EQUIPMENT INSTALLATION MANUAL

VM 1200

HOME COMMUNICATION SYSTEM
Do not proceed with any installation using this manual until you have first read "STATION LOCATION AND WIRING INSTRUCTIONS" and completed the necessary steps laid down in it.

We then strongly suggest that you install the stations and other equipment in the order set out in this manual i.e. 1) room stations 2) front door 3) master station etc.

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1.A Room Stations in Timber Frame Walls

- Cut out hole in wall lining keeping one side of the cut out adjacent to a stud so as to allow for firm fixing.

- Fit room station housing into cut out and mark positions for wall fixing attachments. Remove housing and cut out a 5-7 millimetre vee for the fixing point of the wing toggle bolt.

- Feed the cables from inside the wall through the circular hole at the rear of the room station housing.

- Fit the room station housing back into the cut out hole and secure it with the fixing attachments provided.

- Remove the printed circuit board from the main housing.

- Strip back the outer white cable covering (approx 200MM) then the coloured cables inside (approx 30MM bare cable) and firmly fix all bare cables onto the screw terminals of the circuit board. Make sure any bare wiring on one terminal is not touching another terminal.

- Insert the printed circuit board with the wires affixed (see diagram opposite) back into the opening provided in the main housing.

- Secure the front facia onto the main housing using the four (4) 12 millimetre black screws provided.

- Note: It is suggested that they only be partly screwed in until the system has been fully tested. This will allow for the easy checking of the cable termination should the system not operate correctly.

1.B Room Stations in Cavity Brick Walls

- Before locating any room stations on Cavity brick walls, make sure the instructions set out in the manual "Station Location and Wiring Instructions - VM1200 Intercom" have been carefully read and understood.

- Remove the brick and mortar and insert the wall box ensuring that all cables are first pulled through any one of the holes in the back of the wall box.

- Installation procedure is then the same as for timber frame walls with the exception of using another wood fixing screw instead of a wing toggle bolt (see drawing/diagram opposite)
VR100 ROOM STATION - TIMBER FRAME WALL -

NOTE: No wall box is required for this installation.

Wing Nut

VR 100 ROOM STATION PRINTED CIRCUIT BOARD PC 408B 155 C

NOTE

CUT OFF AND INSULATE FROM OTHER WIRING WITH ELECTRICAL TAPE.
THE SHIELD WIRING IS ONLY CONNECTED AT THE MASTER STATION AND NOT THE ROOM STATION. DISCARD TERMINAL WITH SHIELD.

VR100 ROOM STATION - CAVITY BRICK WALL -

Insert into opening

Facia Fixing Screws (4 x 12mm Black)
2 Front Door/Gate Station(s)

- Depending upon the type of wall to which the station is to be affixed i.e. timber or brick, installation and cable termination is then the same as for room stations.
- Where stations are exposed to extreme weather, consult your authorised dealer with a view to weatherproofing.

3 Auxiliary Input Jack (DIN Socket)

A Installation At Frame Stage Prior to Lining of Walls

- Secure the plate provided (Part No. 155) to the stud wall adjacent to the power point for your stereo, and pull the shielded cable through the opening of the plate.
- After the walls have been lined, cut out inside diameter of plate, strip the shielded cable and solder onto the terminals as indicated on diagram on opposite page.
- Screw the input jack onto the plate.

B Installation in Timber Frame Walls Already Lined

- Ensure the shielded cable can be run to the location selected and that no noggings are in the way.
- Cut out wall lining and insert the plate provided (Part No. 154) then pull the wire through the opening.
- Installation is then the same as for 3. A.

C. Installation In Cavity Brick Walls

- Drill through the brick work to the cavity.
- Enlarge the hole slightly so as to allow the pins of the input jack to recess into the brick work.
- Pull the shielded cable through the opening, strip the shielded cable and solder onto the terminals as indicated on opposite page.
- Drill and plug the brick work for the mounting screws and screw the input jack onto wall.
VF 120 FRONT DOOR STATION - CAVITY BRICK WALL

FROM MASTER STATION

VF 120 FRONT DOOR STATION PRINTED CIRCUIT BOARD
(PC 402 REVA)

WALL BRACKET DIN SOCKET - PN155

AUXILIARY INPUT JACK (DIN)

PLASTER BRACKET DIN SOCKET - PN154
(EXISTING PLASTER WALL)

CUT OUT OPENING IN PLASTER LINING
(30mm x 70mm H x W)
Insert bracket as shown, with clips on the outside of the plasterboard.
4.A Master Station in Timber Frame Walls

Timber Frame Wall Not Lined

- Install the master wall box flush with the front of stud and brace it so as to limit any movement of the box when fitting the master station.
- After the wall has been lined cut out an opening to the inside dimensions of the wall box.

Timber Frame Wall Already Lined

- Cut out an opening in the wall lining (325 mm x 270 mm - H x W) exposing a wall stud at the side.
- Slide in the master wall box and firmly fix (nail) it to the stud so that it is flush with the front on the stud.
- Pull the cables through the back of the wall box, then:
  
  Strip back (approx 200 mm) all the outer white cable coverings on the two pair/two core shielded cables.
  
  Strip back to bare cable (approx 30 mm) all the coloured cables inside the two pair/two core shielded cables from all room stations/front doors and twist them together in their appropriate colours i.e. white with white, blues with blues etc.
  
- The three wiring terminal blocks on the back of the master station affix to the main board of the master station. They are removable should service be required for the master station but are best left on during this stage of the installation.
- Place the master upside down on a bench or support making sure it is resting on a soft surface so as to avoid any marking of the facia.
- Terminate all wiring into the appropriate terminals as per page 9 and ensure all 'stranded shield wires' are insulated with electrical tape once installed.
- Make sure that all wiring is securely fixed to the terminal blocks.

Note: Do not secure the unit onto the wall until such time as all functions have been tested.

4.B Master Station in Brick Wall (Cavity Only)

- Remove bricks and install wall box.
- For homes under construction, install the wall box as the brick work is going up.
- Fitting procedure is then the same as for timber frame walls.
**VM 1200 MASTER STATION - TIMBER FRAME WALL -**

*Note: The cutout size is intentionally smaller than the actual size of the wall box to allow for firmer fixing. Therefore insert the wall box into the opening on its side, then straighten it up.*

**BRICKWORK CUTOUT SIZE**

365mm x 295mm (H x W)

**VM 1200 MASTER STATION - CAVITY BRICK WALL -**
WHAT ARE 'STRANDED SHIELD WIRES FROM ROOM STATIONS'?

Stranded shield wires are those wrapped around the two internal wires of the two core shielded cables that run from the room stations to the master.

When terminated they all should be insulated from other wiring with electrical tape.

SYSTEMS WITH TWO FRONT DOOR STATIONS

Terminate both reds onto terminal 7
Terminate both blues onto terminal 62
Terminate both blacks onto the central earth point
Terminate one white onto terminal 14
Terminate the other white onto terminal 15

TERMINATION OF WIRING FOR ELECTRIC DOOR OPENING DEVICES

First prepare a 'tail wire' of approximately 150MM and terminate onto terminal 49. Now join all striped wires (one side of Figure 8a) from the door opening device and room stations to the tail of terminal 49. Next join all the plain wires from the ROOM STATIONS to the Central Earth Point and the plain wire from the door opening device to terminal 8.
Removal of Terminal Blocks From Master Station

- As detailed in the INSTALLATION OF THE MASTER STATION page 7 the three terminal blocks are removable should the unit need to be serviced.
- To do so, insert a small screwdriver into the openings provided and slowly prise each block off the main circuit board.

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Power Supply

- Connect the 'figure 8' cable (from the master) onto the terminals of the power supply which should be adjacent to its designated power point.
- Screw the power supply onto the wall using appropriate fixing points.
- Put three (3) pin plug into power point and turn power on.