



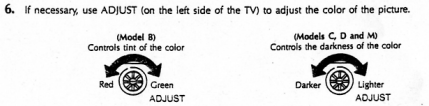
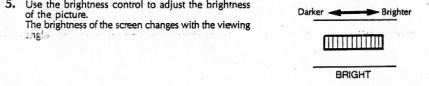
Thank you for purchasing the CASIO TV-480 LCD color television. To fully enjoy the features of this unit and to ensure years of trouble-free operation, be sure to carefully read this manual and follow the instructions contained herein.

CAUTIONS

- Never attempt your own maintenance.
- Avoid water and dust.
- Do not use thinners or other chemical cleaners.
- Only use specified adaptors and power sources.
- Never use adaptors other than genuine CASIO adaptors. Other adaptors may cause serious damage.
- Do not expose to temperature extremes or direct sunlight.
- Turn power OFF when not in use and unplug the adaptor.
- Avoid dropping and strong impact.
- Do not leave the batteries in your TV for extended periods. Old batteries can leak causing damage and malfunction of the unit.

WATCHING THE TELEVISION

1. Extend the rod antenna.
2. Use the function selector to select either VHF (except model D) or UHF.
3. Press either of the tuning keys, \leftarrow and \rightarrow , and the tuning indicator will move to the next receivable channel. Repeat this operation until the desired channel is tuned in.
 Note: The tuning indicator will disappear from the screen after a channel is tuned in. To view the tuning indicator, hold down the channel call key. The tuning indicator will disappear from the screen when you release the channel call key.
4. Use the volume control to set the sound to a suitable level.
5. Use the brightness control to adjust the brightness of the picture.
 The brightness of the screen changes with the viewing



NOTE

Under poor reception conditions, the tuning indicator may continue to move without stopping because the auto tuner cannot detect weak broadcasts. In this case, use a commercially available external antenna or relocate the TV to a place where reception is better.

- #### Locations where TV reception is bad
- Far away from broadcasting stations, among ferro-concrete structures or near mountains.
 - Underground, in tunnels or in ferro-concrete buildings.
 - Near high-tension wires, neon signs, or radio stations whose frequencies interfere.
 - Near railroads, highways or airports.
 - In trains or cars.

- #### Backlight
- Adjust the level of the sound using the control of volume.

GENERAL GUIDE / GUÍA GENERAL

External antenna jack (EXT-ANT)
Toma para antena externa (EXT-ANT)

Function selector (OFF/VHF/UHF)
UHF: UHF band CH 14 - CH 69 (model B)
CH 21 - CH 69 (model C)
CH 27 - CH 68 (model D)
CH 28 - CH 69 (model M)

VHF: VHF band CH 2 - CH 13 (model B)
CH 2 - CH 12 (model C)
CH 0 - CH 11 (model M)

OFF: Power turned OFF

Selector of functions (OFF/VHF/UHF)
UHF: Banda UHF canales 14 al 69 (modelo B)
canales 21 al 69 (modelo C)
canales 21 al 68 (modelo D)
canales 28 al 69 (modelo M)

VHF: Banda VHF canales 2 al 13 (modelo B)
canales 2 al 12 (modelo C)
canales 0 al 11 (modelo M)

OFF: Unidad apagada

External power source jack (DC IN 6V)
Toma para alimentación externa (DC IN 6V)

Volume control (VOLUME)
Control de volumen (VOLUME)

Brightness control (BRIGHT)
Control de brillo (BRIGHT)

Tuning indicator
Indicador de sintonización

Channel display
Indicador del canal

Tuning keys (TUNING)
Teclas de sintonización (TUNING)

Color LCD screen
Pantalla color de CL

Channel call key (CH CALL)
Tecla de recuperación de canal (CH CALL)

Battery compartment
Compartimento para las pilas

Tint control (model B)
Color control (models C, D and M)
(ADJUST)

Control del tinte (modelo B)
Control del color (modelos C, D y M)
(ADJUST)

Rod antenna
Antena telescópica

Stand
Pedestal

Earphone jack (PHONE)
Toma para audífonos (PHONE)

BATTERY LIFE

The first indication of weakening batteries will be a reduction in volume followed by unstable picture quality and sound. At this time, replace batteries with a full set of new ones and never mix battery types.

Battery Type	Battery Life
LR6 (AM-3)	Approx. 3 hours
R6 (UM-3)	Approx. 30 minutes

- The batteries supplied with your TV are test batteries which have a shorter life span than that noted above.
- Low battery power generates heat, but this does not mean malfunction.

VIDEO CONNECTIONS

The optional RF cord lets you use the TV as a video cassette recorder monitor, etc. Use the RF cord to connect the TV to the RF output jack of a video equipment. See Fig. 5 in General Guide above.

TROUBLESHOOTING

Check the following points before assuming malfunction of the TV.

Symptoms	Sound	Possible causes	What to do
No picture	No sound	1. Dead batteries. 2. Polarity of batteries incorrect. 3. AC adaptor or car adaptor not properly connected. 4. Unauthorized power supply being used.	1. Replace batteries. 2. Reinsert batteries making sure poles are properly aligned. 3. Correctly connect adaptor. 4. Use only specifically recommended power supplies.
No picture	Noise	1. Not properly tuned.	1. Adjust tuning.
Picture visible	No sound	1. Volume control dial turned too low. 2. Earphone inserted.	1. Turn up volume. 2. Disconnect earphone.
Picture all white	Sound heard	1. Brightness control not set correctly.	1. Adjust brightness control.
Picture not clear (picture moves up or down, disappears periodically, becomes fuzzy or blurred, is doubled, etc.)	Sound heard	1. Rod antenna folded. 2. Not properly tuned. 3. Battery power low. 4. Interference from automobiles, electric appliances, etc. 5. Reception bad due to weak signals, buildings, mountains, etc.	1. Extend rod antenna. Adjust angle and direction for best reception. 2. Adjust tuning. 3. Replace batteries. 4. * Move farther away from appliance causing interference. * Change antenna position. 5. In locations with poor reception, it may not be possible to get a clear picture or any picture at all.

Español

Muchas gracias por la compra de un televisor color con pantalla de cristal líquido (CL) TV-480 de CASIO. Para disfrutar todas las características de esta unidad y asegurar años de funcionamiento sin fallas, sírvase leer este manual cuidadosamente y seguir sus instrucciones al pie de la letra.

PRECAUCIONES

- No intente sus propios mantenimientos y reparaciones.
- Protéjala contra los líquidos y el polvo.
- No use diluyentes o agentes químicos para limpiarla.
- Use sólo los adaptadores y fuentes de alimentación especificados.
- Nunca utilice adaptadores distintos que los adaptadores originales CASIO. Adaptadores diferentes pueden ocasionar serios daños.
- Evite temperaturas extremas y la incidencia directa de los rayos del sol.
- Apague la unidad y desenchufe el adaptador cuando no la use.
- Evite todo tipo de golpes y caídas.
- Asegúrese de quitar las pilas siempre que no vaya a usar su televisor por un periodo de tiempo prolongado. Si se dejan pilas agotadas, las mismas podrán sulfatarse y dañar los componentes de la unidad.

FUNCIONAMIENTO

1. Extienda la antena telescópica.
2. Use el selector de funciones para escoger entre VHF (excepto modelo D) o UHF.
3. Use la tecla de sintonización que corresponde (\leftarrow o \rightarrow), para sintonizar el canal deseado. Cada pulsación de una de estas teclas sintoniza un canal en uno y otro sentido de la banda escogida.
 Nota: El indicador de sintonización desaparecerá de la pantalla luego de sintonizarse un canal. Para visualizar el indicador de sintonización, sostenga pulsada la tecla de recuperación de canal. El indicador de sintonización desaparecerá de la pantalla cuando se suelta la tecla de recuperación de canal.
4. Ajuste el nivel del sonido mediante el control de volumen.
5. Ajuste el brillo de las imágenes en la pantalla mediante el control de brillo.
 El brillo de la pantalla cambia según el ángulo de visión.

6. En caso de ser necesario, ajuste el color de la imagen usando para ello el control

NOTE

Under poor reception conditions, the tuning indicator may continue to move without stopping because the auto tuner cannot detect weak broadcasts. In this case, use a commercially available external antenna or relocate the TV to a place where reception is better.

Locations where TV reception is bad

- Far away from broadcasting stations, among ferro-concrete structures or near mountains.
- Underground, in tunnels or in ferro-concrete buildings.
- Near high-tension wires, neon signs, or radio stations whose frequencies interfere.
- Near railroads, highways or airports.
- In trains or cars.

Backlight

In low temperatures, it will take some time for the fluorescent material to illuminate, or the light will take on a reddish tinge. This does not indicate malfunction of the backlight. Normal operation will resume after a short while.

OPTIONAL POWER SOURCES

AC household current — See Fig. 1 in General Guide above.

The optional AC adaptor (AD-K64/AD-K65) allows the TV to be powered by standard household current.

Car battery (DC 12V) — See Fig. 2 in General Guide above.

The optional car adaptor (CA-K65) allows the TV to be powered by a car battery through the vehicle's cigarette lighter. You should never, however, attempt to watch television while operating a motor vehicle.

PRECAUTIONS

- Never connect the car adaptor to cigarette lighters for such vehicles as trucks or busses that use 24V DC electrical power.
- When an adaptor is plugged into the DC IN jack, the battery power source is automatically switched OFF.
- Adaptors may become warm to the touch after extended periods of use. This is normal and is no cause for alarm.
- Always be sure to use the AD-K64/AD-K65 AC adaptor (option) or CA-K65 car adaptor (option) only. Using any other AC adaptor or car adaptor can cause damage to the TV not covered by the warranty.
- Be sure to switch power off before connecting or disconnecting the adaptor.
- If you do not plan to use the TV for a long time, be sure to disconnect the AC adaptor from the wall outlet or the car adaptor from the cigarette lighter. Failure to do so may result in damage to the TV or it can run down your car's battery.

EXTERNAL ANTENNAS

Outdoor antenna — See Fig. 3 in General Guide above.

If you are located in a remote area, among ferro-concrete structures or in a mountainous region, reception can be adversely affected. In this case, purchase an antenna adaptor with a 3.5¢ mini plug connector and connect it to your outdoor antenna. Insert the plug of the adaptor into the EXT-ANT jack of the TV.

Car antenna — See Fig. 4 in General Guide above.

Reception may be unstable when the vehicle is in motion due to fluctuations in signal wave conditions. The optional car antenna with a 3.5¢ mini plug connector can be used for better reception in motor vehicles.

Consult the instruction manual for your antenna for details.

LOADING BATTERIES

1. Set the function selector to OFF.
2. Remove the battery compartment cover by sliding it in the direction of the arrow indicated in the figure. (Lower left)
3. Load four batteries ensuring that the poles (+) and (-) are facing in the proper directions.
4. Replace the battery compartment cover.



PRECAUTIONS

- Incorrectly using batteries can cause them to burst or leak, possibly damaging the interior of the unit. Note the following precautions:
- Be sure that the positive (+) and negative (-) poles of each battery are facing in the proper direction.
 - Never mix batteries of different types.
 - Never mix old batteries and new ones.
 - Never leave dead batteries in the battery compartment.
 - Never leave the plan to use the unit for long periods.
 - Replace the batteries at least once every 2 years, no matter how much the unit is used during that period.
 - Never try to recharge the batteries supplied with the unit.
 - Do not expose batteries to direct heat, let them become shorted, or try to take them apart.
 - Should a battery leak, clean out the battery compartment of the unit immediately, taking care to avoid letting the battery fluid come into direct contact with your skin.

Picture visible	No sound	1. Volume control dial turned too low. 2. Earphone inserted.	1. Turn up volume. 2. Disconnect earphone.
Picture all white	Sound heard <th>1. Brightness control not set correctly.</th> <th>1. Adjust brightness control.</th>	1. Brightness control not set correctly.	1. Adjust brightness control.
Picture not clear (picture moves up or down, disappears periodically, becomes fuzzy or blurred, is doubled, etc.)	Sound heard <th>1. Rod antenna folded. 2. Not properly tuned. 3. Battery power low. 4. Interference from automobiles, electric appliances, etc. 5. Reception bad due to weak signals, buildings, mountains, etc.</th> <th>1. Extend rod antenna. Adjust angle and direction for best reception. 2. Adjust tuning. 3. Replace batteries. 4. Move further away from appliance causing interference. 5. Change antenna position. In locations with poor reception, it may not be possible to get a clear picture or any picture at all.</th>	1. Rod antenna folded. 2. Not properly tuned. 3. Battery power low. 4. Interference from automobiles, electric appliances, etc. 5. Reception bad due to weak signals, buildings, mountains, etc.	1. Extend rod antenna. Adjust angle and direction for best reception. 2. Adjust tuning. 3. Replace batteries. 4. Move further away from appliance causing interference. 5. Change antenna position. In locations with poor reception, it may not be possible to get a clear picture or any picture at all.
Vertical stripes on screen	Sound heard <th>1. Weak signal or interference.</th> <th>1. Extend rod antenna and set to proper angle. 2. Move to an area that allows better reception.</th>	1. Weak signal or interference.	1. Extend rod antenna and set to proper angle. 2. Move to an area that allows better reception.
Picture dark or blurred	Sound heard <th>1. Brightness control needs adjusting. 2. Battery power low.</th> <th>1. Adjust brightness. 2. Replace batteries.</th>	1. Brightness control needs adjusting. 2. Battery power low.	1. Adjust brightness. 2. Replace batteries.
Color light, not present	Sound heard <th>1. Color control not properly set. (Models C, D and M) 2. Rod antenna not extended.</th> <th>1. Adjust color control. (Models C, D and M) 2. Extend rod antenna and set to proper angle.</th>	1. Color control not properly set. (Models C, D and M) 2. Rod antenna not extended.	1. Adjust color control. (Models C, D and M) 2. Extend rod antenna and set to proper angle.
Color irregular	Sound heard <th>1. Tint control not properly set. (Model B)</th> <th>1. Adjust tint control. (Model B)</th>	1. Tint control not properly set. (Model B)	1. Adjust tint control. (Model B)

SPECIFICATIONS

Type: LCD Color television
Reception Frequencies: UHF: CH 14 — CH 69 (model B)
CH 21 — CH 69 (model O)
CH 21 — CH 68 (model D)
VHF: CH 28 — CH 69 (model M)
CH 2 — CH 13 (model B)
CH 2 — CH 12 (model O)
CH 0 — CH 11 (model M)
Display Element: High resolution color liquid crystal display (twisted nematic type)
Screen Size: 22 inches
Backlight: High luminance fluorescent material
Antenna: Rod antenna (VHF, UHF)
Speakers: 1 7/8" (28 mm) x 1"
Connection Terminals: External antenna jack (8.5¢ mini)
Earphone jack (3.5¢ mini)
Power Supply: External power source jack (DC 6V)
3-way power supply system
Batteries — 4 AA-size dry batteries
AC — AC adaptor AD-K64/AD-K65 (option)
Car battery — Car adaptor CA-K65 (option)
Power Consumption: Approx. 2.8 W
Ambient Temperature Range: 32°F (0°C) — 104°F (40°C)
Dimensions: 33 1/8" (W) x 12 1/2" (D) x 5 7/8" (H)
8 1/2" (W) x 3 8" (D) x 1 1/8" (H)
Weight: Approx. 8.8 oz
250 g (excluding batteries)
Standard Accessory: Test batteries and Soft case
Specifications and design are subject to change without notice.

OPTIONS

AC adaptor:	AD-K64/AD-K65	Antenna adaptor:	AS-3/5
Car adaptor:	CA-K65	RF cord:	CF-13
Car antenna:	OS-61A	Cassette connector:	OS-76C
Car kit:	OS-K160		

Note: Some of the options listed above may not be available in certain geographic areas.

NOTES

The TV-480 model B is tuned for American standard NTSC (M) system which is adopted in the following countries:

American Samoa, Antigua and Barbuda, Bahamas, Barbados, Belize, Bermuda, Bolivia, Cambodia, Canada, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Mexico, Micronesia, Netherlands Antilles, Nicaragua, Panama, Peru, Philippines, Puerto Rico, Saint Christopher & Nevis, Saint Lucia, South Korea, Taiwan, Thailand, Trinidad and Tobago, Union of Myanmar, U.S.A., Venezuela

The TV-480 model C is tuned for CCIR standard PAL (B/G/H) system which is adopted in the following countries:

Afghanistan, Algeria, Austria, Bahrain, Bangladesh, Belgium, Brunei, Central African Rep., Equatorial Guinea, Ethiopia, Germany, Ghana, Greenland, Holland, Iceland, India, Indonesia, Jordan, Kenya, Kuwait, Liberia, Luxembourg, Malaysia, Maldives, Malta, Mozambique, New Zealand, Nigeria, Oman, Pakistan, Portugal, Qatar, Seychelles, Sierra Leone, Singapore, Spain, Sri Lanka, Sudan, Switzerland, Tanzania, Thailand, The Yemen Arab Rep., Turkey, United Arab Emirates, Yugoslavia, Zambia

The TV-480 model D is tuned for UK standard PAL (I) system which is adopted in the following countries:

Hong Kong, U.K.

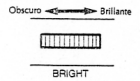
The TV-480 model M is tuned for Australian standard PAL (B) system, which is adopted in Australia. This model can also be used in the same countries as TV-480 model C though the tuning indicator will not actually match the channel that is tuned in.

Para visualizar el indicador de sintonización, sostenga pulsada la tecla de recuperación de canal. El indicador de sintonización desaparecerá de la pantalla cuando se suelta la tecla de recuperación de canal.

4. Ajuste el nivel del sonido mediante el control de volumen.

5. Ajuste el brillo de las imágenes en la pantalla mediante el control de brillo.

El brillo de la pantalla cambia según el ángulo de visión.



6. En caso de ser necesario, ajuste el color de la imagen usando para ello el control ADJUST (en la parte izquierda del TV).

(Modelo B)

Controla el tinte del color

Rojo Verde

ADJUST

(Modelos C, D y M)

Controla la intensidad de la pantalla

Oscuro Brillante

ADJUST

NOTAS

Cuando las condiciones de recepción son malas, es posible que el indicador no se detenga en ningún canal; ello significa que el sintonizador automático no puede sintonizar ningún canal porque las señales son muy débiles. En este caso, ubique su televisor en otro sitio, donde se logre una mejor recepción.

Lugares donde la recepción no es buena

- Lejos de las emisoras de TV, entre estructuras de hierro o cerca de montañas.
- sótanos, túneles y edificios con estructuras de hierro.
- Cerca de cables de alta tensión, cables de tendido o emisoras de radio cuyas frecuencias interfieren.
- Cerca de ferrocarriles, autopistas o aeropuertos.
- Dentro de trenes o automóviles.

Unidad de iluminación

En temperaturas bajas, llevará cierto tiempo hasta que el material fosforescente se ilumine, en algunos casos, la imagen toma un tono rojizo. Ello no significa que se haya averiado la unidad; la imagen se normalizará después de unos momentos.

FUENTES DE ALIMENTACIÓN OPCIONALES

CA de la línea — Vea la Figura 1 en la Guía General anterior.

El uso del adaptador opcional (AD-K64/AD-K65) permite alimentar la unidad con CA de la línea.

Batería de automóvil (CC 12V) — Vea la Figura 2 en la Guía General anterior.

El uso del adaptador para automóvil (opcional CA-K65) permite alimentar la unidad por medio de una batería de automóvil, a través del receptáculo para el encendedor de cigarrillos. Nunca mire la televisión mientras conduce un vehículo.

PRECAUCIONES

- Nunca intente conectar el adaptador en receptáculos para encendedores de vehículos con una alimentación de 24V de CC (camiones y autobuses en algunos casos).
- La alimentación por medio de las pilas se interrumpe automáticamente cuando se conecta un adaptador a la toma "DC IN".
- El adaptador podrá calentarse cuando se lo usa por un período prolongado de tiempo. Ello es normal y no significa que se haya averiado.
- Siempre asegúrese de utilizar únicamente el cable de la batería de automóvil CA-K65 (accesorio opcional) o el adaptador de CA-AD-K64/AD-K65 (accesorio opcional). El uso de cualquier otro adaptador de CA o de otro cable de la batería de automóvil puede ocasionar daños al TV no cubiertos por la garantía.
- Asegúrese de desconectar la alimentación antes de conectar o desconectar el adaptador.
- Si piensa que no va a utilizar el TV por un tiempo prolongado, asegúrese de desconectar del encendedor de cigarrillos el cable de la batería de automóvil, o del tomacorriente mural el adaptador de CA. De lo contrario, el TV se podrá dañar o se podrá descargar la batería de su automóvil.

ANTENAS EXTERNAS

Antenas exteriores — Vea la Figura 3 en la Guía General anterior.

La recepción no será muy buena en sitios alejados de las emisoras, entre estructuras de ferrocemento o en regiones montañosas. En dicho caso, compre un adaptador para antena con un miniconector de 3,5 de diámetro y conéctelo a su antena exterior. Conecte el enchufe del adaptador en la toma EXT-ANT del televisor.

Antenas de automóvil — Vea la Figura 4 en la Guía General anterior.

La recepción podrá ser inestable cuando el vehículo está en movimiento, debido a las fluctuaciones en la intensidad de las señales. La recepción en vehículos motorizados será mucho mejor si se utiliza la antena opcional para automóvil con un miniconector de 3,5 de diámetro. Para mayores detalles, consulte el manual de instrucciones de su antena.