EPABX • Fixed Design

Inspire 104 / 206

104
- 1 Trunk
- 4 Extension

206
- 2 Trunk
- 6 Extension

Inspire 308

308
- 3 Trunk
- 8 Extension

LED Display

KTS

Inspire 414

414
- 4 Trunk
- 14 Extension

KTS

CALLER ID | MMOH# | Battery Backup* | KTS* | Paging# | Electric Gadget Control* | Voice Message*

Inspire 104 / 206

Extension Function	Trunk Function
Standard	**Outgoing Call**
☞ Auto call Back on Busy Extn.	☞ Access Group for Trunk
☞ Barge in with warning tone	(A) Access Linear Mode
☞ Call Monitor	(B) Access Rotational Mode
☞ Call Toggle (between Extension)	(C) Access Selective Mode
☞ Call pickup (Intercom / Trunk Call)	(D) Access Reserve Mode
(A) Common Pickup	☞ Auto call Back on Busy Trunk
(B) Selective Pickup	☞ Class of Service (Local / STD / ISD)
☞ Call Transfer Mode	☞ COS Trunk Check Clause
(A) Transfer with Flash	☞ Call Toggle (Outword Trunk Call)
(B) Transfer without Flash	☞ Day Night Mode (Manual)
☞ Call transfer Type	☞ DTMF Dialing
(A) Transfer after Consult	☞ External Trunk Call
(B) Transfer without Consult	☞ Global 100 Memory Bank (for All Extn.)
☞ Call Hold	☞ Hot Line Dialing (Trunk No.)
☞ Caller ID (Extension Call)	☞ Last no. Redial
☞ Call Forward	☞ Selective Trunk Barring
☞ Conference (3 party)	☞ Trunk Tie Digit
☞ Extension to Extension Call	**Incoming Call**
☞ Do not Disturb	☞ Caller ID (Inbuilt DTMF/Optional FSK#)
☞ Extension Ring Type	(A) Round Robin / Simultaneous
(A) Normal (B) Trunk	(B) Transferred call (In / Out)
(C) Executive (D) Cordless	☞ Call Toggle (Incoming Trunk Call)
Customize	☞ DID (Direct Inward Dialing)
☞ Hot line (Extension)	☞ Day Night Mode (Manual)
☞ Relay action (Manual Mode)	☞ Incoming Ring Type
☞ Flexible Extn. /Features Code No.	(A) Round Robin Ring Call
☞ Feature Enable / Disable Code	(B) Simultaneous Ring Call

Inspire 308 / 414

Extension Function	Trunk Function
Standard	**Outgoing Call**
☞ Auto call Back on Busy Extn.	☞ Access Group for Trunk
☞ Barge in with warning tone	(A) Access Linear Mode
☞ Call Monitor	(B) Access Rotational Mode
☞ Call Toggle (between Extension)	(C) Access Selective Mode
☞ Call pickup (Intercom / Trunk Call)	(D) Access Reserve Mode
(A) Common Pickup	☞ Auto call Back on Busy Trunk
(B) Selective Pickup	☞ Class of Service (Local / STD / ISD)
☞ Call Transfer Mode	☞ COS Trunk Check Clause
(A) Transfer with Flash	☞ Call Toggle (Outword Trunk Call)
(B) Transfer without Flash	☞ Day Night Mode (Manual / Auto)
☞ Call transfer Type	☞ DTMF Dialing
(A) Transfer after Consult	☞ External Trunk Call
(B) Transfer without Consult	☞ Global 100 Memory Bank (for All Extn.)
☞ Call Hold	☞ Hot Line Dialing (Trunk No.)
☞ Caller ID (Extension Call)	☞ Last no. Redial
☞ Call Forward	☞ Selective Trunk Barring
☞ Conference (3 party)	☞ Trunk Tie Digit
☞ Extension to Extension Call	**Incoming Call**
☞ Alarm (One Time / Repeat)	☞ Caller ID (Inbuilt DTMF/Optional FSK#)
☞ Do not Disturb	(A) Round Robin / Simultaneous
☞ Extension Ring Type	(B) Transferred call (In / Out)
(A) Normal (B) Trunk	☞ Call Toggle (Incoming Trunk Call)
(C) Executive (D) Cordless	☞ DID (Direct Inward Dialing)
☞ Flash Time	☞ Day Night Mode (Manual / Auto)
Customize	☞ Incoming Ring Type
☞ Hot line (Extension)	(A) Round Robin Ring Call
☞ Relay action (Manual / Auto Mode)	(B) Simultaneous Ring Call
☞ Flexible Extn. /Features Code No.	
☞ Feature Enable / Disable Code	

Note: FSK CLI support only 2 trunk port in 414 model

Optional Value Added Function of 308 /414

MMOH (120 sec)
- ☞ Music Recordable
- ☞ Voice Recordable
- ☞ Put on Hold Replay

KTS Interface
- ☞ 2 Port Interface
- ☞ Max. 2 KTS Connect

Voice Disa
- ☞ 1 CH VDC
- ☞ Welcome / Error Busy / No Reply
- ☞ Day & Night Greeting

FND Interface
- ☞ To Connect FND Display

Relay & Paging Card
- ☞ Paging (Option to connect external audio amplifier for announcement)
- ☞ Relay (Option to connect external EM Door Lock or Electric Gadgets)

Front No. Display of 308/414

Features
- ☞ Date & time Display
- ☞ Room No. / Extn. No. Display
- ☞ Room Buzzer Alert No. Display
- ☞ Room call Buzzer waiting flash
- ☞ Call waiting flash clear option

Inbuilt Value Added Function for All

- ☞ Password Protected
- ☞ Remote Programming
- ☞ RTC Function (only in 308/414) (To operate timer function for day night mode, Alarm, Flash, etc.)

Utility at Reception of
- Small guest house
- Fire panel Console
- Hospital
- Small shop
- PG

Save Wire
Intercom call / buzzer call on same single pair wire

Technical Specification

Technology	Microcontroller Based SPC
Trunk Loop Resistance	1200 ohms
Crostalk	Better than 70 db
Input Power	AC 220V, 50Hz
Power Consumption	20 watt Max.
Extn Voltage	40 V DC
Cabling	KTS on 2 pair & SLT on single pair

#Required additional Hardware

Configuration & Dimension

EPABX Model	Total Port	TRK (Max.)	Extn (Max.)	Dimension (cm) W	H	D
104	5	1	4	17	20	5
206	8	2	6	17	20	5
308	11	3	8	19.5	21	6
414	18	4	14	24	24	8

*Optional Utility / Function

Power Management

EPABX Model	Power Supply	SMPS Battery Backup cum Charger (Optional)	Req. No. of Battery & Rating*
104	PS	N. A.	N. A.
206	PS	N. A.	N. A.
308	PS	SMPS 12V Battery Backup (without battery)	1 no., 12V,7AH
414	SMPS	SMPS 12V Battery Backup (without battery)	1 no., 12V,7AH

N.A. (Not applicable)

EPABX · Modular Flexible Design

Crystal
Telecom · Energy Meter · CCTV · LED

GAMMA Model

24ZX (618 ZX)
- Max. 6 Trunk
- Max. 22 Extension

40 ZX
- Max. 10 Trunk
- Max. 38 Extension

KTS

56 KX
- Max. 12 Trunk
- Max. 54 Extension

96 KX
- Max. 12 Trunk
- Max. 94 Extension

Op-Con

| CALLER ID" | MMOH" | Battery Backup" | KTS" | Paging" | Electric Gadget Control" | Voice Message" | Computer" |

Trunk Function

Ideal Incomming
- Round Robin Ring
- Simultaneous Ring
- Delay Simultaneous Ring
- Direct Inward Dialing (DID)#
  - (A) DID By Extension Number
  - (B) DID By Extension Name (ZX only)
- Direct Outword Station Access (DOSA)#
  - (A) To make external call
  - (B) To Relay control from Remote Location
- Day / Night Mode (Auto / Manual)#
- Access Group for Trunk
- Class of service: Local / STD / ISD

Ideal Outgoing
- DTMF / PULSE Dialing
- External Call Forwarding (ECF)
- Hot Line Dialing (Trunk No.)
- Last no. Redial
- Linear Access Mode (LAM)
- Reserve junction line
- Selective Trunk Barring
- Walk in Class of Service

Call Cost Control Outgoing
- Auto shut dyanamic lock
- Accepted & Denied Table
- Call Disconnector (Incoming / Outgoing)
- Call Disconnector Warning Tone
- Call Budgeting
- Least Call Routing (LCR)-100 Number
- Global Memory Bank (Common for All extn.)
  - (A) (ZX Model - 90*5 no. with Name)
  - (B) (KX Model 90 no.without name)
- Personal Memory Bank (Individual for Extn.)
  - (A) (ZX Model - 9*5no. With Name)
  - (B) (KX Model 10 no.without name)

Extension Function

Standard
- Auto Call Back on Busy / no Reply
- Caller ID (Extn. To Extn.)
- Call Camp on
- Call Hold
- Call Parking
- Call pickup (Internal/Common/Parked)
- Call toggle
- Conference (3 party)
- Do not Disturb (ZX model only)
- Flash Time
- Hot Line Dialing (For intercom)
- Alarm
  - (A) One time Alarm   (B) Daily Alarm
  - (C) Remote Alarm   (D) Duration Alarm

Customize
- Hunting Group (Busy)
- Call Forward: Busy / All calls / no reply
- Call Privacy
- Follow me

Administrative
- Bargein
- Executive Ring
- Flexible Numbering
- Monitor
- Un supervised conference (2 party)
- Virtual Extension

Relay Port
- 1 port - 24 ZX (Elect. Gadget & D-Lock)
- 2 port - 40 ZX (Elect. Gadget & D-lock)
- 1 port- 56 / 96 KX (Elect. Gadget)
- 24 /10 Set of Time for ZX / KX Model
- Automatic ON/OFF with time duration
- Relay control from Remote Location

ASMDR Buffer

- Call Buffer 2150 No. (ZX Model)
- Call Buffer 1250 No. (KX Model)
- ON Line / OFF Line Call Storage
- ASMDR Billing in Rs (KX Model)
  - (A) Unit Rate
  - (B) Service Charge
- Time slab setting (Weekday / Holiday)

Trunk Call Printout

- Trunk Call Report
- Date wise Call Report
- Extn. Wise Call Report
- All Call Report
- Incomming Call Report with Duration
- Summary Report
- Unanswered / Missed Call Report

System Control

- Password Protected
- Built in RTC
- Bulk Programming
- Jn. Tie line count
- Remote Programming
- Two line Cordless Phone Ring
- Music/Ring back tone setting (ZX only)
- Power Failure Trunk Transfer
  - Automatic TRK Trf. to Respective Extn.

HOTEL Function

Standard
- Room no. wise extn no
- Floor wise room service
- Room call budgeting
- Single digit access to op-con
- Wakeup call service
- Alarm no reply info at console
- Check in / out through
  - Console
  - Phone
- Check in with guest name
- Caller ID-Guest name at console
- Guest station grouping

Administrative
- Guest station service restriction
- Group Function
  - Individual
  - Guest
  - Service
- Room Call Barring / open
- Room Status View at Console
- Temporary Check IN /OUT
- Welcome masage

Trunk Call Printout

Hotel Mode
- Room call printout
- Daily call printout
- Date wise call Report
- Hotel Name at printout report
- Guest Name at printout report

Optional Value Added Function of ZX / KX Model

External Caller ID (DTMF)
External Caller ID (FSK" Optional)
TRK Caller ID Number on Extn
Transferable Caller ID (FSK/DTMF)
Outgoing No. Transfer on EXTN/KTS
CLI Transfer from Non CLI Phone
CLI Based Call Routing

Voice Disa (Multi- level)
(1 CH / 2 CH for ZX & 1 CH for KX Model)
Independent time slot of each level
Multilevel Recordable Message for-
ZX Model
- Welcome · Alarm · Emergency
- Extn. Busy · No. Reply · Wrong No.
KX Model (Welcome Message only)

Op-Con / Paging / Fax
ZX Model
- N. A. for 618
- Optional for 40ZX
KX Model
- Inbuilt Op- con Port
- Inbuilt Paging Port
- N. A. for FAX

Serial / KTS interface
ZX Model
- Combo of KTS/Serial port
- 2 Port KTS int.
KX Model
- Inbuilt Serial Port
- Optional 2 port KTS Int.

MMOH (120 sec)
(For All Model)
Music Recordable
Voice Recordable
Put on Hold Replay

Technical Specification

Technology	Microcontroller Based SPC
Insertion Loss	Less than 1 db (Extn. To Trunk)
Trunk Loop Resistance	1200 ohms
Crostalk	Better than 70 db
Input Power	AC 220V, 50Hz
Power Consumption	40 watt Max.
Extn Voltage	48 V DC (ZX / KX Model)
Cabling	KTS on 2 pair & SLT on single pair

#Requried additional Hardware

Configuration & Dimension

EPABX Model	Total Port	TRK (Max.)	Extn (Max.)	Expansion Step	Dimension (cm) W	H	D
618 ZX	24	6	22	103/004	28	38	11
40 ZX	40	10	38	103/004	28.5	32.5	13
56 KX	56	12	54	206/008	25	32	15.5
96 KX	96	12	94	206/008	43	36.5	19.5

*Optional Utility / Function

Power Management

EPABX Model	Power Supply	SMPS Battery Backup cum Charger (Optional)	Req. No. of Battery & Rating*
618ZX	PS / SMPS	SMPS 12V Battery Backup (without battery)	1 no. , 12V,7AH
40ZX	SMPS	SMPS 24V Battery Backup (without battery)	2no. , 12V,7AH
56KX			
96KX			

N.A. (Not applicable)

Operator Console (40ZX / 56KX / 96KX)

- Caller-ID Number Display
- Extn. Name Storage
- Day, Date & Time Display
- Conferencing
- Memory Dialing

DSS 30

28 (14 + 14) Programmable
DSS Keys and 10 Junction

Features
- Message to guide at various stages
- Internal Caller's / Guest Name Display
- Auto Answer Mode
- Display of Pending Extn. & Trunk
- Call Queuing
- Call Answering in Incoming Order
- Selective Call Answering
- Operator Absent / Present Mode
- Night Mode Indication
- Buffer Status Indication
- Message Wait Display
- Total Call Charge Display of each Extns.

Key Telephone System (KTS) (Inspire 308 / 414 & 24ZX / 40ZX / 56KX / 96KX)

Features
- Alphanumeric 2 X 16 Backlit LCD
- Dial By Name
- Caller -ID (Numeric & By name)
- Auto Answer
- Direct Transfer
- SMS
- H/F Speaker Phone
- Digital Volume Control
- Status Message
- Call History
- Tri Colour LED -
  - Extn • Trunk • Busy

KX - 30

Keys with
Tri Colour LED

28 (14 + 14) Programmable
and 13 Function Key

Caller ID by Name -	Displays the name of the Extension / Jn. Caller.
Status Message-	Display Status Message like "Ext.203 Free", "P&T Ring at 201","205 SP with Ext." etc.
SMS - (KTS to KTS & PBT to KTS)	KTS can send / receive predefined SMS's (e.g.-"Greeting Message", "Meeting Message" etc.). The KTS will receive SMS even while busy.
Call History-	Memory of 100 incoming/ missed calls & SMS's.
Dial By Name -	Memory to store 100 frequently user numbers with name.
Auto Answer -	Active auto hands free mode on receiving incoming ring & auto cancelled after caller disconnection.

GSM FCT (Fixed Cellular Termial)

Crystal

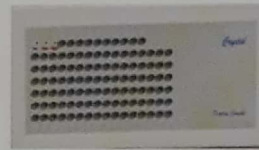*Crystal*

Crystal

EPABX FCT
603

- GSM based
- Dual Band 900 / 1800 / 1900 MHz
- Single SIM Support
- Omini Directional Antenna
- RJ 11 Telephone port
- EPABX Trunk port Connectivity
- Signal Strenght Indication
- CLI (Caller ID) on FCT Display
- CLI transfer to EPABX Extension

Additional with Display FCT
- 2 Line back-lit LCD (Max. 16 character)
- Call Duratation on Display
- Date Time on Display

LED DISLPLAY (56KX / 96KX)

- LED Display
- Run Status
- Night Mode Status
- Buffer Status
- Extension Status
- Trunk Status

Line Protection Unit (LPU)

- Lighting Protected
- RF Noise Filter
- Models
  - 2 Ports
  - 4 Ports

COMPANION PRODUCTS

Crystal DVR, NVR & Camera
- DVR 4/8/16/32 Ch.
- Camera IR/AHD/IP

Crystal Multi Floor Society Intercom
- GX-16 to 64 Ports
- G2K-16 to 2048 Ports

Crystal Video Door Phone
- 4" & 7" Hands Free VDP
- Sleek Outdoor

Crystal A/V Broadcasting
- Audio 16 Ports
- Audio-Video 16-240 Ports

Crystal Scheduler
- Stand Alone Automatic Bell
- Integrate with Broadcast

Crystal Digital EPABX
- 16 Ports to 184 Ports

Crystal Smart Energy Meter
- Dual Sense
- Pre-Paid

Some of the features require optional cards & hardware.

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