

## **DIGITAL AUDIO INTERCOM SYSTEM**

The contractor shall Supply, Install, Test and Commission a modern Audio Entry Phone System to facilitate Audio Communication between the different apartments and the building Main Entrance.

The system shall operate when an apartment is called from the main entrance and shall be received on the unit in the apartment. The system shall block out calls to other apartments while a call is in progress.

The system shall be supplied and installed by a specialist contractor, who shall be the main agent of the equipment supplied. Items of equipment from various manufactures, mixed to form a system shall not be accepted.

The contractor shall submit a complete proposal with schematic drawings, list of materials and original detailed catalogues of the equipment for consultant/client approval before starting the work.

### **1. GENERAL:**

- 1.1** The Audio Entry Phone System shall be suitable for 2 way voice communication between the different apartments and the main entrance panel.

Unlocking of building entrance door shall be possible by pressing the monitor's door-opener button.

### **1.2. Submittals**

The contractor shall submit to the Consultant 5 Copies of Descriptive Literature, Technical Data, Catalogues, Installation Instructions and Maintenance recommendation of all the Products used.

The Contractor shall provide detailed Shop Drawings for the review/approval by the Consultant which include the Schematic Diagram of the VI Distribution Network indicating all the System components including Splitters, Power Supplies, Cables etc.

### **1.3. Codes & Standards**

All the equipment and components shall be in accordance with CE Standards and they shall bear the EU Directives (89/336/EEC) label on them.

**2. System's equipment:**

The system shall consist of, but not necessarily be limited to the following:

- 2.1. Digital audio intercom entrance panel with incorporated speech unit.
- 2.2. Surface wall mounted Interphone handset unit in each apartment.
- 2.3. Sufficient power supply units, cables and all necessary accessories.

**3. Equipment's specifications:**

**3.1. Entrance panel:**

- 3.1.01. Entrance Panel shall be wall-mounted in extruded aluminium with a special paint finish, chosen for its resistance to atmospheric agents and copolymers with optimal technical properties in extruded aluminium with a special paint finish, chosen for its resistance to atmospheric agents and copolymers with optimal technical properties.
- 3.1.02. Set of 3 module panel shall have keypad board for selecting flat's numbers inclusive of call and reset keys with 4 or 8 digit encoding.
- 3.1.03. Panel shall have 8-digit numeric display indicating selected numbers, name tag holder for 13 users with green lighting.
- 3.1.04. Incorporated speech unit following features:
  - Speech units for audio door entry systems shall be with electret amplified speaker and microphone.
  - The microphone should be able to be installed at a distance from the speaker by means of an extension, for application on two channel open voice systems, or systems subject to the LARSEN effect.
  - It shall allow to carry out an audio door entry system with AC call.
  - The speech shall be supplied with a double amplifier for loudspeaker and microphone (with adjustments).
- 3.1.05. Panel shall have sufficient tenant's name-index.

**3.1.06.** "ENGAGED" lamp & bulbs for name-index lighting shall be provided.

**3.2. Interphone Handsets:**

**3.2.01.** Surface wall-mounted type in low-profile thermoplastic housing.

**3.2.02.** Interphone handset shall have Flex cord with two RJ connectors.

**3.3.03.** Interphone handsets shall be equipped with the following:

- With 4 and 8 digit encoding / decoding
- Phone handset with microphone & speaker unit.
- Internal electronic chime with adjustable intensity.
- Sound System, AC
- Call volume
- Red LED for call exclusion and green LED for door/gate open.
- Door Lock / release control push buttons.
- Self protected against short circuit and overload through PTC.
- Equipped with drawable connector for faster and easier connections.
- Terminal numeration matching in all the equipment in a system to avoid connection errors.
- Wiring : 4 common wires, 1 switchboard, 1 for door lock release and 1 for auxiliary services

**3.3. Power supply units:**

**3.3.01.** Basic power supply units shall be in 12-DIN module thermoplastic housing provided with protective covers of removable terminal blocks.

**3.3.02.** Power supply units shall operate on 240 V, 50Hz with extra low-voltage output (10-15 V) .

**3.3.03.** All outputs shall be stabilized and protected against short-circuits.

**3.3.04.** Call inhibiting circuit when system is in use.

**3.3.05.** Incorporated frequency modulated electronic call circuit.

**3.3.06.** Timed lock-release control and automatic disconnection device of monitor previously activated.

**3.3.07.** Incorporated indicator LED's for "power on", "door lock release control", "phonic line" & "auxiliary functions 1 & 2".

**3.3.08.** Integrated relay connection outputs for auxiliary functions.

**3.4. Cables:**

Suitable low loss cables shall be used for wiring the system.

**Bill of materials:**

No.	Description	Unit	Qty	Rate	Total
	<b><u>Digital Audio Intercom System :</u></b> Supply, installation & commissioning of Digital Audio Intercom system for the buildings as per the enclosed specification				
1.	Digital Entrance panel with incorporated speech unit as specified.	No.	01		
2.	Digital Audio Intercom Unit as specified.	Nos.			
3.	Power supply units as required for the system.	Nos.			
4.	Cables	Lot			
5.	Supply, installation and commissioning of the above system as specified with all necessary accessories.	Lot			