

DIGITAL VIDEO INTERCOM SYSTEM

The contractor shall supply, install, test and commission a modern Electronic Digital Video Entry Phone System of an approved manufacturer and design to facilitate audio-visual communication between the different apartments of the building and main entrance.

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 video entry phone system shall be suitable for visual monitoring of the main entrance lobby/door and duplex 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 video intercom entrance panel with incorporated CCD camera and speech unit.
- 2.2. Surface wall mounted Monitor unit in each apartment.

- 2.3. Sufficient power supply units, signal distribution boxes, signal amplifiers, video 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. 3 module panel shall have 12-keypad for selecting flat's numbers inclusive of call and reset keys with 4 or 8 digit encoding and name tag holder for 13 users.
- 3.1.03. Panel shall have 8-digit numeric display indicating selected numbers.
- 3.1.04. Incorporated 1/4" B/W CCD (Charge Coupled Device) camera with the following features:
- Standard CCIR 625 lines, 50 images, 1 Vpp/75 Ohms video output.
 - Electronic brightness control (shutter).
 - With infrared LED at maximum distance of 50 cm.
 - Built-in speech unit (speaker/microphone).
 - Operating temperature -5° C. to +50° C.
- 3.1.05. Programming parameters shall include call time, conversation time, lock opening time entrance panel identification code.
- 3.1.06. "ENGAGED" lamp & bulbs for name-index lighting shall be provided.

3.2. **Monitors:**

- 3.2.01. Surface wall-mounted type in low-profile thermoplastic housing.
- 3.2.02. Monitor in ABS shall have 4" monochrome flat screen complete with phone-type handset.
- 3.3.03. Monitors shall be equipped with the following:

- Phone handset with microphone & speaker unit.
- Internal electronic chime with adjustable intensity.
- Lock release, video moving and watchman/switchboard push button.
- Brightness and contrast controls.
- Indicator lights to confirm door opening.
- Selection switch either for coaxial or twisted pair.

3.3.04. Monitors shall with 4 or 8 digit encoding / decoding..

3.3.05. Monitors shall be fitted onto the wall via a special quick coupling bracket.

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) for feeding all monitors along with the camera and video-signal splitters.

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:

Video multi-conductor cable shall be used for wiring the system. Cable shall consist of the following:

- 75 Ohm shielded coaxial cable.
- 10 colored conductors.
- PVC protection gray jacket.

4. Installation:

- 4.1.** Video signal splitter shall be provided in each floor from which separate video cables should run to each monitor unit.
- 4.2.** Video signal amplifiers shall be installed within the system, if necessary, to compensate the losses of the coaxial cables and to ensure good picture quality at all the monitors.
- 4.3.** Correct number of power supply units shall be provided to fulfill the power requirements of the system.
- 4.4.** In case of having different entrance panels at several gates, all audio/video & door-opening facilities will be switched to that particular gate from which the call is made. The controls at the other entrance panels shall be deactivated during the call till it is ended.

Bill of materials:

No.	Description	Unit	Qty	Rate	Total
	<u>Video Intercom System :</u>				
	Supply, installation & commissioning of video-intercom system for the building as per the enclosed specifications :				
1.	Digital video intercom entrance panel with incorporated CCD camera and speech unit as specified.	No.	1		
2.	Surface-mounted electronic video intercom monitor with 4" monochrome screen and built-in electronic chime as specified.	Nos.			
3.	Power supply units as required for the system.	No.			
4.	Electro-magnetic door lock.	Nos.			
5.	Video cable.	Lot			
6.	Supply, installation and commissioning of the above system as specified with all necessary accessories.	Lot			