



CrystalTM
Telecom • Energy Meter • CCTV • LED

CONNECT TO A SUPERIOR TECHNOLOGY TODAY

Hybrid EPABX
Key Telephone System



**FIRST TIME IN INDIA
CALL TRANSFER WITHOUT FLASH***

* Only in Inspire model

CREATING BENCHMARKS SINCE 1981

Telecom | Multi Floor Apartment Solution | Audio-Video Broadcasting
Surveillance | Video Door Phone | Smart Energy Meter

YAMUNAJI TELECOM (Mobile : +919825045681)

Inspire 104 / 206



- 104**
- 1 Trunk
 - 4 Extension
- 206**
- 2 Trunk
 - 6 Extension

Inspire 308



- 308**
- 3 Trunk
 - 8 Extension

LED Display

Inspire 414



- 414**
- 4 Trunk
 - 14 Extension



CALLER ID



MMOH*



Battery Backup*



KTS*



Paging*



Electric Gadget Control*



Voice Message*

	Extension Function	Inspire 104 / 206	Trunk Function
Standard	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
	Call Transfer Mode		Auto call Back on Busy Trunk
	(A) Transfer with Flash		Class of Service (Local / STD / ISD)
	(B) Transfer without Flash		COS Trunk Check Clause
	Call transfer Type		Call Toggle (Outward Trunk Call)
	(A) Transfer after Consult		Day Night Mode (Manual)
(B) Transfer without Consult		DTMF Dialing	
Customize	Call Hold		External Trunk Call
	Caller ID (Extension Call)		Global 100 Memory Bank (for All Extn.)
	Call Forward		Hot Line Dialing (Trunk No.)
	Conference (3 party)		Last no. Redial
	Extension to Extension Call		Selective Trunk Barring
	Do not Disturb		Trunk Tie Digit
	Extension Ring Type		Caller ID (Inbuilt DTMF/Optional FSK#)
	(A) Normal (B) Trunk		(A) Round Robin / Simultaneous
	(C) Executive (D) Cordless		(B) Transferred call (In / Out)
	Hot line (Extension)		Call Toggle (Incoming Trunk Call)
Relay action (Manual Mode)		DID (Direct Inward Dialing)	
Outgoing Call	Flexible Extn. /Features Code No.		Day Night Mode (Manual)
	Feature Enable / Disable Code		Incoming Ring Type
			(A) Round Robin Ring Call
			(B) Simultaneous Ring Call
Incoming Call			

	Extension Function	Inspire 308 / 414	Trunk Function
Standard	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
	Call Transfer Mode		Auto call Back on Busy Trunk
	(A) Transfer with Flash		Class of Service (Local / STD / ISD)
	(B) Transfer without Flash		COS Trunk Check Clause
	Call transfer Type		Call Toggle (Outward Trunk Call)
	(A) Transfer after Consult		Day Night Mode (Manual / Auto)
Customize	(B) Transfer without Consult		DTMF Dialing
	Call Hold		External Trunk Call
	Caller ID (Extension Call)		Global 100 Memory Bank (for All Extn.)
	Call Forward		Hot Line Dialing (Trunk No.)
	Conference (3 party)		Last no. Redial
	Extension to Extension Call		Selective Trunk Barring
	Do not Disturb		Trunk Tie Digit
	Extension Ring Type		Caller ID (Inbuilt DTMF/Optional FSK#)
	(A) Normal (B) Trunk		(A) Round Robin / Simultaneous
	(C) Executive (D) Cordless		(B) Transferred call (In / Out)
Outgoing Call	Flash Time		Call Toggle (Incoming Trunk Call)
	Hot line (Extension)		DID (Direct Inward Dialing)
	Relay action (Manual / Auto Mode)		Day Night Mode (Manual / Auto)
	Flexible Extn. /Features Code No.		Incoming Ring Type
	Feature Enable / Disable Code		(A) Round Robin Ring Call
			(B) Simultaneous Ring Call
Incoming Call			

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



Utility at Reception of

- Small guest house
- Fire panel Console
- Hospital
- Small shop
- PG

Features

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

Save Wire

Intercom call / buzzer call on same single pair wire

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.)

Technical Specification

Technology	Microcontroller Based SPC
Trunk Loop Resistance	1200 ohms
Crosstalk	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

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

Power Management

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

* Required additional HW/Wire

* Optional Utility / Function

N.A. (Not applicable)

GAMMA Model



CALLER ID*



MMOH*



Battery Backup*



KTS*



Paging*



Electric Gadget Control*



Voice Message*



Computer*

- 24ZX (618 ZX)**
 ≥ Max. 6 Trunk
 ≥ Max. 22 Extension
- 40 ZX**
 ≥ Max. 10 Trunk
 ≥ Max. 38 Extension



- 56 KX**
 ≥ Max. 12 Trunk
 ≥ Max. 54 Extension
- 96 KX**
 ≥ Max. 12 Trunk
 ≥ Max. 94 Extension

Trunk Function

Ideal Incoming

- 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 Outward 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
- Auto shut dynamic lock
- Accepted & Denied Table
- Call Disconnecter (Incoming / Outgoing)
- Call Disconnecter Warning Tone
- Call Budgeting

Call Cost Control Outgoing

- 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

Customize

- (A) One time Alarm (B) Daily Alarm
- (C) Remote Alarm (D) Duration Alarm
- Hunting Group (Busy)
- Call Forward: Busy / All calls / no reply
- Call Privacy
- Follow me

Relay Port Administrative

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

Administrative

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

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/Serail 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
Crosstalk	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

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

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			

*Required additional

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

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

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



DSS 30

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

Keys with
Tri Colour LED



KX - 30

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 Terminal)



- GSM based
- Dual Band 900 / 1800 / 1900 MHz
- Single SIM Support
- Omini Directional Antenna
- RJ 11 Telephone port
- EPABX Trunk port Connectivity
- Signal Strength 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 Duration on Display
- Date Time on Display

LED DISPLAY (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.

Authorized Dealer :