

DIGITAL COLOR OPEN VOICE VIDEO INTERCOM SYSTEM

1. General:

- 1.1 The contractor shall supply, install, test and commission a modern Electronic Digital Open Voice Color 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.

The video entry phone system shall be suitable for visual monitoring of the main entrance lobby and half-duplex voice communication between the different apartments and the main 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** The panel shall have incorporated colour CCD camera with speech unit.
- 2.3** 4" LCD colour display monitor unit in each apartment.
- 2.4** 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" CCD (Charge Coupled Device) colour camera with the following features:
 - PAL, 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** Flush-mounted type in slim-profile thermoplastic housing.
- 3.2.02** Monitor shall have 4" colour LCD flat screen.
- 3.2.03** Monitor shall have the following features:
 - PAL
 - 4 MHz pass band
 - Video input voltage of 0.5 to 2Vpp on 75 Ohm load
 - Brightness & contrast controls.
- 3.3.04** Interphone shall have the following features:
 - Push buttons for door lock and call to switch board
 - Micro-controller for 4 digit coding and decoding
 - Able to be combined with video monitors
- 3.3.05** Monitors shall be fitted with connector for quick interphone wiring to the terminal block of monitor interface.

3.4 Power supply units:

- 3.4.01** Basic power supply units shall be in 12-DIN module thermoplastic housing provided with protective covers of removable terminal blocks.
- 3.4.02** Power supply units shall operate on 240 V, 50Hz with extra low-voltage output (13-18 V) for feeding all monitors along with the camera and video-signal splitters.
- 3.4.03** All outputs shall be stabilized and protected against short-circuits.
- 3.4.04** Call inhibiting circuit when system is in use.
- 3.4.05** Incorporated frequency modulated electronic call circuit.
- 3.4.06** Timed lock-release control and automatic disconnection device of monitor previously activated.
- 3.4.07** Incorporated indicator LED's for "power on", "door lock release control", "phonic line" & "auxiliary functions 1 & 2".

3.4.08 Integrated relay connection outputs for auxiliary functions.

3.5 **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
	<p><u>Open Voice Video Intercom System :</u></p> <p>Supply, installation & commissioning of Digital Open Voice Color Video Intercom System for the building as per the enclosed specifications :</p>				
1.	Digital color video intercom entrance panel with incorporated CCD camera and speech unit as specified.	No.	1		
2.	Flush-mounted electronic video intercom monitor with 4" color LCD screen and built-in electronic chime as specified.	Nos.			
3.	Power supply units as required for the system.	No.			
4.	Video cables.	Lot			
5.	Supply, installation and commissioning of the above system as specified with all necessary accessories.	Lot			