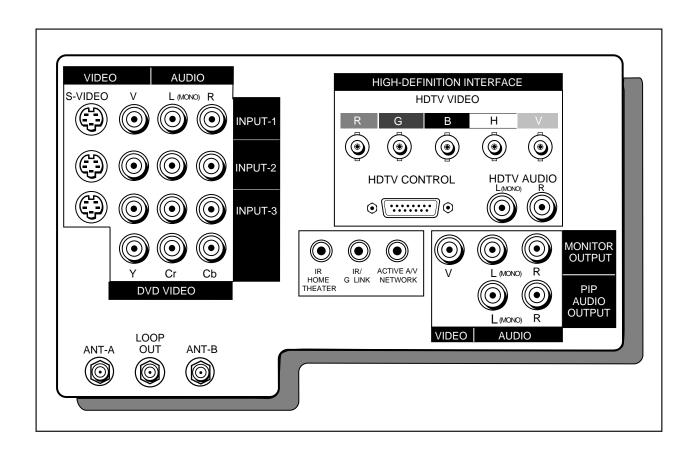


VS-50803 VS-60803 WS-65903 VS-70803 WS-73903 VS-80803

AV Systems Connections Guide





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



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



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

▶Warning: Don't leave stationary images, such as stock market reports, video games, station logos, or the TV's displays, on-screen for more than 10 minutes. Still patterns and repeated display of the same pattern can scar the picture tube, causing permanent damage to the TV.

WARNING:

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

CAUTION:

TO PREVENT ELECTRIC SHOCK HAZARD, DO NOT USE THIS UNIT'S (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

NOTE TO CATV SYSTEM INSTALLER:

THIS REMINDER IS PROVIDED TO CALL THE CATV SYSTEM INSTALLER'S ATTENTION TO ARTICLE 820-40 OF THE NEC THAT PROVIDES GUIDELINES FOR PROPER GROUNDING AND, IN PARTICULAR, SPECIFIES THAT THE CABLE GROUND SHALL BE CONNECTED TO THE GROUNDING SYSTEM OF THE BUILDING, AS CLOSE TO THE POINT OF CABLE ENTRY AS PRACTICAL.

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	TV + separate UHF and VHF antennas 6
	TV + antenna or cable without a cable box 8
	TV + cable with a cable box when TV Guide Plus + will not be used
	TV + VCR + cable with a cable box when TV Guide Plus + will not be used
	TV + VCR + antenna or cable without a cable box
	TV + cable with a cable box when TV Guide Plus + will be used
	TV + VCR + cable with a cable box when TV Guide Plus + will be used
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	TV + stereo audio system
	TV + Mitsubishi products that have A/V network terminals 26
	TV + DVD player with Component Video Outputs 28
	TV + AV receiver 30
	TV + HDTV receiver (Mitsubishi brand only) and cable 34

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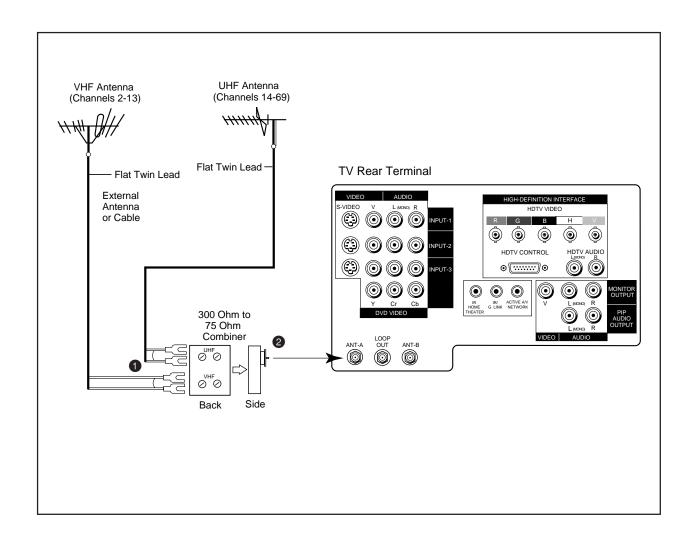
This section will show you the basic connections to hookup your TV.

If you have difficulty making any of the connections to your TV, you may want to contact your Mitsubishi dealer or your local cable company.

- TV + separate UHF and VHF antennas
- TV + antenna or cable without a cable box
- TV + cable with a cable box without TV GUIDE Plus+
- TV + VCR + cable with a cable box without TV GUIDE Plus+
- TV + VCR + antenna or cable without a cable box
- Connecting the Infrared (IR) Emitter
- TV + cable with a cable box with TV GUIDE Plus+
- TV + VCR + cable with a cable box with TV GUIDE Plus+

Warning: You should unplug your TV and any other components before connecting them.

TV + separate UHF and VHF antennas



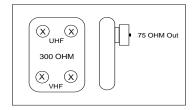
TV + separate UHF and VHF antennas

If UHF and VHF signals are brought into your home with two separate antennas, you'll need to combine them in order to connect them to the TV. To do this you will need a UHF/VHF combiner.

Use this hook-up to:

• connect separate UHF and VHF antennas to your TV.

equipment you will need:



This is a standard combiner with the following specifications:

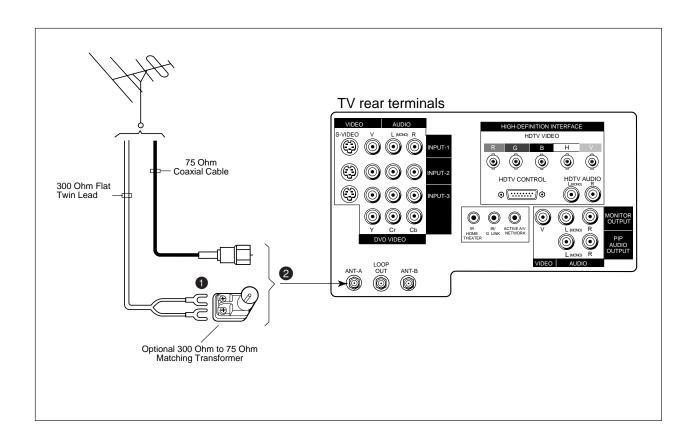
Two (2) 300 ohm inputs One (1) 75 ohm output

(There are different combiners for different kinds of wires. Check with your local electronics store for the kind of combiner you need.)

procedure:

- 1 Connect the UHF and VHF antenna leads to the appropriate terminals on the UHF/VHF combiner.
- Press the combiner onto the ANT-A terminal on the rear of the TV

TV + antenna or cable without a cable box



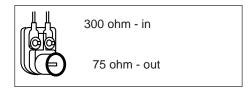
TV + antenna or cable without a cable box

Use this hook-up to:

• connect the incoming cable or antenna to the ANT-A input terminal on the TV.

equipment you will need:

If you have a standard 75-ohm coaxial cable, you will not need additional equipment. If your antenna has two leads (called twin lead or 300 ohm antenna lead), you will need:

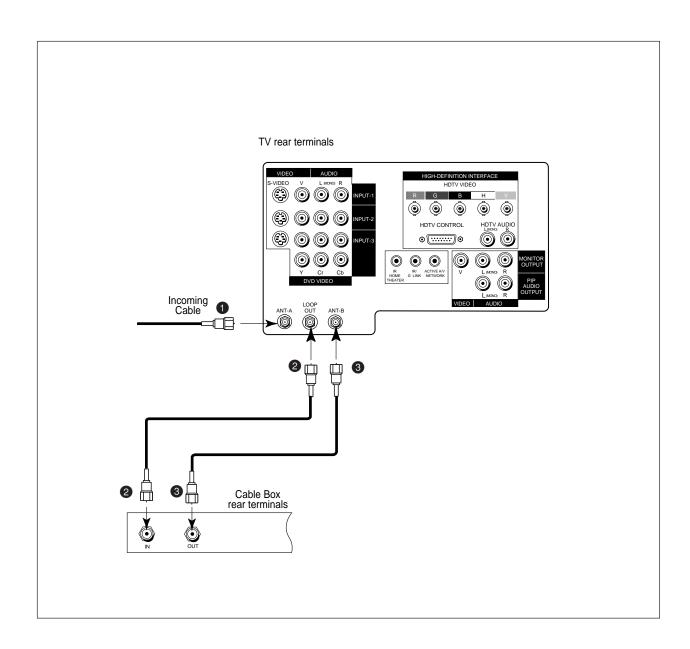


One 300-75 ohm matching transformer

procedure:

- ① Use a screwdriver to connect the 300 ohm twin leads to the transformer.
- **2** Push the 75 ohm side of the transformer onto the ANT-A terminal on the TV.

TV + cable with a cable box when TV GUIDE Plus + will not be used



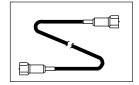
TV + cable with a cable box when TV GUIDE Plus + will not be used

This hook-up will allow you to use the advanced features of your TV, such as 2-tuner PIP and SuperQuickView[™] and watch basic cable channels on Antenna-A. You will be able to view the premium cable channels that are descrambled by your cable box on Antenna-B.

Use this hook-up to:

 connect a cable box used only to view premium channels and you will not be using TV GUIDE Plus +

equipment you will need:

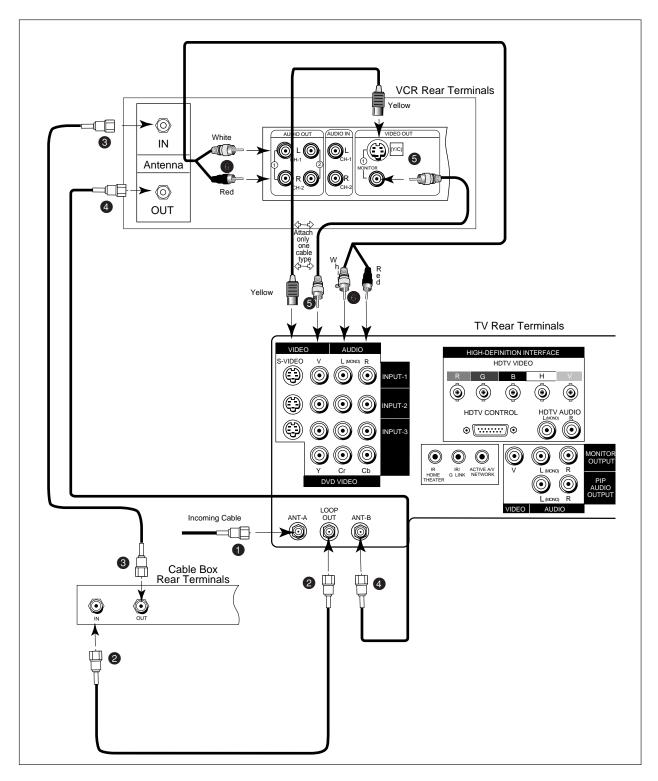


two lengths of 75 ohm coaxial cable

procedure

- 1 Connect the cable system's incoming cable to the ANT-A terminal on the back of the TV.
- 2 Connect a coaxial cable from the LOOP-OUT terminal on the back of the TV to the IN terminal on the back of the cable box.
- 3 Connect the second coaxial cable from the OUT terminal of the cable box to the ANT-B terminal on the back of the television.

TV + VCR + cable with a cable box when TV GUIDE Plus + will not be used



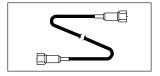
AV Systems Connection Guide

TV + VCR + cable with a cable box when TV GUIDE Plus + will not be used

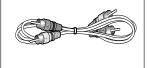
Use this hook-up to:

connect a VCR along with your cable and cable box, when you will not be using TV GUIDE Plus+

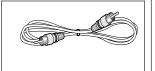
equipment you will need:



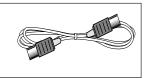
Three lengths of 75 ohm coaxial cable



One set of RCA pintype audio cables



One RCA pin-type video cable (if connecting a standard VCR)



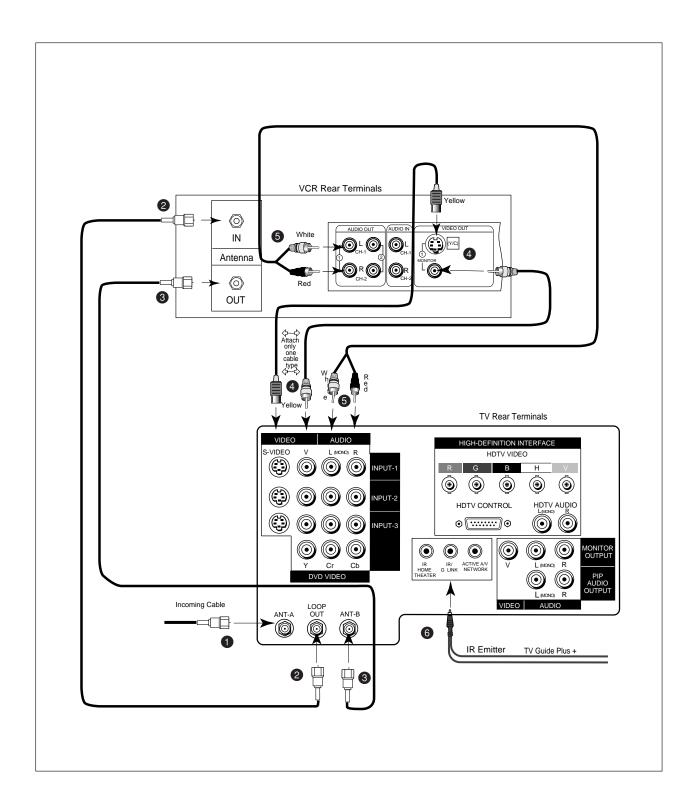
One S-Video cable (if connecting a S-VHS VCR)

procedure:

- Connect the incoming cable to the ANT-A terminal on back of the TV.
- Connect a coaxial cable from the LOOP-OUT terminal on the back of the TV to the cable box IN terminal.
- 3 Connect a second cable from the OUT terminal on the cable box to the ANTENNA IN terminal on the back of the VCR.
- 4 Connect a third coaxial cable from the ANTENNA OUT terminal on the back of the VCR to the ANT-B terminal on the back of the TV.
- 6 Connect an RCA pin-type video cable from the VIDEO OUT terminal on the back of the VCR to the VIDEO INPUT 1 or INPUT 2 terminal on the back of the TV.
- ▶ Important: If you are connecting a Super VHS (S-VHS) VCR, use an S-Video cable instead of an RCA pin-type video cable. Connect this cable to the S-VIDEO OUT terminal on the VCR. Connect the other end of this cable to the S-VIDEO INPUT 1 or INPUT 2 terminal on the back of the TV.
 - 6 Connect a set of RCA pin-type audio cables to the AUDIO OUT terminals on the back of the VCR. Use the red cable to connect the right (R) channel and the white cable to connect the left (L) channel. Connect the other ends of this cable to the AUDIO INPUT terminals on the back of the TV.
- ▶ **Important:** If your VCR is monaural (non-stereo), connect a single RCA pintype audio cable. Connect the cable from the VCR's AUDIO OUT terminal to the left (L) AUDIO INPUT on the back of the TV.
- ▶ **Important:** If your VCR has a video channel switch with an "OFF" position, set it to "OFF". See your VCR owner's guide for details.

Basic Connections

TV + VCR + antenna or cable without a cable box

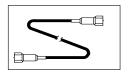


TV + VCR + antenna or cable without a cable box

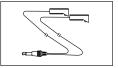
Use this hook-up to:

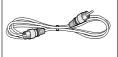
connect a VCR along with your cable or antenna

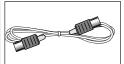
equipment you will need:











Two lengths of 75 ohm coaxial cable

One set of RCA pin-type audio cable

One IR emitter assembly (if connecting TV Guide Plus +

type video cable

One RCA pin- OR One S-Video cable (if connecting a S-VHS VCR)

procedure

- 1 Connect the incoming cable to the ANT-A terminal on back of
- Connect one end of the coaxial cable from the LOOP-OUT terminal on the TV to the ANTENNA IN terminal on the VCR.
- 3 Connect the second coaxial cable from the VCR ANTENNA OUT to the TV ANT-B.
- Connect an RCA pin-type video cable from the VIDEO OUT terminal on the back of the VCR to the VIDEO INPUT 1 or INPUT 2 terminal on the back of the television.

▶Important:

If you are connecting a Super VHS (S-VHS) VCR, use an S-Video cable instead of an RCA pin-type video cable. Connect this S-Video cable from the S-VIDEO OUT terminal on the VCR to the S-VIDEO INPUT 1 or INPUT 2 terminal on the back of the TV.

6 Connect a set of RCA pin-type audio cables to the AUDIO OUT terminals on the back of the VCR. Use the red cable to connect the right (R) channel and the white cable for connecting the left (L) channel. Connect the other ends of this cable to the AUDIO INPUT terminals on the back of the TV.

►Important:

If your VCR is monaural (non-stereo), connect a single RCA pintype audio cable. Connect the cable from the VCR's AUDIO OUT terminal to the left (L) AUDIO INPUT on the back of the TV.



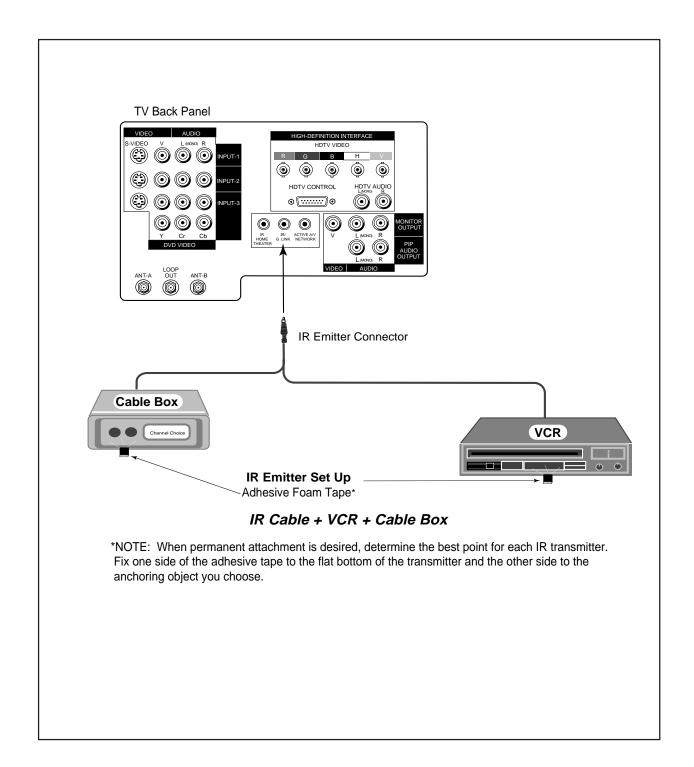
If you plan to use TV GUIDE Plus+, connect the IR emitter cable to the IR /G LINK jack. Place one of the emitter ends in front of the VCR. For more detail concerning the placement of the emitter lenses, see pages 16 and 17 of this book.

►Important:

If your VCR has a video channel switch with an "OFF" position, set it to "OFF". See your VCR owner's guide for details.

Basic Connections 15

Connecting the Infrared (IR) Emitter for TV GUIDE Plus+



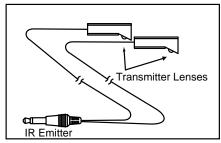
Connecting the Infrared (IR) Emitter for TV GUIDE Plus+

Use this hook-up to:



• use TV GUIDE Plus + with a cable box and/or VCR. There are two separate IR emitters connected to the end of the plug. Each IR emitter is used to send control signals from your TV to your cable box, and/or your VCR.

equipment you will need (included with TV):



the initial set up of TV GUIDE Plus+.

IR emitter assembly two strips of double-sided adhesive foam tape (not pictured).

▶ **Important:** The IR emitter included with your TV must be connected to the back panel of the TV before cable box and VCR users can perform

procedure

- 1 Insert the IR emitter into the IR / G LINK jack at the back of your TV as shown in the illustration on the previous page.
- 2 Arrange each cable line coming from an IR emitter so that it can be laid underneath or along side of the cable box or VCR.
- 3 Place each IR transmitter lens (small clear sphere resembling a tiny light bulb) so that it directly faces the remote control infrared receiver(s) of your cable box and/or VCR.

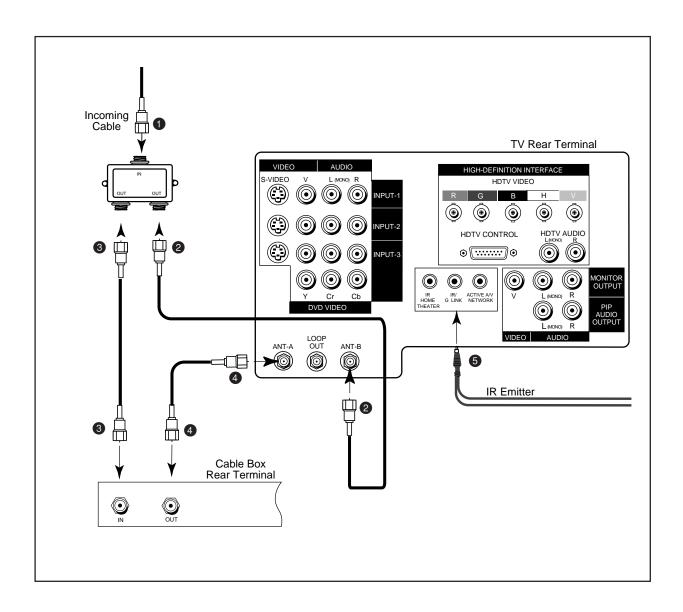
Infrared receivers are usually located on the front face of the VCR or cable box. Consult the owner manual(s) of your equipment to ensure accurate positioning of the Mitsubishi IR transmitter lenses.

▶ **Important:** When you have both a cable box and a VCR, place one IR transmitter in front of each component. When you have only a cable box or a VCR, but not both, place one IR transmitter in front of that component and place the other IR transmitter in another, out-of-the-way location.

▶ Important: TV GUIDE Plus+ can control only those types of cable boxes and VCRs that can select channels by using the number keypad on their remote controls.

Basic Connections

TV + cable with a cable box when TV GUIDE Plus + will be used



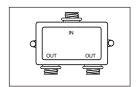
TV + cable with a cable box when TV GUIDE Plus + will be used

Use this hook-up to:

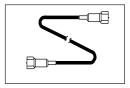


connect a cable box to view premium cable channels and use
TV GUIDE Plus+

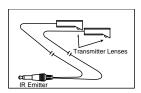
equipment you will need:



one two-way splitter



four lengths of 75 ohm coaxial cable



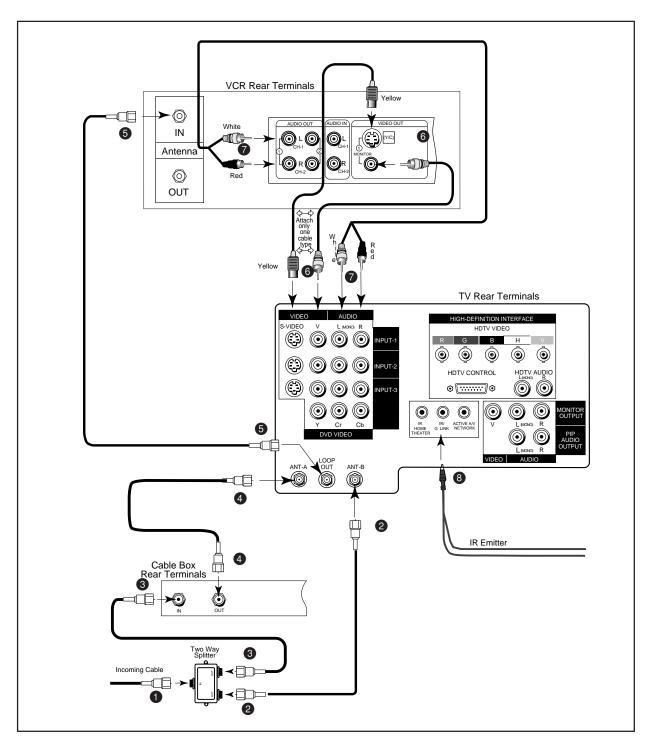
one IR emitter assembly (provided with TV)

procedure:

- 1 Connect the cable system's incoming cable to the IN terminal on the two-way splitter. NOTE: This splitter must be a type approved by your local cable provider.
- **2** Connect one coaxial cable from one of the OUT terminals on the splitter to the ANT-B terminal on the back of the TV.
- 3 Connect a second coaxial cable from the other OUT terminal on the splitter to the IN terminal on the cable box.
- 4 Connect the third coaxial cable from the OUT terminal on the back of the cable box to the ANT-A terminal on the back of the TV.
- 6 Connect the IR emitter to the IR/G LINK. Place one of the emitter ends in front of the cable box. For more detail concerning the placement of the transmitter lenses, see pages 16 and 17 of this book.

► **Important:** TV GUIDE Plus+ can control only those types of cable boxes and VCRs that can select channels by using the number keypad on their remote controls.

TV + VCR + cable with a cable box when TV GUIDE Plus + will be used



AV Systems Connection Guide

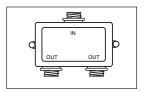
TV + VCR + cable with a cable box when TV GUIDE Plus + will be used

Use this hook-up to:

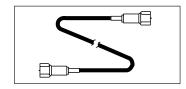


connect a VCR along with a cable box and use TV GUIDE Plus+

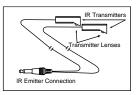
equipment you will need:



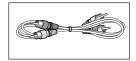
one two-way splitter



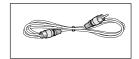
four lengths of 75 ohm coaxial cable



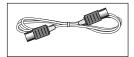
one IR emitter (provided with TV)



one set of RCA pintype audio cables



One RCA pin-type video cable



One S-Video cable (if connecting a S-VHS VCR)

▶ Important TV GUIDE Plus + can control only those types of cable boxes and VCRs that can select channels by using the number keypad on their remote controls.

procedure

- 1 Connect the cable system's incoming cable to the IN terminal on the two-way splitter.
- Connect a coaxial cable to one of the OUT terminals on the splitter; connect the other end of this cable to the ANT-B terminal on the back of the TV.
- **3** Connect a second coaxial cable to the other OUT terminal on the splitter; connect the other end of this cable to the IN terminal on the cable box.
- 4 Connect the third coaxial cable to the OUT terminal on the back of the cable box; connect the other end of this cable to the ANT-A terminal on the back of the TV.
- **6** Connect the fourth coaxial cable from the CABLE LOOP-OUT terminal on the back of the TV to the ANTENNA IN terminal on the back of the VCR.

Basic Connections

TV + cable with a cable box with TV GUIDE Plus + (cont.)

- 6 Connect an RCA pin-type video cable from the VIDEO OUT terminal on the back of the VCR to the VIDEO INPUT 1 or INPUT 2 terminal on the back of the TV.
- ▶ Important: If you are connecting a Super VHS (S-VHS) VCR, use an S-Video cable instead of an RCA pin-type video cable. Connect this S-Video cable to the S-VIDEO OUT terminal on the VCR. Connect the other end of this cable to the S-VIDEO INPUT 1 or INPUT 2 terminal on the back of the TV.
 - 7 Connect a set of RCA pin-type audio cables to the AUDIO OUT terminals on the back of the VCR. Use the red cable to connect the right (R) channel and the white cable to connect the left (L) channel. Connect the other ends of this cable to the AUDIO INPUT terminals on the back of the TV.
- ▶ **Important:** If your VCR is monaural (non-stereo), connect a single RCA pintype audio cable. Connect the cable from the VCR's AUDIO OUT terminal to the left (L) AUDIO INPUT on the back of the TV.
 - 3 Connect the IR emitter cable to the IR OUT/G LINK. Place one of the emitter ends in front of the cable box. Place the other emitter end in front of the VCR. For more detail concerning the placement of the emitter lenses, see pages 16 and 17 of this book.
- ▶ **Important:** If your VCR has a video channel switch with an "OFF" position, set it to "OFF". See your VCR owner's guide for details

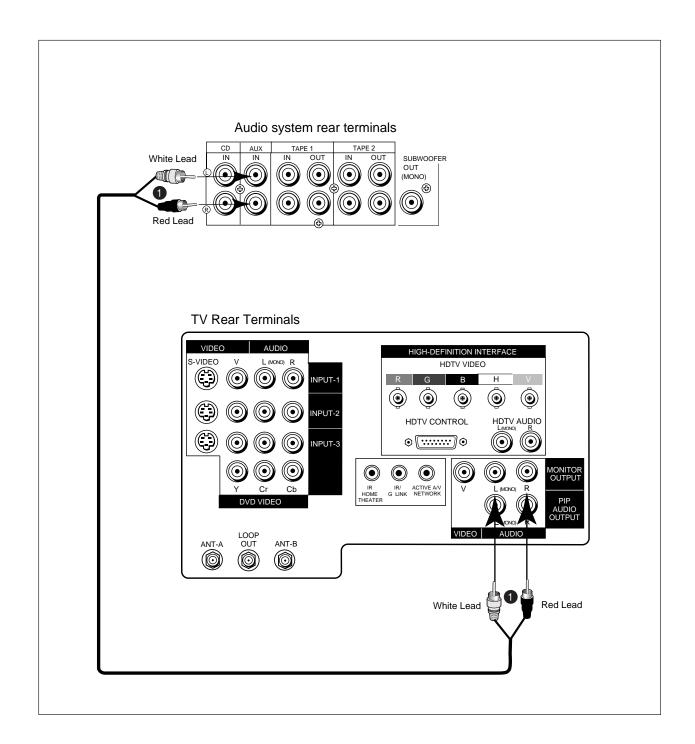
This book will show you the basic connections to hookup your TV with components.

If you have difficulty making any of the connections to your TV, you may want to contact your Mitsubishi dealer or your local cable company.

- TV + stereo audio system
- TV + Mitsubishi products that have A/V Network terminals
- TV + DVD player with Component Video Outputs
- TV + AV receiver
- TV + HDTV receiver (Mitsubishi brand only) and cable

▶Warning: You should unplug your TV and any other components before connecting them.

TV + stereo audio system



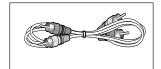
TV + stereo audio system

After you have completed your basic connections (TV to antenna, cable, VCR and TV GUIDE Plus+ emitter assembly) as shown in the previous pages,

Use this hook-up to:

• listen to the sound from your TV and/or VCR through your home audio system.

equipment you will need



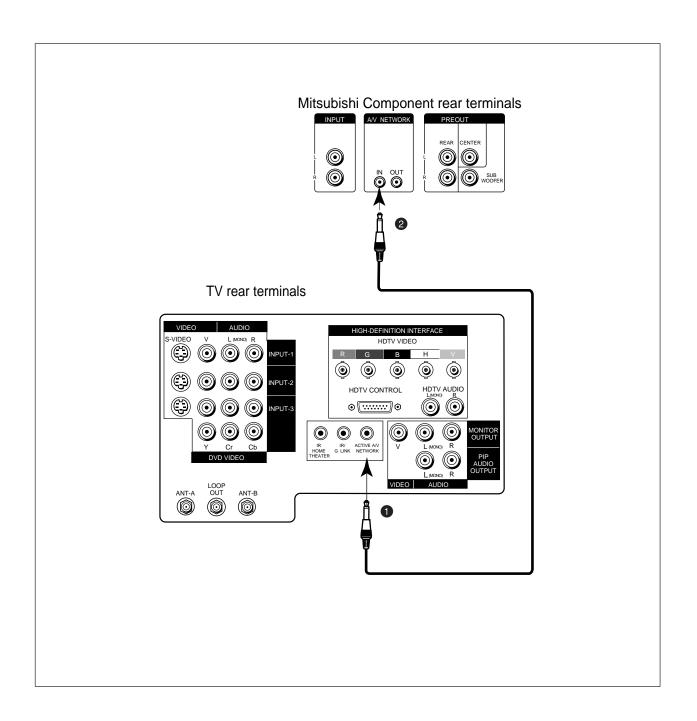
one set of RCA pin-type audio cables

procedure

- 1 Connect one end of the audio cables to the AUDIO MONITOR OUTPUT terminals on the back of the TV. Connect the other end to the TV IN or AUX IN terminals on the back of the audio system. Use the red cable to connect the right (R) channel and the white cable to connect the left (L) channel.
- 2 Turn off the TV's speakers. To do this, press MENU on the remote control to select "SETUP menu". Follow the on screen instructions to select "YES" at the "External Audio" option in the "AV CONNECTION" menu. For more detailed directions see "Creating the AV CONNECTION" in Chapter 2 of the Owner's Guide.
- 3 Set the audio system's input to the TV or AUX position to hear the sound coming from the TV.

▶ **Important:** For proper tone and volume balance, turn off the TV speakers when using an external audio system.

TV + Mitsubishi products that have A/V network terminals



TV + Mitsubishi products that have A/V network terminals

After you have completed your basic connections (TV to antenna, cable, VCR and TV GUIDE Plus+ emitter assembly) as shown in the previous pages.

When the supplied cable is connected between two Mitsubishi products with A/V network, you can point the remote control at the TV and it will "pass" the remote control command to the others. Only one of the products needs to be in "line of sight" of the remote control.

Mitsubishi VCRs that have Active A/V Network also have the benefits of additional automated tasks. See Chapter 2 of the Owner's Guide, "*Creating the AV Connection*," for more information about the Active A/V Network features.

Use this hook-up to:

•control all your Mitsubishi audio and/or video product with one remote control through the AV Network .

equipment you will need:



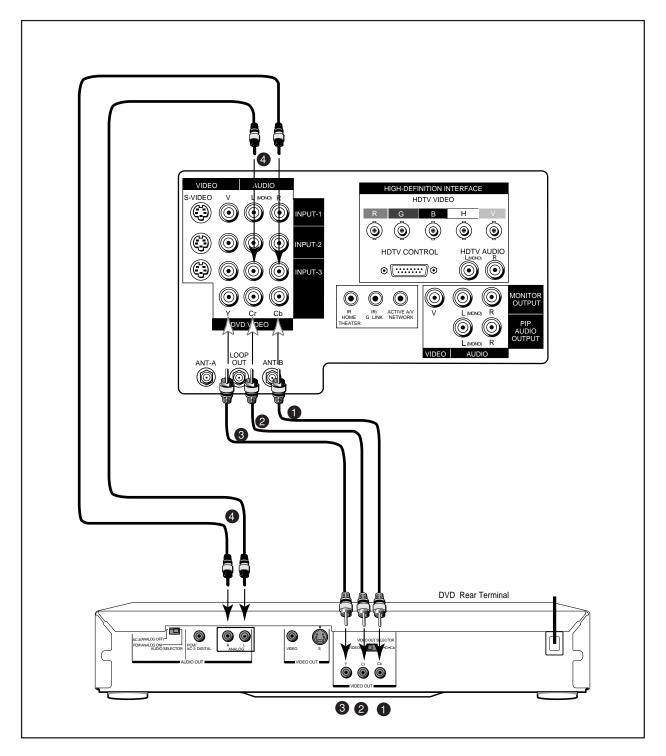
A/V Network cable (supplied with your television)

procedure

- 1 Connect one end of the A/V network cable to the ACTIVE A/V NETWORK terminal on the back of the TV.
- 2 Connect the other end of the A/V Network IN terminal to the back of a Mitsubishi component that has A/V network terminals.

▶ **Important:** Depending on which components you have and the way you plan to use your equipment, the method of connecting the A/V network can change. For more detailed information, review the owner's guide of each particular Mitsubishi component.

TV + DVD player with component video outputs



AV Systems Connection Guide

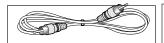
TV + DVD player with component video outputs

After you have completed the basic connections (TV to antenna, cable, VCR and TV GUIDE Plus+ emitter assembly) outlined in the previous pages, you can use the following hookup to:

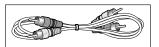
Use this hook-up to:

• view a very high resolution picture using your DVD player or other video product with component video outputs.

equipment you will need:







three single RCA pintype video cables

OR one component video cable with with three RCA pintype connectors on each end

one set of RCA pin-type audio cables

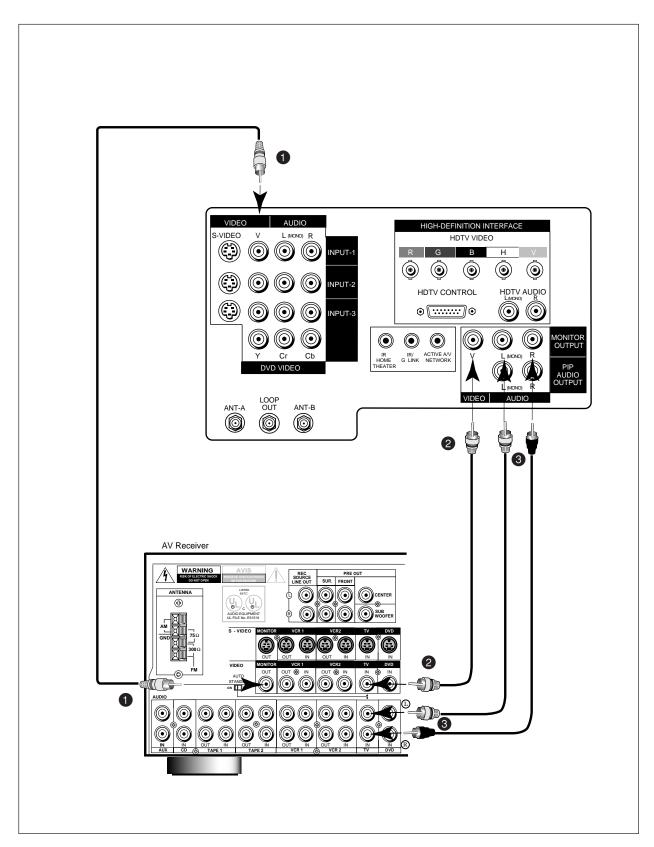
procedure:

- 1 Connect one end of the Component Video cable or one end of the three video cables to the VIDEO OUT Cb terminal on the back of the DVD player. Connect the other end to the Cb terminal DVD VIDEO on the back of the TV.
- 2 Connect one end of the Component Video cable or one end of the three video cables to the VIDEO OUT Cr terminal on the back of the DVD player. Connect the other end to the Cr terminal DVD VIDEO on the back of the TV.
- 3 Connect one end of the Component Video cable or one end of the three video cables to the VIDEO OUT Y terminal on the back of the DVD player. Connect the other end to the Y terminal DVD VIDEO on the back of the TV.
- 4 Connect a set of RCA pin-type audio cable to the AUDIO OUT terminals on the back of the DVD player. Connect the other ends of these cables to the DVD audio input terminals on the back of the TV. Use the red cable to connect the right (R) channel and the white cable for connecting the left (L) channel.

▶ **Important:** DVD signals are sometimes referred to as "COMPONENT DVD" or "Y, Cr, Cb" signals.

Additional Component Connections

TV + AV receiver



AV Systems Connection Guide

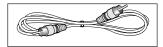
TV + AV receiver

After you have completed your basic connections (TV to antenna, cable, VCR and TV GUIDE Plus+ transmitter) as shown in the previous pages,

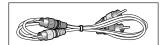
use this hook-up to:

• Select the inputs and control the sound through the AV receiver's remote control. Your TV will act as a monitor, showing the video selected by the AV receiver. After installation you MUST select the correct AV Connection Menu choices. See Chapter 2, "Creating the AV Connection."

equipment you will need



two RCA pin-type video cables

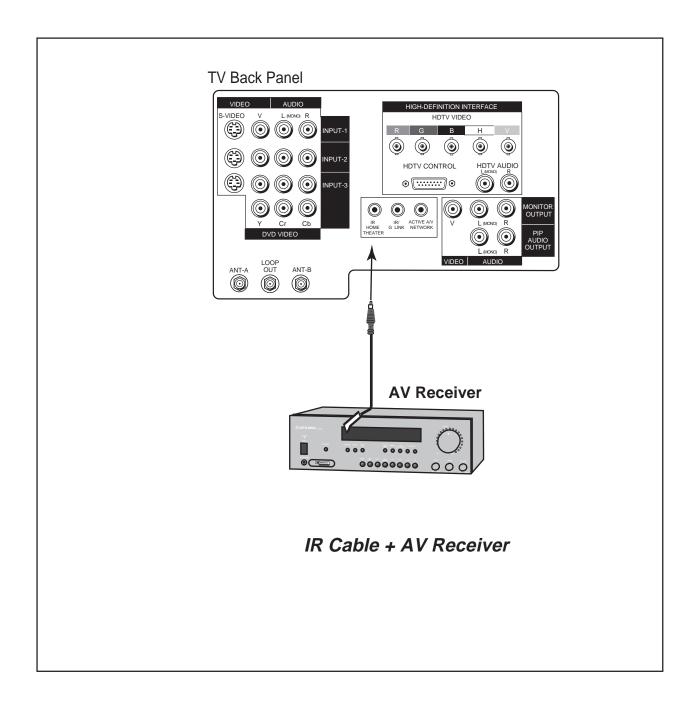


one sets of RCA pin-type audio cables

procedure:

- 1 Connect one end of the video cable to the video MONITOR OUT terminal of the AV Receiver; connect the other end to the video INPUT 1 of the TV.
- Connect the RCA pin-type video cable to the VIDEO MONITOR OUTPUT of the TV; connect the other end to the VIDEO TV IN terminal of the AV Receiver.
- 3 Connect a set of RCA pin-type audio cables to the AUDIO OUTPUT of the TV; connect the other ends to the AUDIO TV IN terminals of the AV Receiver. Use the red cable to connect the right (R) channel and the white cable to connect the left (L) channel.

Connecting the Infrared (IR) Emitter for the Home Theater connection

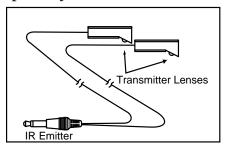


Connecting the Infrared (IR) Emitter for the Home Theater connection

Use this hook-up to:

• connect a Mitsubishi AV receiver to your TV for the Home Theater function.

equipment you will need (included with TV):



IR emitter assembly

two strips of double-sided adhesive foam tape (not pictured).

Included with your television is an IR emitter assembly. There are two separate IR transmitter lenses connected to the end of the plug. One IR transmitter is used to send control signals from your TV to your AV receiver, the other transmitter will not be used.

procedure

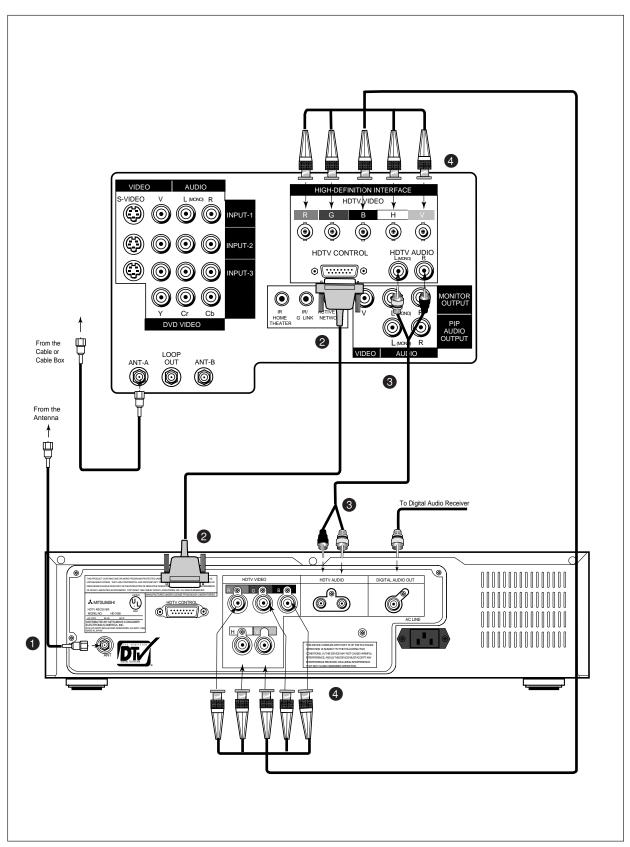
- Insert the IR emitter into the IR HOME THEATER jack at the back of your TV as shown in the illustration on the previous page.
- 2 Arrange a cable line coming from an IR emitter to the AV receiver. The cable can be laid on top of the AV receiver. For permanent installation use the adhesive tape to secure the bottom of the transmitter to the anchoring object you choose.
- 3 Place an IR transmitter lens (small clear sphere resembling a tiny light bulb) so that it directly faces the remote control infrared receiver(s) of your AV receiver.

Infrared receivers are usually located on the front face of the AV receiver. Consult the owner manual of your receiver to ensure accurate positioning of the Mitsubishi IR transmitter lens.

4 Place the unused transmitter lens in an out-of- the-way location.

Additional Component Connections

TV + HDTV Receiver



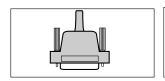
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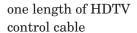
TV + HDTV Receiver (cont.)

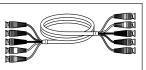
use this hook-up to:

• connect your Mitsubishi HDTV receiver and a cable television system.

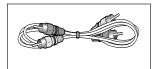
equipment you will need:



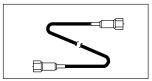




one 5-in-1 BNC pintype video cable



one set of RCA pintype audio cables



one length of coaxial cable

procedure

- ① Connect the cable from the outside antenna to the ANT-IN input terminal on the Mitsubishi HDTV receiver. Connect the cable system coaxial cable to the ANT A terminal on your television.
- 2 Connect one end of the HDTV control cable to the HDTV CONTROL terminal of the television. Connect the other end to the HDTV CONTROL terminal on the receiver.
- 3 Connect a set of RCA pin-type audio cables from the HDTV AUDIO terminals on the HDTV receiver to the HDTV AUDIO jacks on the television.
- 4 Following the color codes, connect the 5-in-1 BNC cable to the HDTV VIDEO terminals on the back of the TV. Connect the other ends to the HDTV VIDEO terminals on the HDTV receiver. The terminal ends are color-coded as follows:

R- red cable

G- green cable

B- blue cable

H- white cable

V- yellow cable



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