XGEDA CH1160D-1MF

XGEDA CH1160D-1MF Power Supply Board User Manual

Model: CH1160D-1MF | Brand: XGEDA

Introduction

This user manual provides essential information for the proper installation, operation, and maintenance of your XGEDA CH1160D-1MF Power Supply Board. Please read this manual thoroughly before attempting any procedures to ensure safe and efficient use of the product.
This product is a specialized electronic component, specifically a television replacement part. It is designed for use by individuals with a certain level of technical expertise in LCD TV repair. Due to its specialized nature, it is important to verify compatibility and understand its function before purchase or installation.

Important Safety Information

WARNING: Risk of electric shock. Do not open the casing. Refer all servicing to qualified service personnel. This product contains high voltage components that can cause severe injury or death if handled improperly.
WARNING: For continued protection against risk of fire, replace fuses only with the same type and rating as indicated on the circuit board. Refer to the markings on the board for specific fuse specifications (e.g., T5AH 250V~).

- Always disconnect power before installation or maintenance.
- Ensure proper grounding.
- Do not expose the product to moisture or extreme temperatures.
- Handle with care to avoid damage to sensitive electronic components.
- Installation should only be performed by experienced technicians.

Product Overview

The XGEDA CH1160D-1MF is a replacement power supply unit (PSU) for compatible LCD televisions. It is identified by model numbers such as CH1160D-1MF, 600-U, and 600-UBE. This board integrates various components responsible for power conversion and distribution within the television.

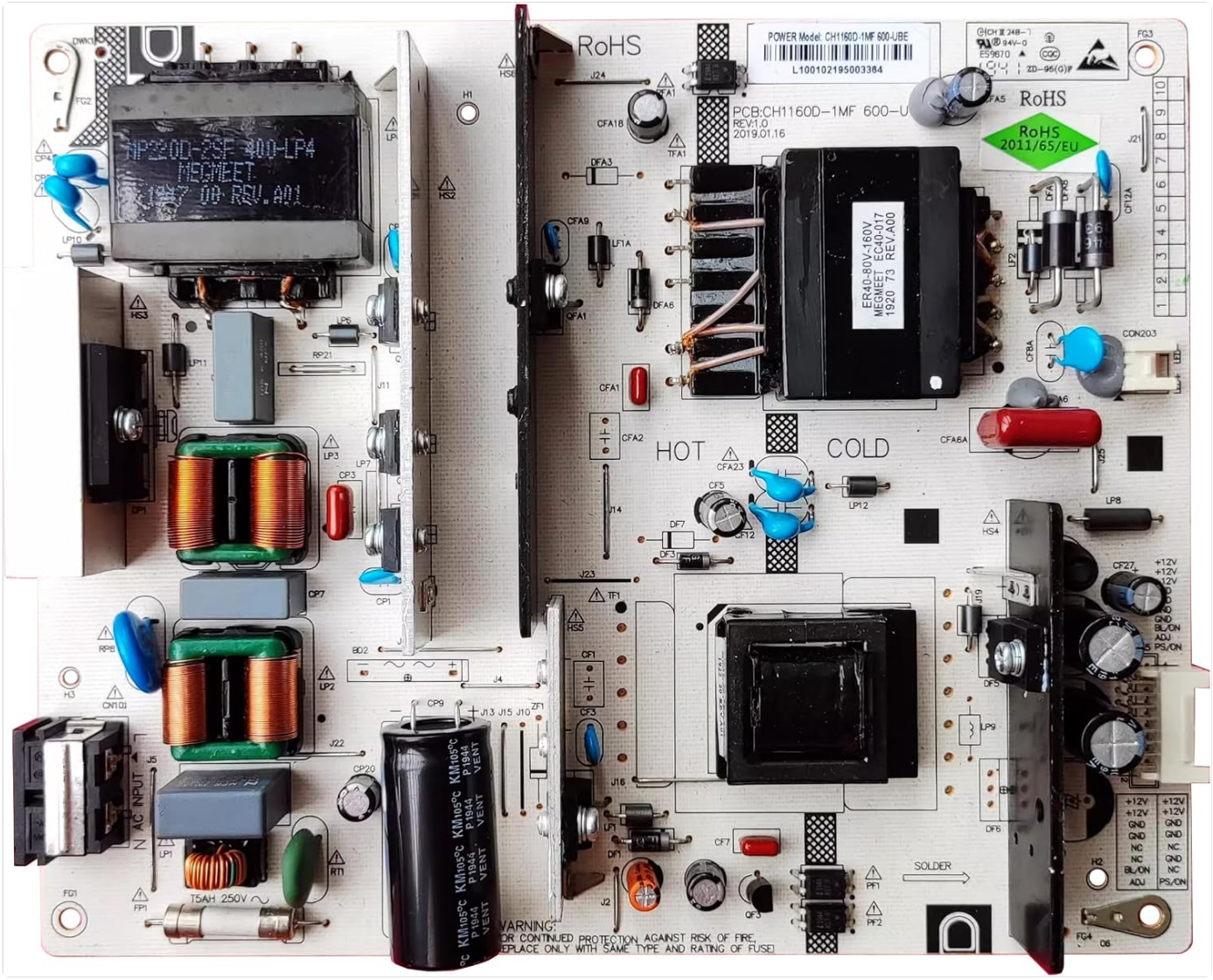


Figure 1: Overview of the CH1160D-1MF Power Supply Board.

This image displays the full power supply board, highlighting key sections such as the input AC, transformers, and output connectors. Visible markings include "RoHS" compliance, model numbers "CH1160D-1MF 600-U", and manufacturing date "2019.01.16".

Key Components and Markings:

- **Model Identification:** Look for markings like "CH1160D-1MF 600-U" and "600-UBE" on the PCB.
- **Transformer Markings:** Key transformers are labeled with specifications such as "HP2200-2SF 400-LP4" and "ER40-80V-160V".
- **Fuse:** A T5AH 250V~ fuse is located near the AC input.
- **Capacitors:** Various capacitors, including large electrolytic capacitors (e.g., KM105°C), are present.
- **Input/Output Connectors:** Clearly marked sections for AC input (N AC INPUT) and DC outputs (+12V, GND, BL/ON, ADJ, PS/ON).

Setup and Installation

Installation of this replacement part requires technical proficiency and should only be performed by qualified personnel. Incorrect installation can lead to product damage, electric shock, or fire.

Pre-Installation Checklist:

1. Ensure the television is completely disconnected from the main power supply.
2. Verify the compatibility of the replacement board (CH1160D-1MF) with your specific television model. Refer to the

original TV's service manual for part numbers.

3. Prepare a clean, static-free workspace. Use an anti-static wrist strap.
4. Gather necessary tools: screwdrivers, multimeter, plastic prying tools.

Installation Steps:

1. Carefully open the television casing, following the manufacturer's guidelines.
2. Locate the existing power supply board.
3. Disconnect all cables connected to the old power supply board, noting their positions and orientations. Take photos if necessary.
4. Unscrew and remove the old power supply board.
5. Position the new CH1160D-1MF board in the same location. Ensure all mounting holes align.
6. Secure the new board with the appropriate screws. Do not overtighten.
7. Reconnect all cables to their corresponding ports on the new board. Double-check all connections for secure fit and correct polarity.
8. Before closing the casing, perform a preliminary power-on test if safe to do so, ensuring no loose connections or immediate issues.
9. Carefully reassemble the television casing.

Operating Considerations

Once installed, the CH1160D-1MF power supply board operates automatically as part of the television's power management system. There are no user-adjustable settings on the board itself.

Normal Operation:

- The board provides stable DC voltages (+12V, etc.) to various television components, including the main board, backlight inverter, and audio circuits.
- It manages power states (standby, on) based on signals received from the television's main control board (PS/ON, BL/ON).

Power Output Connections:

The board features a multi-pin connector for DC power output. Typical pin assignments are:

Pin Name	Description
+12V	12 Volt DC output
GND	Ground
BL/ON	Backlight On/Off control signal
ADJ	Backlight Brightness Adjustment
PS/ON	Power Supply On/Off control signal
NC	No Connection

Note: Specific pin configurations may vary slightly. Always refer to the television's service manual for exact pinouts.

Maintenance

The CH1160D-1MF power supply board is designed for long-term reliability and generally requires minimal maintenance. However, periodic inspection can help identify potential issues early.

General Maintenance Tips:

- **Dust Removal:** Over time, dust can accumulate on electronic components, leading to overheating. If the television casing is opened for other repairs, gently clean the board with compressed air or a soft brush. Ensure power is disconnected.
- **Visual Inspection:** Periodically inspect the board for signs of damage, such as bulging capacitors, burnt components, or loose connections.
- **Ventilation:** Ensure the television's ventilation openings are not blocked to allow for proper heat dissipation from the power supply and other internal components.

Do not attempt to repair individual components on the board unless you are a certified electronics technician with experience in power supply repair. Component-level repair can be dangerous and may void any remaining warranty.

Troubleshooting

This section provides guidance for common issues that may indicate a problem with the power supply board. Always ensure the television is disconnected from power before performing any internal checks.

Common Symptoms of PSU Failure:

- **No Power:** The television does not turn on, and there are no indicator lights.
- **Intermittent Power:** The television turns on and off randomly, or struggles to power on.
- **No Backlight:** The television turns on and produces sound, but the screen remains dark. (Verify BL/ON signal and backlight inverter first).
- **Burning Smell or Visible Damage:** Any unusual odors, smoke, or visible signs of burnt components on the board.

Troubleshooting Steps (for qualified technicians):

1. **Check Fuse:** Visually inspect the T5AH 250V~ fuse near the AC input. If blown, replace it with an identical type and rating. A blown fuse often indicates a deeper problem, so further investigation is recommended.
2. **Inspect Capacitors:** Look for bulging or leaking electrolytic capacitors, especially the larger ones. These are common points of failure.
3. **Verify Output Voltages:** With the board connected and powered (*exercise extreme caution*), use a multimeter to check the DC voltages at the output connector (+12V, etc.). Compare readings to expected values.
4. **Check Control Signals:** Verify the PS/ON and BL/ON signals from the main board are present when the TV is commanded to turn on.

If these steps do not resolve the issue, or if you are not comfortable performing these checks, it is recommended to consult a professional television repair service or consider replacing the power supply board.

Specifications

The following specifications are based on the product information available for the CH1160D-1MF power supply board.

Feature	Detail
Model Name	CH1160D-1MF
Manufacturer	XGEDA

Feature	Detail
Compatible Devices	Television (specific models vary)
Input Voltage	Standard AC input (e.g., 100-240V AC, 50/60Hz) - *Refer to board markings for exact range.*
Output Voltages	+12V DC, and other regulated voltages as required by the TV.
Fuse Rating	T5AH 250V~ (Time-lag, 5 Ampere, 250 Volt)
Board Revision	REV:1.0 (as per board markings)
Manufacturing Date	2019.01.16 (as per board markings)

Warranty and Support

Due to the specialized nature of LCD products and replacement parts, this product typically does not support 7 days no reason for return or exchange. It is crucial to verify compatibility and diagnose the issue correctly before purchasing this part.
For technical support or inquiries regarding compatibility, please contact the seller or manufacturer directly. Provide your product model number (CH1160D-1MF) and any relevant details about your television model.
Note: Improper installation or handling by unqualified individuals may void any implied warranty.

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Example: How do I reset this device or fix this error?

Details

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