

## **Televoter Master (MST-MA-US) and Slave Antennas (FCC ID: OM4TLV-MA-US) USER MANUAL**

**1- Slave antennas set-up:** Slave antennas are supplied in three parts which have to be assembled as following:

- Screw down the brass antenna into the the hole, in the center of the round plate, avoiding side knoks.
- Insert the alluminium pipe into the base and extend the support up to 2 mt max.
- Insert the antenna box at the top of the extensible pipe.

**2 - Apparate connecting:** The Master Unit is designed to use a separate power supply. Each commercial DC power supply, with output **12V dc ?20%, 15 A** is acceptable. The power is supplied to the master through a 2 contact circular connectors (male) fixed on the back of the Master; the relative female connector is supplied by Logos.

On the rear panel of the master are four Canon 9 pole connectors:

- the female one is for PC RS232 connection
- the males are for connecting slave antennas by means of a RS485 line.

Connect the special cable, supplied with the system, to the PC serial line, before the switching on of the PC and of the Master himself and shut the fixing screws.

The connector which have to be screwed to the PC is signed with a label (the connection is mono-directional).

Connect slave antennas in series by means of the 25 mt cables supplied with the system.

These cable transport signals and power to slaves antennas (9 to 12 Volts).

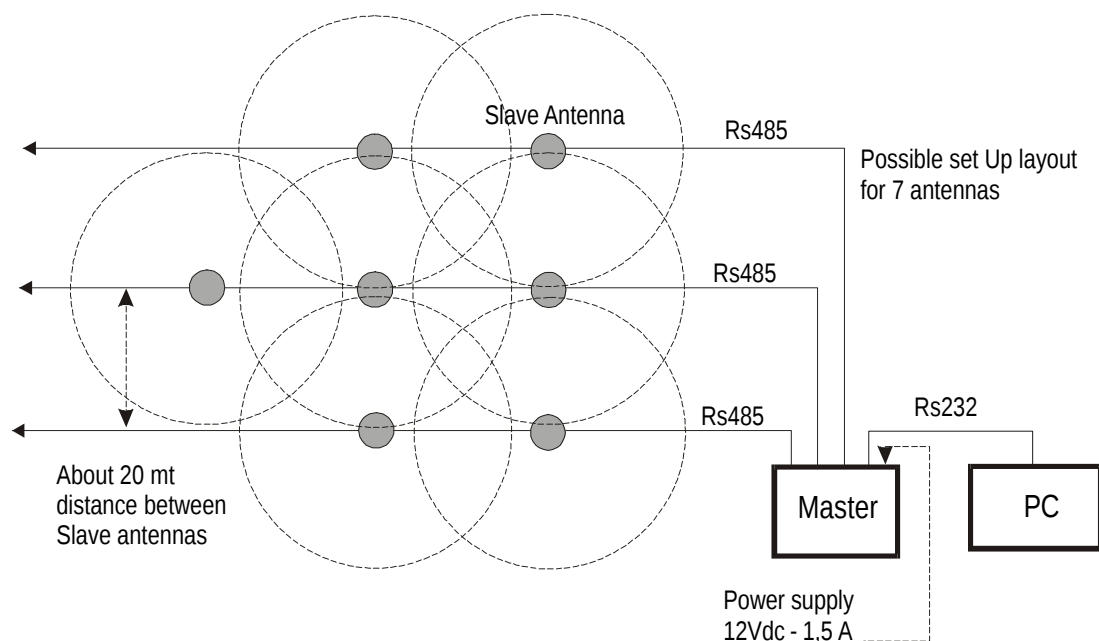
Each cable is equipped with Canon 9 pin, male and female connector, as it is each slave antenna.

A maximum of 32 antennas could be connected to the Master and could be distributed on three lines or all connected on one line only.

Slave antennas have an efficiency of 20 mt radius and the efficiency field must be overlapped, so that each voting pad could be received, contemporarily, by more than one antenna.

At the end of each line of slave antennas must be connected a terminator, a special connector supplied with the Master Unit, the RS485 lines not used, must be terminated directly on the rear panel of the master Unit. Remember to shut the fixing screws.

RS485 cables, supplied with the system can be joined to reach distances of mote than 25 mt; additional 50 mt cables are available.



After all the connections are made, the Master Unit and the PC can be switched on.  
The software developers must use, exclusively, the instructions of the "Communication Protocol" distributed by Logos Av Com srl.

**3 – Caution** – Changes or modification not expressly approved by the manufacturer for compliance could void the user's authority to operate the system.

**NOTE .** This equipment has been tested and found to comply with the limits for Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interface in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with this instructions, may cause harmful interface to radio communication.

However, there is no guarantee that interface will not occur in a particular installation.

If this equipment does cause harmful interface to radio or television reception, which can be determined by turning this equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.