

Multimessage Systems Limited

Dealer's stamp

TV Module
User Guide

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**Model
M401**

GUARANTEE

Multimessage Systems Ltd. guarantees this product for one year from the date of purchase provided that:

- The product has only been used for its intended purpose, and has not been subjected to misuse, or been wilfully or accidentally damaged.
- The product has been installed according to the maker's Installation Instructions.
- The product has not been tampered with or repaired by anyone other than Multimessage Systems Ltd. or its approved agents.

If a fault occurs in this product within twelve months of purchase you should return it to where you bought it, together with the sales receipt, and it will then be replaced or repaired free of charge.

This guarantee does not affect your statutory rights and is applicable to the United Kingdom only.

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TECHNICAL NOTES

INTRODUCTION

The Multimessage M401 is an eight port RF distribution box. From your television aerial the signal can be split into eight separate feeds for televisions or other video equipment.

The M401 also contains three RF modulators which enable you to connect three AV (audio video) devices such as a security camera, DVD player or other devices with AV output. The output of these devices is mixed with your existing television aerial signals on vacant RF channels and may be viewed on all eight of the RF feeds from the unit.

M401 Features

- One RF feed distributed to eight RF outputs
- Compatible with both analogue and digital television
- Three AV inputs that are modulated onto spare RF channels
- User configurable to accommodate regional frequency variations
- Enables you to view a security camera on your television at the press of a button
- Enables you to watch a DVD on any television in the house

1. Interconnection circuits made to any port should be such that the equipment continues to comply with the requirements of EN60950 2.3 for SELV circuits. (The voltages in a SELV circuit shall not exceed 42.4V peak or 60V dc.) Advice should be sought from a competent engineer before such a connection is made.

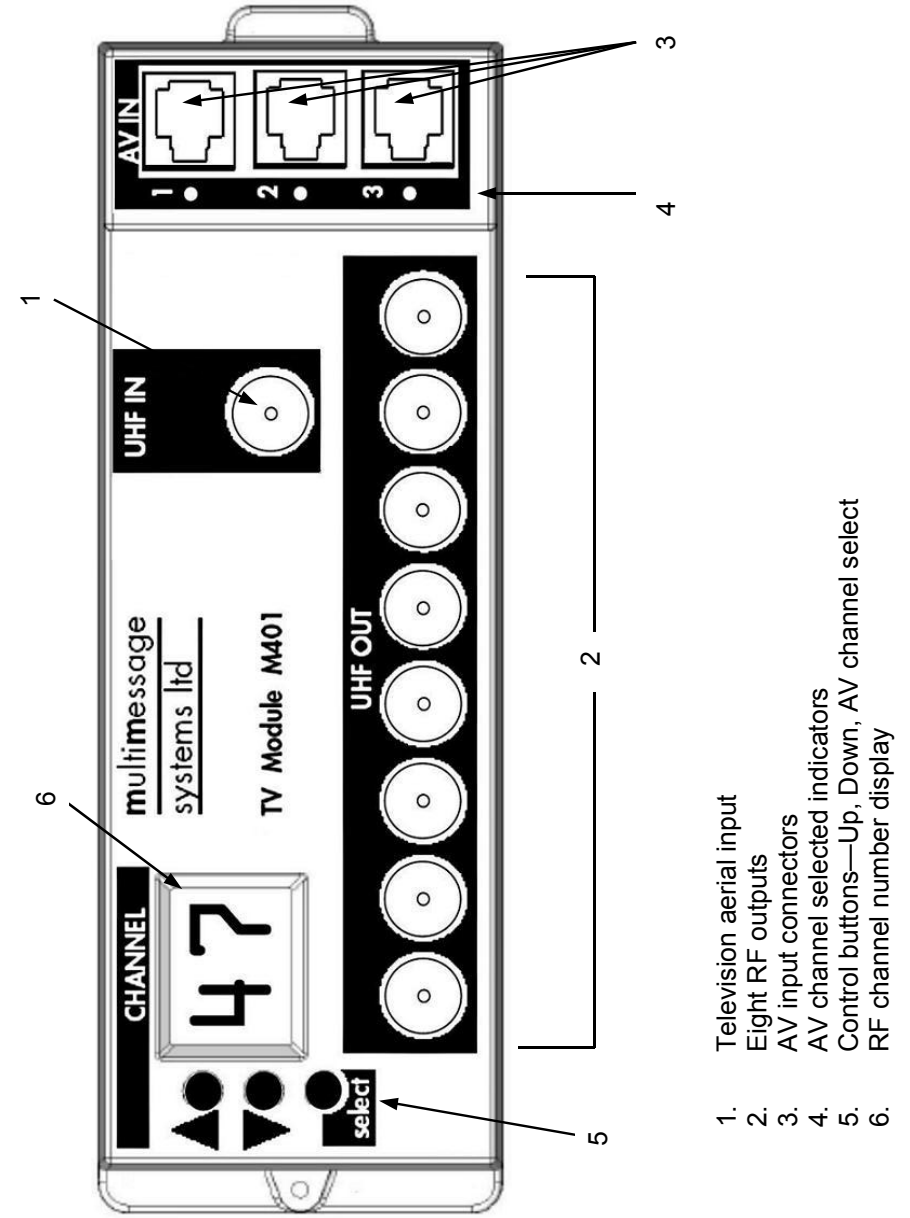
2. Refer all servicing to qualified personnel or to the Multimessage Systems Customer Servicing Department at the address given on the back page of this handbook.

Arial Connections	8
AV Connections	3
PAL System	Pal I
RF Channels	25 to 69
Dimensions	200mm l x 67mm wide x 33mm deep
Weight	252g
Power Supply	24V AC 50 Hz
Power Consumption	300mA maximum
Temperature	0 to 40°C working
Relative Humidity	0 to 95% (non-condensing)

In Case of Difficulty

- Poor reception of television channels are likely to be caused by the reception of the aerial / satellite receiver. The M401 does not amplify the incoming signal, it just distributes it.
- If you are getting interference between an AV programmed channel and television channel they may be located too close to each other. Set the AV channel to an empty channel with at least one empty channel either side.

Product Illustration



INSTALLATION

The M401 should already be fitted into the M400 chassis by an installation engineer. If the M401 has not been installed please follow the installation guide supplied with the unit.

Installation of aerial feed

- The main aerial feed needs to be connected to the television aerial input connector on the M401.
- If the main aerial has been wired into the main box of the M400 then it can be connected directly to the M401.
- If the main aerial has been wired into one of the rooms the following procedure should be followed:
- Select a socket in the room required to connect the aerial to. Connect the aerial and note down the number on the socket. (Note: an aerial socket must be used, not an RJ45)
- On the patch panel, link the corresponding numbered socket on the patch side to the television aerial input connector on the M401, using the appropriate patch lead.

Installation of televisions

- Up to eight televisions or other RF receiving equipment can be connected
- Select a socket in the room required to connect the television to. Connect the television aerial and note down the number on the socket. (Using an aerial socket.)
- On the patch panel, link the corresponding numbered socket on the patch side to one of the television aerial output connectors on the M401, using the appropriate patch lead.

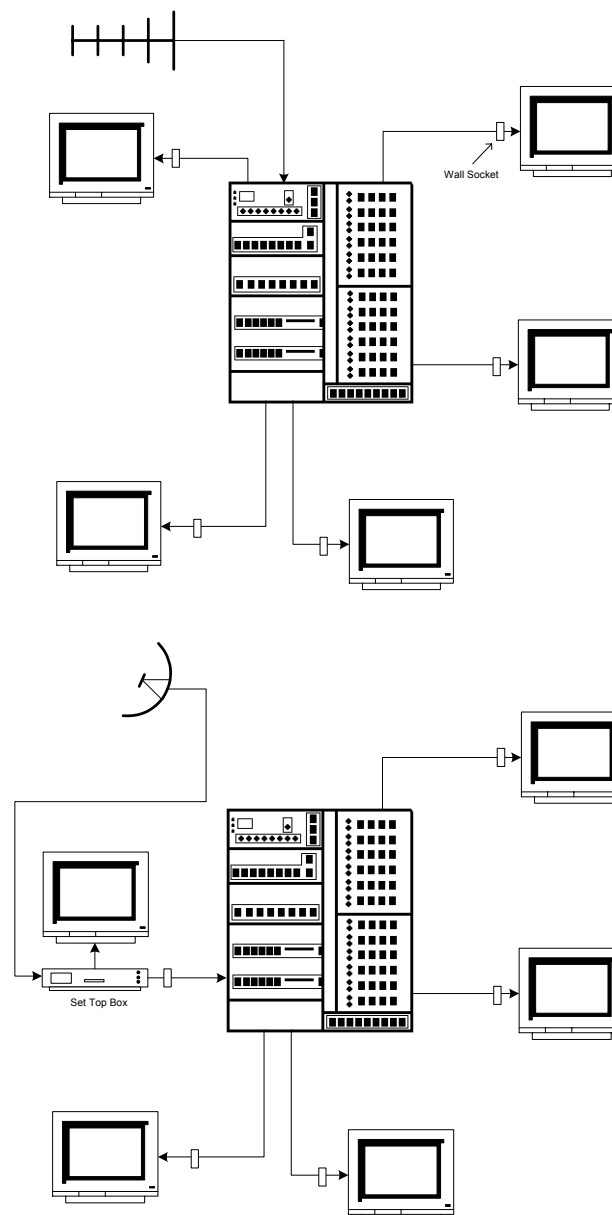
Programming the AV Modulators

- Once all the available stations have been tuned in check for three empty channel numbers. The factory default for the M401 are 30,40 & 50. The channel numbers used will depend on the television region you live in.
- Choose three empty channels with an empty channel either side, e.g. choose CH30, CH29 and CH31 must also be empty. This is because adjacent channels may interfere with each other.
- Using the select button choose the first AV modulator.
- Using the up and down buttons adjust the channel number to the required empty channel.
- Tune your television to the required channel number following the manufacturer's instruction booklet.
- Repeat procedure for the two remaining AV modulators.
- It is advisable to have the AV equipment playing something recognisable during the tuning process so that it is easier to confirm that the programming process is successful.
- Once all the AV channels are programmed, the televisions connected to the system should be able to receive all of the AV devices.

Setting up the M401

- With the required equipment connected to the system, (see installation section of this manual), the televisions need to be tuned into all of the available stations. This should be done by following the manufacturer's instruction booklet.
- **Before connecting any AV equipment to the M401 it is advisable to tune in at least one television to ensure that you are receiving all the required stations and to check for empty channels (see later) .**
- If you are receiving all the channels you need then you may proceed to connect any AV equipment to the M401.
- If you are missing some channels it may be that one of the AV modulators is set to the same channel number as a required station. This will depend on the television region you live in.
- To adjust the AV modulators to different channels see the programming section further on in this manual.

Typical Application



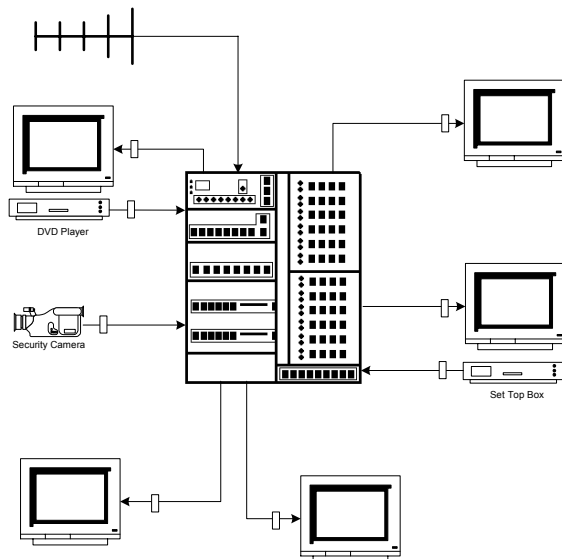
The main aerial is feed into the TV module, either directly or via a wall socket. Up to eight TV's can be connected via the patch panel to any room within the house. If you receive digital television via an aerial and a digital receiver box, you will need a separate receiver box for each television unless you use the AV connection (see later in this manual).

A satellite receiver is connected to your TV following the manufacturer's instruction via the SCART connection. The RF out from the set top box is fed to the TV Module Aerial In socket. Up to eight more televisions can be connected via the patch panel.

Installation of AV equipment

- **Before connecting any AV equipment to the M401 it is advisable to tune in at least one television .**
- There are three AV inputs which enable you to connect AV equipment such as a DVD player or security camera to all of the televisions connected to the M401.
- Select a socket in the room required to connect the AV equipment to. Connect the equipment via it's SCART lead to a RJ45 wall socket (using lead 961015316) and note down the number on the socket.
- On the patch panel link, the corresponding numbered socket on the patch side to one of AV IN connectors on the M401, using the appropriate patch lead.

Typical Application



Three AV devices have been connected to the M401. The module is then programmed so that each device can be viewed on separate channels by all of the TV's connected to the system.

USING THE M401

The M401 is a television signal distribution system which splits your TV signal into up to eight separate signals so that you can distribute your television signal throughout the house. The M401 is transparent to the TV signal so that what arrives from your television aerial can be seen on all eight outputs connectors.

The M401 also has the ability to mix up to three AV signals with the TV signal . It takes the base band video signal from your AV source, such as a DVD player, and modulates it up to a selected RF TV channel. This means that the AV source can be viewed on up to eight televisions throughout your house all at the same time.

The AV signals can be positioned on any vacant RF channels between 25 and 69. This means for example you could have a security camera on channel 30 and a DVD player on channel 40. This will enable you to watch a DVD on any television throughout the house and when the front door bell rings you can switch channels to see who is at the door.