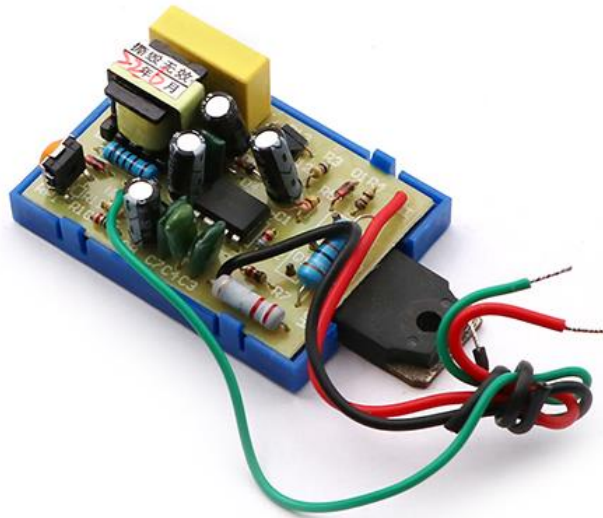


29-3 Three Wire Series Super Power Module Suitable for TVs Below 29" Color TV Universal Switching Power Supply



Description:

This module is suitable for replacing the TV color switch repair power supply 29" and below. The module only has three lead connections, the connection method is simple, the performance is stable, and it is the first choice for TV power color switch repair! If you use this module on VCD, DWD , satellite receiver, etc., you only need to connect the red and black lines of the module.

Installation conditions:

After the color TV switching power supply is damaged, as long as the switching transformer is intact, the 300V power supply is normal, and the additional switching transformer rectification and filtering circuit has no problems, the module can be used to repair the power supply.

Installation method:

- 1- Check whether the original +300V power supply is normal, the secondary rectifier of the switching transformer, the filter circuit is not damaged, and the load is short.
- 2- Remove the diaphragm from one thickness of the power switch tube whose original machine was damaged, and install the module on the heat sink of the original switch tube. The heat sink of the fixed module part should be flat, and make sure the switch tube on the module is in good contact. Whether fever.
- 3- The red line on the module is connected to the c-solder joint of the original switch tube (D-pole FET) or solder the c-pole of the corresponding power tube in the thick film block. Also check the connection between the c-pole and +300V of the original switch tube. Whether the peak voltage absorption cycle is damaged. Some TV power supply takes other forms of absorption chain. As long as the module is running hot but not whistling, there is no interference on the TV screen. If there is no absorption circuit, install one according to fig. 1 (switching power supply can be omitted);
- 4- The black wire on the module is connected to the original pole of the original switch tube (the field effect tube is the S pole) or e pole solder joint of the corresponding power tube in the thick film block (The black line of the parallel type switching power supply can be directly connected to the hot ground)
- 5- The green line on the module is the remote-control shutdown and multi-functional control line. It turns off the output with a black line, and its connection is flexible. The original machine accepts the relay or close line scan to perform power management shutdown without green line. When the green line is suspended, pay attention to the insulation. If the original light is turned off due to illness, the green wire must be connected to the c-pole of the original optocoupler switch, and other components on the c-pole must be turned off. The E-pole of the optocoupler is connected to

the black line of the module (parallel switch power to heat). If there are multiple opto sockets on the original power supply, some are off, some are adjustable, some are protected, then the green line can only be connected to the shutdown function. If you want to use the voltage regulation and protection functions of Uehara, you can connect the c and e poles of multiple optocouplers in parallel to connect the green and black lines. The series switching power supply that uses the backup tube to turn off, must change the original machine to turn off the optocoupler or turn off the relay to realize the switch through control.

Debugging method:

After the connection of each line is correct, disconnect the line load, connect a 60-100W lamp to output B to make a dummy load, start the test. At this point, the initial value of the module output voltage should be between 30V-90 volts DC (depending on the model). The original value of the output voltage used in VCD, DVD, satellite receiver is 2 to 5V), sometimes accompanied by voltage instability and a little squeal, clockwise adjustment of the potentiometer on the module, the output voltage gradually, when it rises to a normal value, the voltage hidden and the sound is cleared, and the output voltage module is adjustable, and the real testing machine can be restored. If the green line of the module is connected to the original voltage regulator, the output voltage will not rise after it is corrected to a certain value. This is because the original voltage regulator component plays a role. If the potentiometer on the module is used at this time. After adjusting clockwise for about one-third of a week, the module's output voltage will be fully controlled by the original voltage regulator circuit. The module voltage regulation effect is equivalent to the original machine, which can effectively solve the problem of picture shrinkage after turning on the sound to repair machines. After adjusting clockwise for about one-third of a week, the module's output voltage will be fully controlled by the original voltage regulator circuit. The module voltage regulation effect is equivalent to the original machine, which can effectively solve the problem of picture shrinkage after turning on the sound to repair machines. After adjusting clockwise for about one-third of a week, the module's output voltage will be fully controlled by the original voltage regulator circuit. The module voltage regulation effect is equivalent to the original machine, which can effectively solve the problem of picture shrinkage after turning on the sound to repair machines.

A common problem:

- 1- The module does not start after installation or the output voltage is low. First, disconnect the green line of the test rig (buck-type switch of the power supply should disconnect the rectifier diode that provides power to the processor when the green line is disconnected, in case of accidents, such as the STR6309 power supply). If it can start and the output voltage is normal, then check the optocoupler control circuit. Under normal circumstances, the original optocoupler should be off when it's on and on when it's off. If the optocoupler operates in the opposite direction, a first stage inverter circuit must be added. If the green line is still not activated, check if the 300V power supply is normal, whether the transformer switching and its corresponding load is short (note that the +B rectifier is broken), and the power supply series switch power supply should also check whether the freewheel diode is broken. Or open the way.
- 2- Howling, interference, overheating. After installing the module, such phenomena are mainly related to the voltage absorption circuit from the peak voltage. The original absorption circuit can be removed first, then R (33-56 ohm, 3-5 W), C (470-2000p, 1-in Fig. 1). 2KV) data plus a set of absorbent loops. When an absorption loop is added, the larger the C value selected, the smaller the noise modulus, but the higher the module temperature, the less howling. Some power supplies whistle when using module maintenance due to excessive capacitance of the ceramic capacitor connected in parallel to the 110V main voltage rectifier diode. At this time, the capacitor can be

reduced to 100p-470p to eliminate sound (for example, panda 3631). Color TV). When the series switching power supply uses the audio restoration module, the high voltage ceramic capacitors in the power supply part can be removed. If interference still occurs after changing the absorption loop, check if the antenna is connected or shielded.

- 3- When connecting the dummy (lamp-lamp), the TV works normally, and the fake load of the TV does not work. This fault can be an emergency between the +B output and its negative pole and a 5-10K (3-5W) resistor. Solve.
- 4- If the original machine uses the conduction of the optocoupler to reduce the main voltage for remote shutdown, a 680 **ohm** resistor can be connected between the green line and the c-pole of the optocoupler to achieve buck shutdown or the original machine. The CPU adds a 5V power supply to ensure the normal operation of the CPU in the off state. You can also use our universal power module for a solution.
- 5- When this module is used on VCD, DVD, satellite receiver and other models, the installation and debugging methods can be as above. If the output voltage is too high or unstable, connect the green line. Since some models of switching transformers are compatible with this module, the output voltage does not meet the requirements, and the sound is heavy. This module is not suitable for use, but the module can be applied to other models. For used modules, the voltage must be adjusted to the lowest output state before reuse (the potentiometer is rotated counterclockwise to the end) to avoid burning out components due to excessive voltage when used on other models.

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