

WISI OV50A

WISI OV50A BASE UNIT Instruction Manual

Model: OV50A

1. INTRODUCTION

The WISI OV50A Base Unit is a universal, modular system designed for professional channel processing applications. It meets the requirements for high-quality signal processing in various environments, from cable TV headends to community antenna TV systems. This base unit, combined with compatible modules, can process both satellite and terrestrial broadcast programs, delivering them to your distribution system with excellent quality.

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your WISI OV50A Base Unit and its associated modules.

2. SAFETY INFORMATION

Please read and understand all safety instructions before installing or operating the device. Failure to follow these instructions may result in electric shock, fire, or damage to the equipment.

- **Power Supply:** Ensure the unit is connected to a grounded power outlet with the correct voltage (230 VAC / 50/60 Hz).
- **Ventilation:** Do not block ventilation openings. Ensure adequate airflow around the unit to prevent overheating.
- **Moisture:** Keep the unit away from water, rain, and excessive humidity. Do not operate in condensing environments.
- **Servicing:** Refer all servicing to qualified personnel. Do not attempt to open or repair the unit yourself.
- **Installation:** Install the unit in a stable environment, away from direct sunlight and heat sources.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- WISI OV50A Base Unit
- Power Cord

- Instruction Manual (this document)
- *Note: Individual modules (e.g., OV36, OV36A) are sold separately and are not included with the base unit.*

4. PRODUCT OVERVIEW

The WISI OV50A Base Unit serves as the foundation for a modular headend system. It features a high-output wideband amplifier and can accommodate up to 10 individual processing units (modules) for various signal types.





Figure 4.1: General view of the WISI OV50A Base Unit with a single module installed. This image shows the overall design and the slot for a processing module.

Each module, such as the OV36A or OV36, is designed for specific signal processing tasks, offering individual fine processor control and simple programming. The modular design allows for easy configuration and expansion of your headend system.



Figure 4.2: Close-up of the side label of a WISI TOPLINE OV36A Headend Modulator Stereo module. This label provides model information, frequency range (45-862 MHz), and serial numbers like [05316157](#) and 06290225, indicating manufacturing details.



Figure 4.3: Front panel of a WISI OV36 module. This view highlights the digital display, navigation buttons (up, down, left, right), and indicators for A/V, VHF, and UHF signals, allowing for local control and monitoring. The module also shows a serial number [316157](#).



Figure 4.4: Multiple WISI OV36 modules installed in a rack. This image demonstrates the modularity of the system, showing several processing units side-by-side within a larger setup. Serial numbers like [044836](#) and [06250183](#) are visible on the modules.

5. SETUP

5.1. Installation of the Base Unit

1. Choose a suitable location for the base unit, ensuring adequate ventilation and access to a power outlet.
2. Mount the base unit securely in a rack or on a flat surface.
3. Connect the power cord to the base unit and then to a grounded 230 VAC / 50/60 Hz power outlet. Do not power on yet.

5.2. Module Installation

1. Ensure the base unit is powered off and disconnected from the mains.
2. Carefully slide each processing module into an available slot on the base unit until it clicks into place.
3. Connect the necessary RF input cables (e.g., satellite, terrestrial antenna) to the respective inputs on each module.
4. Connect the RF output from the base unit to your distribution system. The base unit features 2 RF inputs with loop-through functionality and a test output.

5.3. Initial Power-Up

1. Once all modules are securely installed and RF connections are made, connect the base unit to the power supply.
2. Observe the LED display for 5 / 12 / 13.5 VDC to confirm proper power distribution to the modules.

6. OPERATING INSTRUCTIONS

6.1. Module Programming

Individual modules can be programmed using one of two methods:

- **Front Control Unit (OV 51S):** If equipped, use the front panel display and navigation buttons on the OV 51S module for direct programming of individual unit parameters.
- **Remote Control Interface (OV 52):** For centralized control, utilize the OV 52 remote control interface to program and manage all connected modules.

Refer to the specific module's manual for detailed programming steps, including setting output frequency (fully adjustable in FM/VHF/UHF range), TV standards (B/G, D/K, I, L, M, N), and adjacent channel operation settings via SAW filter and vestigial sideband modulation.

6.2. Output Level Adjustment

The base unit features an adjustable attenuator (0-10 dB) to fine-tune the overall output level. Adjust this as needed to match the requirements of your distribution network. The system is designed for high output levels, with typical output levels at 60 dB IMA3 of 121 dBμV and at 60 dB IMA2 of 115 dBμV.

7. MAINTENANCE

7.1. Cleaning

Periodically clean the exterior of the base unit and modules with a soft, dry cloth. Do not use liquid cleaners or aerosols, as they may damage the components.

7.2. Environmental Conditions

Ensure the operating environment maintains a temperature between -10°C and +52°C and a non-condensing humidity level of up to 95%. Avoid extreme temperature fluctuations.

8. TROUBLESHOOTING

If you encounter issues with your WISI OV50A Base Unit, refer to the following common problems and solutions:

- **No Power:**
 - Check if the power cord is securely connected to both the unit and the power outlet.
 - Verify that the power outlet is functional.
 - Inspect the power cord for any damage.
- **No Signal Output:**
 - Ensure all RF input and output cables are correctly and securely connected.
 - Verify that the individual modules are properly seated in their slots.
 - Check the programming of each module to ensure correct frequency and standard settings.
 - Confirm that the input signal source is active and strong enough.
- **Low Output Level:**
 - Adjust the attenuator setting on the base unit.
 - Check the input signal strength to the modules.
- **Module Malfunction:**
 - Remove and re-insert the module to ensure proper contact.
 - If the issue persists, try swapping the module with a known working one (if available) to isolate the problem.

If these steps do not resolve the issue, please contact customer support.

9. TECHNICAL SPECIFICATIONS

Feature	Specification
Model	OV50A Base Unit
Power Supply (AC)	230 VAC / 50/60 Hz
Output Power (DC)	124W DC
Operating Voltages (DC)	5 VDC/12 A, 12 VDC/7.0 A, 13.5 VDC/1.0 A
RF Inputs	2 (F-type connector), loop-through, output, TP -20 dB
Frequency Range	45-862 MHz
Gain	30 dB
Adjustable Attenuator	0-10 dB
Output Level (60 dB IMA3)	121 dBμV
Output Level (60 dB IMA2)	115 dBμV
Test Output	-20 dB

Feature	Specification
TV Standards Supported	B/G, D/K, I, L, M, N
Operating Temperature	-10°C to +52°C
Storage Temperature	-5°C to +66°C
Humidity	95% (non-condensing)
Dimensions (H x W x D)	70 x 40 x 200 mm
Weight	8.4 kg
Compatible Devices	Television, Satellite Receiver

10. WARRANTY INFORMATION

The WISI OV50A Base Unit comes with a warranty period of **30 days from the date of purchase**. This warranty covers manufacturing defects under normal use. Please retain your proof of purchase for any warranty claims. The warranty does not cover damages resulting from improper installation, misuse, unauthorized modifications, or natural disasters.

11. SUPPORT

For technical assistance, troubleshooting beyond the scope of this manual, or warranty inquiries, please contact your authorized WISI dealer or the point of purchase. You may also visit the official WISI website for additional resources and contact information. When contacting support, please have your product model (OV50A) and serial number ready.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

conversion attribution. [Privacy details](#).

Question

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

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question