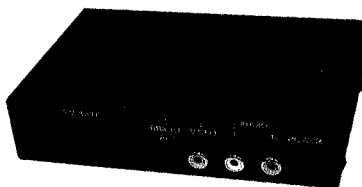


DIGITAL VIDEO SENDER
MODEL: VH89



(PLEASE READ BEFORE USE)



CAUTION



**RISK OF ELECTRIC SHOCK. DO NOT
OPEN**

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.



The exclamation point with an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instruction in the literature accompanying the appliance.



The lightning flash with arrowhead symbol, within an equilateral, is intended to alert the user of the presence of uninsulated "dangerous voltage" within the product's enclosure; that may be of sufficient magnitude to constitute a risk of electric shock to persons.

Introduction to VH89 (UHF PLL MODULATOR)

With MODEL VH89 PLL modulator you will be able to distribute the signal from any audiovisual equipment (satellite receivers, VCR etc) to all the TV-sets of the house. VH89 is especially useful for digital satellite receivers without internal modulator and in general for distributing any signal UHF channel. Then you will be able to insert the signal in the head of the installation without

any appreciable attenuation in cables.

For the correct installation of the MODEL VH89 watch very carefully the location of the different connectors and controls in the fig3. In order to choose the output channel, locate by means of your TV-set, a free RF channel at your antenna installation. We recommend choosing UHF channel (according to model), in order to minimize the attenuation in the cables. Now switch to ON the switches indicated at the figure 3 for the chosen channel. Keep switch 8 at the ON position in order to provide the test signal.

Carry out the video and audio connections from your audiovisual equipment to the MODEL VH89 connectors (see fig3). For the signal insertion to your antenna installation, you can make the connections of fig1a/1b, installing a new cable between the MODEL VH89 and the head of the TV-set installation (then you can combine both signals by means of a mixer) or carry out the assembly of the figure 1c (if your equipments are located at the first TV-socket of the installation).

At this moment you can connect the MODEL VH89 to 240V or 230V or 220V and tune all the TV-sets to the chosen output channel (the test signal will appear). In order to eliminate the test signal SW1 to OFF. Once the electric assembly is concluded you can mount the device on the wall, fixing first the metallic piece.

Cautions:

- In case of high output channels or in big installations, it could be necessary the use of an amplifier before the antenna signal mixer.
- If you see any contrast differences between the pictures of MODEL VH89 channel and the standard channels try to adjust very carefully the video level (see fig3).
- MODEL VH89 Modulator allows the distribution of the audiovisual signals to all the TV-sets of the house. In you want to control the corresponding equipments from the TV-sets. We recommend the use of the 2077 remote

MODEL VH89 remote control extension system. In this case carry out the assembly of fig2.

- In case of problems read the instructions again and check the connections in your installation. In case of doubt or persistence of any problem ask your distributor.

SPECIFICATIONS:

ITEM	MODEL
	VH89
System	PAL I
ANT TO TV	40~1000MHz:-2~+4dB
ANT/TV Port	IEC169-2(f)/IEC169-2(m)
RF Output	470~860MHz Adj.
RF Output Level	70dB μ V (Picture Carrier)
AudioSub-carrier	6.0MHz
Audio Carrier O/P Level Compare to Video Carrier	-15dB
Audio/Video Input Port	RCA Jack OR SCART
Video Input Level	Adjustable,Recommend 1Vpp
Video Input Impedance	75 Ω
Audio Input Level	Recommend 1Vpp
Audio Input Impedance	13K Ω
Power Supply	240VAC or 230VAC or 220VAC, 50Hz

fig 1a

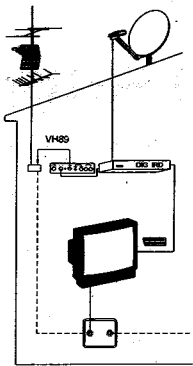


fig 1b

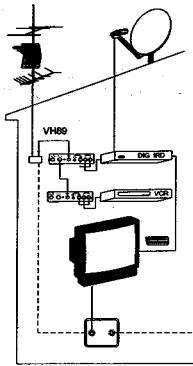


fig 1c

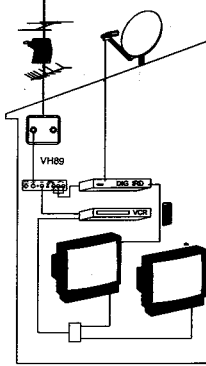
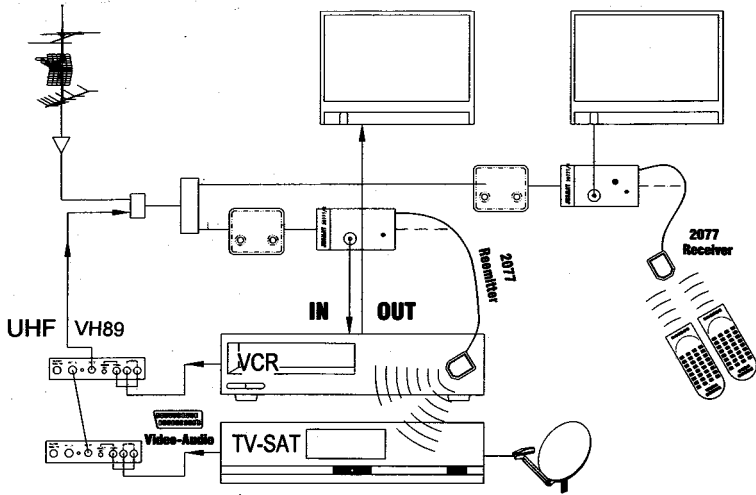


fig 2

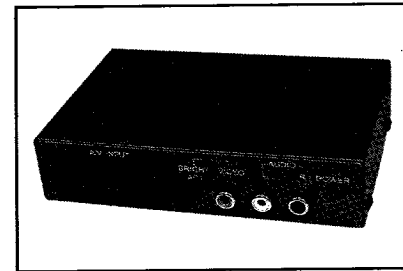


VH89 Control PAL/I

CH	8PIN switch status CH. Frequency	ON="1", OFF="0"						
		1	2	3	4	5	6	7
21	471.25	0	0	0	0	0	0	
22	479.25	0	0	0	0	0	1	
23	487.25	0	0	0	0	1	0	
24	495.25	0	0	0	0	1	1	
25	503.25	0	0	0	1	0	0	
26	511.25	0	0	0	1	0	1	
27	519.25	0	0	0	1	1	0	
28	527.25	0	0	0	1	1	1	
29	535.25	0	0	1	0	0	0	
30	543.25	0	0	1	0	0	1	
31	551.25	0	0	1	0	1	0	
32	559.25	0	0	1	0	1	1	
33	567.25	0	0	1	1	0	0	
34	575.25	0	0	1	1	0	1	
35	583.25	0	0	1	1	1	0	
36	591.25	0	0	1	1	1	1	
37	599.25	0	1	0	0	0	0	
38	607.25	0	1	0	0	0	1	
39	615.25	0	1	0	0	1	0	
40	623.25	0	1	0	0	1	1	
41	631.25	0	1	0	1	0	0	
42	639.25	0	1	0	1	0	1	
43	647.25	0	1	0	1	1	0	
44	655.25	0	1	0	1	1	1	

Checking Contents of Box

Check to make sure that all of the items shown as below are included with your MODEL VH89. If something is missing, please contact your dealer as soon as possible.



1. VH89 × 1

2. Owner's manual × 1

CH.	8PIN switch status		ON= "1" ,OFF="0"							
	CH. Frequency		1	2	3	4	5	6	7	8
45	663.25		0	1	1	0	0	0		×
46	671.25		0	1	1	0	0	1		×
47	679.25		0	1	1	0	1	0		×
48	687.25		0	1	1	0	1	1		×
49	695.25		0	1	1	1	0	0		×
50	703.25		0	1	1	1	0	1		×
51	711.25		0	1	1	1	1	0		×
52	719.25		0	1	1	1	1	1		×
53	727.25		1	0	0	0	0	0		×
54	735.25		1	0	0	0	0	1		×
55	743.25		1	0	0	0	1	0		×
56	751.25		1	0	0	0	1	1		×
57	759.25		1	0	0	1	0	0		×
58	767.25		1	0	0	1	0	1		×
59	775.25		1	0	0	1	1	0		×
60	783.25		1	0	0	1	1	1		×
61	791.25		1	0	1	0	0	0		×
62	799.25		1	0	1	0	0	1		×
63	807.25		1	0	1	0	1	0		×
64	815.25		1	0	1	0	1	1		×
65	823.25		1	0	1	1	0	0		×
66	831.25		1	0	1	1	0	1		×
67	839.25		1	0	1	1	1	0		×
68	847.25		1	0	1	1	1	1		×
69	855.25		1	1	0	0	0	0		×

NOTE: "×" 0=Video in; 1=Test

Trouble shooting care and maintenance

If you have some difficulties, consult the following table.

It will guide you through the most common problems and their solutions.

No picture	▲.Check power supply
	▲.Adjust channel control switch
	▲.Check video line
Can not receive good sound	▲.Check audio line
Picture blur	▲.TV station interference

If you are interested in the functions and products as follows, please contact our Sales Dept. we will try our best to provide samples and make quotations.