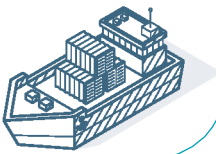


# MED-100/200 Hybrid and Full IP Telephone System

IP Based PABX (Private Automatic Branch eXchange)(MED-100, MED-200)  
16~128 Extension, 8-trunk, GPS Interface



## GENERAL DESCRIPTION

Auto Telephone System is an electronic telephone switchboard with reliability and durability to meet various needs occurring inside or outside the ship. It operates with the interface between the central exchange unit, which is a micro-computer controlled system, and telecommunication equipment. Particularly, the system is suited to connecting not only to the telecommunication equipment such as Inmarsat-F, VSAT, Mini-M, and VSM but also to the Internet protocols and network communications. This system contains a minimum of 24 extension lines up to 500 and the lines can be installed by 8 or 16 units. As for the type of telephone, flush, wall, portable, waterproof, explosion-proof, and intrinsically safe (Used for normal condition or in the area with the possibility of explosive gas in case of accident) types are available, which can be interfaced to Horn/Bell/Flashing Light. This system was tested at the IEC60945 standard. The Type Appraisal was done from DNV GL, RMRS.



### Product Information

System Features	<ul style="list-style-type: none"><li>· Extension 40 + Trunk 4 ~ Extension 128 + Trunk 4</li><li>· Simultaneous Call : number of lines</li><li>· Paging call : 3-Groups to PA system</li><li>· Priority call / Group call / Call pickup function / Wake-up call</li><li>· Call transfer / Call forwarding / Camp-on / Hotline</li><li>· Add-on conference : 5 Party, 6 Group</li><li>· Self-ring testing / System fails alarm &amp; display</li><li>· Handset hook fail alarm / Handset hook fail display</li><li>· Main / emergency power automatic change &amp; alarm display</li><li>· Method for programming at front of main PABX cabinet</li><li>· ISDN Connection using gateway (Optional)</li><li>· VoIP using gateway (Optional)</li><li>· Call accounting by serial printer (Optional)</li><li>· EPROM back-up memory (Optional)</li><li>· Recording and playback for PAGA paging (Optional)</li><li>· Time synchronization between master clock or GPS system</li><li>· Interface among VSAT and LAN/WAN network using IP gateway(Optional)</li><li>· Program password protection / Variety application</li></ul>
Electric & Environment	<ol style="list-style-type: none"><li>1. Power Source : AC110/220V, 1Ø, 50/60 Hz</li><li>2. Emergency Power : AC or DC 24V (Ripple less than 5%)</li><li>3. Power Consumption : AC - less than 100VA DC - less than 5A (At 24V DC)</li><li>4. Temperature : -20°C ~ +45°C</li><li>5. Humidity : Less than 90%</li><li>6. Certification : Submitted</li></ol>
Integrated Communication System	<ol style="list-style-type: none"><li>1. PABX system : Analog, IP, Wi-Fi Phone using gateway</li><li>2. PAGA system : Single or duplicated applications</li><li>3. Communal aerial system : IP-TV, CCTV, TVRO, DVD &amp; etc</li><li>4. Master clock system : Slave clock interfaced with GPS</li></ol>



MED-100 Main Cabinet ▲

### Integrated Communication System

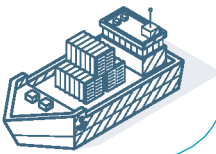
1. PABX system : Analog, IP, Wi-Fi Phone using gateway
2. PAGA system : Single or duplicated applications
3. Communal aerial system : IP-TV, CCTV, TVRO, DVD & etc
4. Master clock system : Slave clock interfaced with GPS

### Wiring Diagram of Integrated Communication System



# MCX-5000 Auto-Exchanger System

Marine PABX (Private Automatic Branch eXchange)(MCX-5000),  
24~128 Extension, 4-trunk, GPS Interface



## GENERAL DESCRIPTION

Auto Telephone System is an electronic telephone switchboard with reliability and durability to meet various needs occurring inside or outside the ship. It operates with the interface between the central exchange unit, which is a micro-computer controlled system, and telecommunication equipment. Particularly, the system is suited to connecting not only to the telecommunication equipment such as Inmarsat-F, VSAT, Mini-M, and VSM but also to the Internet protocols and network communications. This system contains a minimum of 24 extension lines up to 500 and the lines can be installed by 8 or 16 units. As for the type of telephone, flush, wall, portable, waterproof, explosion-proof, and intrinsically safe (Used for normal condition or in the area with the possibility of explosive gas in case of accident) types are available, which can be interfaced to Horn/Bell/Flashing Light. This system was tested at the IEC60945 standard. The Type Approval was done from DNV GL.



Electric & Environment

- 1. Power Source : AC110/220V, 1Ø, 50/60 Hz
- 2. Emergency Power : AC or DC 24V (Ripple less than 5%)
- 3. Power Consumption : AC - less than 100VA  
DC - less than 5A (At 24V DC)
- 4. Temperature : -20°C ~ +45°C
- 5. Humidity : Less than 90%
- 6. Certification : Submitted

Integrated Communication System

- 1. PABX system : Analog, IP, Wi-Fi Phone using gateway
- 2. PAGA system : Single or duplicated applications
- 3. Communal aerial system : IP-TV, CCTV, TVRO, DVD & etc
- 4. Master clock system : Slave clock interfaced with GPS

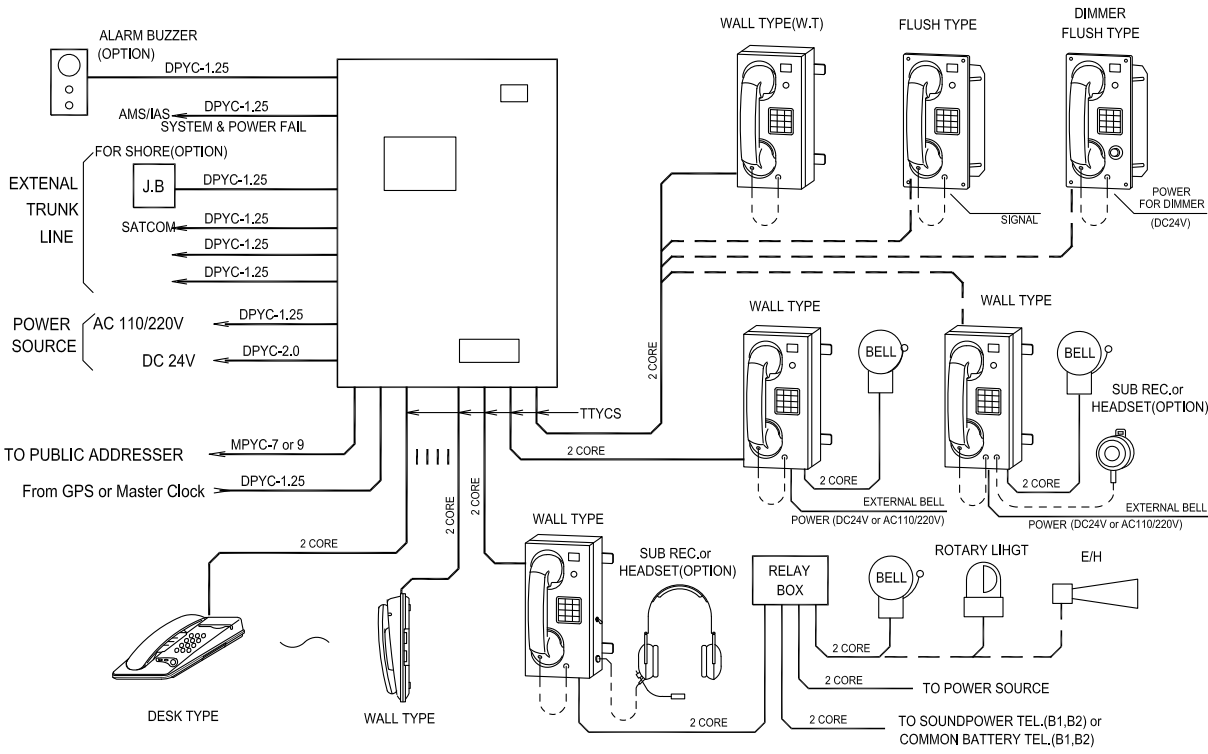
Product Information

- System Features
- Extension 40 + Trunk 4 ~ Extension 128 + Trunk 4
  - Simultaneous Call : number of lines
  - Paging call : 3-Groups to PA system
  - Priority call
  - Group call
  - Call pickup function
  - Wake-up call
  - Call transfer
  - Call forwarding
  - Camp-on
  - Hotline
  - Add-on conference : 5 Party, 6 Group
  - Self-ring testing
  - System fails alarmz & display
  - Handset hook fail alarm
  - Handset hook fail display
  - Main / emergency power automatic change & alarm display
  - Method for programming at front of main PABX cabinet
  - ISDN Connection using gateway (Optional)
  - VoIP using gateway (Optional)
  - Call accounting by serial printer (Optional)
  - EPROM back-up memory (Optional)
  - Recording and playback for PAGA paging (Optional)
  - Time synchronization between master clock or GPS system
  - Interface among VSAT and LAN/WAN network using IP gateway (Optional)
  - Program password protection
  - Variety application



MCX-5000 Main Cabinet ▲

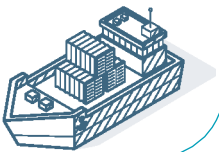
Wiring Diagram of Auto Exchanger System












Accessory-Auto Telephone






MAIN CABINET :  
MED-100 | MED-200 | MCX-5000 Series



ACCESSORY FOR TELEPHONE				
MODEL	LC-221A	LC-221B	LC-213A	LC-213B
PHOTO				
MOUNTING TYPE	DESK	WALL	WALL	WALL
GLAND	X	X	X	1
SIGNAL CONTACT	X	X	O	O
TERMINAL DEVICE	X	O	O	O
HEADSET	X	X	X	X
DIMMER	X	X	X	X
IP GRADE	IP22	IP22	IP22	IP44
(WxDxH)mm	168x100x210	168x100x210	152X143X270	152X143X270
WEIGHT	0.4kg	0.5kg	2.2kg	2.2kg
COLOUR	WHITE IVORY	WHITE IVORY	GRAY	GRAY
MATERIAL	ABS	ABS	ABS	ABS
INSTALL AREA	ACCOMMODATION	ACCOMMODATION	ACCOMMODATION	ACCOMMODATION

LC-213C	LC-213E	LC-213G	LC-213G1
			
WALL	WALL	WALL	WALL
2	3	2	3
O	O	O	O
O	O	O	O
X	X	O	O
X	X	X	X
IP44	IP44	IP44	IP44
152X143X270	220X143X270	220X143X270	220X143X270
2.2kg	2.7kg	2.9kg	2.9kg
GRAY	GRAY	GRAY	GRAY
ABS	ABS	ABS	ABS
GALLEY,WORK SHOP	GALLEY,WORK SHOP	MACHINERY	MACHINERY

MODEL	LC-215A	LC-215C	LC-215AW	LC-217
PHOTO				
MOUNTING TYPE	FLUSH	FLUSH	FLUSH	PORTABLE
GLAND	X	X	X	X
SIGNAL CONTACT	O	O	O	X
TERMINAL DEVICE	O	O	O	V
HEADSET	X	X	X	X
DIMMER	O	X	X/O	X
IP GRADE	IP22	IP22	IP56	IP56
(WxDxH)mm	152X175X270	152X175X270	152X175X270	156X162X274
WEIGHT	1.7kg	1.5kg	2kg	2.5kg
COLOUR	BLACK	BLACK	BLACK	GRAY
MATERIAL	ABS	ABS	ABS	STEEL/ABS
INSTALL AREA	CONSOLE	CONSOLE	WING CONSOLE	-

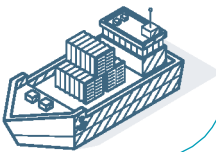
INTRINSICALLY SAFE TELEPHONE					
MODEL	LIS-114	MRN-2000IS	LIS-117	IBT-100	IBT-200
PHOTO					
CERT NO	IECEX BAS 17.0014X			IECEX BAS 17.0013	
GLAND	1	X	X	6	6
IP GRADE	IP44	IP22	IP44	IP44	IP44
WEIGHT	2.9kg	0.7kg	4.1kg	8.5kg	8.5kg
COLOUR	BLACK	BLACK	BLACK	GRAY	GRAY
MATERIAL	ABS	ABS	ABS	STEEL	STEEL
INSTALL AREA	HAZARDOUS AREA	HAZARDOUS AREA	HAZARDOUS AREA	SAFETY AREA	SAFETY AREA
(WxDxH)mm	189x100x224	200x110x223	194x153x25	406x83x256	406x83x256





\* "N" - Noise Cancel Type





Accessory-Auto Telephone







MAIN CABINET :  
MED-100 I MED-200







Auto-Exchanger System



ACCESSORY FOR TELEPHONE (NEW VERSION)					
MODEL	LAA-113A	LAA-114B	LAA-114C	LAA-114HB	LAA-114HC
PHOTO					
MOUNTING TYPE	WALL	WALL	WALL	WALL	WALL
GLAND	X	2	3	2	3
SIGNAL CONTACT	O	O	O	O	O
TERMINAL DEVICE	O	O	O	O	O
HEADSET	X	X	X	O	O
DIMMER	X	X	X	X	X
IP GRADE	IP56	IP56	IP56	IP56	IP56
(WxDxH)mm	189x100x224	189x100x224	189x100x224	189x100x224	189x100x224
WEIGHT	2.9kg	2.9kg	2.9kg	2.9kg	2.9kg
COLOUR	BLACK	BLACK	BLACK	BLACK	BLACK
MATERIAL	ABS	ABS	ABS	ABS	ABS
INSTALL AREA	ACCOMMODATION	GALLEY,WORK SHOP	GALLEY,WORK SHOP	MACHINERY	MACHINERY

LAA-115A	LAA-115D	LAA-116A	LAA-116D	LAA-117A
				
FLUSH	FLUSH	FLUSH	FLUSH	PORTABLE
X	X	X	X	X
O	O	O	O	X
O	O	O	O	O
X	X	X	X	X
X	O	X	O	X
IP56	IP56	IP56	IP56	IP56
189x100x224	189x100x224	189x100x224	189x100x224	194x153x255
2.9kg	2.9kg	2.9kg	2.9kg	4.1kg
BLACK	BLACK	BLACK	BLACK	BLACK
ABS	ABS	ABS	ABS	STEEL/ABS
CONSOLE	CONSOLE	CONSOLE	CONSOLE	-

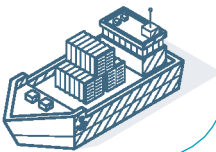
ACCESSORY FOR VOIP PHONE VERSION						
MODEL	LVD-111A	LVD-112A	LVD-113A	LVD-114B	LVD-114C	LVD-114HB
PHOTO						
MOUNTING TYPE	DESK	WALL	WALL	WALL	WALL	WALL
GLAND	X	X	X	2	2	2
SIGNAL CONTACT	X	X	O	O	O	O
TERMINAL DEVICE	X	X	O	O	O	O
HEADSET	X	X	X	X	X	X
DIMMER	X	X	X	X	X	X
IP GRADE	IP22	IP22	IP56	IP56	IP56	IP56
(WxDxH)mm	220x97x200	220x97x200	189x100x224	189x100x224	189x100x224	189x100x224
WEIGHT	0.9kg	0.9kg	2.9kg	2.9kg	2.9kg	2.9kg
COLOUR	BLACK	BLACK	BLACK	BLACK	BLACK	BLACK
MATERIAL	ABS	ABS	ABS	ABS	ABS	ABS
INSTALL AREA	ACCOMMODATION	ACCOMMODATION	GALLEY,WORK SHOP	MACHINERY	MACHINERY	MACHINERY

LVD-114HC	LVD-115A	LVD-115D	LVD-116A	LVD-116D	LVD-117A
					
WALL	FLUSH	FLUSH	FLUSH	FLUSH	PORTABLE
3	X	X	X	X	X
O	X	O	O	O	X
O	O	O	O	O	X
X	X	O	X	O	X
X	X	O	X	O	X
IP56	IP56	IP56	IP56	IP56	IP56
189x100x224	189x100x224	189x100x224	189x100x224	189x100x224	194x153x255
2.9kg	2.9kg	2.9kg	2.9kg	2.9kg	2.9kg
BLACK	BLACK	BLACK	BLACK	BLACK	BLACK
ABS	ABS	ABS	ABS	ABS	STEEL/ABS
MACHINERY	CONSOLE	CONSOLE	CONSOLE	CONSOLE	-

\* "N" - Noise Cancel Type

Accessory-Auto Telephone

MAIN CABINET :  
MED-100 | MED-200 | MCX-5000 Series



ACCESSORY FOR CONNECTION BOX AND ETC		
MODEL	JB-5A	JB-1A
PHOTO		
MOUNTING TYPE	WALL	WALL
IP GRADE	IP56	IP56
GLAND	2	2
DIMENSION(WxDxH)mm	153x110x160	153x110x160
MATERIAL	POLYCARBONATE	POLYCARBONATE
COLOUR	GRAY	GRAY
WEIGHT	1.9kg	1.9kg
INSTALL AREA	FOR PORTABLE	FOR SHORE TEL

MODEL	BZ-7A	BZ-7B
PHOTO		
MOUNTING TYPE	FLUSH	WALL
IP GRADE	IP22	IP22
GLAND	X	X
DIMENSION(WxDxH)mm	89x60x156	89x60x156
MATERIAL	STEEL	STEEL
COLOUR	BLACK/IVORY	BLACK/IVORY
WEIGHT	0.7kg	0.7kg
INSTALL AREA	-	-

JB-61A	JB-62A	JB-63A	JB-63B
FLUSH	WALL	FLUSE	WALL
IP22	IP22	IP22	IP22
X	X	X	X
80x58x120	80x58x120	72x40x120	68x60x30
ABS	ABS	ABS	ABS
IVORY	IVORY	IVORY	IVORY
0.2kg	0.15kg	0.11Kg	0.11Kg
FOR DESK TEL	FOR DESK TEL	FOR DESK TEL	FOR DESK TEL

RB-25	MR-2000	MRN-2000	ATC-2000'S
WALL	-	-	-
IP44	IP22	IP22	IP22
5	X	X	X
140x79x254	200x110x223	200x110x223	5M/10M/15M
ABS	ABS	ABS	PVC Jacket
GRAY	BLACK	BLACK	GRAY
1kg	0.7kg	0.7kg	0.2kg
SAFETY AREA	SAFETY AREA	MACHINERY("N" TYPE TEL)	PORTABLE TYPE TEL