JBL Professional Video Products

Owner's Manual • Model 6810 Television Projector

Dear Customer,

Your JBL Model 6810 Television Projector has been designed and engineered to bring you years of viewing enjoyment. This Projector has many input and output terminals which allow you to use it with a wide array of video and audio accessories. Please read the manual carefully to understand all the features of this Projector and to ensure years of safe and reliable operation

The Model and Serial numbers are found on the rear panel of the Projector. Please record these numbers for future reference.

MODEL NO: _____ **SERIAL NUMBER:** _____ **PURCHASE DATE:** _____

CAUTION
RISK OF ELECTRICAL SHOCK DO NOT OPEN
ATTENTION
RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIR

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

This symbol is intended to alert the user of the presence of un-insulated "dangerous voltage" with the product's enclosure, that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the Literature accompanying the appliance.

WARNING!

TO PREVENT DAMAGE WHICH MAY RESULT IN FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR EXCESSIVE MOISTURE.

FEATURES

* **Remote Control**
    The 35 pushbutton, 40 function remote hand transmitter allows you to switch the set ON and OFF, adjust volume, change channels, adjust the picture and select other features on your set.
* **Cable TV**
    Your set will receive standard VHF and UHF channels plus additional cable channels. The CABLE/NORM switch gives you the choice of either standard channels or cable channels. This may eliminate the need for a cable converter box for unscrambled signals. A converter box may still be needed for premium (pay) channels. Check with your cable company for details.
* **Favorite Channel Programming**
    Your set can be programmed to sequence only the channels broadcast in your area. These programmed channels can be accessed using the channel scan buttons on the control panel or the remote control.
* **Stereo Sound**
    Your set has the capability to receive and decode stereo and SAP broadcast signals.
* **Expanded Sound**
    Expanded sound produces an enhanced audio response in either mono or stereo modes.
* **On Screen Graphics**
    Special graphic messages will appear on the screen when different function buttons are pressed. These on screen graphics may be deleted if desired.

Table of Contents

ANTENNA CONNECTIONS

Single Lead-In UHF/VHF Connector

Antenna systems with a single lead-in cable will be hooked to the set in one of the ways shown below.

1. Coaxial Cable - Connect it directly to the 75 ohm connector on the rear input panel marked ANT.

2. Twin Lead Cable - Connect the lead wires from the antenna to the screws of a 300-75 ohm adapter. Push the end of the adapter onto the connector marked ANT.
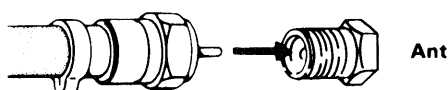
SEPARATE LEAD-IN

Antenna systems with twin lead-in wires (one for UHF and one for VHF) will need to use an optional "Combiner" available from your dealer. Attach the appropriate lead wires to the screws on the combiner, then push the adapter onto the ANT jack on the input panel.

CABLE TV

In addition to normal broadcast channels (VHF 2-13 and UHF 14-69) your TV is equipped to receive types of cable TV (CATV) systems, including HRC and ICC systems. Check with your local cable company to ensure proper installation and reception.

Cable connections without Converter/Descrambler Box

* Connect the coaxial cable to the 75 ohm ANT connector on the input panel.

* Place the Cable/Norm switch in the CABLE position. In this mode, Channels 1-178 can be accessed, excluding 95-96-97, which are not valid entries.

* Select channels above 99 by pressing the 100 button and entering the two remaining digits.

Cable connection with a Converter/Descrambler box:

Cable systems usually offer premium channels which are scrambled to control access. The illustration demonstrates one method to connect both regular and scrambled channels using the accessory inputs.
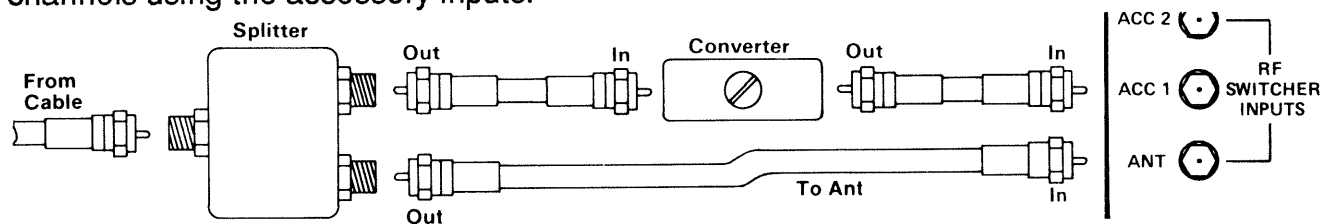

If you connect your cable system as shown, the regular cable channels will be accessed through the ANTENNA model and the encoded (scrambled) channels will be seen through the ACC1 mode. NOTE: Cable systems vary and the system shown may not be the same as yours. The cables, converter box and splitter are not furnished with your set.

LOCATING AND PROPERLY SETTING UP YOUR SET

1. Place the projector and screen in a convenient area for viewing. Your dealer will have adjusted your set to produce a 5 - 15 ft picture (measured diagonally) on curved or flat screen surface (not supplied). The set may be placed on the floor, a riser, table or cart to obtain the proper projector height in relationship to the screen. It is wise to measure and somehow mark this location so the set can be easily repositioned if it is moved or accidentially knocked out of alignment.

2. You may also contract to have the set permanently ceiling mounted. The projector should only be installed by an authorized dealer, working with a qualified contractor and adjusted by a factory approved service technician. No two installations are the same. The cost of ceiling mounting will vary with the complexity of each installation and is not included in the purchase price of the projector or under terms of the product warranty. Under no circumstances should the customer attempt to perform the installation or the adjustments necessary to ceiling mount this projector.

3. The reflected brightness of the projector is dependent on the size and gain of the screen material. In most cases the picture quality depends more on the amount of ambient room light which falls onto the screen rather than the brightness setting on the projector control panel. Unwanted ambient room light destroys the contrast or black level within the picture. For this reason the screen should be placed away from direct light, or in an area where the light can be controlled for optimum viewing. In particular, position the screen to eliminate light which strikes the screen from the same axis as the projector.

4.   Connect the cable or antenna system to the Antenna RF terminal on the input panel of the set. If the lead-in cable is coaxial, connect it directly to the terminal. If the lead-in cable is twin-lead, use a 300-75 ohm adapter.

5.   Connect speakers (not provided) to the projector's stereo amplifier using the terminals to the right side of the input/output board. You may also connect sound to an external sound system. Both monaural and stereo fixed level outputs are located on the input/output board. Connect these to an auxiliary input on an external amplifier.

6.   Connect the set to a live 120V AC outlet. The plug is a three prong grounded type that can be inserted only one way. Do not defeat this plug by using a two prong adapter.

7.   Turn the set on by pressing the POWER button.

8.   Select a channel available in your area. If there is no picture, check the following:

   A. The set should be in the ANTENNA mode. Press the Recall Button twice to bring the Signal Input status onto the screen. If it is not in the ANTENNA mode, press the ANT/ACC1-2 Button until it is.

   B. The set should be in the Tuner mode. If not press the RGB, A/V1, A/V2 Button until the set returns to the Tuner mode.

   C. If you have a picture and no sound, check the Volume control or SAP Button.

KEYBOARD CONTROLS AND REMOTE FEATURES
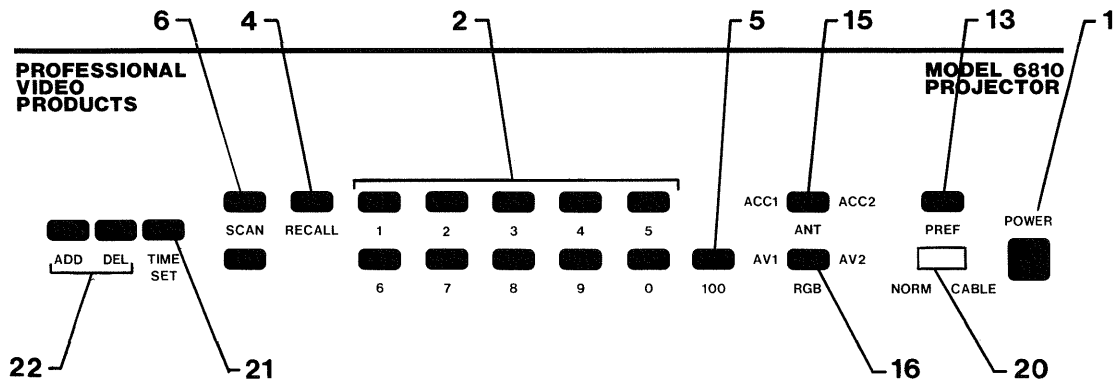
The buttons located on the control panel of the Projector and the Remote Transmitter have the same basic functions. This section explains the features of both.
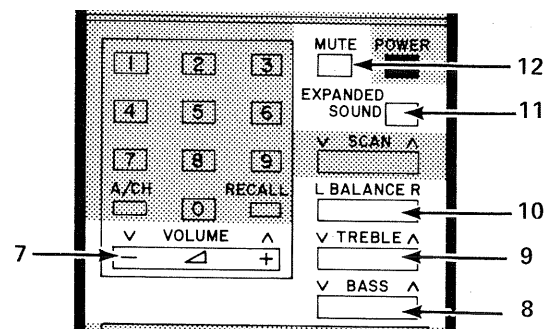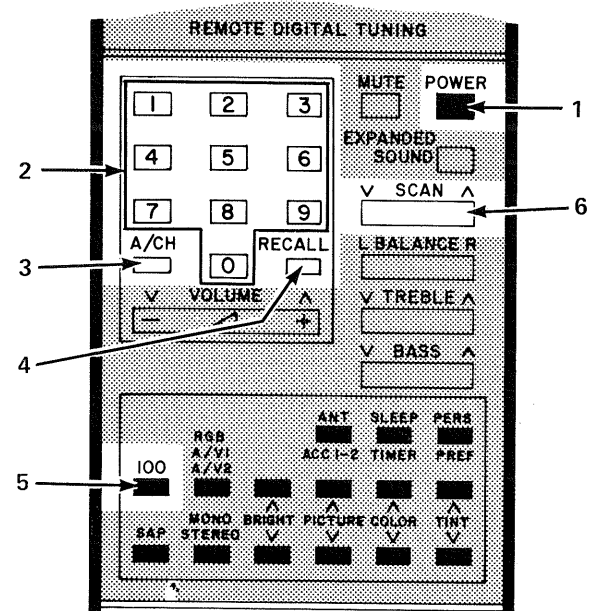
To gain access to the control panel, press down on the lower edge of the control panel door. This releases the catch and the door will open.

Press the **Power Button** (1) to turn the set **ON**, press again to turn **OFF**.

Use the **Numerical Buttons** (2) for direct channel selection. Press the two buttons which correspond to the channel you want to tune. If the channel is a single digit, you must press a 0 first.

By pressing the **A/CH** (3) Alternate Channel Button, the set will instantly tune to the previously viewed channel. Example: If you are watching Channel 4 and then change to Chanel 10, pressing A/CH will return the set to Channel 4; pressing again will return the set to Channel 10.

Press the **Recall Button** (4) to bring the channnel mode and time back onto the screen. By repeatedly pressing the button six other status screens will appear. (Signal Input, Audio Modes, Bass & Treble Range, Balance, Tint & Color, Brightness and Contrast.)

RED   BLUE   NORM   ON

HORIZ   VERT   HORIZ   VERT   TEST   DETAIL   SYNC   DISPLAY   JBL
   OFF   STAB

PICTURE   BRIGHT   COLOR   TINT   L   R   BASS   TREBLE   VOLUME   MONO   AUDIO   SAP
   BALANCE   STEREO   EXPAND

19   10   8   9   23   7   18   11   17
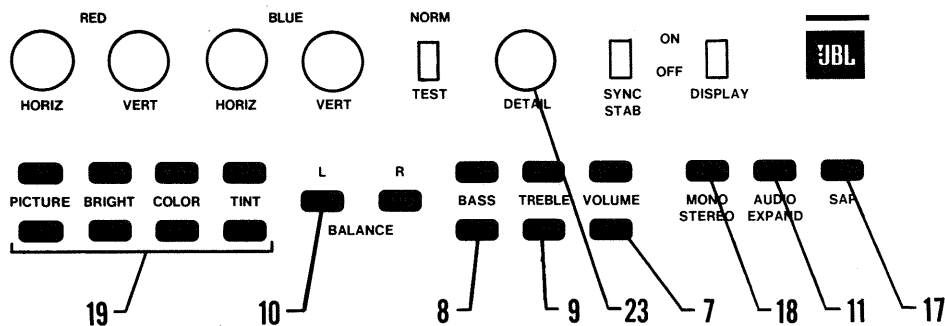
To gain access to cable channels with
numbers in excess of 99, press the
100 Button (5), then the remaining
two channel numbers.

The **Channel Scan Buttons** (6) are
used to sequentially scan up or down
through the programmed channels.
See the programming section on how to
program channels into the memory.

Use the **Volume Buttons** (7) to adjust
the sound ro the desired level; press
the upper button to increase and the
lower side to decrease the sound.

To increase the low frequency sound
press the upper **Bass Button** (8) up.
To decrease, press the lower Bass Button
down.

VOLUME   TREBLE

BASS

ANT   SLEEP   PERS   13

15   RGB   ACC 1-2   TIMER   PREF   14
A/V1
100   A/V2

16   MONO   BRIGHT   PICTURE   COLOR   TINT

SAP   STEREO

ANT   SLEEP   PERS

18   RGB   ACC 1-2   TIMER   PREF
A/V1
100   A/V2

   MONO   BRIGHT   PICTURE   COLOR   TINT

17   SAP   STEREO   19

The high frequencies are controlled by the **Treble Button** (9).

NOTE: During adjustment a screen display will show the range for each control and
will move according to adjustment.

The **Balance Control** (10) is used to adjust the relative volume of each speaker.
Press L to increase volume to the left speaker or R side to move the sound to the right.

To add greater depth and dimension to the audio you can press the **Expanded
Sound Button** (11). This creates a dimensional effect that simulates stereo in mono
and enhances the sound in the stereo mode.

By pressing the **Mute Button** (12) the sound is completely eliminated, but the picture
is unaffected. By pressing the mute again, the sound will be restored. When activated,
MUTE will flash on the screen.

The **Personal Preference Button** (13) allows you to return to a specific channel or
AV mode which you can place in the set's memory along with other options. See
Personal Preference section.
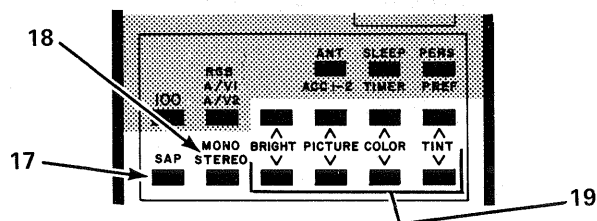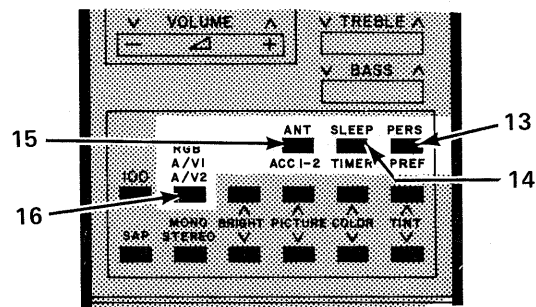
Your TV can be set to turn off automatically at the end 30, 60 or 90 minutes by using the **Sleep Time Button** (14).

The **Antenna/ACC 1/ACC2 Button** (15) will select one of three RF terminals used to connect your antenna, cable or other accessories.

The **RGB/AV1/AV2 Button** (16) transfers the set from the TV tuner to the following external input hookups in sequence. Pressing the button in the RGB mode will return the set to the TV tuner mode.

When a second audio program is available, it may be selected by pressing the **SAP Button** (17). The SAP section will explain how this feature is used.

You can place the set in the Stereo mode by pressing the **Stereo Button** (18). NOTE: If you press this button and stereo is unavailable, the set will be placed in a Stereo standby mode.

Color Adjustment Controls

One of the unique features of this set is its ability to adjust the color control using the remote transmitter. When the **Bright, Picture, Color or Tint Buttons** (19) are pressed the on-screen display shows the range for the button being pressed. Pressing the upper button increases the function; pressing the lower button decreases the function.

Non Remote Features

Several features are found only on the set's control panel. The **Cable/NORM Switch** (20) should be placed in the NORM position when connecting to a standard antenna system or to the CABLE position when connected to a cable system.

The **Time Set** (21) button is used to set the clock on the screen. See the Clock Operation section.

Favorite Channel Buttons (22 Add & Delete) are used to program channels into the memory. See the programming section.

The Detail Control (23) increases or decreases the picture detail. Under normal reception conditions, the control should be at midrange. Reception and personal preference will determine the setting to obtain the most pleasing picture. If the control is set too far counter clockwise the picture loses detail; too far clockwise and the picture may appear grainy.

BATTERY INSTALLATION AND REPLACEMENT

The remote transmitter is powered by four AAA size, 1.5V batteries.

1. Turn the unit upside down. Slide the battery compartment door in the direction of the arrow, as illustrated. Remove the old batteries if necessary.

2. Place the batteries into the unit. Be careful not to reverse polarity, as this could damage the unit.

3. Replace the battery compartment cover by sliding it back until it locks into place.
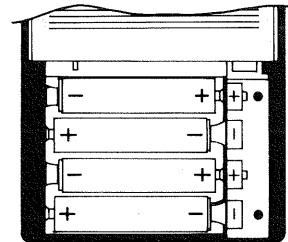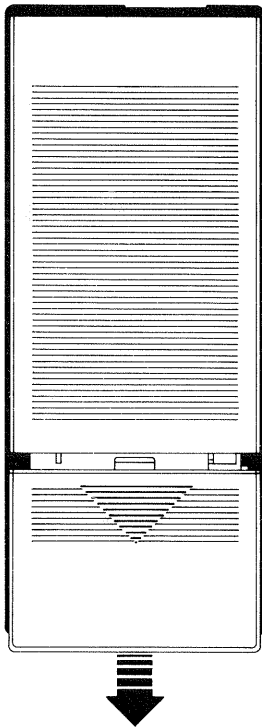
CONVERGENCE ADJUSTMENT

Tune to a good strong station (without ghosts) and observe objects in the picture for color fringing (colors around the edges of objects). Turn the COLOR control to minimum (counter clockwise) to produce a black and white picture and determine if the color fringing disappears. If the fringing disappears, an antenna reception problem exists. If the fringing remains with a black and white picture, it will be necessary to converge the picture as follows.

1. Allow the unit to warm up for 10 to 15 minutes and have a clear sharp picture without "snow."

2. Identify the convergence controls on the far left side of the Control Panel. Place the TEST-NORMAL switch in the TEST position. A crosshair pattern will appear at the middle of the screen. The green image is stationary and used as the reference. Overlay the Red and Blue onto the Green. When correctly converged, the vertical and horizontal lines will appear as one white line.

3. The illustration below identifies the four convergence controls and their action when adjusted.

4. When the convergence is properly adjusted, place the TEST-NORMAL switch back in the NORMAL position.
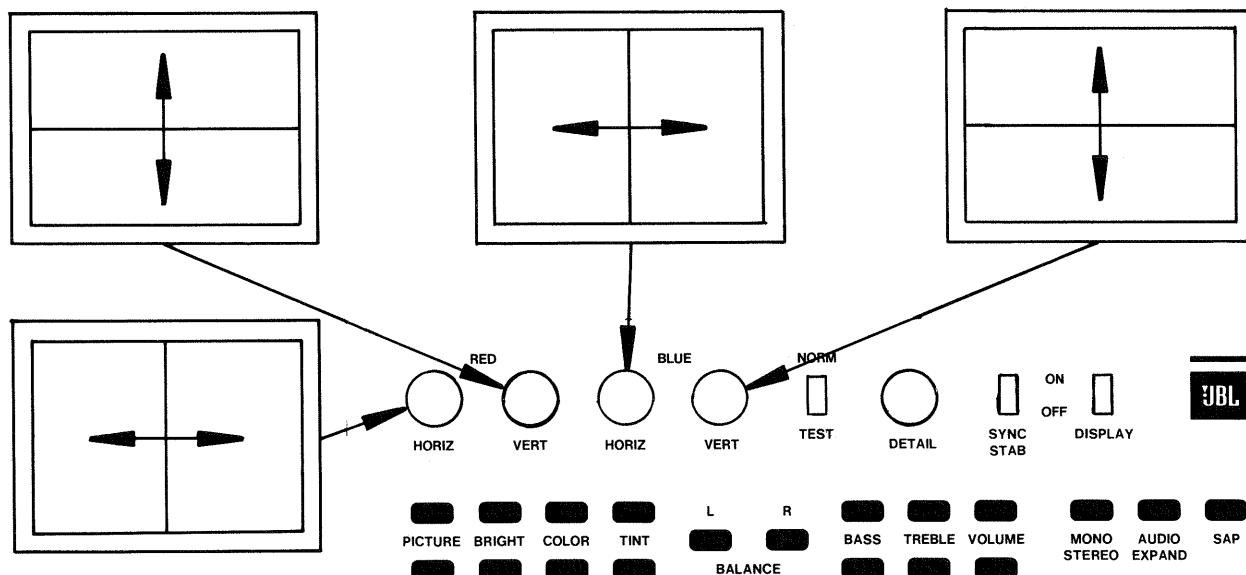
CLOCK OPERATION

Your Projector has a built-in clock which can be displayed in the upper left hand corner of the screen below the channel number. When your set is turned on initially, Channel 3 will appear and the time setting will appear as four dashes below the word "NORMAL" or "CABLE" To set the clock, follow the steps below.

**PLEASE ENTER
CURRENT TIME
-- : --**

TIME SET PROCEDURE

1. Press the Time Set Button located on the Control Panel

2. Use the numerical buttons on the Remote Control or Keyboard to enter the present time. If the time is 2:54, enter 2, 5, and 4.

**0 : 0 2
0 : 2 5
2 : 5 4**

NOTE: You may also use the channel scan buttons to enter the time. Scan up adjusts the minutes and Scan down adjusts the hours.

3. When the correct time is entered, press the Time Set Button again. A message will flash on the screen.

**CURRENT TIME
ENTERED
THANK YOU**

NOTE: If an improper time (i.e. 13:42 or 12:68) is entered, a message will appear. Repeat the procedure with proper numbers.

**INVALID TIME
ENTERED
PLEASE READ
OWNER MANUAL**

TIMER OPERATION

Your Projector has a special Timer Operation (Sleep Mode) which can be set to turn the set off automatically after 30, 60 or 90 minutes.

To set Timer Mode

1. Press **SLEEP/TIMER Button** on the Remote Control

2. Press the Timer Button again within 5 seconds. This will set the timer for 30 minute shut-down.

3. Press the button again for 60 minute shut-down. A third key press will shut the set off at the end of 90 minutes.

4. Approximately 5 seconds after you cease programming the timer, an on-screen message will confirm the operation.

<div align="center">

**SLEEP MODE
PROGRAMMED
THANK YOU**

</div>

6. When the Timer Button is pressed after programming, the remaining time will appear on the screen. A **GOOD NIGHT** message will appear just before the unit shuts itself off.

7. If you wish to exit sleep mode. press the TIMER/SLEEP button until the on-screen status displays the start-up message (**-- MINUTES REMAINING**).

PERSONAL PREFERENCE

Your Projector can be set to access a predetermined station with special settings for Bass, Treble, Balance, Stereo or Mono and Antenna/Accessory mode. To program this Personal Preference station, follow these instructions.

1. Select the Antenna/Accessory mode along with the desired station.

2. Adjust the Bass, Treble and Balance controls.

3. Select Stereo or Mono mode.

4. After you have made all your selections, press the ADD button (on the control panel). While the ADD display appears on the screen, press the PREF Button.

5. Pressing the PREF button will restore your programmed selection. This preference may be reprogrammed at any time.

PROGRAMMING FAVORITE CHANNEL

Your Projector can be programmed to scan only the selected VHF, UHF or Cable channels of your choice. These are accessible through the SCAN Buttons on the remote or control panel. To program the set's memory, follow the instructions below.

To add channels to scanning system:

1. Select desired channel using the numerical buttons. NOTE: If you want to program the higher cable channels, place the CABLE/NORM switch in the CABLE position.

2. Press ADD Button to enter the channel number into the memory.

3. Repeat the process for each channel you want to add into the memory. Channels will scan in numerical sequence, regardless of the order in which they are entered into the memory.

To remove channel from the scanning system:

1. Use the Channel up or down Buttons to select the channel to be removed.

2. Press the Delete Button to remove the channel from the memory.

3. Repeat this process for every channel you want to remove. NOTE: To remove the cable channels, the CABLE/NORM switch must be in the CABLE position.

The last channel will remain until another channel is selected. If a SCAN button is pressed, an on-screen message will appear

**NO
FAV. STATION
PROGRAMMED
PLEASE READ
OWNER MANUAL**

ANTENNA ACCESSORY

The accessory RF connectors are provided on the input/output panel to connect two additional sources, i.e., video games. Selection is made by pressing the ANTENNA, ACC1, ACC2 Button on the remote or control panel.

STEREO AND SECOND AUDIO PROGRAM (SAP)

Multi-Channel Television Sound System

Many stations are broadcasting selected programs in stereo sound. Some stations also broadcast another audio track called Second Audio Program (SAP). This may be used to provide alternate language dialogue, or other information such as news and weather information, background music or educational purposes.

Your set will receive these audio signals, decode the stereo or SAP signals if available, and route them through the audio system. To place the TV in the desired mode, you can press the STEREO or SAP button. A confirming mode message will appear on the screen.

STEREO MODE	SAP MODE
AUDIO MODES	AUDIO MODES
NORMAL AUDIO STEREO MODE	SECOND AUDIO MONAURAL SND EXPAND SND

If you place the unit in a mode where the audio is unavailable, a message will appear on the screen. Though the message may indicate STEREO SOUND is not available, the set is placed on a standby mode and will play in stereo when a stereo signal becomes available.

| STEREO SND NOT AVAIL.	SECOND AUDIO NOT AVAIL.

Your Projector is equipped with an EXPANDED sound feature. When the EXPANDED Button is pressed, a special circuit creates a dimensional effect that simulates stereo in monaural and enhances the stereo sound which is being received.

MONAURAL SND
EXPAND SND

PICTURE STABILIZATION SWITCH

Signals from some external sources may exhibit jitter or other instabilities which can be corrected by placing the switch in the OFF position. If there is no problem the switch should remain in the ON position.

INPUT/OUTPUT PANEL
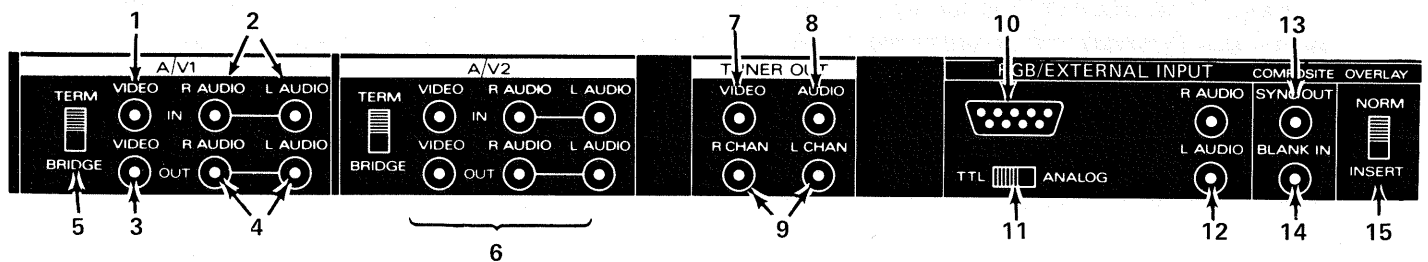
The video and audio input/output terminals located on the rear of your Projector enable you to hook up a variety of external components. These terminals are accessed by the RGB/AV1/AV2 Button on the keyboard or the remote control. Examples of some typical connections are given on the following pages. When activated, a message will appear on the screen showing the mode you are in. When the status message disappears from the screen, no picture will be viewed until the accessory connected to the jack is placed in operation. Continually pressing the RGB/ AV1/ AV2 Button will return the set to the ANTENNA mode for normal TV operation.

1. **A/V1 Video Input** - Video connection for a camera, VCR or other video source.

2. **A/V1 R & L Audio Input** - Audio inputs for the Video 1 signal

3. **A/V1 Video Output** - A bridged video output of the A/V1 input signal.
   NOTE: The TERM/BRIDGE Switch must be in the BRIDGE position.

4. **A/V1 Audio Output** - Bridged audio outputs for A/V1.

5. **Term/Bridge Switch** - The TERM position provides proper signal termination for best viewing. The BRIDGE position loops the incoming signal to other equipment connected to the Video and Audio Outputs.

6. **A/V2 Video & Audio Input**, Output Jacks and Term/Bridge Switch - The same as A/V1, accessed with the RGB/AV1/AV2 switch in the AV2 mode.

7. **Tuner Out Video** - This delivers a constant off air video signal for connection to a VCR or separate monitor.

8. **Tuner Out Audio** - A constant monaural (audio) tv tuner output.

9. **Tuner Out R Chan & L Chan** - Constant stereo (audio) tv tuner outputs. Actual stereo signals will only be present if the Projector is receiving a stereo signal and is in the STEREO mode.

10. **RGB Input** (9 pin D connector - This input accommodates many personal computers or other equipment which provide an RGB output signal. Read the RGB Input Section before using this terminal.

11. **TTL-Analog Switch** - RGB input signals will be either TTL (transistor logic) or analog. The instructions for your equipment will state which type it is. **This switch must be in the CORRECT POSITION BEFORE CONNECTING the accessory unit to prevent damage to the RGB circuits in this Projector.**

12. **RGB R & L Audio** - The RGB connector will only pass video. These audio input jacks allow you to connect stereo audio signal (if available).

13. **Composite Sync Out** - This jack is used with equipment that has Gen-Lock capability.

14. **Blank In** - This input works with special equipment to superimpose special effects.

15. **Normal/Insert Switch** - Used to access the Blank-In jack.

CONNECTING EXTERNAL EQUIPMENT

Your unit is equipped with two sets of Audio/Video input and output terminals. The examples show only the A/V1 set. Identical connections can be made with the A/V2 terminals and mode switch.

NOTE: The illustrations show stereo audio hook-ups. If your equipment has a monaural output, connect it to either the right or left audio input.

WARNING: Unauthorized recording of copyrighted television programs, films, video tapes and other materials may infringe on the rights of the copyright holder and be contrary to copyright laws.

DIRECT VIDEO PLAYBACK
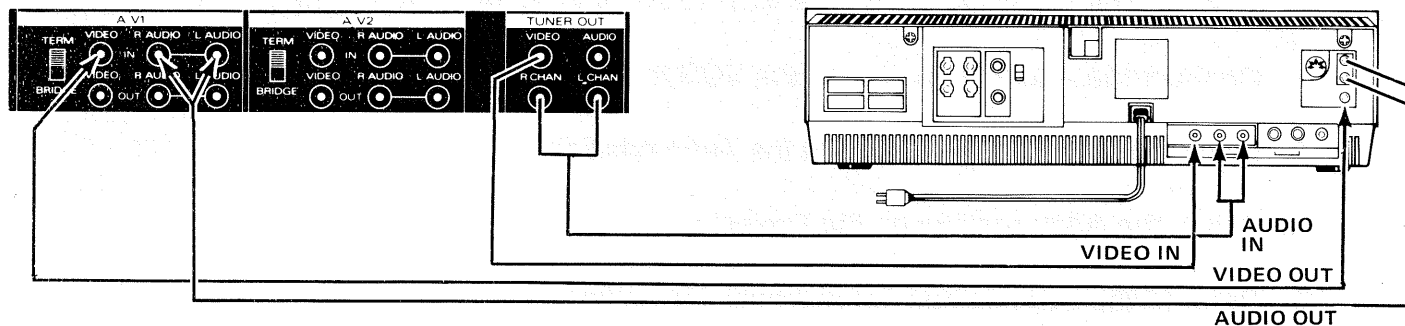
1. Connect the Video Out from a VCR or Videodisc Player to the A/V1 Input jack on the unit.

2. Connect the Audio Out on the video source to the Audio Input on the set.

3. Place the Term/Bridge Switch in the Term position.

4. Place the set in the A/V1 mode on the front keyboard panel.

5. Refer to the owner's manual of the accessory for direct playback operation.

RECORDING

This example shows how to connect a VCR to the Tuner Out Video/Audio jacks for direct recording through the TV tuner.

1. Connect the Tuner Video Out on the panel to Video on the VCR.

2. Connect the Tuner Audio Out on the panel to Audio In on the VCR.

3. Select the desired channel to be recorded.

4. Refer to the VCR manual for recording instructions.

DO NOT CHANGE CHANNELS OR MODES WHILE RECORDING

NOTE: Timed recordings are possible but not recommended because the Projector must be left on.

PLAYBACK

1. Connect the Video Output on the VCR to the A/V1 Video Input on the panel.

2. Connect the Audio Output(s) on the VCR to the A/V1 Audio Input(s) on the panel.

3. Place the Term/Bridge Switch in the Term position.

4. Select the A/V1 position on the Projector.

5. Refer to the VCR manual for playback instructions.

EXTERNAL SPEAKERS

Speakers are attached to the Projector at the terminals located to the right side of the input/output board. The red terminals have a plus (+) polarity and the black terminals have a minus (-) polarity. When connecting speakers to these terminals, match the polarity to the inputs of the speakers. NOTE: The nominal speaker impedance should not be less than 8 ohms for best operation.

RGB INPUT TERMINAL

The RGB terminal is primarily used to connect personal computers, such as the IBM PC, or other equipment which provides an RGB output. To access this terminal, press the RGB/AV1/ AV2 Button until the RGB status screen appears. Before using this terminal, please note the following points:

1. Switch off both the Projector and the input signal source.

2. Read the manual to determine the type and compatibility of the RGB signal source with the Projector. Some devices require a special interface device. Others use high resolution scanning rates which are incompatible with the Projector. The area of the screen used for the display and the positioning may vary with the source and is not caused by the Projector

3. Place the TTL/Analog switch in the correct position for the input source.

NOTE: The color may vary with input source, particularly with computers that do not have true RGB output.

Other Points

Some computers generate RF signals which can interfere with reception. Turn off your computer when watching TV.

RGB signals fed to the Projector cannot be recorded.

Table of Pin Numbers and Signal Assignments

The designation of the terminal on the Projector is a 9 pin Miniature D Jack. Cables are available at Electronics/Computer stores, as are the plugs and wire necessary to construct customized cables. We recommend using a shielded 7 conductor cable, long enough to permit using your computer at a comfortable viewing distance.

Signal Assignment

1. Ground
2. Ground
3. Red Signal
4. Green Signal
5. Blue Signal
6. Intensity
7. Key
8. Horizontal Sync*
9. Vertical Sync*
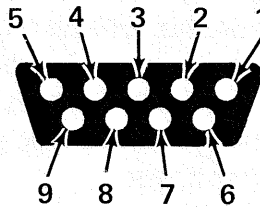
* Input pins 8 and 9 can accept the following Sync forms:

A. Neg Composite Sync (8 or 9)
B. Pos Composite Sync (8 or 9)
C. Pos Vert (8 or 9) and Pos Horiz (9 or 8)
D. Neg Vert (8 or 9) and Neg Horiz (9 or 8)

SAFETY PRECAUTIONS

The following safety information is designed to ensure the long life of your projector. Read these instructions carefully and abide by the warnings.

LOCATION

Place the unit in an area relatively free from dust and moisture. Do not place the Projector in direct sunlight or near stoves or other heat radiating appliances. Avoid rough handling which can damage internal parts of the set.

Provide adequate ventilation to prevent heat built up within the cabinet.

CLEANING

Unplug the set from the wall before cleaning. Use a soft, damp cloth. A mild soap solution may be used to remove heavy stains. Do not allow moisture to enter vent openings; severe damage or shock/hazard could result. **Do not attempt to clean the lenses with dry cloth or paper.** Remove dust with a lens brush or compressed air. Both are available at camera stores. Persistent spots, fingerprints and other dirt may be carefully removed by gently wiping the lenses with a water moistened cloth or soft paper tissue.

POWER

Use only 120V AC, 60 Hz line current. Handle the power cord carefully. A damaged cord could be hazardous. Unplug the unit by grasping the plug; do not pull on the cord. Unplug the power cord when you will not use the Projector for prolonged periods.

PRECAUTIONS

Keep the inside free of foreign objects - nails, clips, pins, etc. Do not insert metallic objects or wire into openings in the cabinet. This can cause electric shock.

WARNING

This equipment generates and uses frequency energy and if not installed and used properly, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. The Projector has been tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following methods:

1. Reorient the antenna
2. Relocate the computer with respect to the receiver
3. Move the computer away from the receiver
4. Plug into a different outlet so that the computer and receiver are on different branch circuits.

If necessary the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio-TV Interference Problems." This booklet is available from the U.S. Government Printing Office, Washington, D.C., 40402, Stock No. 004-000-00345-4.

JBL LIMITED WARRANTY
MODEL 6810 TELEVISION PROJECTOR

Thank you for selecting a JBL Professional Model 6810 Television Projector. Please read the Owner's Manual furnished with this product. Your warranty protects the original owner so long as: A) Your JBL product has been purchased in the Continental United States, Hawaii or Alaska. (This warranty does not apply to JBL products purchased elsewhere. Other purchasers should contact the local JBL distributor for warranty information.); and B) The original dated bill of sale is presented whenever warranty service is required.

JBL RESPONSIBILITY

Parts and Labor - For the first 3 months after installation, JBL will repair any product defect and replace any defective part including the cathode ray tubes without charge for parts or labor. For the next 9 months JBL will furnish replacement parts at no charge, you must play the labor to replace the defective part.

Replacement Cathode Ray Tubes - Except for return shipping costs, JBL will, for the first 12 months after installation of the Projector, replace a defective cathode ray tube without charge for the cathode ray tube. If the tube replacement is made during the first 90 days, JBL will pay for the labor charged to replace it. If replacement is made during the next 9 month period, you pay the labor charges to replace the defective tube. Replacement tubes may be new or they may be rebuilt to meet JBL's high quality standards.

Replacement parts and cathode ray tubes installed during the unit warranty are warranted for the balance of the original warranty period.

JBL Warranty Coverage - This warranty extends only to the original purchaser for this product and it covers defects in workmanship and materials only. It does not cover... installation, adjustment of the customer controls identified in the Owner's Manual, poor reception of TV stations due to inadequate antanna or cable service and/or operations within fringe-signal areas, damage resulting from misuse or abuse, and all other failures not attributable to manufacturing defects.

OWNER RESPONSIBILITY

Operating Instructions - Please read the Owner's Manual carefully so that you will understand the operation of your Projector and how to adjust the controls.

Power - Be sure that your Projector is plugged into a POWERED electrical outlet.

Antenna - For good reception, you must have an adequate antenna which has been properly installed.

How to Get Warranty Service - Warranty service will performed by any Authorized Service Center. We suggest that you contact your dealer. If your dealer does not operate an Authorized Service Center, he will direct you to the Authorized Service Center engaged by him to service the JBL product he sells.

IMPORTANT

This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

If at any time during the warranty period your dealer or his servicer is unable to make a satisfactory repair to this Projector, please contact the JBL Consumer Affairs Office identified on this page:

JBL
8500 Balboa Blvd.
Northridge, CA 91329

CONSUMER AFFAIRS

All dealers offer repair service through their own service departments or through one or more nearby JBL Authorized Service Centers. Although it is expected that needed repair service will be furnished by the Dealer's service organization, situations which may not be resolved to the owner's satisfaction should be reported to JBL.

Call or write JBL. (818) 893-8411

BEFORE CALLING FOR SERVICE

Remember! Charges for set installation, adjustments of customer controls or repair of antenna systems outside the unit are not covered under your warranty. Be sure to make these simple checks before calling for service. These tips can save you time and money.

PROBLEM	ACTION
No power	Check the set's AC plug Unplug then reinsert the plug Be sure that the outlet is not OFF
No picture	Check ANT/ACC1/ ACC2 Button for correct positioning. Check that the Projector is not in an AV or RGB mode. Check the NORMAL/TEST switch. Try another channel.
No sound	Check Mute button Check Volume control. Check SAP Mode Check speaker connection Check auxillary sound system
Set displays wrong channel	Repeat channel change Check batteries in remote, replace if necessary
Channel up and down will not operate	Add channels to scanning system memory See programming of favorite channels
Wrong color	Adjust color and tint

Color Fringes in picture	Adjust convergence as explained in manual
Set displays incorrect Channel entry or Power Switch is innoperable	Unplug set from wall outlet, then plug back in and turn set on again.
Picture interference	Adjust antenna

CAUTION: Video games can cause picture damage. If a set is used with a video game or computer continuously for long periods of time, the pattern of the non-moving portions of the picture could leave an image permanently on the picture tubes. We recommend that the device be turned off when not in use and that it be alternated with normal TV viewing.

JBL