

**MAIN PANEL**

Manufacturer : Micro-CTL Electronics Sdn.Bhd  
 Brand : Mictron  
 Model : 800  
 Part Number : M8P-MP  
 Power Consumption : 24V DC 150mA  
 Operating Temperature : 0 - 45 degree C  
 Operating Humidity : 5% to 95% (Non-condensation)  
 Panel Construction : Mild Steel  
 Panel Thickness : 1.2 - 1.5mm  
 Finishing : Epoxy powder coat paint  
 Colour : Red  
 Testing Standard : MS1745 Part2:2004  
 : EN 54 Part2:2004  
 : 2011EL0096 & 2011EMC014SIRIM  
 Test Report

**DIGITAL SUB-PANEL (RTTU)**

Model : RTTU (Remote Telephone Terminal Unit)  
 Material : Mild Steel  
 Thickness : 0.9mm  
 Finishing : Epoxy powder coated paint  
 Colour : Red  
 Dimension : 400 (H) x 350 (W) x 80mm (D)  
 Capacity Zone Card : 10 maximum  
 Part Number : M800-RTTU-ALL  
 Zone module card : MCP-8ZRV  
 Termination module card : MCP-8RT  
 Power Consumption : 20mA or 0.6w, 22-32 volts DC  
 Max. Distance to Main Panel : 2km (wires as shown in schematic)  
 Operating Temperature : 0 - 50 degree C  
 Operating Humidity : 5% to 95% (Non-condensation)

**REMOTE FIREMAN INTERCOM STATION (RFIS)**

Model : M8-RFIS  
 Handset Material : High Impact Thermoplastic  
 Handset Colour : Red  
 Constant Rating : 24V DC 1A  
 Transmitter : Condenser mic.  
 Receiver : Dynamic  
 Impedance : 150 ohms  
 Max. Distance to MH : 2km (2 x 1.5 PVC cable)  
 Operating Temperature : 0 - 50 degree C  
 Operating Humidity : 5% to 95% (Non-condensation)  
 Box Material : Mild Steel  
 Box Colour : Red  
 Box Thickness : 0.9 - 1.2mm  
 Box Finishing : Epoxy powder coat paint  
 Box Dimension : 356mm (W) x 172mm (H) x 80mm (D)  
 Box Cover Dimension : Surface Mount (M8-BC-S)  
 : (362mm (W) x 178mm (H))  
 : Flush Mount (M8-BC-F)  
 : (380mm (W) x 196mm (H))

**MIMIC DISPLAY**

Model : M800-Mimic  
 Material : Multicolour mimic on perspex with alarm LED  
 Operating Temperature : 0 - 45 degree C  
 Operating Humidity : 5% to 95% (non-condensation)  
 Enclosure Construction : Mild Steel  
 Enclosure Thickness : 1.2 - 1.5mm  
 Enclosure Finishing : Epoxy powder coated paint  
 Colour : Red  
 Dimension : Customized

**SUB-PANEL**

Model : M800-SFIP  
 Maximum Distance : 2 km  
 Operating Temperature : 0 - 45 degree C  
 Operating Humidity : 5% to 95% (non-condensation)  
 Panel Construction : Mild Steel  
 Panel Thickness : 1.2 - 1.5mm  
 Finishing : Epoxy powder coated paint  
 Colour : Red  
 Dimension : Customized

**PC Station**

Model : M800-PC-R1  
 Operating System : Windows XP, 7 or higher  
 MFP Interface : RS232 serial communication  
 User Interface : Graphical User Interface (GUI)  
 Maximum Display : 99 display panel  
 : 99 graphical floor plans  
 Maximum Users : 16 with password  
 Features : Automatic display calling intercom  
 : Zone indication on floor plan

**BATTERY CHARGER**

Model : MCPS-8  
 Charger Type : Constant voltage  
 Input Voltage : 240V AC ±10% 50Hz  
 Charging Voltage : 27.5V DC 1.2A  
 (output voltage)  
 Ripple & Noise : 100mV (RMS) maximum  
 Operating Temperature : 0 - 50 degree C  
 Operating Humidity : 5% to 95% (Non-condensation)

**SYSTEM STATUS PANEL**

Panel Model : M8P- CPU  
 Type : Microprocessor based  
 Model : Freescale MC68HC05/08  
 Memory : 8K byte EPROM  
 : 2K byte RAM  
 I/O port : 1 serial & 2 parallel  
 Operator Interface : Keyboard with 16 keys  
 : 16 x 1 Alphanumeric LCD Display  
 Trouble Indications : LED for system fault, AC on/fail  
 : DC on, Charger fail & Battery low  
 Type of meter : Voltmeter 0-30V DC  
 Power Consumption : 22-32V DC, 50mA or 1.5W  
 Panel Construction : Perspex on aluminium  
 Panel Colour : Light grey/light blue/black labelling  
 Panel Dimension : 400mm (W) x 90mm (H) x 30mm (D)  
 Operating Temperature : 0 - 50 degree C  
 Operating Humidity : 5% to 95% (Non-condensation)

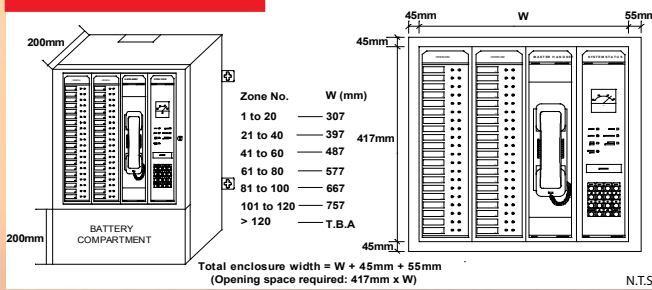
**INTERCOM STATUS PANEL**

Panel Model : M8P- DP  
 Capacity Per-panel : Maximum 20 zones  
 Indication : CALL - Red LED  
 : FAULT - Amber LED  
 Zone card Construction : Zone card model : MCP-8ZRV  
 : Capacity : 10 zones  
 : Wiring card model : MCP-8RT  
 : LED card model : MCP-8ZT  
 Power Consumption(20 zones) : 22-32V DC, 20mA or 0.6W  
 Panel Construction : Perspex on aluminium (1.4+1.4mm thick)  
 Panel Colour : Light grey/light blue/black labelling  
 Panel Dimension : 400mm (W) x 90mm (H) x 30mm (D)  
 Operating Temperature : 0 - 50 degree C  
 Operating Humidity : 5% to 95% (Non-condensation)

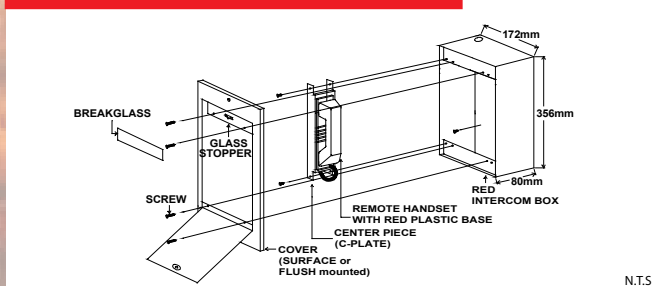
**MASTER HANDSET PANEL**

Panel Model : M8P-MH  
 Handset Material : High Impact Thermoplastic  
 Handset Colour : Red  
 Constant Rating : 24V DC1A  
 Transmitter : Condenser mic  
 Receiver : Dynamic  
 Impedance : 150 ohms  
 Panel Construction : Perspex on aluminium (surface panel)  
 : Mild-steel (flush panel)  
 Panel Colour : Light grey/light blue / black labelling  
 Panel Dimension : 400mm (W) x 90mm (H) x 30mm (D)  
 Operating Temperature : 0 - 50 degree C  
 Operating Humidity : 5% to 95% (Non - condensation)

**MAIN PANEL DIMENSIONS**



**REMOTE FIREMAN INTERCOM STATION DETAILS**



# THE ULTIMATE CHOICE WITH UNCOMPROMISING FEATURES

## MICTRON 800 MULTIPLEX FIREMAN INTERCOM SYSTEM



Low in price  
 High in technology  
 Low in maintenance costs  
 High in efficiency  
 Minimum servicing required  
 Maximum performance expected

Intelligent buildings  
 Apartments  
 Commercial complexes  
 High rises  
 Hospitals / Medical centres  
 Distributed blocks of buildings



Other available Products:



**MICRO-CTL AUTOMATION SDN. BHD.** (457153-X)  
 No.3, Jalan SS13/6A, Subang Jaya Industrial Estate,  
 47500 Selangor Darul Ehsan, Malaysia.  
 Tel: 006-03 5633 4993 Fax: 006-03 5636 1117  
 E-mail: sales@micro-ctl.com www.micro-ctl.com  
 Micro-CTL reserves the right to alter specification of its product from time to time without notice.

# MICTRON 800 MULTIPLEX FIREMAN INTERCOM SYSTEM

The Mictron 800 Microprocessor-Based Multiplex Fireman Intercom System is a result of the advanced technologies available today & uses the latest single chip microprocessor. It provides features which are beyond the capability of the conventional 2-way communication system.

**Digital Sub-Panel RTTU (Remote Telephone Terminal Unit)**  
A RTTU is a distributed data gathering panel. All the external remote handsets are connected to the RTTU.

The microprocessor in the RTTU will convert the data into serial format and communicate with the Main Fireman Intercom Panel (MFIP) via standard data cable.

A standard RTTU can interface up to 10 Remote Fireman Intercom Station (RFIS). Depending on building zoning layout, each RTTU can be used to serve several floors.

A standard Mictron 800 is a 2-BUS system, each BUS allows up to 32 RTTU. However, an extension can be added to increase the BUS to 4 with maximum of 128 RTTU & 1280 zones.

The distributed configuration (Multiplex Technique) of the sub-panel (RTTU) in Mictron 800 offers the ultimate solution in terms of wire saving, reduces installation cost and easy maintenance work.


**Optional Multi-Colour Mimic Panel (M800-Mimic)**  
Consist of all floor plans and section of building printed on perspex sheet with LEDs on the mimic floor plans to indicate location of each intercom zone.


**Interlinking Capability :**  
Integration between main panel and other sub-system can be achieved through 2 twisted pair of data cable or other medium.

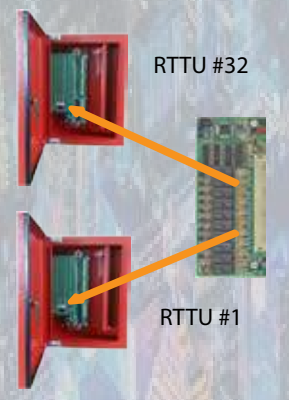
The sub-system can be a full repeater or just a simple panel for the master handsets in different control room to communicate with each other.

High level integration to other building services system can also be achieved by RS-232 serial communication, with protocol provided upon request.

- Why Mictron 800 is Preferred :-**
- Its excellent features.
  - Its competitive pricing.
  - Easy availability of parts.
  - Reliable and well-trained support team to provide after sales service.
  - Free in-house training on trouble-shooting is available upon request.

 No extra wiring. All wirings from remote handsets are pulled to nearest sub-panel (RTTU). Looping from Mictron 800 to sub-panel (RTTU) consists of 4 data cables, 2 speech cables and 2 power supply cables only.

 No extra labour. All the numbering details at the termination cards of RTTU enable each cable to be easily identified for tracing wirings so as to save on labour time.



### Parts Interchangeability

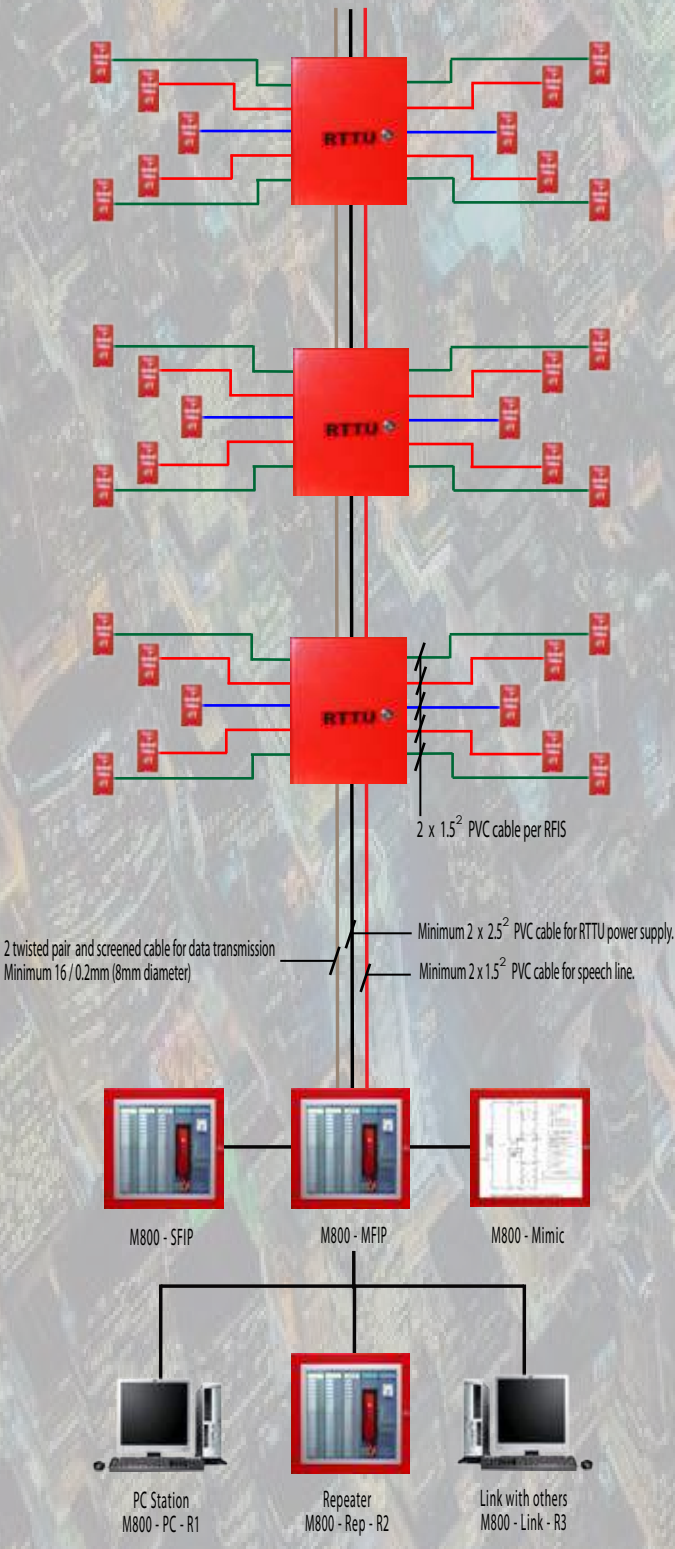
No Address setting is required for RTTU module. The address is set on the wire termination module. To replace the faulty RTTU, just un-plug the faulty card & plug in a new card.

A typical highrise building will require each RTTU to serve several floors. A straight forward wiring configuration is required for looping RTTU to RTTU and back to main control panel.

For highrise buildings with different blocks of configuration, RTTU will be installed at strategic locations to serve various floors, interconnection of RTTU can be directly pulled back to master control panel or tee-off from another RTTU of another block.

RTTU will be ideal in distributed blocks of building like campuses and hostels. The data cable interlinking the RTTU can be "branch" or "star" connection.

For different blocks of building like condominiums, each condo will have its own main control panel and RTTUs. Since 24 hours standby guard is normally at the guard house, all information will be repeated at the guard house master control panel. Cabling required is 2 pairs data cable + 1 pair speech cable from each block to master control panel at guard house. The master handset at guard house will be able to talk to any of the remote handset of any block.



2 twisted pair and screened cable for data transmission  
Minimum 16 / 0.2mm (8mm diameter)

Minimum 2 x 2.5<sup>2</sup> PVC cable for RTTU power supply.

Minimum 2 x 1.5<sup>2</sup> PVC cable for speech line.

Depending on the distance of the RFIS to the RTTU, and the RTTU looping to the MFIP, the wire size may vary, refer to the actual project schematic drawing for verification.

User friendly simple keyboard operation to call and connect between the master and remote handset.

16 x 1 character LCD on keyboard. Displays alphanumeric message.

Auto connection between the remote handset with the master handset, when the latter is lifted.

Ringing / Engaged tones both at the remote and master handset, to show callers the status of the system.

Two non-polarised wires are required for inter linking each remote handset with the main fireman intercom panel.

Party line of a minimum of seven which enables conference call to be made.

Compact plug-in modules save on space.

20-Point indication on facial display saves space on main cabinet housing. Red & amber LEDs to differentiate calling & fault conditions.

Automatic volume compensation for different wire length.

Superb interlinking ability between master-master-remote. Only 2+1 pair data cable is needed between the two masters.

Volmeter & LED indication on keyboard panel showing system status.

Audio & visual facility both at master panel & remote handset.

Built-in transient suppressor to protect the modules from external high surge or irregular voltage.

Built-in servicing software for easy maintenance and servicing.

Optional mimic diagram to show the locations of all remote handsets by LED Lights.

Optional printer/computer interfacing for event recording.

