

## **VIDEO INTERCOM SYSTEM**

### **Introduction:**

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 the main entrance.

Local supplier shall be ISO 9001 & OHSAS 18001 Certified Company.

### **System Parameter:**

The contractor shall submit a complete technical proposal with schematic drawings, list of materials and 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 panel in lobby and duplex voice communication between the different apartments and the main entrance panel.

The system shall be completely programmable at site from the main entrance panel without the need of any external programming devices or PCs. It shall be possible to back up the parameters and internal memory on PC/CD/DVD via built-in RS232 serial interface.

The system shall be powered by a main power supply unit; additional power supplies shall be provided within the riser as the system demands; however, feeding each of the apartment monitors by a dedicated power supply unit will absolutely be rejected.

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

### **Standards & Codes:**

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.

### **Equipment Specification:**

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

- Digital video intercom entrance panel with incorporated CCD camera and speech unit.
- 7" LCD color monitor unit in each apartment.
- Sufficient power supply units, signal distribution boxes, signal amplifiers, video cables and all necessary accessories.

**Entrance panel:**

- The entrance panel shall be wall-mounted in stainless steel finishing.
- Panel shall have 12-key matrix keyboard for selection of flat numbers with call and reset keys, in addition to up & down index scrolling and a help key. The buttons shall be back-lit;
- Minimum memory capacity of 600 lines.
- The panel shall have a dedicated key button for the watchman;
- Panel shall operate on 8-digit encoding system;
- Panel shall incorporate 2 line x 16 characters graphic monochrome LCD screen;
- Incorporated 1/4" CCD camera with integrated speech unit. The camera shall have a minimum resolution of 480 TV lines, minimum of 1.0 lux when AGC on.
- White LEDs for object lighting to ensure clear vision in total darkness; illuminated "ENGAGED" signal shall also be provided;
- The panel shall have a full Arabic language interface for the instructions and help menus;

**Flush Mounted Monitors:**

- Flush-mounted 7" high-resolution wide-screen color LCD TFT monitor; 16:9 aspect ratio for wider field of vision.
- Handsfree open-voice monitor. Conversation shall be carried out without the need of keeping the reply button pressed;
- Monitor shall be equipped with dedicated push-buttons for self-start, stair light, door lock release and reply functions;
- Green LED "door open" signal.
- Clip-on interchangeable front panel frames in a range of different colours to the choice of the architectural engineer and interior designer;
- Privacy function which disables the ringtone.

**Power supply units:**

- Basic power supply units shall be in 12-DIN module thermoplastic housing provided with protective covers of removable terminal blocks.
- 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.
- All outputs shall be stabilized and protected against short-circuits.
- Call inhibiting circuit when system is in use.
- Incorporated frequency modulated electronic call circuit.
- Timed lock-release control and automatic disconnection device of monitor previously activated.
- Incorporated indicator LED's for "power on", "door lock release control", "phonic line" & "auxiliary functions 1 & 2".
- Integrated relay connection outputs for auxiliary functions.

**Cables:**

Video multi-conductor single 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.

**Submittals:**

The contractor shall submit to the Consultant 4 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 like Splitters, Power Supplies, Cables etc.

**Installation:**

- Video signal splitter shall be provided in each floor from which separate video cables should run to each monitor unit.
- 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.
- Correct number of power supply units shall be provided to fulfill the power requirements of the system.
- 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.

**MAINTENANCE:**

The system shall be warranted for a period of 12 months after final approval.

**Bill of materials:**

No.	Description	Unit	Qty	Rate	Total
	<p><b><u>Open Voice Video Intercom System :</u></b></p> <p>Supply, installation &amp; 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.	Nos.			
2.	Flush-mounted open-voice electronic video intercom monitor with 7" color LCD screen and built-in electronic chime as specified.	Nos.			
3.	Power supply units as required for the system.	Nos.			
4.	Video cables.	Lot			
5.	PVC junction boxes in the electrical/ telephone room of each floor of the building.	Lot			
6.	Supply, installation, commissioning and warranty of the above system as specified with all necessary accessories.	Lot			