SMART P A SYSTEM. MODEL MCS-II

(DISTRIBUTED AMPLIFIER BASED DESIGN) (NON BLOCKING TYPE).



SMART INDUSTRIAL PA SYSTEM (MODEL MCS II) Distributed Amplifier Design Concept INDUSTRIAL PA SYSTEM with unique features of MULTIPLE PAGE CHANNELS & PRIVATE INTERCOM CHANNELS for Paging and talkback facility.

The system allows for locating individuals anywhere in the plant by using the Individual location paging, zone paging & ALL call paging feature. Multiple Private Intercom Channel allows two way private Communications. The **PLANT EPABX** Interface allows user to make and receive telephone calls to and from the outside world.

SMART INDUSTRIAL PA SYSTEM is essential for growing organizations because of its unique features, flexibility and compatibility with **PLANT EPABX** (The backbone of every establishment communication.)

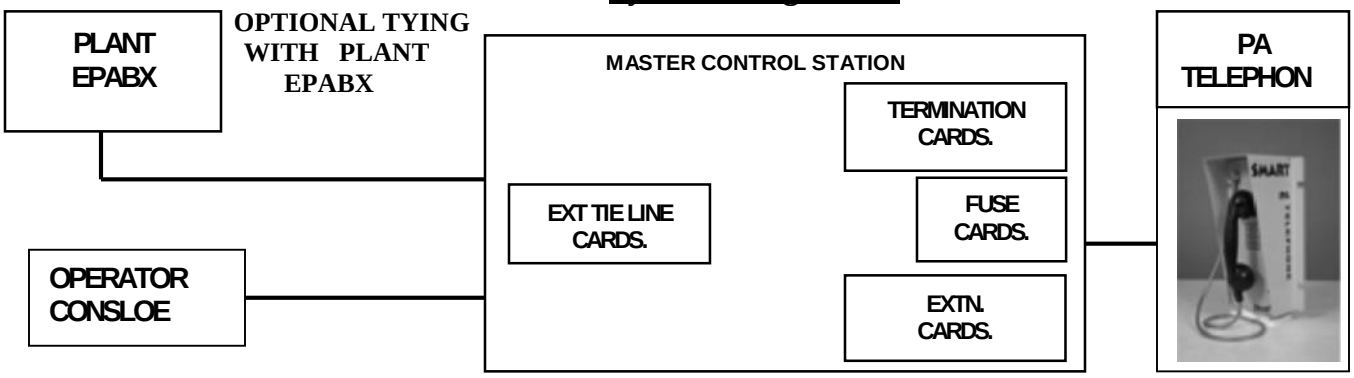
MULTIPLE PAGE CHANNEL: This feature is used for:-

- MULTI CHANNEL SMART PA TELEPHONE PAGING.
- SIMULTANEOUS DIFFERENT ZONE PAGE CALL FROM MULTIPLE LOCATIONS.
- ALL CALL paging.
- The SMART PA TELEPHONES IN AN AREA formed as Zones.
- UPTO 12 ZONES.
- Locating and contacting people in a Particular location, zone or all over the plant.

MULTIPLE PRIVATE INTERCOM CHANNEL: This feature is used for:-

- Multi Channel point to point communication.
- Selective communication by dialing individual access code.
- Talk back after Individual / zone & All Call page by called person in private mode.

System configuration



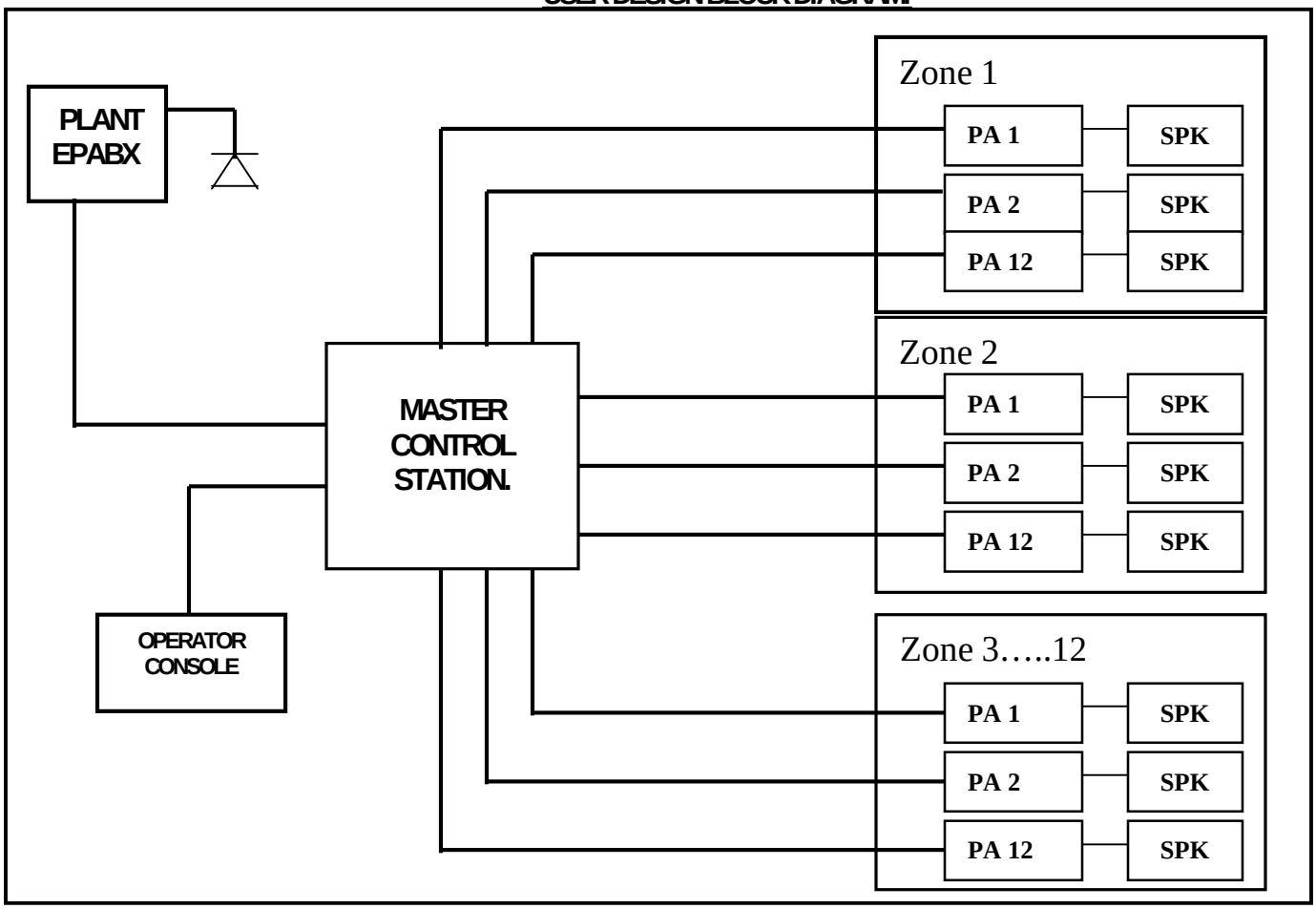
SMART PA TELEPHONE's are connected to extensions of the **MCS**. Control room operator can have one or more **SMART OPERATOR CONSOLE** units connected through **MCS**. On dialing individual extension number of any **PA TELEPHONE** the required person may be paged from any other **PA TELEPHONE, SMART OPERATOR CONSOLE UNIT** OR from any normal telephone connected to **plant EPABX.**

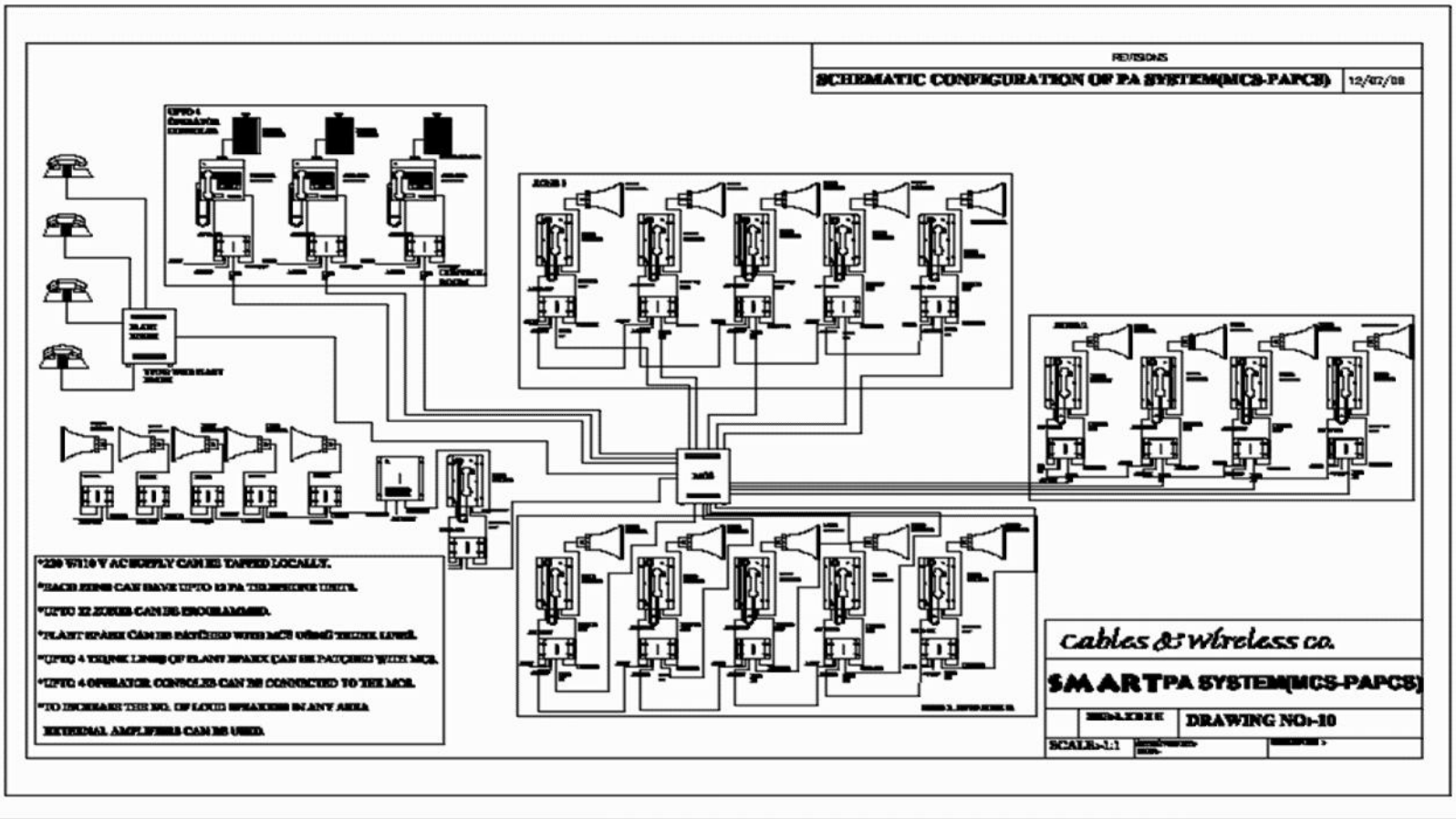
SMART CHOICE:-

- MULTIPLE PAGE CHANNEL'S.
- MULTIPLE PRIVATE INTERCOM CHANNEL'S.
- SINGLE CODE ALL PAGE CALL FROM FIELD.
- SINGLE CODE PRIVATE LINE COMMUNICATION AFTER ZONE / ALL PAGE CALL.
- DIAL KEYPAD FOR SELECTIVE PAGING.
- DISTRIBUTED AMPLIFIER DESIGN CONCEPT.
- ANY NUMBER OF LOUDSPEAKER'S CAN BE CONNECTED TO A SMART PA TELEPHONE BY USING SMART EXTERNAL AMPLIFIERS.
- SYSTEM DESIGNED FOR 12 ZONES.
- UPTO 12 SMART PA TELEPHONE IN EACH ZONE.
- ANY PA TELEPHONE CAN BE INCLUDED IN MULTIPLE ZONES.
- SMART PA TELEPHONE MODEL WMHS-II , WMHF-II USED AS FIELD UNITS.
- **NO NEED OF HIGH POWER AMPLIFIERS.**
- **NO NEED OF BULKY RELAY BASED LOUDSPEAKER CONTROLLERS.**
- **NO NEED OF 19" EQUIPMENT RACK.**
- SOFTWARE PROGRAMMABLE ZONE AND ALL CALL FEATURE.
- **UNI DIRECTIONAL** PAGING CALL TO ALL SMART PA TELEPHONES.
- **UNI DIRECTIONAL** PAGING CALL TO SMART PA TELEPHONES IN A ZONE.
- **BI DIRECTIONAL** PAGING CALL TO INDIVIDUAL SMART PA TELEPHONE.
- OPERATING VOLTAGE 220 V / 110 V AC FOR SMART PA TELEPHONES / OPERATOR CONSOLES / MCS II.
- DIRECT ACCESS SWITCH FOR VARIOUS ZONES AND ALL CALL FROM OC.
- KEYPAD FOR SELECTIVE PAGING FROM OC.
- ADDITIONAL EXTERNAL SMART ALARM UNIT FOR VARIOUS USER DEFINED PRE PROGRAMMED ALARMS.
- SIMULTANEOUS MULTI PAGE CALLS FROM DIFFERENT LOCATIONS.
- EASY EXPANSION REQUIRING NO HARDWARE CHANGE.
- INDIVIDUAL UNIT IN MULTIPLE ZONES POSSIBLE.
- TO INCREASE THE NUMBER OF LOUD SPEAKERS IN A SMART PA TELEPHONE, SMART EXTERNAL AMPLIFIERS ARE REQUIRED. THE AMPLIFIER WILL BE DRIVEN BY A PA TELEPHONE.

SMART INDUSTRIAL PA SYSTEM MCS-II.

USER DESIGN BLOCK DIAGRAM.





WORKING PROTOCOL: -

CONTROL ROOM TO ANY PA TELEPHONE (DIRECT CALLING)

Lift the handset off the cradle (Off-Hook), Dial the individual extn of PA TELEPHONE after hearing the beep tone Control room operator makes the paging announcement from handset of OC. After hearing the announcement, the called person approaches the called PA TELEPHONE lifts the handset and communicates. The communication is in the private mode and the same shall not be heard over the loudspeakers. In case no pick up or one-way paging the PA TELEPHONE will reset automatically on blank after operator hangs up. THE INDIVIDUAL PAGE CALL IS BI DIRECTIONAL.

CONTROL ROOM TO ZONE (ZONE PAGE CALL):

Lift the handset off the cradle (Off-Hook), Press ZONE 1/ZONE 2/ZONE 3 / ZONE 4/ ……ZONE 12 BUTTONS from OC. All PA TELEPHONE's in that zone activates; announcement made from operator console is heard over all the on hook PA TELEPHONE's loudspeakers. The ZONE page call is UNI DIRECTIONAL only. The concerned person dials the code for talk back from any of the called PA TELEPHONE for private communication with the operator.

CONTROL ROOM TO ALL PA TELEPHONE (ALL PAGE CALL): -

Lift the handset off the cradle (Off-Hook), Press ALL CALL BUTTON from OC of control room. All the PA TELEPHONE gets activated; announcement made from MIC of operator console is heard over all the on hook PA TELEPHONE loudspeakers. The all page call is UNI DIRECTIONAL only. The concerned person dials the code for talk back from any of the PA TELEPHONE for private communication with the OPERATOR.

PA TELEPHONE TO CONTROL ROOM (DIRECT CALLING)

Lift the handset off the cradle (Off-Hook) of nearest PA TELEPHONE dial the ACCESS CODE of the control room, the Operator console gets activated automatically and the announcement from the field is heard over its speakers. The communication is established by speaking over the mic by the operator.

PA TELEPHONE TO PA TELEPHONE

From any PA TELEPHONE of the zone dial the ACCESS CODE of any other PA TELEPHONE. After hearing the beep tone make the paging announcement. After hearing the announcement, the called person approaches the called PA TELEPHONE, lifts the handset and communicates. The communication is in the private mode and the same shall not be heard over the loudspeakers. In case no pick up or one-way paging the PA TELEPHONE will reset automatically on blank after calling party hangs up.

PA TELEPHONE TO INDIVIDUAL ZONE PAGE CALL: -

From the any PA TELEPHONE dial the ACCESS CODE for ZONE 1, 2, 3, 4, 5, ….12. ALL the PA TELEPHONE of that zone gets activated and announcement is heard over its loudspeaker after a beep tone of 1 kHz. The PA TELEPHONE will reset automatically after calling party hangs up. The zone page call is UNI DIRECTIONAL only. The concerned person dials TALKBACK code from any called PA TELEPHONES for private communication with the calling person after the paging is over.

PA TELEPHONE TO ALL ZONE PAGE CALL: -

From the any PA TELEPHONE dial the ACCESS CODE for ALL ZONE CALL, the PA TELEPHONE of ALL the zones get activated and announcement is heard over their loudspeakers after a beep tone of 1 kHz. The PA TELEPHONE will reset automatically after calling party hangs up. The all zone page call is UNI DIRECTIONAL only. The concerned person dials TALKBACK code from any called PA TELEPHONES for private communication with the calling person.

General features of all the Equipment's in SMART PA SYSTEM(MCS-II)

SMART MASTER CONTROL STATION (MODEL MCS-II): -

SMART **MASTER CONTROL STATION MCS-II** is 100% non-blocking TDM/PCM based system. The system is designed for MINIMUM 24 ports.

- Main CPU card
- PA TELEPHONE connection card
- All Zone selection card
- Termination card
- Motherboard card
- Expandable Up to 112 PA TELEPHONE ports
- All call up to 64 PA TELEPHONE ports
- Up to 12 predefined zones (user defined configuration)
- Up to 12 PA TELEPHONES can be grouped in each zone.
- Installation in multiple of 16 PA TELEPHONE possible.
- Long loop supported covering large distance (utpo 2000mtrs).
- Operates on 220 V / 110 V AC.
- Line voltage 40 V
- Tone dialing
- Can be patched with the existing PLANT EPABX.
- Up to 4 operator consoles can be connected

SMART PA TELEPHONE (MODEL WMHS/HF-II): -

- Simple Installation.
- Simple Operation.
- One-piece waterproof non-tactile keypad.
- Magnetic reed hook-switch reduces moving parts subject to wear.(WMHS-II)
- 16-gauge rugged steel powder coated construction.
- Heavy industrial ABS handset & cord.(WMHS-II)
- Connect, Release & PTT SWITCH for communication(WMHF-II)
- Noise canceling dynamic microphone.
- Environment Protected.
- Single PCB design for plug & play operation.
- Easy troubleshooting ensuring minimum downtime.

SMART INDUSTRIAL LOUDSPEAKER HORNS (MODEL LSOD/LSIN): -

SMART LOUDSPEAKER HORNS (MODEL LSOD):-Outdoor weatherproof loudspeaker horns

- Max power handling capacity :-8 Ohms 60WATTS (RMS)
- Sound pressure level 107 dB
- Re-entrant type loudspeakers
- ABS constructions
- 'C' clamp for Mounting

SMART INDOOR BOX SPEAKERS (MODEL LSIN):-Indoor speaker box with metallic construction

- Max power handling capacity:-8 Ohms 10 WATTS (RMS)
- Sound pressure level 90 dB
- Used at indoor locations
- 'L' clamp for Mounting.

SMART OPERATOR CONSOLE STATION (MODEL DTHS-II): -

The Operator Console station is desktop type unit installed in the control room. The unit comprises of:

- ABS HAND SET TYPE
- All CALL PAGE switch
- Individual ZONE CALL PAGE switches
- CONNECT, RELEASE & FLASH SWITCHES
- Keypad for dialing.
- Volume controller POT
- Magnetic reed hook-switch
- Full duplex telephony type communication
- In built amplifier

SMART JUNCTION BOX (MODEL JB-II):-

SMART JUNCTION BOXES are meant to be connected with SMART PA SYSTEM WITH MCS-II it has single PCB based design with built in surge protection.

- 16 gauge rugged steel powder coated construction
- Integrated Canopy design for weather protection
- Single PCB design
- Wall mountable type

PATCHING WITH PLANT EPABX: -

MCS can be patched with plant EPABX by :

TRUNK LINES OF PLANT EPABX -EXTENSION TIE LINES OF MCS.

Upto 4 trunk lines from PLANT EPABX can be connected to MCS.

Connect TRUNK LINES of Plant EPABX- EXTENSION TIE LINE of **MCS.**

INWARD CALLING (PLANT EPABX-MCS)

Access the trunk from TELEPHONE of plant EPABX by dialing the assigned code, calling party will get the dial tone of MCS. Dial desired access codes of MCS.

OUTWARD CALLING (MCS-PLANT EPABX)

USING DID (DIRECT INWARD DIALING) FACILITY

Dial the assigned access code of ETL from any pa telephone of MCS, the DID message of plant EPABX will be heard, dial the desired EXTN no of plant EPABX TELEPHONE.

In case DID is not available the call will land on the operator console of plant EPABX.

POWER RATINGS OF VARIOUS EQUIPMENTS FOR CALCULATING UPS LOAD;-

SMART MASTER CONSOLE STATION (MODEL MCS-II)		
MCS FOR 24 PORTS	50 VA (RMS)	PEAK 90 VA
MCS FOR 112 PORTS	130 VA (RMS)	PEAK 220 VA
SMART PA TELEPHONE (MODEL WMHS-II)	30 VA (RMS)	PEAK 55 VA
SMART OPERATOR CONSOLE STATION (MODEL DTHS-II)	20 VA (RMS)	PEAK 45 VA

SPECIFICATIONS (MCS): -

Electrical Requirement : -

Power Source	220 volts / 110 volts AC
PA TELEPHONE line	40 VOLTS.
Power consumption	< 100 Watts.
Insulation	600 v for 3 min between power source & Telephone line.
Ringer Voltage	50 VAC (100 V PP).

Mechanical Specifications : -

Dimensions	320 X 380 X 200 (in mm).
Weight	8.5 Kgs.
Construction	16 gauge Powder Coated Steel Body.
Standard mounting	Vertical wall / desktop.

Environmental : -

Moisture Resistance	0 to 95% humidity with PCB conformal coated.
Temperature Range	0 to +60C.

SMART CABLES:-

NON SPECIALITY, NON CRITICAL CABLES

SMART MASTER CONTROL STATION (MODEL MCS-II): -

- 0.5 mm, 2 CORE, PVC insulated, Twin twisted, TELEPHONE CABLE FORM MCS TO EACH LOCATION.
- 1.5 sq mm 3 CORE, ATC, PVC insulated, overall PVC sheathed POWER cable for POWER SUPPLY UNIT OF MCS FROM NEAREST POWER BOARD

SMART PA TELEPHONES (MODEL WMHS-II): -

- 0.5 mm, 2 CORE, PVC insulated, Twin twisted, TELEPHONE CABLE for FOR EACH SMART PA TELEPHONES FROM MCS.
- 1.5 sq mm 3 CORE, ATC, PVC insulated, overall PVC sheathed POWER cable for EACH SMART PA TELEPHONES FROM NEAREST POWER JB
- 0.75 mm mm, 2 core, ATC, PVC insulated, Twin twisted, and flexible cable for LOUDSPEAKERS HORNS FROM SMART PA TELEPHONES.

SMART OPERATOR CONSOLE STATIONS(MODEL DTHS-II) : -

- 0.5 mm, 2 CORE, PVC insulated, Twin twisted, TELEPHONE CABLE for FOR SMART OPERATOR CONSOLE UNIT FROM MCS.
- 1.5 sq mm 3 CORE, ATC, PVC insulated, overall PVC sheathed POWER cable for SMART OPERATOR CONSOLE UNIT FROM NEAREST POWER JB

I N D U S T R I A L C O M M U N I C A T I O N S S I M P L I F I E D .

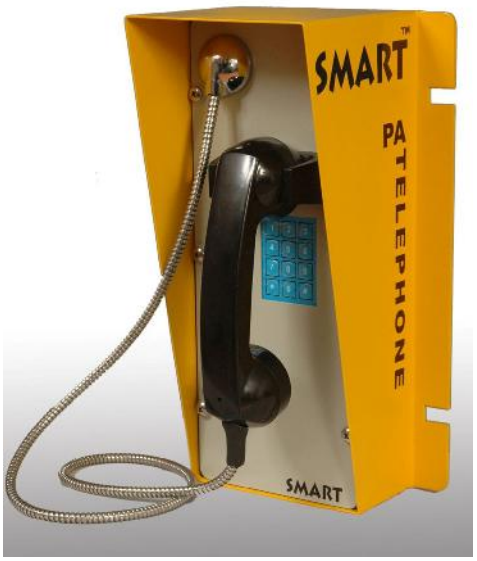
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"(Specifications and description subjected to change without prior notice)"

SMART PA TELEPHONE MODEL WMHS-II

SMART PA TELEPHONE (WMHS-II) is a multiple role; multiple location operating telephone units by construction with built in public address system, works as a normal telephone as well as a page phone unit. This phone has a built in amplifier, which is connected to external loudspeaker horn and works on either 220 volts AC or 110 Volts AC. One has to just lift the telephone handset of any extension, dial the extension number of PA Telephone and after the call matures automatically, make necessary announcement. The communication between the calling party and the called party is in private mode, when the called party lifts the handset.



SMART PA TELEPHONE (WMHS-II) disconnects automatically if the calling party disconnects the call. The announcement is made at specified location only and not all over the plant and at any time more than one person can make announcement on different PA telephone sets. Incoming call from the PA telephone is like normal telephone call, just lift the receiver and dial the required extension. It is essential for growing organizations because of its unique features and is proposed to be used in conjunction with **SMART MASTER CONTROL STATION (MCS-II) OR WITH PLANT EPABX** (The backbone of every establishment's communication.)

OPERATIONS:

1. **TO MAKE A CALL: -**
   - *f* Lift the handset, hear the dial tone.
   - *f* Dial desired extension number & communicate.
   - *f* Replace handset to disconnect active call.
2. **INCOMING CALL: -**
   - *f* From any phone dial the extension number of SMART PA TELEPHONE. It will connect automatically and acknowledge with a BEEP TONE.
   - *f* Announce after the hearing the BEEP TONE.
   - *f* Communication will be in PRIVATE MODE when called party lifts the receiver.
   - *f* Replacing the receiver on cradle will reset the SMART PA TELEPHONE.

VERSATILE APPLICATIONS

Æ Cement Plants. Æ Mines. Æ Petrochemical Refineries. Æ Chemical Plants. Æ Construction Sites. Æ Steel Plants. Æ Spinning Yarns Æ Fertilizer Plants. Æ Sugar Mills. Æ Power Generation Facilities Æ Pulp & Paper Mills Æ Food Processing Plant Æ Warehouses Æ Recreation Facilities ÆHydroelectric Facilities Æ Drilling Rigs Æ Ammonia Storage Area Æ Process industriesÆ ANY LARGE AND MEDIUM SCALE INDUSTRIAL UNITS.

ACCESSORIES AND OPTIONS

- External Loudspeaker Horn.
- Color selection (subject to minimum quantities).
- Customized dial plates with FLASH & RESET SWITCH.

SMART CHOICE: -

- Simple Installation.
- Simple Operation.
- One-piece waterproof non-tactile keypad.
- Magnetic reed hook-switch reduces moving parts subject to wear.
- 16-gauge rugged steel powder coated construction.
- Heavy industrial ABS handset & SS cord.
- Noise-canceling type microphone.
- Auto disconnect to free line for next call.
- A service temperature range from 0 to +60 o C.
- Encapsulated circuit boards impervious to water and condensation.
- Environment Protected.
- Single PCB design for plug & play operation.
- Easy troubleshooting ensuring minimum downtime.

"Two units can be connected in parallel to one extension"

SPECIFICATIONS: -

Electrical Requirement :-

Power Source:	220 V AC / 110 V AC (SWITCH ABLE).
Phone line:	24 VOLTS (EPABX) / 50 VOLTS (TEL LINE).
Power consumption:	< 35 Watts.
Stand by consumption:	< 5 Watts.
Amplifier:	30 Watts (RMS).
Horn Speaker:	60 watts, 8 ohms.
Handset:	Standard hand set, four feet stainless steel Armour tube.
Insulation:	600 v for 3 min between power source & Telephone line.
Ringer Voltage:	75 V AC (150 V PP).
UPS LOAD	30VA (RMS) PEAK 50 VA.

Mechanical Specifications:-

Dimensions:	360 X 160 X 180 (in mm).
Weight:	5 Kgs.
Construction:	16 SWG Powder Coated Steel Body.
Cradle:	Al-Alloy with Magnetic reed switch.
Hand set construction:	High impact ABS.
Standard mounting:	Vertical wall / panel.
Microphone:	Noise canceling dynamic.

Environmental:-

Moisture Resistance:	0 to 95% humidity with PCB conformal coated.
Temperature Range:	0 to +60C.
Dust resistance:	Fully weather proof enclosure.

INDUSTRIAL COMMUNICATIONS SIMPLIFIED.

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SMART PILFER PROOF PA TELEPHONE
MODEL WMHF-II



SMART PILFER PROOF PA TELEPHONE (WMHF-II) is **HANDSFREE** version (VANDAL RESISTANT TYPE) of **SMART PA TELEPHONE** which is multi location-operating unit by construction with built in **PUBLIC ADDRESS** system. This unit has a built in amplifier, which is connected to external loudspeaker horn and internal speaker. It works on either 220 V AC or 110 V AC. Dial the **EXTN** number of PA TELEPHONE, TELEPHONE activates automatically, make the necessary announcement.

SMART PILFER PROOF PA TELEPHONE (WMHF-II) phone disconnects itself automatically if the calling party disconnects the call.

The communication between the calling party and the called party is established when the called party acknowledges by pressing the connect button and speaks by pressing the **PTT.**

Incoming call from the PA TELEPHONE is like normal telephone call, just press the connect button and dial the required extension and talk by pressing the PTT switch.

OPERATIONS: -

TO MAKE A CALL: -

- ƒ Press the connect button, hear the dial tone.
- ƒ Dial desired extension number.
- ƒ Communicate with the (PTT) Press to Talk and Release to Listen button.
- ƒ Reset by pressing the release button to disconnect the active call.

INCOMING CALL: -

- ƒ From any phone dial the extension number of **SMART PILFER PROOF PA TELEPHONE (WMHF-II).** It will connect automatically and acknowledge with a **BEEP TONE.**
- ƒ Announce after the hearing the **BEEP TONE.**
- ƒ Communication will be established when the called party presses the connect button.
- ƒ Use **(PTT)** Push to Talk button for communication.
- ƒ Reset by pressing the release button.

VERSATILE APPLICATIONS: -

Æ **Cement Plants.** Æ **Paper Mills.** Æ **Mines.** Æ **Petrochemical Refineries**. Æ **Chemical Plants.**
Æ **Construction Sites.** Æ **Steel Plants.** Æ **Spinning Yarns** Æ **Fertilizer Plants.** Æ **Sugar Mills.**
Æ **ANY LARGE AND MEDIUM SCALE INDUSTRIAL UNITS.**

ACCESSORIES AND OPTIONS

- Color selection (subject to minimum quantities).
- All other accessories are supplied as per specific requirements.

SMART CHOICE: -

- Simple Installation.
- Simple Operation.
- One-piece waterproof non-tactile keypad.
- 16-gauge steel enclosure with powder coat finish.
- Noise-canceling type microphone.
- Auto disconnect to free line for next call.
- A service temperature range from 0 to +60 o C.
- Environment Protected.
- Encapsulated circuit boards impervious to water and condensation.
- Single PCB design for plug & play operation.
- Easy troubleshooting ensuring minimum downtime.

SPECIFICATIONS

Electrical Requirement :-

Power Source:	220 volts / 110 volts AC (SWITCH ABLE).
Phone line:	24 VOLTS (EPABX) / 50 VOLTS (TEL LINE).
Power consumption:	< 35 Watts.
Stand by consumption:	< 5 Watts.
Amplifier:	30 watts (RMS).
Horn Speaker:	60 watts, 8 ohms.
Internal Speaker:	3 Watts, 8 ohms.
Insulation:	600 v for 3 min between power source & Telephone line.
Ringer Voltage:	75 V AC (150 V PP).
UPS LOAD	30VA (RMS) PEAK 50 VA.

Mechanical Specifications :-

Dimensions:	360 X 160 X 180 (mm).
Weight:	5 Kgs.
Construction:	16 SWG Powder Coated Steel Body.
Standard mounting:	Vertical wall / panel.
Microphone:	Noise canceling dynamic.

Environmental :-

Moisture Resistance:	0 to 95% humidity with PCB conformal coated.
Temperature Range:	0 to +60 C.
Dust resistance:	Fully weather proof enclosure.

CONFIRMING TO IP 65 DEGREE PROTECTION

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SMART PA TELEPHONE MODEL DTHS-IIC



SMART DESK TOP **PA TELEPHONE** (DTHS-IIC) is a multiple role; multiple locations operating telephone unit by construction with built in public address system, works as a normal telephone as well as a page phone unit. This phone has a built in amplifier, which is connected to external loudspeaker horn and works on either 220 volts AC or 110 Volts AC. One has to just lift the telephone handset of any extension, dial the extension number of PA Telephone and after the call matures automatically, make necessary announcement. The communication between the calling party and the called party is in private mode, when the called party lifts the handset.

SMART DESK TOP **PA TELEPHONE** (WMHS-IIC) disconnects automatically if the calling party disconnects the call. The announcement is made at specified location only and not all over the plant and at any time more than one person can make announcement on different PA telephone sets. Incoming call from the PA telephone is like normal telephone call, just lift the receiver and dial the required extension. It is essential for growing organizations because of its unique features and is proposed to be used in conjunction with **SMART MASTER CONTROL STATION (MCS-II)OR WITH PLANT EPABX** (The backbone of every establishments communication.)

OPERATIONS:

1. TO MAKE A CALL: -

- Lift the handset, hear the dial tone.
- Dial desired extension number & communicate.
- Replace handset to disconnect active call.

2. INCOMING CALL: -

- From any phone dial the extension number of SMART PA TELEPHONE. It will connect automatically and acknowledge with a BEEP TONE.
- Announce after the hearing the BEEP TONE.
- Communication will be in PRIVATE MODE when called party lifts the receiver.
- Replacing the receiver on cradle will reset the SMART PA TELEPHONE.

VERSATILE APPLICATIONS

Æ Cement Plants. Æ Mines. Æ Petrochemical R e f i n e r i e s . Æ Chemical Plants. Æ Construction Sites. Æ Steel Plants. Æ Spinning Yarns Æ Fertilizer Plants. Æ Sugar Mills. Æ Power Generation Facilities Æ Pulp & Paper Mills Æ Food Processing Plant Æ Warehouses Æ Recreation Facilities ÆHydroelectric Facilities Æ Drilling Rigs Æ Ammonia Storage Area Æ Process industriesÆ ANY LARGE AND MEDIUM SCALE INDUSTRIAL UNITS.

ACCESSORIES AND OPTIONS

- External indoor speaker Box.
- Color selection (subject to minimum quantities).

SMART CHOICE: -

- Simple Installation.
- Simple Operation.
- One-piece waterproof non-tactile keypad.
- Magnetic reed hook-switch reduces moving parts subject to wear.
- 16-gauge rugged steel powder coated construction.
- Heavy industrial ABS handset & SS cord.
- Noise-canceling type microphone.
- Auto disconnect to free line for next call.
- A service temperature range from 0 to +60 o C.
- Encapsulated circuit boards impervious to water and condensation.
- Environment Protected.
- Single PCB design for plug & play operation.
- Easy troubleshooting ensuring minimum downtime.

"Two units can be connected in parallel to one extension"

SPECIFICATIONS: -

Electrical Requirement :-

Power Source:	220 V AC / 110 V AC (SWITCH ABLE).
Phone line:	24 VOLTS (EPABX) / 50 VOLTS (TEL LINE).
Power consumption:	< 35 Watts.
Stand by consumption:	< 5 Watts.
Amplifier:	30 Watts (RMS).
Horn Speaker:	60 watts, 8 ohms.
Handset:	Standard hand set, four feet stainless steel Armour tube.
Insulation:	600 v for 3 min between power source & Telephone line.
Ringer Voltage:	75 V AC (150 V PP).
UPS LOAD	30VA (RMS) PEAK 50 VA.

Mechanical Specifications:-

Dimensions	270 x 110 x 130 mm.
Net weight	1.2 kgs.
Construction:	16 SWG Powder Coated Steel Body.
Cradle:	Al-Alloy with Magnetic reed switch.
Hand set construction:	High impact ABS.
Standard mounting:	Vertical wall / panel.
Microphone:	Noise canceling dynamic.

Environmental:-

Moisture Resistance:	0 to 95% humidity with PCB conformal coated.
Temperature Range:	0 to +60C.
Dust resistance:	Fully weather proof enclosure.

INDUSTRIAL COMMUNICATIONS SIMPLIFIED.

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SMART OPERATOR CONSOLE (MCS-NONBLOCKING)MODEL DTHS-II

SMART OPERATOR CONSOLE is designed to be used with **SMART INDUSTRIAL PA COMMUNICATION SYSTEM (NON-BLOCKING)**. The operator station is digital desktop type unit with handset for private communication and is installed in the control room.



SMART CHOICE: -

- All zone access switch
- Individual zone access switches
- Handset for communication.
- Noise canceling type hand set.
- Keypad for dialing.
- Power indicator
- Volume controller switch
- Magnetic reed hook-switch reduces moving parts subject to wear.
- One-piece waterproof non-tactile keypad.

OPERATIONS: -

The operation is very simple: -

- To make individual PA TELEPHONE PAGE CALL: -Pick up the handset from hook, dial the individual ACCESS CODE (217,218,219Ö) from the keypad of the OC after hearing the beep tone operator can make the paging announcement from the MIC.

- To make ZONE PAGE CALL: -Pick up the handset from hook, PRESS THE ZONE 1/ZONE 2/ZONE 3 / ZONE 4/ ÖÖZONE 12 BUTTON from the keypad of the OC after hearing the beep tone operator can make the paging announcement from MIC, it is heard over all the on hook PA TELEPHONE loudspeakers, and off hook earphone handsets of that ZONE.

- To make ALL PAGE CALL: - Pick up the handset from hook, Press the ALL CALL BUTTON from OC of control room. ALL THE PA TELEPHONE gets activated; announcement made from MIC of operator console is heard over all the on hook PA TELEPHONE loudspeakers and off hook earphones handsets of the plant.

SPECIFICATIONS: -

Electrical Requirement: -

Power Source	220 VAC / 110 V AC (SWITCH ABLE). Power
consumption	< 15 Watts.
Amplifier	10 Watts (RMS). Internal
Speaker	3 Watts, 8 Ohms. External Box Speaker
(optional)	10 Watts, 8 Ohms.
Insulation	600 v for 3 min between power source & Telephone line.

Mechanical Specifications: -

Dimensions	360 X 160 X 180 (in mm). Weight
5 Kgs.	
Construction	16 gauge Powder Coated Steel Body. Standard
mounting	Vertical wall / panel.
Microphone	Noise canceling dynamic.

Environmental: -

Moisture Resistance	0 to 95% humidity with PCB conformal coated.
Temperature Range	0 to +60C.
Dust resistance	Fully weatherproof enclosure.

I N D U S T R I A L C O M M U N I C A T I O N S S I M P L I F I E D .

Cables & Wireless Co.

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(Specifications and description subjected to change without prior notice)