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 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 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 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 7” LCD colour 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 The entrance panel shall be wall-mounted in paint-finished aluminum and copolymer housing.

3.1.02 Panel shall have 12-key matrix keyboard for selecting flats' numbers with call and reset keys, in addition to up & down index scrolling keys.

3.1.03 Panel shall operate on 8-digit encoding system.

3.1.04 Panel shall incorporate 2 line x 16 characters alphanumeric monochrome LCD screen.

3.1.05 Incorporated 1/4" CCD (Charge Coupled Device) camera with integrated speech unit.

3.1.06 Electronically saved name index of sufficient capacity.

3.2 **Monitors:**

3.2.01 Flush-mounted 7" high-resolution wide-screen colour LCD monitor;

3.2.02 16:9 aspect ratio for wider field of vision;

3.2.03 Hands-free open-voice monitor. Conversation shall be carried our without the need of keeping the reply button pressed.

3.2.04 Monitor shall be equipped with dedicated push-buttons for self-start, stair light, door lock release and reply functions.

3.2.05 Green LED "door open" signal.

3.2.06 Clip-on interchangeable front panel frames in a range of different colours.

3.3.07 Privacy function which disables the ringtone.

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:**

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<tr>
<th>No.</th>
<th>Description</th>
<th>Unit</th>
<th>Qty</th>
<th>Rate</th>
<th>Total</th>
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<td>1.</td>
<td><strong>Open Voice Video Intercom System:</strong></td>
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<td>Supply, installation &amp; commissioning of Digital Open Voice Color Video Intercom System for the building as per the enclosed specifications:</td>
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<td></td>
<td>Digital color video intercom entrance panel with incorporated CCD camera and speech unit as specified.</td>
<td>Nos.</td>
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<td>3.</td>
<td>Power supply units as required for the system.</td>
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<td>4.</td>
<td>Video cables.</td>
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<td>5.</td>
<td>Supply, installation and commissioning of the above system as specified with all necessary accessories.</td>
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