## **Televoter Master and Slaves Operational Description**

## 1.1 Product description

EUT is s transceiver designed to be able to send command to one or more keypad and to receive data from them (FCC ID: OM4SLV-MA-US) whether to receive command from the Master Unit (MST-MA-US) and send data to the same.

The Slave is composed of a metal box containing an electronic card with the logics, the RF transmission and reception of data (transceiver), with 1 antenna screwed into his own socket, which is welded on BCB

## 1.1.1 Operational description

The system (Slaves and Master) recognize up to 16.383 voting keypads, divided in 32 blocks of 512 each.

When requested by the operator, who control the Master Unit through the PC, a command is sent to the installed slave antennas.

One or more slave antennas (FCCID: OM4SLV-MA-US) could be connected to the Master; up to 32.

Then, the installed slave antennas, one after the other, send a command on air, being able to be received by all the keypad present in the area.

After this command the keypad owners are allowed to enter their choice through the keyboard. Later, when closing the voting is decided, a second command is sent by the operator through the Master to the antennas, so the antennas, one by one, send on air a command, being able to be understood by the voting keypad, which pertain to the first block of voting pads present in the area. After this command the antennas switch themselves in "receiving mode" in order to receive, one after the other, the data stored into the voting pad pertaining to the first block.

In this way the system can interrogate by air (TX/RX mode) the available voting keypad (FCC ID: OM4TLV-MA-US) one block at a time, being able to recognize, properly, each voting keypad pertaining the block and receives from each Voting keypad the data indicating the key/s that has/have been previously selected.

This data was, previously, stored into the internal memory of the voting keypad.

Immediately after being received, this data (identifying the voting keypad and the given vote) are sent to the Master Unit (MST-MA-US) through a cable connection RS 485.

In the meantime the slave antennas are collecting another block of pad, until all the present block of voting keypad are collected.

The Master Unit is connected to an outside PC, through a standard serial port RS232, for the processing and displaying of the results.

## 1.1.2 Modulation upon the carrier

- only one frequency is used: 916.50 MHz

modulation type: AFKdata rate max: 56 Kbps