 5 is used for enabling or disabling holiday rates. A 1 in this column enables holiday rates for cellular calls and 0 disables holiday rates. The default entry in this column is 0. 14th column is used for entering the pulse rate for holiday. The default entry is 1800.

15th column is used for entering the charge of one unit. The default entry is 200 corresponding to Rs. 2 for one unit of cellular call. For example if it is required to charge Rs. 5 for one unit of cellular call, the entry in this column must be 500.

16th column is used for entering the service charge for one cellular call. The deft entry is 0.

Note: Rows 1 to 5 refers to default rates and are used if there is no Code entered or there is no
match found in the codes entry..
: Rows 6 to 25 are general purpose rates.
In default, rows 6 to 9 contain the various ISD pulse rate; rows 10 to 13 contain various
STD pulse rate; rows 14 and 15 contain Local dialing rates.

Entering of Codes i.e., the starting digits of Telephone Numbers

STD / ISD codes or even the staring digits of local Telephone numbers can entered along with a Row Number from where the cost is to be calculated.
Command to enter the codes is:

      Press 'prog' key + 1234 (PBX Password)
     62 XXXXX RR
        Where XXXX = STD / ISD / Local Code in 5 digits.
              RR = Row number

Example: If a call made to Madras is to be calculated as per the setting of Row number 10, the
      command will be 62 04400 10
    : For entering the ISD code 0011 and cost as per Row No. 9, the command will be:
           62 00110 09

Note**:** Maximum 100 codes can be entered
    : If no match is found in the Codes, then the default entries in the rows 2 to 5 in the Cost
     Table are used.
    : While entering the codes, row numbers 02 to 05 can be used.
    : Local numbers can also be entered.
     A maximum of 4 digits. Example: 9180, 9181, 9182 etc.

Call Billing – Serial Port Data Out – Direct / On Request

Serial port of the PBX can be controlled with the following command:
        Press 'prog' key + 1234 (PBX Password)
        25 8 X
          Where, X= 0 to send the data to serial port only on request
              = 1 to send data without waiting for HMS /PMS request.
         Default: X = 0

Call Billing Metering – Time Based / Reversal Based

This command is used to set the metering on the Junction line either by setting it on time base or on polarity reversal.

Press 'prog' key + 1234 (PBX Password)

39 TRK X

Where, X = 0 for Time based / Call progress tone detection.

= 1 for Polarity reversal.

When the metering type is set as Time based / CPTD, for near perfect billing the CPTD takes over and overrides the time based function on maturity of the call, even if the time based metering has already started. The time-based function is therefore used only when the CPDT fails to operate due to poor line conditions.

Default: Junction metering is set to Time Base for all the Junctions.

Call Billing – Time Delay + Delayed Dial Tone for Redial

When Call Billing is done on time based, the time (from the moment Junction is seized) after which the PBX should consider the call as matured for the purpose of Call billing, is set through the following command.

Following command also sets the time delay to be given for Telephone number dialing after seizing the Junction. This delay is required for Reail & Memory dialing, where the Dial Tone appears after a moment of seizing the Junction.

Press 'prog' key + 1234 (PBX Password)

23 T D

where, T = 2 to 9 in multiple of 10 seconds. For Call billing.

D = 1 to 9 in multiple of 100 milliseconds. Delay for Dialing.

Example: If T=2, the call will be considered as matured after 20 seconds of seizing the Junction Line.

If D=2, the PBX will start dialing Telephone number after 200 mili secs of seizing the Junction line, in case of Redial & Memory Dialing.

Default: T = 2, D = 2.

Call Budgeting

(Only with Hotel Version)

Following are the various programs that control the Call Budgeting feature:

Allow the feature in the PBX

Press 'prog' key + 1234 (PBX Password) + 254 Y

If, Y= 0 then Call Budgeting is not allowed in the PBX.

= 1 then Call Budgeting is allowed in the PBX.

Default: Not allowed in the PBX.

Allow the feature to required Extensions

Press 'prog' key + 1234 (PBX Password) + 34 EX Y

Where, EX = Extension Number.

If, Y= 1 then calls from extension EX get budgeted.

= 0 then calls from extension EX are not budgeted.

Default: Not available at any extension.

Set call budgeting amounts

An extension is to be allocated a Call Budget amount.

When the amount of calls made by the extension crosses the Call Budget amount, the Junction dialing facility is disabled.

The Call Budget amount can be increased through the same programming by adding more amount.

Programming:

Press 'prog' key + 1234 (PBX Password) + 65 EX MMMM

Where, EX = Extension Number

MMMM = 0001 – 9999 (Call Budget Amount for extension EX or the additional amount to be added. 0001 means Rs 1/- and 9999 means RS 9,999/-)

Note**:** This command will also be used for adding the advance money to an Extension.

Call Details Erasing - Extension Wise

(Only in Office Version)

To erase the call details (whose print out has been taken) of an extension, the command is:

Press 'prog' key + 1234 (PBX Password) + 29 EX

Where EX = 200 ,201,................

Note: This command erases only those calls of the extension, whose print out has been taken.

: This command is applicable for Office Version only.

Call Details Print Commands

Extension Wise or Junction Wise

This command will selectively print calls extension-wise or Junction-wise.

This command does not erase calls from the buffer.

Press 'prog' key + 1234 (PBX Password) + 22 LN

Where, LN = Junction number or Extension number.

200, 201,.... for Extensions or 700, 701, ...for Junctions.

All Calls details

To take print out of the calls stored in the PBX memory, the command is:

Press 'prog' key + 1234 (PBX Password)

12 X

Where, X = 0 for Stop printing.

= 1 to Print from buffer, clearing buffer, and continue printing on-line. In case of printer error, calls will not be lost. They will remain in the buffer until printing is resumed.

= 2 To Clear buffer without printing.

= 9 To Print from buffer without clearing buffer and continue printing on-line while storing calls in buffer.

Default = 0.

CTI Port Interface Commands

Press 'prog' key + 1234 (PBX Password)

126 - Start sending on CSI.

127 - Stop sending on CSI.

128 - Re-start sending on CSI. i.e. send all calls again.

125 - This code is reserved and is used only for factory testing.

Note: If the HMS is integrated with DX-240, there is no need to set the above commands. HMS power on message i.e. "%H$" sets the desired commands automatically.

Print PBX Information

Press 'prog' key + 1234 (PBX Password)

19X

In case of Office Version, X= 3 for memory banks.

= 4 for PBX information.

= 5 for Information on Flexible Numbering.

In case of Hotel Version, X = 3 for Checked in Rooms list with guest name.

= 4 for System information.
= 5 for Information on flexible numbering

Call Details Print out – Today's

Following command is for getting outgoing call details of the same day:

    Press 'prog' key + 1234 (PBX Password)

    189

This printout can also be taken with direct access through the following command:

    9 + Night Code + 9 (This is an Optional command)

Call Details Print out – Special Print Outs

(Optional)

Special printouts can be taken Junction wise, extension wise, time wise or even based on charges or based on the number dialed.

Procedure:

Ensure Printer is 'ON'

Enter the following command :

    Press 'prog' key + 1234 (PBX Password)

    129 - For print from buffer without clearing buffer and continue printing on-line while storing calls in buffer.

    Press "HOLD" key

Now enter the following command:

    94 TRK EXT GRP HH DD MM RR XXXXX + HOLD

      Where, TRK = Junction number. 700 to 796

          EXT = Extension number (It should be a valid 3 digit number only)

          GRP = Group of the extension number (0 is invalid)

               This group is the department group which is set by the command `32 EX G'.

          HH = 00 to 23 (24 is invalid)

          DD = Date of the calls (32 is invalid)

          MM = 01 to 12 Month (13 is invalid)

          RR = 01 to 99 Call Charges (00 is invalid)

            = 01 To Print calls with charges greater than Rs. 10

             (Call charges 'RR' can be only in multiple of Rs. 10)

        XXXXX = 1 to 5 starting digits of telephone numbers whose print out is required.

Note: This command doesn't cover the range of the days. For example, if you want to take printout of calls from 10/02/11 to 13/02/11 then this command will not work.

    : TRK, EXT GRP HH, DD, MM, RR, XXXXX are the fields. If any field is not required for the printout then enter the invalid entry in place of that field.

Example 1: If the following printout is required:

    The calls made by the extensions on 10th of every month through JUNCTION and the call charges should be more than Rs. 10

    The command will be:

        94 800 475 0 24 10 13 01 + HOLD

            Here only DD & RR are the valid entries and the rest are invalid. Thus all the invalid entered fields will be disabled and the required calls will be printed.

Example 2: The calls of extension no 222 through JUNCTION 700 made in February

and only STD/ISD calls are required then the command will be :
94 700 222 0 24 32 02 00 0 + HOLD
Here TRK, EXT, MM and X are valid and rest of the entries are invalid**.**

Call Details Print out on Serial Port in place of Parallel Port

This command diverts the printer port content to the serial port which can be connected to HYPER TERMINAL.

Press 'prog' key + 1234 (PBX Password)
12 X
Where, X = 3 for print out from Parallel Port.
= 4 for detailed data out from Serial Port.
Default = 3

Call Details – Storing of Local / STD / ISD calls

Press 'prog' key + 1234 (PBX Password)
17 X
Where, X= 3 for recording Local/STD/ISD calls.
= 4 for recording STD/ISD calls.
Default: X= 3.

Call Details – Number of digits of Local Tel Nos to Print

Press 'prog' key + 1234 (PBX Password)
54 + 62203 + 00 + X + 00
Where, X = 4 to 7, Number of digits to print.
Should be greater than 3.
Note: On entering this command, "ERROR" will be shown in place of "PASS".
Default: Maximum length of the local telephone number is `7'.
To make sure that the programming done is correct, enter the following command:
Press 'prog' key + 1234 (PBX Password)
53 + 62203 + 00 + 0 +00
On entering this command, ERROR will be displayed with two extra Zeros following the no of digits entered.

Call Forward

To enabled or disabled Call Forward feature, following is the command:
Press 'prog' key + 1234 (PBX Password)
24 1 X
Where, X= 1 to disable the feature.
= 0 to enable the feature.
Default: The feature is enabled.

Call Forward Busy

(Only with Hotel Version)
This feature will work only for service extensions.
Programming:
Press 'prog' key + 1234 (PBX Password) + 41 + Ext1 + Ext2
Where, EX1 = Extension number whose calls are to be forwarded when busy.
EX2 = Extension number where the Calls are to be forwarded.

For Cancellation:
   Press 'prog' key + 1234 (PBX Password) + 41 + Ext1 + Ext1

Call Forward – Follow Me

To enabled or disabled "Call Forward-Follow Me" feature, following is the command:
   Press 'prog' key + 1234 (PBX Password) + 24 3 X
      Where, X= 1 to disable the feature.
               = 0 to enable the feature.
Default: The feature is enabled.

Call Transfer Rights

(Applicable in Hotel Version only)

In a Hotel environment, it is not desirable to give HOLD and transfer facility to room extensions.
Hence, in Hotel Version this facility is not given to any extension except Console, in default.
To give call transfer right to an Extension program as below:
   Press 'prog' key + 1234 (PBX Password)
   32 EX Y
         Where, EX = Extension Number
                  In case Flexible numbering this programming is to be done before the
                  flexible numbering. Else delete the flexible number, do this programming & then
                  the flexible numbering.
            If, Y= 0 then Extension cannot transfer external calls.
                  = 1 then Extension can Hold a Junction call and transfer.
Default: Available to Console only.

Conference with 2 Junction Lines

Two types of conferences are possible as listed below. Both type of conferencing requires DID card to be installed in the PBX.

3 Party Conference (Hotel Version & Office Version)

This feature enables to activate conference as explained below:
   While talking with a party (internal or external)
   Press [hold] key to hold the first party and dial the number of second party
   While conversing with the second party, press [conf] key to start a three party
   conference
Note**:** 3 Party Conference will work only if DISA card is installed in the PBX.
      : For having a 3 party conference with two Junction lines and yourself, you must have
      the rights to pick the second Junction while holding the first Junction. This right is
      given by system programming. 3 Party Conference can not be done from SLT.

Eight Party Conference (Only with Office Version)

This feature requires an additional card i.e. 8 party conference card. You can establish conference among internal / external callers or called parties.
   To start a conference call
   Make conversation with a party (Internal / External) and park the call
   Disconnect and call other parties, park each of them one at a time
   Dial 83 to initiate conference
Note**:** 8 Party Conference will work only if Conference card is installed in the PBX. DISA
      Card is not required for 8 Party Conference.
    : Conference will get over when the initiator disconnects. If a participant of the
      conference wants to leave the conference, he has to keep the handset.

2nd Junction Access

Following command is used to allow an extension to access a second Junction line after putting the first line on hold.

Press 'prog' key + 1234 (PBX Password)

39 EX Y

Where, Y = 5 to allow second Junction line access.

= 6 to disallow second Junction line access.

Default: No extension has this facility.

Note**:** If any extension wants to establish a conference between 2 Junctions then that extension should have second Junction pick up rights.

Console - Main / Console - Auxiliary / FAX Port

To set any of these ports, following is the command:

Press 'prog' key + 1234 (PBX Password)

31 EX Y

In Office Version

Ex = 200, 201,.... 499, the extension to be set as operator.

In case Flexible numbering this programming is to be done before the flexible numbering. Else delete the flexible number, do this programming & then the flexible numbering.

Y = 1, to set extension Ex as main operator.

= 2, 3 and 4, to set extension as 1st, 2nd and 3rd Auxiliary operator respectively.

= 5, for no extension as Auxiliary operator or Fax port.

= 6, to set extension as Fax port.

Auxiliary console is an extension, which will help main operator to handle incoming traffic. An incoming call or internal call to the operator will be automatically transferred to the auxiliary console if the main console is busy. Auxiliary 2 can be set only if Auxiliary 1 has been set.

Default**:** The 1st digital port is the main operator. No port as auxiliary/fax port. If no digital port is available, then first analog port is Operator.

In Hotel Version

Ex = 200, 201,.... 499, the extension to be set as operator

Y = 8, to set EX as the main operator

= 2, to set Ex as AUX-1.

= 3, to set EX as AUX-2

= 4, to set Ex as AUX-3.

= 5, for no extension as auxiliary operator or fax port.

= 6, to set extension as fax port.

Default**:** The 1st digital port is the main operator. If there is no digital port, first analog extension is the main operator.

Date Setting

Press 'prog' key + 1234 (PBX Password)

61 DD MM YY W

Where, DD = day 01 to 31.

MM = month 01 to 12.

YY = year 00 to 99.

W = days of the Week 0 to 6.(0 = SUN & 6 = SAT)

Note: If invalid day is entered then it will register as 1st of next month i.e. if 31/02/11 Sunday is entered, it will register as 01/03/11 Monday.

Day / Night changeover Time
(Only with office version)
To set Auto Day / Night Change over timings:

    Press 'prog' key + 1234 (PBX Password) + 82 W HH MM Hh Mm

Where	W	=	day of week 0 - 6, & 0 as SUNDAY.
	HH	=	day mode start hours 00 - 23.
	MM	=	day mode start minutes 00 - 59.
	hh	=	day mode end hours 00 - 23.
	mm	=	day mode end minutes 00 - 59.

Default: 09:00 hrs. to 18:00 hrs. for all days

Weekly Off Day

This command is used for defining the weekly off day. On the weekly off day, the system remains in the night mode for the whole day. The weekdays are numbered from 0 to 6. 0 corresponds to Sunday & 6 to Saturday. To set Friday as the weekly off day, the command is,

    Press 'prog' key + 1234 (PBX Password) + 13 W

        Where, W = Weekly Off day

            = 0 for Sunday

            = 1 for Monday

            = 2 for Tuesday

            = 3 for Wednesday

            = 4 for Thursday

            = 5 for Friday

            = 6 for Saturday

            = 7 for No Weekly Off

Default**:** Sunday is the weekly off day for the system

Day / Night Changeover Code Change

The PBX can be manually changed over fro Day to night mode & vice versa from any extension, using two digit night code (99 in default).

The night code can be changed using the following command:

        Press 'prog' key + 1234 (PBX Password)

       21 ZZ Set Night Code as ZZ.

            Where, ZZ = Night code.

Example: To set night code as 33 dial 2133.

Note: The night code has to be greater or equal to 10.

Default: Night code is 99.

Following is the process to change the PBX from Day mode to Night mode or vice versa:

    In case of Office Version

      Dial 6 + ZZ + M

         where, ZZ = Night code (99 in default)

            M = 1 for Day Mode

              0 for Night Mode

  Night Code can be changed as explained in Programming Manual.

    In case of Hotel Version

      Dial 499 + ZZ + M

        Where, ZZ = Night Code (99 in default)

           M = 1 for Day Mode

             0 for Night Mode.

DSS Unit Setting

To set a KTS extension as a DSS extension, program as below:

    Press 'prog' key + 1234 (PBX Password) + 36 EX Y

Where, EX= 500 – 740 (500 means Extension Number 200 and 740 means Extension number 240)
Y = 4 to set DSS as Type 1 with keys from 1 to 120.
= 5 to set DSS as Type 2 with keys from 121 to 240.
= 6 to set a DSS extension back to a KTS extension.

Note**:** Do not use flexible numbering to 500.

    : With Office version no DSS Extension is set.

With Hotel version, 2nd digital port is set as DSS.

Setting a KTS extension as Operator of the DSS

After using the above command, set a KTS extension as the operator for DSS, by using the following command:

Press 'prog' key + 1234 (PBX Password) + 41 + DSS + KTS'.

In case of OFFICE VERSION,
DSS = 500,501...etc.
KTS = 200,201...499
Example: If extension 201 has to be allocated as DSS for KTS extension 200, then the command will be:
Press 'prog' key + 1234 (PBX Password) + 41 501 200

In case of HOTEL VERSION,
DSS = 200,201,…499.
KTS = 200,201,... 499.

It is used for allocating DSS for a KTS extension, which is set as the operator.

Example: If extension 201 has to be allocated as DSS for KTS extension 200, then the command will be:
Press 'prog' key + 1234 (PBX Password) + 41 201 200

Default: The second digital port is the DSS of first digital port i.e. KTS which is set as the operator.

DSS Unit - Keys setting

Press 'prog' key + 1234 (PBX Password) + 45 K F

Where, K = 001 to 120 for the keys of the first DSS and 201 to 320 for the keys of a second DSS.
F = Extension numbers (200,201, etc.)
= Junction lines (700,701, etc.)
= 100,101, etc. for memory dialing

Default: As per the system configuration, the Junctions are first allocated from first key onwards at the top of the DSS, the extensions are then allocated from the bottom key onwards till all the extensions are accounted for. The keys that are left in between are then allocated for "Memory – Common" bank numbers.

Do Not Disturb

To enabled or disabled "Do Not Disturb" the feature, following is the command:

Press 'prog' key + 1234 (PBX Password) + 24 6 X

Where, X= 1 to disable the feature.
= 0 to enable the feature.

Default: The feature is enabled.

Extension / Junction - Enable / Disable

To enable or disable any Extension or a Junction, program as below:

Press 'prog' key + 1234 (PBX Password) + 30 LN Z

Where, Z = 2 - Disable line.

= 3 - Enable line.

LN = Extension numbers (200, 201,…499)

= Junction Number (700, 701,…etc.)

Default: All Junction and extensions are enabled.

Extensions Grouping for Dept wise Call Transfer
(Only with Office Version)

This grouping is workable only for Junction Lines landing in DISA mode i.e., when DISA card is installed in the PBX and Junctions are programmed to land in Welcome Message.

The Extensions can be grouped and a single digit code is assigned to each Group.

The caller on the Junction line can dial a single digit number to land on any of the free Extension of the Group.

Example: Extensions can be divided into following groups:

Group	Group Number
Sales	1
Marketing	2
Purchase	3

The caller will dial 1 to land on the free extension of sales department.

An extension can be put only in one group.

Key phones of the same group will have similar programming for their flexible keys.

Programming:

Press 'prog' key + 1234 (PBX Password)

32 EX g

Where, EX = Extension Number (200, 201, ….)

g = Extension Group number from 0 to 9

Default**:** All extensions are in Group 0.

Note**:** This command has no relevance with the commands '37 EX G' and '91 G EX1 EX2….HOLD'.

Extensions & Junctions Grouping for Group wise Access

Extensions Grouping

Extensions and Junctions can be grouped separately. Extensions of a Group get access to Junction lines of Junction Group having the same Junction Group number by dialing 0. Example: Extensions of Extension Group number 2 get access to Junctions of Junction Group number 2 by dialing 0.

Programming:

Press 'prog' key + 1234 (PBX Password) + 37 EX G

Where, Ex = Extension numbers (200, 201, ….)

If, G = 1-8 (Same number Extension Group can access same number Junction Group)

= 0 (To access all Junction Lines)

= 9 (To deny all Junction Lines)

Note**:** An extensions can be included in only one Extension Group.

Whereas, a Junction Line can be included in more than one Junction Group.

: In default all extensions are in Group 0.

Junctions Grouping:

Press 'prog' key + 1234 (PBX Password) + 37 JUN G

Where, JUN = Junction line numbers (700, 701, 702...)
                    If, G = 0 (Extensions can access this Group as per its Class of Service).
                            = 1-8 (Same number Extension Group can access same number
                                    Junction Group)
                            = 9 (Extension Group 0 can access Junction Group 9)
Important: Before programming Junction grouping, first program all the Junctions
            in Junction Group 9., else grouped Junctions will get mixed.

Note**:** A Junction Line can be included in more than one Junction Group.
        Whereas, extensions can be included in only one Extension Group.
    : In default all Junctions are in all groups.

Features setting
External Music Source
Night Mode Message
Call Charge sharing
Call Budgeting / Collect Advance
Department Transfer in Day Mode

Following is the command for various feature controls:
        Press 'prog' key + 1234 (PBX Password)
        25 F A
In Office Version
        F = 1for External background music from VOICE card connected
            to External Source.
            = 2 for Night mode announcement by VRR during night hours.
            = 3 for Call sharing of STD/ISD outgoing calls.
            = 4 for Call budgeting
            = 5 for Department transfer in day time.(This is the single digit
            access to departments with the use of the Auto Attendant facility)
A = 0 to disallow the feature.
            = 1 to allow
In Hotel Version
        F = 1 for External background music from VOICE card connected to the
            External Source.
            = 4 for Call budgeting/Collect Advance.
        A = 0 to disallow the feature.
            = 1 to allow
Default: All are disabled

Flash Time Setting
The Flash Time range that the system accepts can be changed with the following command:
    Press 'prog' key + 1234 (PBX Password) + 28 T P
        Where, T= 0 – 7 (Flash Time). 0 means 70 ms, 1 for 100 ms, 2 for 200 ms, 3 for
                300ms, ….. 7 for 700 ms.
            P= 0 – 4 (Percentage of the Flash Time that is accepted by the PBX).
                0 means 10%, 1 means 20% …… 4 means 50 %.
Note**:** After setting flash time, soft reset is to be done to make the new settings
        effective.
    : In default, T= 5 and P = 4 which corresponds to flash timings = 500ms with 50%
        variation range.

Flexible Numbering

Following are the commands for flexible numbering:

For Office Version

Press 'prog' key + 1234 (PBX Password)

63 O N 1

Where, O = Original Number.

N = New flexible Number in 3 digits. N can be 200 to 499 only.

Example: To change 200 to 299 dial 632002991. An original hardware number has to be given a new number if the same number has to be allocated as a flexible number e.g., if an extension has to be given a flexible number of 201, then the original hardware extension of 201 has to be given a new number.

Default: Hardware numbers and the software numbers are the same.

Note**:** If already existing numbers are required as flexible then first change the already existing numbers into any dummy numbers and then those numbers can be used as flexible.

Example: If original 225 is to be changed to '201' and the extension '201' is already existing in default condition then this number can not be allocated to extension '225' .To use this '201', first change '201' into any dummy digit say '475' i.e. '63 201 475 1' and then '201' can be accepted as flexible i.e. '63 225 201 1'.

For Hotel Version

Press 'prog' key + 1234 (PBX Password)

63 ORG FLEX

Where, ORG = Original Number of the extension in 3 digits. This has to be the Original default Extension number even after the number has been changed.

FLEX = New flexible Number in 4 digits. If new number is required in less than 4 digits then use 0 before the number.

Example: If new number is 288 then enter 0288.

Default: Hardware numbers and software numbers are the same.

Note: If already existing numbers are required as flexible then first change the already existing numbers into any dummy numbers and then those numbers can be used as flexible number.

: With hotel version, there is no restriction for the flexible number. Single to four digits can be set as flexible.

Feature codes can also be changed with hotel version.

Example: If original 225 has to be changed into `501'. As `50' is the command for `form feed for printer' so you can't use `501'. To use `501', first change `50' into any dummy digit say `475' i.e. `63 050 0475' & then `501' can be accepted as flexible i.e. `63 225 0501'.

Hotline

To enabled or disabled the Hotline feature, following is the command:

Press 'prog' key + 1234 (PBX Password)

24 0 X

Where, X= 1 to disable the feature.

= 0 to enable the feature.

Default: The feature is enabled.

Hotline / Gate Phone

An Extension can be set a Hotline to Operator. It is also called Gate Phone.
The command for this feature is:

> Press 'prog' key + 1234 (PBX Password)
> 30 EX Y
> > Where, Y = 1 to set Extension Ex as Gate Phone.
> > > = 0 to set Extension Ex as Normal Extension.
> > > Ex = Extension Number 200, 201,....

When a gate phone handset is lifted, it automatically establishes a hotline to the console. An extension cannot program itself as a gate phone.

Default: No extension is set as gate phone.

Hotline Cancellation (Only in office version)

For Extension wise cancelation of the feature, refer the following command:

> Press 'prog' key + 1234 (PBX Password)
> 31 EX 9
> > Where, EX = 200,201…etc
> > This command will reset the Delayed or immediate hotline.

Junction – DTMF / Pulse Dialing

A Junction line can be defined to dial in either DTMF / TONE or DECADIC/PULSE mode.

> Press 'prog' key + 1234 (PBX Password)
> 30 TRK Y
> > Where, Y = 1 To set Junction in TONE dialing mode.
> > > 0 To set Junction in PULSE dialing mode.

Default: All Junctions are in pulse mode.

Junction Dialing Control

Each extension can be given a Class of Service whereby its dialing rights are controlled differently in Day and Night modes as explained below:

Programming:

> Press 'prog' key + 1234 (PBX Password) + 42 EX D N 1
> > Where, EX = Extension Number (200, 201 .. etc.)
> > > D= 0 (To give only extension to extension dialing facility in Day Mode)
> > > = 1 (To give Local calls dialing except for restricted table in Day Mode)
> > > = 2 (To give Local calls except for Tel Numbers starting with digit 1, in Day Mode).
> > > = 3 (To allow Local calls in Day Mode)
> > > = 4 (To allow Local/STD dialing in Day Mode)
> > > = 5 (To allow Local/STD/ISD dialing in Day Mode)
> > > N= 0 (To give only extension to extension dialing facility in Night Mode)
> > > = 1 (To give Local calls dialing except for restricted table dialing)
> > > = 2 (To give Local calls except for Tel Numbers starting with digit 1, in Day Mode).
> > > = 3 (To allow Local calls, in Night Mode).
> > > = 4 (To allow Local/STD dialing, in Night Mode).
> > > = 5 (To allow Local/STD/ISD dialing, in Night Mode).

Note: In default all extensions are having COS= 3

Junction Ring Assignment

Incoming Junction calls landing can be defined as detailed below:

Office Version

Assigning Ringing Type to Junctions

    Press 'prog' key + 1234 (PBX Password)
    42 TRK D N 1

Here, D = Landing type in Day mode
    N = Landing type in Night mode.
    D / N = 0 for Round Robin.
        = 1 for Simultaneous ringing.
        = 2 for Delayed ringing.
        = 3 for Ringing at Operator Console.
        = 4 for One Termination mode. If any Junction is programmed in one termination mode
            by this command then set an extension also for incoming landing through
            that Junction by the command

                        Press 'prog' key + 1234 (PBX Password)
                        41 TRK EX
                            Where, TRK = Junction Number 700, 701, …
                                    EX = Extension number 200, 201,…

        Note: In this case, the Incoming call would ring on the Extension for 6 times and then
                shift to Operator if not answered.
        = 5 for Auto Attendant with welcome message.
    ROUND ROBIN: Ringing one after the other at defined extensions. Only one
                    extension will ring at a time.
    SIMULTANEOUS RINGING: Incoming P&T call lands simultaneously at defined
                            extensions. The call gets connected to the
                            extension, which lifts the handset first.
    DELAYED RINGING: Ringing one after the other while the previous extension
                        keeps ringing.
    OPERATOR CONSOLE: Incoming P&T line lands at the Console only. This line
                        can be picked by dialing '6' from any extension.
    ONE TERMINATION MODE: Incoming P&T call rings only at one defined
                            extension.
                            If any Junction is programmed in one
                            termination mode by this command then set
                            an extension also for incoming landing through
                            that Junction by the command
                                Press 'prog' key + 1234 (PBX Password)
                                41 TRK EX
                                    Where, TRK = Junction Number 700, 701, …
                                            EX = Extension number 200, 201,…
    AUTO ATTENDANT (Requires a VOICE card): In this mode, the incoming call is
                        directly attended by the system, the caller is greeted by
                        a message. And on dialing an extension number (in
                        DTMF mode), the caller gets connected to the
                        desired extension.

If any Junction is programmed in Round robin, Simultaneously ringing or in
Delayed ringing, then do the following programming as well:

Extension Grouping

    Press 'prog' key + 1234 (PBX Password)
    91 G EX1 EX2 EX3 ..... HOLD.'
        Here, G = 0 – 9 (Extension Group Number)

Ex1, Ex2... = Extension numbers belonging to the service group
to be assigned for incoming Junction Ring Assinment.
The maximum number of extensions in the self service
group can be 6 and a minimum of 1.

Note: This command is not similar to the commands '32 EX G' & '37 EX G'.
The command '37...' is used to define the JUNCTION access to
various extensions.
The command '32 EX G' is used to define the grouping of KTS for
individual setting of flexible keys of KTS. The command '32 EX G' is
also used to define the group of extensions for department transfer.

Assigning Extension Group to Junction Lines

Press 'prog' key + 1234 (PBX Password)
42 TRK DN 2
Here, TRK= Trunk No
D= Extension Group Number to be used in Day Time
N= Extension Group Number to be used in Night Time

Default**:** All Junction lines land at the Operator Console.

Example 1**:** Junction 700 should ring in Round robin in day mode and the extensions
numbers for round robin are 201, 202, 205, 210 and in night mode, the
Junction should ring simultaneously and the extensions for Simultaneous
ringing are 215,220,225,230. For this the programming will be:

First set the ringing pattern
42 700 01 1
Here D= 0, for Round Robin and N =1 for Simultaneously ringing.

Now fill the groups, which will ring in D/N respectively.
91 0 201 202 205 210 + HOLD.   Here G = 0
& 91 1 215 220 225 230 + HOLD.   Here G = 1

Now set the groups for D/N mode
42 700 01 2
Here D = 0 and N = 1 means in day mode 'group 0' will ring and in
night mode 'group 1' will ring.

Example 2: For Junction 705, if same extensions 210,215,225,230,235 are required to
ring in Delayed ringing mode in day mode and Simultaneously ringing in
night mode , the programming will be:
42 705 21 1
Here D = 2, for delayed ringing in day mode and N = 1 for
Simultaneously ringing in night mode.
91 5 210 215 225 230 235 + HOLD. Here G = 5.
42 705 55 2 Here D & N both are '5' because same extensions have to
ring in Delayed and Simultaneously ringing in D & N mode
respectively.

Hotel Version

Press 'prog' key + 1234 (PBX Password)
42 TRK D N 1
Here, D = Landing type in Day mode
N = Landing type in Night mode.
D / N = 3 for Ringing at Operator Console.
= 4 for One Termination mode.
= 5 for Auto Attendant with welcome message.

OPERATOR CONSOLE: Incoming Junction line lands at the Console only.

ONE TERMINATION MODE: Incoming Junction call rings only at one defined

extension.
If any Junction is programmed in one
termination mode by this command then set
an extension also for incoming landing through
that Junction by the command
Press 'prog' key + 1234 (PBX Password)
41 TRK EX
Where, TRK = Junction Number 700, 701, …
EX = Extension number 200, 201,…
AUTO ATTENDANT: (Requires a VOICE card): In this mode the incoming call is
attended by the system, where the caller is greeted by a
welcome message stored in the VOICE card. After the
message is played the call gets automatically
connected to the main operator.
Default: Incoming calls through all Junction lines land at the Operator Console.

Junction Special Group

Junctions in this group can not be picked by dialing `0'. They are accessed by dialing 89 or direct
Junction access codes.
When a Junction Line is programmed in Special Junction Group, It is then accessible   to all
Extensions (even to extensions of different Extension Groups).
This grouping is generally required in following cases:
Where Hotlines are to be used
Where some Junction Lines are used for tie linking of two PBXs.
Where different group for STD/ISD Junctions are to be created.
Programming:
Press 'prog' key + 1234 (PBX Password) + 39 TRK H
Where, H = 4 (For Normal Junction line)
= 5 (For Special Junction)
TRK = Junction Line number 700, 701, ...
Default: All Junctions lines are set as Normal Junction lines.
 : This special Junction Group is accessible to all extensions except for
Extensions whose COS= 0.

KTS Flexible Keys

The programming for flexible keys is done group-wise after the grouping, as explained above, has
been done.
Press 'prog' key + 1234 (PBX Password)
44 G K F
Where, K = 01 to 16, for Keys on KTS instrument.
= 17 to 20, for A to D keys on 4x4 matrix phones
= 200, 201, etc. for extension numbers
= 700, 701, etc. for Junction lines
= 100, 101, etc. for memory dialing
G = 0 to 9 with office version
To be decided by PBX Programming command
`32 EX X'
= 0 with Hotel version,
So individual KTS cannot have different setting of the

keys in hotel version.

Note: Programming for flexible keys can be done only extension group-wise and not individual extension-wise.

Default**:** As per the system configuration, the Junctions are first allocated from the first key onwards, and the rest of the keys are allocated to the extensions starting from first extension onwards.

Memory - Common

Telephone numbers can be entered in "Memory – Common" with the following command:

Press 'prog' key + 1234 (PBX Password) + 93 CC + TRK + Tel no. + Hold ……
repeat to enter more codes …. Hook Flash at the end to terminate.

Where, CC = 10 – 99 (Common Dialing Code)

TRK = 700, 701...etc. or '0' to access any free Junction line.

Example**:** To enter Telephone number 6229432 in Common Dialing Code 12 and to be allowed to dial from any free Junction line, the command is:

93 12 0 6229432

If the dialing is to be done only through Junction Line no 702 then the command will be:

93 12 702 6229432

Note**:** Common dialing codes from 55 to 99 can be accessed by all extensions irrespective of their Class of Service.

: Common dialing codes from 10 to 54 are accessible as per the Class of Service.

Name Setting

Press 'prog' key + 1234 (PBX Password)

92 EX A B C..... + HOLD

Where, Ex = Extension number.

A, B, C.... = ASCII codes for names corresponding to 65, 66, 67....

The ASCII codes are given below:

32 – Space   33 - ! 34 - "
35 - #   36 - $ 37 - %
38 - & 39 - '   40 - (
41 -)   42 - * 43 - +
44 - ,   45 - - 46 - .
47 - /   48 – 0 49 – 1
50 – 2 51 – 3 52 – 4
53 – 5 54 – 6 55 – 7
56 – 8 57 – 9 58 - :
59 - ;   60 - < 61 - =
62 - >   63 - ? 64 - @
65 – A 66 – B 67 – C
68 – D 69 – E 70 – F
71 – G 72 – H 73 – I
74 – J 75 – K 76 – L
77 – M 78 - N 79 – O
80 – P 81 - Q 82 – R
83 – S 84 – T 85 – U
86 – V 87 – W   88 – X
89 – Y 90 – Z

Example: To enter name as ARUN for the Extension 201, "dial 92 + 201+ 65 + 82 + 85 + 78 + HOLD"

Operator Access Code 9

To define Operator access code, following is the command:

In Hotel Version

Operator number is 9 and cannot be changed. Moreover, Operator can not be called by its extension number. It can be called only 9.

In Office Version

Operator access code is 9 in default. Operator can be called by dialing 9 as well as its Extension number.

Note: KTS caller will get to see the extension number only, while calling the Operator by 9.

The access code 9 can be disabled / enabled using the following command:

Press 'prog' key + 1234 (PBX Password)

25 9 X

Where, X = 1 to enable operator access by 9.

= 0 to disable operator access by 9.

Paging Rights to Extensions

The TONE card of the PBX has two paging ports in-built (1 in case of DG 120) which can be connected to an external PA amplifier. The command to allow and disallow Paging to extensions, the command is:

Press 'prog' key + 1234 (PBX Password)

33 Ex P

Where, P = 1 To allow Paging to extension EX.

0 To disallow Paging.

EX = Extension number 200,201...etc.

Default: All extensions have this facility.

Private Junction Line

A Junction line can be set as a private line to any extension user. Only that extension user can access private line.

In Office Version

To set the private line to any extension

Press 'prog' key + 1234 (PBX Password)

48 TRK EXT

For Cancellation

Press 'prog' key + 1234 (PBX Password)

48 TRK TRK

In Hotel Version

With hotel version, private line is set through operator. For detail, see the KTS Operating Manual.

Room Extension / Floor Service Phone

(Only with Hotel Version)

Defining an Extension as Room Extension / Floor Service Extension

Following is the command to set Room Phone / Floor Service Phone in case of Hotel Version:

Press 'prog' key + 1234 (PBX Password)

31 EX Y

Where, Y= 1 stands for Room phone.

= 0 stands for Floor Service phone.

EX = Extension number 200,201,202…

Note: A room phone can't call another room phone. It is possible via operator only. A room phone can call a service phone and vice-versa.

Default: All extension are set as service phone.

Allotting Floor Service Extension to Room Extensions

Following is the command:

Press 'prog' key + 1234 (PBX Password)

41 EX EY

Where, EX = Room Extension Numbers 200, 201, 202, …..

EY = Floor Service Extension Numbers 200, 201, 202, …..

Default: No floor service is defined.

Note**:** Before this programming, set 'EX' as Room Extension and 'EY' as Floor Service extension.

Remote Programming
(REQUIRES A VOICE CARD)

Remote programming is the simplest way to attend the service calls if the PBX requires changes in the software programming. This programming can be carried out over the telephone. Remote programming can be carried out only from the tone type of instrument. The procedure for Remote programming is as follows:

Establish conversation with the required EPABX.

Ask customer to transfer the call to Main operator (should be key telephone or DSS)

Ask customer to press [HOLD] + [PROG] key

When the customer presses the [PROG] key, the system goes into remote mode

Now it is up to customer to keep the handset, or he can keep viewing the programming done by the Engineer

Now start programming

Dial command directly without any password

Hear confirmation tone and press # key to enter the next program

Press '∗' to terminate programming or the system will terminate programming if no key is pressed by the Engineer for 30 sec's

Note**:** Remote Programming is possible only through VOICE card.

Resetting the system

To reset PBX or its programming following is the command:

Programming:

Press 'prog' key + 1234 (PBX Password)

14X

Where, X= 1 - To clear memory and set to factory default setting, (Hard reset).

= 9 - To reset system without changing any setting, (Soft reset).

Restricted Table

Telephone Numbers starting with defined 1 digit or 2 digits can be restricted to Extensions having Local Dialing facility (i.e. extensions having COS= 1).

A maximum of 5 digits can be programmed for restriction.

This feature is effective only for the extensions having class of service = 1

Programming:

Press 'prog' key + 1234 (PBX Password) + 52 D1 D2 D3 D4 D5

Where D1, D2, D3, D4, D5 are the first single/ two digits of the Telephone numbers to be restricted.

Example: If it is required to restrict single digit '1', '2' , '25' , '35' then program as '52 01 02 25 35 00 '

: if two digits '11' and '22' are to be restricted then program as '52 11 22 00 00 00'

Default: No digit is restricted.

Time Setting

Press 'prog' key + 1234 (PBX Password)

43 HH MM SS

Where, HH = 00 to 23 hours.

MM = 00 to 59 minutes.

SS = 00 to 59 seconds.

Voice Link Message to HMS / PMS

Press 'prog' key + 1234 (PBX Password)

25 7X

Where, X = 0 to not to send the voice link message to HMS /PMS

= 1 To send voice link message to HMS / PMS

Default: 25 70

Warranty Terms

CCL Epabx warrants that this product is manufactured under stringent quality standards, making it free from defects in material and workmanship, as per the following terms and conditions:

1. The limited warranty for the system is valid for a period of twelve months from the date of purchase or fifteen months from the date of manufacture which ever is earlier.
2. The limited warranty extends only to the original consumer/ purchaser of the product and is not assignable or transferable to any subsequent purchaser/end user.
3. During the limited warranty period, CCL Epabx or its authorised service network will repair or replace, at CCL Epabx option, any defective product or parts thereof with a new or factory rebuild replacement items and return the product to the consumer in working conditions. No charge will be made to the consumer for either parts or labour in repairing or replacing the product. All replaced parts shall become the property of CCL Epabx.
4. Repaired product will be warranted for a balance of original warranty period.
5. Upon request from CCL Epabx or its authorised service centre, the consumer must provide purchase receipt or other information to prove the date and place of purchase.
6. The consumer shall have no benefit or coverage if any of the following conditions are applicable:
a) The product has been subjected to abnormal use, abnormal condition, improper storage, exposure to moisture or dampness, exposure to excessive temperature or fire etc., unauthorised modifications, unauthorised connections, unauthorised repairs including but not limited to use of unauthorised spare parts in repairs, misuse, neglect, abuse, accident, alteration, improper installation.
b) CCL Epabx was not notified by consumer of the alleged defect or malfunction of the product during the limited warranty period.
c) The product was used with or connected to equipment not fit for use with CCL Epabx system or used in other than its intended use.
d) **THE SYSTEM IS NOT CONNECTED TO A PROPER EARTH OR INCASE HIGH VOLTAGES APPEAR ON EARTH.**
e) **THE DAMAGE IS CAUSED BY LIGHTENING ON EXTENSIONS/ JUNCTION LINES/ OR SPIKES/ SURGES/ HIGH VOLTAGES FROM AC MAIN SUPPLY.**

7. The consumer may contact the authorised dealer to call the service personnel for carrying out repairs or maintenance and the same would be attended within a reasonable response time assigned to the dealer.
8. The consumer will be billed for parts or labour charges not covered by this limited warranty.
9. If the product is brought to CCL Epabx for repairs, after the warranty period CCL Epabx normal service policy shall apply and customer shall be charged accordingly.
10. In no event shall CCL Epabx or their authorised dealer be liable for special or consequential damages or any delay in the performance of this warranty due to causes beyond their control. CCL Epabx shall not be liable for incidental or consequential damage or a loss of anticipated benefits or profits, loss or impairment of privacy of conversation, work stoppage or loss or impairment of data arising out of the use or inability to use the product.
11. CCL Epabx neither assumes nor authorises any authorised service centre or any person or entity to assume for it any other obligation or liability beyond what is expressly provided by this limited warranty. All warranty information, product features and specifications are subject to change without prior notice.
12. Any dispute arising out of this warranty shall be subjected to jurisdiction of the arbitrator within the city of Delhi.
13. The decision of CCL Epabx, on defects, damages etc shall be final and binding on the parties and no dispute regarding this, could be agitated before any civil court.

Part No: DG 120/248 PRGM-18

CCL Epabx