

## PA SYSTEM (MODEL-MCS III)

#### (CENTRAL AMPLIFIER DESIGN CONCEPT).

SMART INDUSTRIAL PA SYSTEM MCS-III Central Amplifier Design Concept INDUSTRIAL PA SYSTEM has unique feature of Single button Loudspeaker Paging and Private Talkback with dial keypad for Selective Calling. The system has two separate channels viz Single Common Loudspeaker Page Channel and Multiple Private Intercom channels. Loudspeaker page Channel allows for locating individuals anywhere in the plant. Two-way private communication then occurs by using the Multiple Private Intercom Channel feature. The PLANT EPABX Interface allows user to make and receive telephone calls to and from the outside world.

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



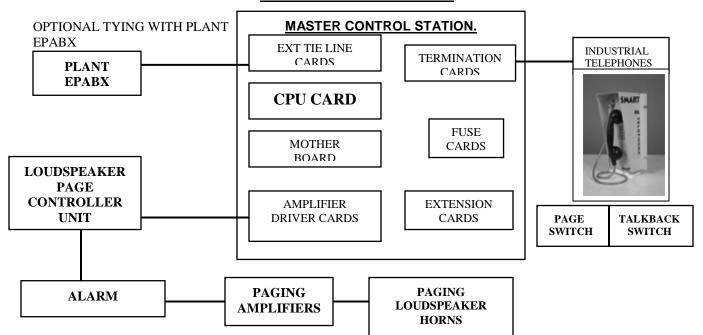
#### LOUD SPEAKER PAGE CHANNEL:

- LOUD SPEAKER PAGING.
- Locating and contacting people in a zone or all over the plant by press of a button with ease.
- The loudspeakers in parallel line are formed as zones.
- Individual Zone's or all Zones can be contacted by press of a button from OC.
- ALWAYS ALL CALL from field station by press of a button.

#### **PRIVATE INTERCOM CHANNEL:**

- Multi Channel point to point communication.
- Selective communication by dialing individual access code.
- Talkback during or after paging by called person in private mode by press of a button.

#### SYSTEM BLOCK DIAGRAM



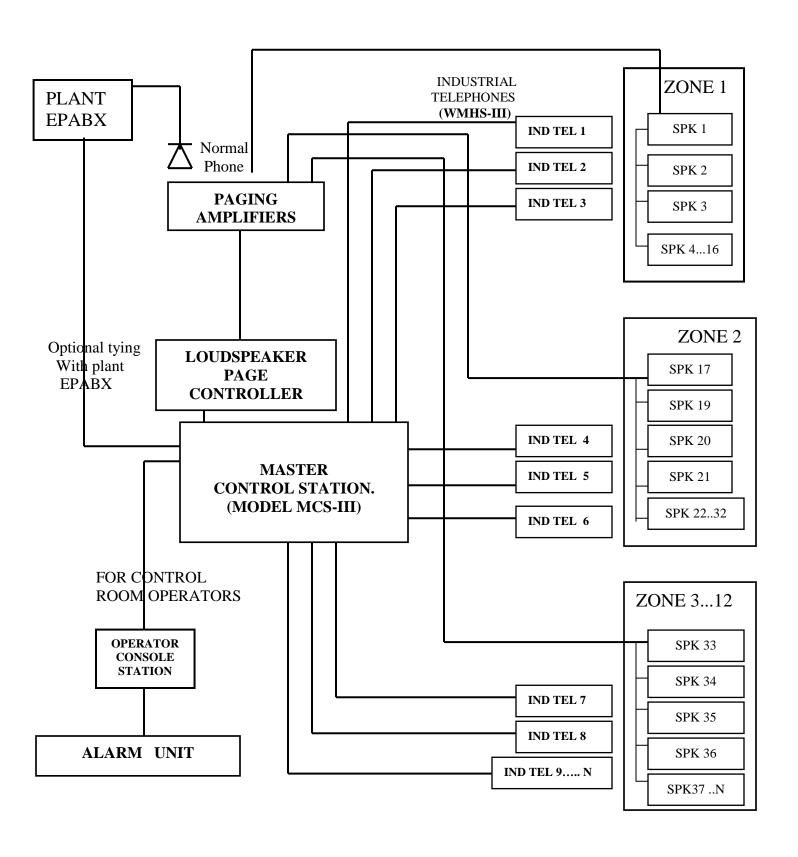
#### **SMART CHOICE**

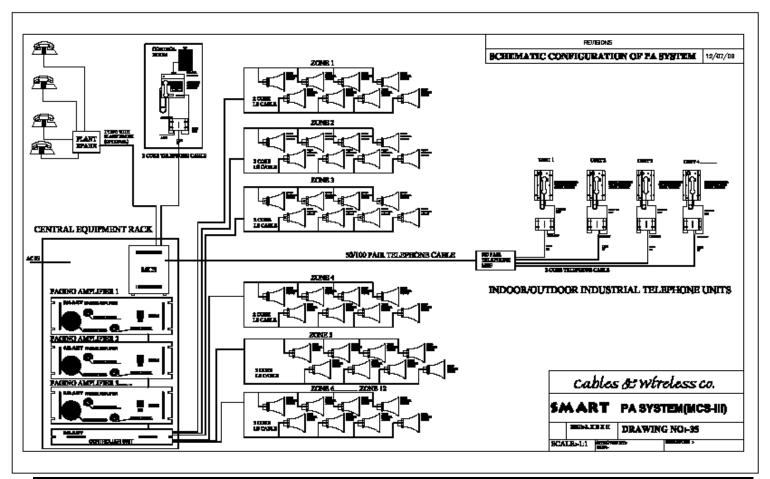
- SINGLE LOUD SPEAKER PAGE CHANNEL.
- MULTIPLE PRIVATE INTERCOM Channel's.
- SMART Industrial Telephone model WMHS-IIIPT, WMHF-IIIPT are used AS FIELD UNITS.
- SINGLE BUTTON ALL PAGE CALL FROM FIELD/OC
- SINGLE BUTTON PRIVATE INTERCOM COMMUNICATION DURING OR AFTER PAGE CALL FROM FILED / OC.
- MULTI CHANNEL SELECTIVE CALLING using dial keypad.
- Direct access buttons for making LOUD SPEAKER page call from OC
- Any number of Loudspeaker's can be connected by using **SMART PAGING AMPLIFIERS**.
- System designed for UPTO 12 LOUDSPEAKER LINES (ZONES).
- 100 V LMT based Loudspeakers installed in field for long distance operation.
- NO NEED OF PRE AMPLIFIERS.
- NO NEED OF BULKY RELAY BASED PAGE CONTROLLERS.
- SMART MICROCONTROLLER BASED AMPLIFIERS AND LOUDSPEAKER CONTROLLERS.
- SMART AMPLIFIERS are always in off mode. Activates only during paging.
- Increase in the life of Amplifiers and SMARTER WAY to operate the system.
- **BI DIRECTIONAL paging calls** to all loudspeaker lines.
- **BI DIRECTIONAL paging call** to individual loud speaker line.
- BI DIRECTIONAL call to individual SMART INDUSTRIAL TELEPHONES.
- SMART INDUSTRIAL TELEPHONES operate on line voltage
- **SMART PA TELEPHONES** can also be installed with the SMART MCS giving all the Features of distributed amplifiers.

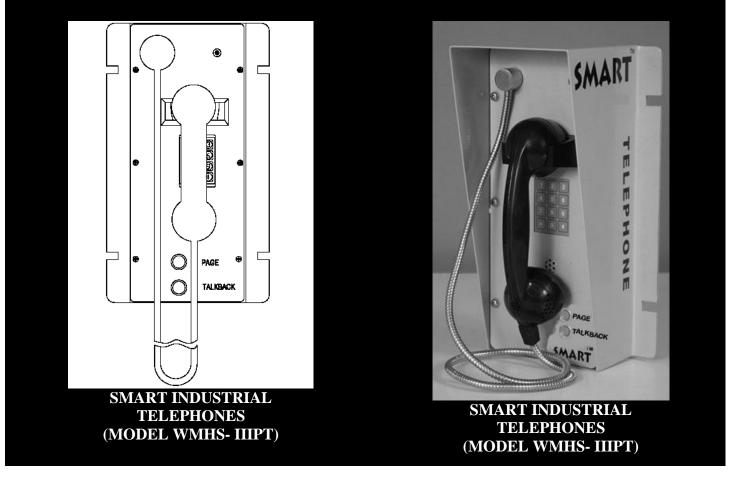
#### **SMART OPTIONS:**

- NON KEYPAD FRONT DIAL VERSION
- AUTO PAGE ON HANDSET LIFT
- SMART PA TELEPHONE WITH MINI SPEAKER AS FIELD STATION FOR INDIVIDUAL PAGE CALL

### MCS (CENTRAL AMPLIFIER SYSTEM). USER DESIGN BLOCK DIAGRAM.







#### WORKING PROTOCOL: -

#### CONTROL ROOM TO ALL PAGE CALL (ALL PAGE CALL): -

Lift the handset, Press ALL CALL BUTTON from OPERATOR CONSOLE of control room. All amplifiers get activated thus activating **all the loudspeakers**. Announcement made from handset of operator console is heard over all loudspeakers. The concerned person presses the TALKBACK switch from any of the nearest INDUSTRIAL TELEPHONE for private communication with the operator freeing the PAGE CHANNEL for next page call.

#### CONTROL ROOM TO ZONE (ZONE PAGE CALL): -

Lift the handset, Press any zone page call button i.e, ZONE 1/ZONE 2/ZONE 3 / ZONE 4/.....ZONE 12 BUTTON from OPERATOR CONSOLE unit. The amplifier of associated zone activates; thus activating all the **loudspeakers in that zone**. Announcement made from handset of the operator console is heard over all loudspeakers of that zone. The concerned person presses the TALKBACK switch from any of the nearest INDUSTRIAL TELEPHONE for private communication with the operator freeing the PAGE CHANNEL for next page call.

#### CONTROL ROOM TO ANY INDUSTRIAL TELEPHONE (SELECTIVE CALLING)

Dial the individual extension No of INDUSTRIAL TELEPHONE. An electronic ringer is initiated giving a ringer tone. Communication is established in private mode when called party lifts the handset of the called INDUSTRIAL TELEPHONE. Replacing the receiver on cradle will reset the INDUSTRIAL TELEPHONE. The communication is in the private mode.

#### INDUSTRIAL TELEPHONE TO ALL PAGE CALL (ALL PAGE CALL): -

From the any INDUSTRIAL TELEPHONE press the PAGE button. All amplifiers get activated there by activating all the loudspeakers. Announcement made from the mouthpiece of the handset of the INDUSTRIAL TELEPHONE UNIT, is heard over all loudspeakers. The concerned person presses the TALKBACK switch from any of the nearest INDUSTRIAL TELEPHONE for private communication freeing the PAGE CHANNEL for next call.

#### INDUSTRIAL TELEPHONE TO CONTROL ROOM (SELECTIVE CALLING)

Lift the handset of nearest INDUSTRIAL TELEPHONE dial the DIRECT ACCESS CODE (OR extension No) for control room operator console unit, Call hunting feature will give access to any of the free available line of operator console. (Feature available only when using more than one Operator Console's)

#### INDUSTRIAL TELEPHONE TO INDUSTRIAL TELEPHONE (SELECTIVE CALLING)

From any INDUSTRIAL TELEPHONE dial extension number of any other INDUSTRIAL TELEPHONE. An electronic ringer is initiated giving a ringer tone. Communication is established in private mode when called party lifts the handset of the called INDUSTRIAL TELEPHONE. Replacing the receiver on cradle will reset the INDUSTRIAL TELEPHONE. The communication is in the private mode.

#### CENTRAL EQUIPMENT RACK IS FITTED WITH:-

- SMART MASTER CONTROL STATION (MODEL MCS-III): -
- PAGING AMPLIFIER MODULES (MODEL EXA PA 250)
- LOUDSPEAKER PAGE CONTROLLER UNIT (MODEL PCU)

### 8.0 General features of Equipment's in the CENTRAL EQUIPMENT RACK

#### SMART MASTER CONTROL STATION (MODEL MCS-III): -

The Master Control Station is 100% non-blocking architecture and is based on TDM/PCM technology. With improved speech quality, minimum noise interference & the distortion. The software related to operation of the system and all features of the system are programmed in the MASTER CONTROL STATION. The system is designed for MINIMUM 24 ports.

#### **FEATURES**;-

- Main CPU card.
- Industrial telephone connection cards.
- Operator Console
- Main termination card.
- Motherboard card.
- PAGE CALL from field stations can be possible
- SELECTIVE CALL FACILITY.
- UPTO 12 Numbers of predefined Loud Speaker lines (zones)
- Minimum 24 industrial telephone ports Expandable Up to 112 ports
- Installation in multiple of 16 line TELEPHONE CARDS possible.
- Long loop supported covering large distance.
- Operates on 220 V AC/110 V AC (predefined).
- Line voltage 40 V
- Tone dialing
- Can be patched with the existing PLANT EPABX using TRUNK LINES OF plant EPABX.
- Up to 4 operator consoles can be connected

#### SMART PAGING AMPLIFIER MODULES (MODEL EXA PA 250):

The paging amplifiers are fully solid state type & is of high reliability with built in over load protection, short circuit protection, open circuit protection and inductive/capacitive loading circuitry. The Amplifier design eliminates the need of Pre Amplifier in the system.

Each amplifier module is of 250 watts (RMS). Each Amplifier is designed to handle Max 10 loudspeakers. The increase in speakers load can be handled by adding additional Amplifiers in the system. The system operates on a line voltage of 100 Volt to facilitate the use of loudspeaker at remote locations..

#### **FEATURES;-**

- Type: solid state design
- Short circuit protection & over load protection
- Power requirement: 220 V AC
- LMT based amplifiers
- 250 watt RMS output
- Fuse protection from overload
- Hot swappable connectors
- Power indications
- Volume controls (master and monitor)
- NO NEED OF PRE AMPLIFIERS.

#### LOUDSPEAKER PAGE CONTROLLER UNIT (MODEL PCU)

The SMART LOUDSPEAKER PAGE CONTROLLER UNIT is microprocessor based unit for controlling the operations of the Amplifiers and the Loudspeaker relays.

#### **FEATURES:-**

- Controls the switching of amplifiers
- Input from Alarm signals & broadcast through 100V line.
- Relay circuit to handle 100 V line feed to loudspeakers
- Operates on 220 / 110 V AC

#### SMART MASTER OPERATOR CONSOLE STATIONS (MODEL DTHS-III): -

The SMART MASTER OPERATOR CONSOLE STATION is digital desktop unit and is installed in the control room.

#### **FEATURES**;-

- □ OPERATING ON 220 V AC
- □ KEYPAD FOR INDIVIDUAL DIALING
- □ DIRECT ZONE ACCESS KEYPAD
- □ FULL DUPLEX COMMUNICATION
- □ HANDSET TYPE
- □ PAGING INDICATION LED
- □ TALK BACK SWITCH
- □ PRIORITY PAGE OVERRIDE SWITCH
- □ INTEGRATED ALARM UNIT WITH KEY LOCK SWITCH

#### OPERATOR CONSOLE BUILT IN ALARM UNIT

- Electronic filters are provided
- Alarm Push Button
- Keylock switch for alarm On & Off
- Predefined timer based Alarm tones.
- Different User Predefined Multiple Tones

#### SMART INDUSTRIAL TELEPHONE (MODEL WMHS-III PT):-

The SMART INDUSTRIAL TELEPHONES are column / wall mounted type with integrated canopy design and special noise canceling feature for harsh and noisy areas.

#### **FEATURES:-**

- Simple Installation.
- Simple Operation.
- Telephone line powered
- DIRECT PAGE & TALKBACK BUTTONS
- One piece waterproof non tactile keypad.
- Magnetic reed hook-switch reduces moving parts subject to wear.
- 16 gauge rugged steel powder coated construction.
- Environment Protected.
- Single PCB design for plug n play operation.
- Easy troubleshooting ensuring minimum downtime.
- EXTERNAL contact to CONNECT SMART LOUDRINGER/FLASHER.
- Heavy industrial handset & cord, equipped with noise canceling microphone to eliminate the acoustic feedback during paging.

#### SMART LOUDSPEAKER S (MODEL LSOD): -

SMART LOUDSPEAKER HORNS are Outdoor weatherproof loudspeaker horns for 25 Watts (RMS)

- Sound pressure level 107 dB
- Reentrant type loudspeakers
- ABS constructions
- 'C' clamp for Mounting
- Max power handling capacity :-25Watt (rms)

#### SMART INDOOR BOX SPEAKERS (MODEL LSIN):-

Indoor speaker box with metallic construction -8 watts (RMS)

- Max power handling capacity:-10 W
- Sound pressure level ;-90 dB
- Fitted with the master calling stations
- 'L' clamp for Mounting.

#### 9.0 PATCHING WITH PLANT EPABX

The SMART MCS-III can be patched with PLANT EPABX using trunk lines of PLANT EPABX connected to the extension of MCS

#### 10 POWER RATINGS OF VARIOUS EQUIPMENTS FOR UPS LOAD;-

SMART MASTER CONSOLE STATION (MODEL MCS-III);-POWER SUPPLY UNIT MCS FOR 24 PORTS

160 VA (RMS) PEAK 240 VA

SMART OPERATOR CONSOLE STATION (MODEL DTHS-III) 20 VA (RMS) PEAK 25 VA

SMART PAGING AMPLIFIER MODULE(MODEL EXA PA 250) 320 VA (RMS ) PEAK 450 VA 11.0 CABLING DETAILS

NON SPECIALITY, NON CRITICAL CABLES

#### SMART MASTER CONTROL STATION (MODEL MCS-III): -

0.5 mm, 1 PAIR, PVC insulated, TELEPHONE CABLE FROM MCS TO EACH LOCATION.

#### SMART INDUSTRIAL TELEPHONES (MODEL WMHS-IIIPT): -

 0.5 mm, 1 PAIR, PVC insulated, TELEPHONE CABLE for EACH SMART INDUSTRIAL TELEPHONES FROM MCS.

#### SMART MASTER OPERATOR CONSOLE STATION(MODEL DTHS-III): -

- 0.5 mm, 2 PAIR, PVC insulated, TELEPHONE CABLE for SMART MASTER OPERATOR CONSOLE UNIT FROM MCS.
- 1.5 sq mm 3 CORE, ATC, PVC insulated, overall PVC sheathed POWER cable for SMART OPERATOR CONSOLE UNIT

#### SMART PAGING AMPLIFIERS (MODEL EXA PA 250): -

 0.75 mm, 2 core, ATC, PVC insulated, flexible cable for LOUDSPEAKER HORNS FROM SMART PAGING AMPLIFIERS.

#### TECHNICAL SPECIFICATIONS; ELECTRICAL, MECHANICAL & ENVIRONMENTAL

**TECHNICAL SPECIFICATIONS (MCS): -**

**Electrical: -**

Power Source 220 volts
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 rack mounted 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.

INDUSTRIAL TELEPHONE (MODEL WMHS-IIIPT): -

**Electrical requirements** 

Ringer sensitivity  $40-100 \text{ V} \otimes 16-25 \text{ Hz}.$ 

Line voltage 24 – 56 VDC. Loop current 20 - 120 mA.

Connection method PCB terminal block.

FUSE 0.25 AMP 2AG FAST BLOW.

**Environmental** 

Temperature 0 to +60 C.

Humidity 0 to 95% Rh non-condensing. DUSTPROOF ENCLOSURE FULLY GASKETTED.

Mechanical

Hook switch (magnetic reed) life >1 000 000 operations. Body construction 16 SWG steel, powder coated.

Body construction 10.5 w d steet, powder coates

Dimensions 360 x 160 x 180 mm.

Net weight 5 kgs.

Handset material High impact ABS.

Microphone Noise reducing dynamic.

STANDARD MOUNTING VERTICAL WALL.

Hardware material Stainless steel.

Handset cord Stainless steel.

MASTER OPERATOR CONSOLE STATION (MODEL DTHS-III): -

Electrical: -

Power Source 220 VAC. Power consumption <5 Watts.

Insulation 600 v for 3 min between power source & Telephone line.

Microphone Noise canceling dynamic (120 ohms)

**Mechanical Specifications: -**

Dimensions 280 X 200 X 90 (in mm).

Weight 2 Kgs.

Construction 18 gauge Powder Coated Steel Body.

Standard mounting Vertical wall / panel.

**Environmental: -**

Moisture Resistance 0 to 95% humidity with PCB conformal coated.

Temperature Range 0 to +60C.

Dust resistance Dustproof enclosure.

#### LOUDSPEAKER HORN (MODEL LSOD) :-

**Electrical performance: -**

Audible range frequency response 300 - 3400 Hz. Audio output max 107 dB @ 1 meter.

**Electrical specifications: -**

Coil resistance. 6 Ohm. Coil impedance@ 1 Khz 8 Ohm. Rated output watt RMS 25 Watts. Sound level@ 30 watt RMS 70 dB.

**Environmental: -**

Temperature 0 to +60 C.

Humidity 0 to 95% Rh non-condensing. Enclosure Dustproof fully gasketted.

Mechanical: -

Body ABS.

**Dimensions** 240 x 170 x 250 mm.

Net weight kgs .8 KGS.

Standard mounting 'C" Clamp Type.

#### PAGING AMPLIFIER MODULE (MODEL EXA PA 250):-

**ELECTRICAL REQUIREMENT:-**

Power Source 220 volts / 110 volts AC (SWITCH ABLE).

Power consumption 300 Watts.

Amplifier output 250 Watts (RMS).

Horn Speakers 60 watts, 8 ohms X 10 nos

**ELECTRICAL SPECIFICATIONS: -**

Output 100 Volt Audio line.

Isolation 1.5 KV between PRI & SEC for 15 Min.

Protection Input fuse (1A fast blow).

**ENVIRONMENTAL: -**

0 to +60 C.Temperature

Humidity 0 to 95% Rh non-condensing. Enclosure Dustproof fully gasketted.

**MECHANICAL: -**

18 SWG steel. Body

SURFACE FINISH POWDER COATED.

Net weight 12 kgs. Vertical wall. Standard mounting

#### INDUSTRIAL COMMUNICATIONS SIMPLIFIED.

cables & wireless co.	
FF 75 RAJAT ARCADE, MIDC T-POINT,	

AMRAWATI ROAD, WADI,

NAGPUR -440023.

PHONE:-07104-321913, 07104-224381. Fax:- 07104-224381. Website:- www.cnwcom.in. E-mail: - cnwcom@gmail.com.

Cell: - 098226 95746, 09225227945, 09822941190.

# SMARTINDUSTRIALTELEPHONE MODEL WMHS-IIIPT

**SMART INDUSTRIAL TELEPHONE** (WMHS-IIIPT) is a practical communication solution for people in different locations who need to stay in contact. These units are fully line powered and do not require an internal battery or external power source. They are designed for use in industrial locations and are ideal for noisy areas due to unique NOISE CANCELING FEATURE.

**SMART INDUSTRIAL TELEPHONE** (WMHS-IIIPT) provides dependable, high quality communications where standard telephones are not suitable. They are equipped with magnetic reed hook switch with no moving parts and a sealed Non tactile keypad to keep out dust, dirt and moisture. The sealed electronic ringer also prevents dust from entering the unit.

SMART INDUSTRIAL TELEPHONES are constructed of a high-impact, 16 gauge steel enclosure with integrated canopy and an industrial strength onemeter handset cord. The stainless steel handset cord remains flexible in the most extreme temperatures, unlike PVC cords that are limited to minimum pull strength and begin to deteriorate fast. It is essential for growing organisations because of its unique features and is proposed to be used in conjunction with SMART MASTER CONTROL STATION (MCS-III) equipped with PAGE & TALKBACK SWITCH for communication



#### **OPERATIONS:**

#### TO MAKE A CALL: -

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

#### **INCOMING CALL: -**

- From any phone dial the extension number of SMART INDUSTRIAL TELEPHONE.
- An electronic ringer will Ring up giving a ringer tone.
- Communication will be established when called party lifts the receiver.
- Replacing the receiver on cradle will reset the PHONE.

### TO MAKE A PAGE CALL: -

- Lift the handset, PRESS THE PAGE BUTTON to make all page call.
- Relay the massage from the handset microphone to all loudspeakers
- Release the page button & Replace handset to disconnect the active page call.

#### TALKBACK: -

- Lift the handset of any phone while paging in going on & press the TALKBACK BUTTON, to get connected with the paging party.
- Communication will be established with the paging party in private mode.
- Replacing the receiver on cradle will reset the communication.

#### **VERSATILE APPLICATIONS**

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

#### **ACCESSORIES AND OPTIONS**

- External Loudringer/Flasher Unit.
- Color selection (subject to minimum quantities).
- All other accessories are supplied as per specific requirements.

#### SMART CHOICE: -

- Simple Installation.
- Simple Operation.
- Telephone line powered
- PAGE & TALKBACK BUTTONS
- One piece waterproof non tactile keypad.
- Magnetic reed hook-switch reduces moving parts subject to wear.
- 16 gauge rugged steel powder coated construction.
- Environment Protected.
- Single PCB design for plug n play operation.
- Easy troubleshooting ensuring minimum downtime.
- EXTERNAL contact to CONNECT SMART LOUDRINGER/FLASHER.
- Heavy industrial handset & cord, equipped with noise canceling microphone to eliminate the acoustic feedback during paging.

#### **SPECIFICATIONS: -**

#### **Electrical requirements**

Ringer sensitivity 40 - 100 V @ 16 - 25 Hz.

Line voltage 24 – 56 VDC. Loop current 20 - 120 mA.

Connection method PCB terminal block.
Fuse 0.25 Amp 2AG fast blow.

#### **Environmental**

Temperature 0 to +60 C.

Humidity 0 to 95% Rh non-condensing.

Dustproof enclosure Fully gasketted.

#### **Mechanical**

Hook switch (magnetic reed) life >1 000 000 operations.

Body construction 16 SWG steel, powder coated.

Dimensions 360 x 160 x 180 mm.

Net weight 5 kgs.

Handset material High impact ABS.

Microphone Noise reducing dynamic.

Standard mounting Vertical wall.
Hardware material Stainless steel.
Handset cord Stainless steel.

#### **CONFIRMING TO IP 65-DEGREE PROTECTION.**

#### INDUSTRIAL COMMUNICATIONS SIMPLIFIED.

Cables & Wireless Co.	
FF 75 RAJAT ARCADE, MIDC T-POINT, AMRAWATI ROAD, WADI, NAGPUR –440023.	
PHONE:-07104-321913,07104-224381.Fax:- 07104-224381.	
Website:-www.cnwcom.in. E-mail: - cnwcom@gmail.com.	
Cell: - 098226 95746, 09225227945, 09822941190.	

# SAART OPERATOR CONSOLE (MCS III-NONBLOCKING)MODEL DTHS-III

**SMART OPERATOR CONSOLE** is designed to be used with **SMART INDUSTRIAL PA SYSTEM MODEL MCS-III** (CENTRALISED AMPLIFIER BASED SYSTEM). The operator station is digital desktop type unit with handset for private communication and is installed in the control room.

#### **SMART CHOICE: -**

- OPERATING ON 220 V AC
- KEYPAD FOR INDIVIDUAL DIALING
- DIRECT ZONE ACCESS KEYPAD
- FULL DUPLEX COMMUNICATION
- HANDSET TYPE
- PAGING INDICATION LED
- TALK BACK SWITCH
- PRIORITY PAGE OVERRIDE SWITCH

#### **OPERATIONS: -**

The operation is very simple: -

- To make ALL PAGE CALL: -Lift the handset, Press PRIORITY PAGE OVERRIDE SWTICH incase page indication LED is on, this will free the paging channel, then press ALL CALL BUTTON. Announcement made from handset of operator console is heard over all loudspeakers.
- To make ZONE PAGE CALL: Lift the handset, Press PRIORITY PAGE OVERRIDE SWTICH incase page indication LED is on, this will free the paging channel then Press any zone page call button i.e, ZONE 1/ZONE 2/ZONE 3 / ZONE 4/.....ZONE 8 BUTTON. Announcement made from handset of the operator console is heard over all loudspeakers of that zone.
- To make INDIVIDUAL TEL CALL: Dial the individual extension No of INDUSTRIAL TELEPHONE. Communication is established in private mode when called party lifts the handset of the called INDUSTRIAL TELEPHONE.

#### **SPECIFICATIONS: -**

#### **Electrical Requirement: -**

Power Source 220 VAC/110 V AC.

Power consumption < 5 Watts.

Insulation 600 v for 3 min between power source & Telephone line.

#### Mechanical Specifications: -

Dimensions 270 X 275 X 90 (in mm).

Weight 2 Kgs.

Construction 18 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.

#### INDUSTRIAL COMMUNICATIONS SIMPLIFIED.

FF 75 RAJAT ARCADE, MIDC T-POINT, AMRAWATI ROAD, WADI, NAGPUR -440023.

PHONE:-07104-321913,07104-224381.

Fax:- 07104-224381.

Website:- www.cnwcom.in. E-mail: - cnwcom@gmail.com.

Cell: - 098226 95746, 09225227945, 09822941190.

# SMART LOUDSPEAKER HORN. (MODEL LSOD)

#### **SMART** LOUDSPEAKER HORNS:-

Outdoor loudspeakers are of 60 watts (RMS). Loud speakers are connected to PA TELEPHONE /PAGE PRIVATE UNITS; up to two loud speakers can be connected to each UNIT. For more number of loudspeakers in each location **SMART EXTERNAL AMPLIFIERS** can be connected to PA TELEPHONE/PAGE PRIVATE UNITS.



#### **TECHNICAL SPECIFICATIONS: -**

#### **ELECTRICAL PERFORMANCE: -**

Audible range frequency response Loudspeaker horn output max

#### **ELECTRICAL SPECIFICATIONS: -**

Coil resistance. Coil impedance@ 1 Khz Rated output watt RMS

Sound level@ 30 watt RMS

#### **ENVIRONMENTAL: -**

Temperature Humidity Enclosure

#### **MECHANICAL: -**

Body Dimensions

Net weight kgs Standard mounting 300 - 3400 Hz. 107 dB.

6 Ohm. 8 Ohm. 60 Watts. 70 dB.

0 to +60 C.

0 to 95% Rh non-condensing. Dustproof fully gasketted.

ABS.

240 x 170 x 250 mm.

.8 KGS.

'C" Clamp Type.

#### **CONFIRMING TO IP 65-DEGREE PROTECTION.**

#### INDUSTRIAL COMMUNICATIONS SIMPLIFIED.

### cables & Wireless co.

FF 75 RAJAT ARCADE, MIDC T-POINT, AMRAWATI ROAD, WADI, NAGPUR –440023. PHONE:-07104-321913,07104-224381. Fax:-07104 -224381. Cell: - 098226 95746, 09225227945, 09822941190. Website:- www.cnwcom.in. E-mail: - cnwcom@gmail.com.

## SMART LOUDSPEAKER. (MODEL LSIN).

Indoor loudspeaker boxes are of 10 watts (RMS). Loudspeaker boxes are connected to indoor OPERATOR CONSOLE UNITS.

#### **TECHNICAL SPECIFICATIONS: -**

#### **ELECTRICAL PERFORMANCE: -**

Audible range frequency response Loudspeaker BOX max

#### **ELECTRICAL SPECIFICATIONS: -**

Coil resistance. Coil impedance@ 1 Khz Rated output watt RMS Sound level@ 5 watt RMS

#### **ENVIRONMENTAL: -**

Temperature Humidity Enclosure

#### **MECHANICAL: -**

Body Dimensions Net weight kgs Standard mounting 300 – 5000 Hz. 90 dB.@ 1 MTR

4/8 Ohm. 4/8 Ohm. 7 Watts. 40 dB.

0 to +60 C. 0 to 95% Rh non-condensing. Dustproof Metal Enclosure.

16 SWG Powder Coated MS Enclosure. 265 x 165 x 145 mm. 2.1 KGS. "L" Clamp Type.

### INDUSTRIAL COMMUNICATIONS SIMPLIFIED.

### cables & wireless co.

FF 75 RAJAT ARCADE, MIDC T-POINT, AMRAWATI ROAD, WADI, NAGPUR –440023. PHONE:-07104-321913,07104-224381. Fax:-07104 -224381. Cell: - 098226 95746, 09225227945, 09822941190. Website:- www.cnwcom.in. E-mail: - cnwcom@gmail.com.



**SMART LINE MATCHING TRANSFORMERS** are meant to be connected with **SMART EXTERNAL AMPLIFIERS** it has transformer based design.

Locations where long loop cables are used for loud speakers and LMT based Amplifiers at such places these units are installed near the loudspeaker horns to minimize the cable loop resistance and enhance the audio quality.



#### **FEATURES:-**

- Suitable for long loop for speakers.
- Transformer based design.
- Wall mounted with integrated canopy with weatherproof design.

#### **CONNECTIONS: -**

- AMPLIFIER UNIT TO LMT:-24/0.2 mm, 2 core, ATC, PVC insulated, Twin twisted, FROM AMPLIFIER UNIT TO LMT
- LMT UNIT TO SPEAKER:-24/0.2 mm, 2 core, ATC, PVC insulated, Twin twisted, FROM LMT TO LOUD SPEAKER HORN.

#### **TECHNICAL SPECIFICATIONS: -**

#### **ELECTRICAL SPECIFICATIONS: -**

Input 100 Volt Audio line.

Output 20 Watt Max. Output impedance 8 Ohms.

1.5 KV between PRI & SEC for 15 Min. Isolation

**ENVIRONMENTAL:** -

Temperature 0 to +60 C.

Humidity 0 to 95% Rh non-condensing. Enclosure Dustproof fully gasketted.

**MECHANICAL:** -

Body ABS. Surface finish MATT.

**Dimensions** 139 x 119 x 70 mm.

Net weight kgs .650 kg. Vertical wall. Standard mounting

**CONFIRMING TO IP 65-DEGREE PROTECTION.** 

#### INDUSTRIAL COMMUNICATIONS SIMPLIFIED.

cables & Wireless Co.

FF 75 RAJAT ARCADE, MIDC T-POINT, AMRAWATI ROAD, WADI, NAGPUR -440023. PHONE:-07104-321913,07104-224381.Fax:- 07104-224381.

Cell: - 098226 95746, 09225227945, 09822941190.

Website:- www.cnwcom.in. E-mail: - cnwcom@gmail.com. "(Specifications and description subjected to change without prior notice)"

## SMART JUNCTION BOX MODEL JB-III

**SMART JUNCTION BOXES** are meant to be connected with **SMART PA SYSTEM WITH MCS III** it has single TERMINATION based design.



#### **FEATURES:-**

- Suitable for long TELEPHONE UNITS
- TERMINAL based design.
- IP 55/65 degree protection
- Wall mounted with integrated canopy with weatherproof design.

#### **TECHNICAL SPECIFICATIONS: -**

#### **ELECTRICAL SPECIFICATIONS: -**

Connectors 2.5 mm 2 Amps.

#### **ENVIRONMENTAL: -**

Temperature 0 to +60 C.
Humidity 0 to 95% Rh non-condensing.
Enclosure Dustproof fully gasketted.

#### **MECHANICAL:** -

Body ABS.
Surface finish MATT

Dimensions  $139 \times 119 \times 70 \text{ mm}$ .

Net weight kgs .650 kg. Standard mounting Vertical wall.

#### **CONFIRMING TO IP 65-DEGREE PROTECTION.**

#### INDUSTRIAL COMMUNICATIONS SIMPLIFIED.

cables & Wireless co.

FF 75 RAJAT ARCADE, MIDC T-POINT, AMRAWATI ROAD, WADI, NAGPUR -440023. PHONE:-07104-321913,07104-224381.

Fax:- 07104-224381.

Cell: - 098226 95746, 09225227945, 09822941190.

Website:- www.cnwcom.in. E-mail: - cnwcom@gmail.com.