

PMCV2 Installation and Usage Instructions for 2008 – 2010 Panasonic Plasma TVs

Thank You for Your Purchase!

I sincerely hope that the PMCV2 extends your enjoyment of your Panasonic Plasma television for many more years. For any PMCV2 related questions, please visit the website at <http://audiodane.dandk.org>.

Warranty and Refund Policy

Your PMCV2 has been fully tested before shipping. If you believe that your device was damaged in shipping, please contact me for a replacement. **Aside from shipping damage, there is no other warranty offered for the PMCV2.** You assume all risk and liability for the use of the PMCV2. I have spent a great deal of effort to reduce the likelihood that the PMCV2 will cause harm, but I cannot and will not assume any liability for any damage caused by its use or misuse.

Software Version Identification

Your PMCV2 was shipped with the latest available software, which may be verified by the LED pattern **during power-up**:

- **V1.0 & v2.0 (original PMCV1 & PMCV2):** Both LEDs light up and remain lit for five (5) seconds.
- **V2.2 (this version):** Both LEDs light up for two (2) seconds, then blink off-on-off, then light up for two (2) seconds.

Installation

1. **Before installation**, set the mode of the PMCV2. **For most customers, Automatic Mode is recommended.**

To select Automatic Mode, switch #1 should be positioned towards "**LED ON.**"

Automatic Mode is the original mode of the PMCV2 and is the proper mode for most users. Every time the TV turns on the PMCV2 will check the TV's black level and reset it if necessary. If Automatic Mode causes problems or if you wish to be the one to decide when and how often your black levels are reset, use the Manual Mode instead.

To select Manual Mode, switch #1 should be positioned towards "**LED OFF.**"

Manual Mode may be used when Automatic Mode causes problems or when you wish to decide when black level resets are performed. In this mode, the PMCV2 will remain idle until "manually triggered." More details on this mode are found later in this manual.

2. Ensure that switch #2 is positioned towards "**RUN.**"

3. **Remove power from the TV.**

For USA TV Models:

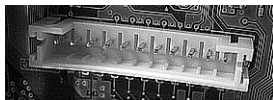
Unplug the TV.

For non-USA TV Models:

Put TV into standby mode first, and then switch off power to the TV.

4. On the back of your TV, locate and **remove the TV's access cover** to the TV's service panel. Its location and size will vary from model to model. 2008-2009 models use a removable plastic cover, 2010 models use an adhesive label. See <http://audiodane.dandk.org/PMCV2> for some examples of various models.
5. Behind the **TV's access cover** removed in the previous step, locate the **11-pin service connector** (see below).

2008-2009 Model Year Service Connector

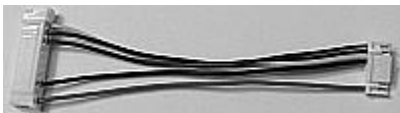


2010 Model Year Service Connector

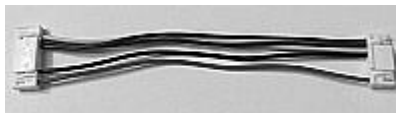


6. Using the pictures above and below, ensure that your PMCV2 device has the **proper cable** installed to match your TV's **11-pin service connector**. (Your PMCV2 was shipped with the 2008-2009 cable attached.) If you need to switch cables, press down gently on the top of the white connector (see image below) and gently pull the cable out of the PMCV2. You may then insert the other cable. Each cable will only fit one way into the PMCV2 and will "click" into place and remain securely connected.

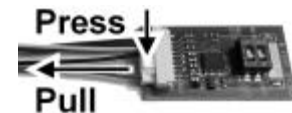
2008-2009 Cable (Wide & Narrow Ends):



2010 Cable (Two Narrow Ends):



Removing Cable from PMCV2



7. Install the **PMCV2 with proper cable** into the TV's **11-pin service connector**. The TV-end of the PMCV2 cable will only fit one way into the service connector and may click or snap into place. Verify the PMCV2 is firmly attached.
8. **Apply power to the TV.**
For USA TV Models: Plug in the TV but do not turn it on.
For non-USA TV Models: Switch on power to the TV **but keep the TV in standby mode.**
9. The device will power-up, first indicating its software version and then will indicate that it is in automatic mode (**solid** green OR red LED for four (4) seconds) or manual mode (**blinking** red OR green LED four (4) times). The LED color (red or green) indicates if the device is in RUN mode (green) or UNDO mode (red).
10. After indicating the software version, the PMCV2 will go into an IDLE state and the LEDs will report their mode (green OR red LED) for four (4) seconds and then turn off so they are not distracting during TV usage.

(Instructions Continued On Next Page)

Operation (Automatic Mode)

1. Turn on the TV. The PMCV2 will check the TV's black level and will automatically reset it if necessary.
 - a. If a reset occurs, the PMCV2 will blink its green LED once every few seconds to indicate that a reset occurred successfully. At this time the TV will be on but may not show an image on the screen. **This is normal.** Turn the TV off and back on again (non-USA models: standby then out of standby).
 - b. **Congratulations, your TV's black level has been restored to looking its best!**
 - c. If no reset occurs, the PMCV2 will not blink its LED, and the TV will turn on normally.
2. From now on, every time your TV is turned on, the PMCV2 will repeat the previous step. Resets will occur approximately every 150 hours of TV usage.
3. When the PMCV2 is idle, the LEDs will turn off after four (4) seconds so they are not distracting during TV usage.

Operation (Manual Mode)

1. In the manual operating mode, the PMCV2 will do **nothing** unless you instruct it to do something. You may use your TV normally. When you are ready to manually reset your black levels (or UNDO), proceed to the next step.
2. To manually reset your black levels (or undo a previous reset):
 - a. Ensure the TV is in **standby mode (not powered off)**.
For USA TV Models: Plugged in but turned off.
For non-USA TV Models: Power switched on but TV in standby mode.
 - b. Slide switch #1 from the left to the right (towards the "LED ON" label). The device will respond by blinking its red and green LEDs in an alternating pattern (red-green-red-green-red-green-red- . . .).
 - c. Turn the TV on.
 - d. The TV should turn on but show no picture. If your TV has fans, you may hear them turn on. **NOTE: If your TV shows a picture, then manual mode does not support your model TV. Remove the device.**
 - e. Slide switch #1 from the right back to the left (towards the "LED OFF" label). The device will then perform the reset (or undo) operation. Upon completion the device will blink its LED once (success) or twice (failure) per second. After several seconds it will revert back to its waiting condition, blink its LEDs four (4) times, and then return to the idle state and the LEDs will turn off.
 - f. Turn the TV off and then back on again (non-USA models: standby then out of standby) and enjoy!

Moving the PMCV2 to Another TV

The PMCV2 has been designed to work with a single TV (for its UNDO operation) and is not meant to be used on multiple TVs. If you have multiple TV's that need their black level reset, please purchase additional PMCV2 units.

LED Blinking Patterns and What They Mean

Red and green LEDs are used to indicate information. Use the table below to understand what they mean:

LED Blinking Pattern	What it means, and what to do next
The TV's front LED is on, no image appears on the TV, and the PMCV2 green LED blinks once every few seconds	Congratulations! The PMCV2 has just successfully reset your TV's black level! Simply turn the TV off and back on again. <u>This is normal and will happen again every 150 hours of TV usage</u> (in automatic mode) to ensure that your TV's black level remains at its best. In manual mode, it will not happen again until you instruct it to do so.
The TV's front LED is on, no image appears on the TV, and the PMCV2 green LED blinks twice every few seconds	The PMCV2 has attempted to reset the TV's black level but something went wrong. Try turning the TV off and back on again to let the PMCV2 try again. If this condition continues to occur, then the PMCV2 is not compatible with your TV and you should flip the switches on the PMCV2 towards the UND label and turn your TV off and back on one more time. This will instruct the PMCV2 to restore the original values back to your TV. Then remove the PMCV2.
The PMCV2 red LED blinks once every few seconds	The PMCV2 has just successfully restored the TV back to its original condition (e.g. like it was before the PMCV2 was installed), and the PMCV2 will no longer attempt to reset your TV's black level. The PMCV2 may be left installed (it is now dormant), or removed / discarded.
The PMCV2 red LED blinks twice every few seconds	The PMCV2 has attempted to restore the TV back to its original condition (e.g. like it was before the PMCV2 was installed), but something went wrong. Try turning the TV off and back on to let the PMCV2 try again. You may then remove the PMCV2 and discard it.
The TV's front LED blinks and no image appears on the TV	The PMCV2 is not compatible with your TV and you should flip the switches on the PMCV2 towards "UND" (Undo) and turn your TV off and back on one more time to allow the PMCV2 to undo its last operation. You may then remove the PMCV2 and discard it. NOTE: You may need to hold the TV power button for at least five (5) seconds and then release it to turn off the TV. The TV should "click" off and then try to turn back on automatically.