

This system will run with or without a Master station. When it is run without a Master station (ie room & door stations only), it is called a **Mini-com**.

# **DJ500 INSTALLATION INSTRUCTIONS**

#### Includes: with and without Master station, Camera and Monitor

## STATION MEASUREMENTS

| Cut Out Sizes: | Master – Large     | 180mm High x 205mm Wide. |  |
|----------------|--------------------|--------------------------|--|
|                | Room/Door – Medium | 95mm High x 205mm Wide.  |  |
| Dimensions:    | Master – Large     | 218mm High x 260mm Wide. |  |
|                | Room/Door – Medium | 135mm High x 260mm Wide. |  |

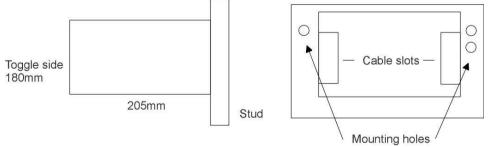
## **MOUNTING STATIONS**

It is common to mount stations with one side against a stud, but if this is not practical, toggles may be used to mount the unit into the plaster at both sides.

#### Mounting the Master Station

The facia of the Master station is connected to the back-case with some cables. Care must be taken when mounting the Master Station not to break any of these cables.

The wires should be connected to the Master station before it is mounted.



Cut the appropriate sized hole in the plaster (see Station Measurements). Insert the toggle into the mounting hole then put the Master station into the hole. Screw one side of the Master back-case to the stud. Level the Master then tighten the toggle.

#### Mounting Room Stations

Cut the appropriate sized hole in the plaster (see Station Measurements). One side may be cut against a stud. Cut a notch for the toggle in the other side.

Remove the facia from the Room station, and put the toggle into the mounting hole. Bring the wire through the cable slot and insert the back-case into the hole. Level the Room station then tighten the toggle.

If the Room Station is to be mounted in brickwork, see **Mounting Door Stations** for details.

#### Mounting Door Stations

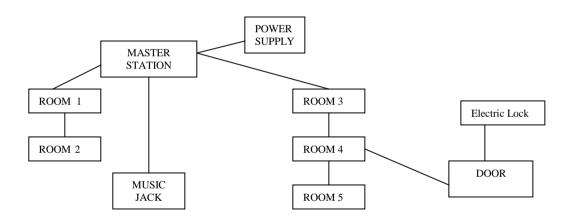
Usually the Door station will be mounted in brickwork. A wall box is supplied when this is the case. Cut brickwork to fit wall box.

Remove the Door station facia. Bring the cable through the cable slot and screw the back-case to the wall box.

## CABLING

#### The cable that must be used is Cat 5.

If this cable is not used the system will not perform to full capacity. The system should be branch wired from the station connected to the Power Supply. An example of branch wiring is shown below:



It is not recommended that the number of Stations exceed four on each branch. Cables should <u>not</u> be run parallel to other cables such as power or data cables. There should be at least a 200mm gap between the intercom cables and other cables.

The power should be wired to a Station that is relatively central to the system. The maximum length of cable between units **should not exceed** 100m.

The Stations should **<u>not</u>** be less than <u>**four**</u> metres apart and Power Supply should <u>not</u> be located in an area subjected to high temperatures such as the roof.

If an Electric lock is to be connected to the system, a Figure 8 cable should run from the Door station to the Lock.

#### **Connection of a Power Supply**

Power is supplied to the central unit which is usually the Master unit in a full system or the central Room station in a Minicom system.

Terminal 1 is positive. Terminal 2 is negative.

#### VIDEO POWER SUPPLY

If the system has a monitor (Video Unit) then a Video Power supply should be used. This should be terminated at the central station (usually the Master Unit) Positive to Terminal 1, negative to Terminal 2.

#### DJ POWER SUPPLY

If the system includes a Master Unit and does not include a monitor, the DJ Power supply should be used. This should be terminated at the central station (usually the Master Unit). Positive to Terminal 1, negative to Terminal 2 (trace is negative).

#### MINI POWER SUPPLY

When the system does not include a Master Unit or a monitor the Mini Power Supply can be used.

Once all the Stations have been connected, power can be applied to the system. Do not turn power on until all Stations have been connected. The Power Supply should be located in an easily accessible location such as a cupboard or pantry. A power point is required for the Power Supply. Do not install in hot areas such as ceilings.

#### **Connecting Cables to the Master Station**

Door bell volume at the Master is adjusted with the pot, located on the lower rear PCB inside the Master.

The terminal block is located on the back of the Master Station near the bottom right hand corner. There are ten terminals on the DJ Master. These are connected as shown below.

The terminal block is colour coded to match Cat 5 and Fig 8 cables.

| POSITIVE | TERMINAL 1  | 0 | BROWN         |
|----------|-------------|---|---------------|
| NEGATIVE | TERMINAL 2  | 0 | BROWN STRIPE  |
| NEGATIVE | TERMINAL 3  | 0 | ORANGE        |
| DATA     | TERMINAL 4  | 0 | ORANGE STRIPE |
| L1-A     | TERMINAL 5  | 0 | BLUE          |
| L1-B     | TERMINAL 6  | 0 | BLUE STRIPE   |
| MUSIC A  | TERMINAL 7  | 0 | GREEN         |
| MUSIC B  | TERMINAL 8  | 0 | GREEN STRIPE  |
|          | TERMINAL 9  |   | NOT USED      |
|          | TERMINAL 10 |   | NOT USED      |

There is a terminal block on the rear of the Master labelled ANT ANT GND. Cabling should be used as according to instructions packaged with your AM Loop Aerial.

### AM Aerial

Connect the centre core of the coaxial cable supplied with the Loop Antenna to the ANT terminal and the braid to the GND terminal. This becomes a directional AM aerial.

#### FM Aerial

Strip a figure-8 cable of approximately 90cm in length and run this along the wall or inside the wall cavity. Leave one end unstripped and the other end connected to the remaining terminal marked ANT.

#### **Connecting Cables to Room Stations**

The terminal block is colour coded to match Cat 5 and Figure 8 cables. Incorrect connection of the cable may cause damage to the Stations or incorrect operation.

| POSITIVE            | TERMINAL 1 | 0 | BROWN         |  |
|---------------------|------------|---|---------------|--|
| NEGATIVE TERMINAL 2 |            | 0 | BROWN STRIPE  |  |
| NEGATIVE TERMINAL 3 |            | 0 | ORANGE        |  |
| DATA                | TERMINAL 4 | 0 | ORANGE STRIPE |  |
| L1-A                | TERMINAL 5 | 0 | BLUE          |  |
| L1-B                | TERMINAL 6 | 0 | BLUE STRIPE   |  |
| MUSIC A             | TERMINAL 7 | 0 | GREEN         |  |
| MUSIC B             | TERMINAL 8 | 0 | GREEN STRIPE  |  |

There are 8 terminals on a room station and the cable should be terminated in an identical manner to the master unit as shown above.

#### **Connecting Cables to the Door Station**

The connection of the Door Station is the same as the connection of the Room Station, with the exception of the Lock connection. If a lock is not fitted, the connection is identical. If a lock is to be fitted, connect the wires to the LOCK and POS terminals.

The Pot located on the Door Station PCB is the adjustment for both the chime and the audio volume at the Door Unit only.

#### **Connection of an Electric Lock**

If an Electric Lock is to be connected to the system it must be connected to the Door Station. The Door Station has two additional terminals for the lock. Information regarding Electric Locks should be obtained when purchasing the lock.

Maximum current output is 1A for five seconds. A Figure 8 (or two core) cable should be run from the Door station to the Lock. For electric devices requiring higher current, a relay should be used with a separate power supply.

#### <u>SJ Input</u>

A remote music source may be fed into the system via the SJ and GND terminals on the rear of the Master. The GND terminal is connected to the striped wire on the Music Jack Plate and the SJ terminal is connected to the plain wire on the Music Jack Plate.

If the system does not have a Master, a Music Interface Board may be used and connected into the nearest room station to the music source, eg.CD player, stereo. The MIB should be located behind the Music Jack Plate. The cable that MUST be used is Austel approved internal telephone cable, (eg Cat5). There must be at least two pairs in this cable.

Use one pair for POS and NEG and the second pair for the two MUS terminals.

The POS is connected to Terminal 1 of any Room Unit.

| The NEG is connected to Terminal 2 | " | " |
|------------------------------------|---|---|
| One MUS is connected to Terminal 7 | " | " |
| One MUS is connected to Terminal 8 | " | " |

The GND is connected to the striped wire on the Music Jack Plate and either L or R is connected to the plain wire on the Music Jack Plate.

A lead may be purchased to suit your Music Source (usually from the headphone socket). Consult your Deltacom agent for further details regarding this lead.

#### STATION OPTIONS (DIP SWITCHES)

Each Station may be programmed to individual settings. The default settings are as follows:

| Number | Setting Description  |
|--------|--|
| 1-1    | Numbering  |
| 1-2    | Numbering  |
| 1-3    | Numbering  |
| 1-4    | Numbering  |
| 1-5    | Door Bell Chime  |
| 1-6    | Attention Beep on if a Station is paged                        |
| 1-7    | Attention Beep will sound only if a Station is in Full Privacy |
| 1-8    | Alarm  |

| Number | Setting Description         |
|--------|-----------------------------|
| 2-1    | Lock Time                   |
| 2-2    | Lock Time                   |
| 2-3    | Unlock                      |
| 2-4    | Privacy                     |
| 2-5    | This Dip switch is not used |
| 2-6    | Auto Cancel                 |
| 2-7    | This Dip switch is not used |
| 2-8    | Should be switched on       |

#### **ROOM NUMBERING**

| Room Number | 1-1 | 1-2 | 1-3 | 1-4 |
|-------------|-----|-----|-----|-----|
| 1           | ON  | ON  | ON  | ON  |
| 2           | OFF | ON  | ON  | ON  |
| 3           | ON  | OFF | ON  | ON  |
| 4           | OFF | OFF | ON  | ON  |
| 5           | ON  | ON  | OFF | ON  |
| 6           | OFF | ON  | OFF | ON  |
| 7           | ON  | OFF | OFF | ON  |
| 8           | OFF | OFF | OFF | ON  |

### Connecting a Camera and Room Monitor

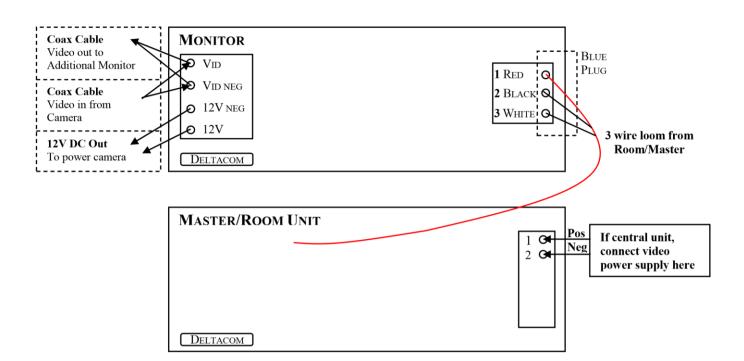
A monitor and camera may be included in the intercom system. The monitor must be connected to either a DJ500 Master or Room station and is usually mounted above one of these units. A 3 core cable is used for the connection between the monitor and room/master unit and is supplied already connected to the associated unit.

The DJ500 Intercom Kit with or without a Master station is to be wired as usual using CAT 5 cable and FIG 8. When adding a Door/Monitor you need to use an additional Figure 8 and coaxial cable between the Camera (usually mounted in the door unit) and the unit with the monitor and a coax between additional monitors.

The Room station(s) with monitor will be wired in as part of the system with CAT 5 and FIG 8. See the diagrams for the specific wiring of the Door and Room station with monitor.

A video power supply should be used and wired into the system in the usual way. Eg: Terminal 1 - POS, Terminal 2 - NEG.

#### CONNECTING DJ MASTER OR ROOM TO UNIVERSAL MONITOR





#### **Our Commitment :**

Deltacom Intercoms is committed to High Quality Products and Services. Should you have concerns, queries, suggestions or difficulties, contact us on 03 9894 4099.