

TELEVES 532103

TELEVES Avant X Basic Programmable Headend

Model: 532103

Brand: TELEVES

1. INTRODUCTION

The TELEVES Avant X Basic is a programmable multi-input headend designed for terrestrial TV installations, suitable for single or multi-dwelling units. It features 32 programmable digital filters across 4 VHF+UHF (DTT) inputs. The unit has 5 inputs, configurable for two distribution modes: FM-4xVHF/UHF or FM-DAB-3xUHF. It allows for precise adjustment of amplification and equalization for various RF inputs. Programming is simplified via the ASuite application (Android or Windows). The device includes automatic LTE filtering, detecting and cutting frequencies from channel 48 (LTE700). It is RED compliant.

2. SAFETY INFORMATION

- Read all instructions carefully before installation and operation.
- Do not expose the device to rain, moisture, or extreme temperatures.
- Ensure proper ventilation to prevent overheating.
- Only use the provided power supply or a compatible alternative specified by TELEVES.
- Disconnect power before making any connections or performing maintenance.
- Installation should be performed by qualified personnel to ensure safety and optimal performance.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- TELEVES Avant X Basic Programmable Headend Unit (Model 532103)
- Power Cable
- Instruction Manual (this document)
- Mounting Accessories (if applicable)

4. PRODUCT OVERVIEW

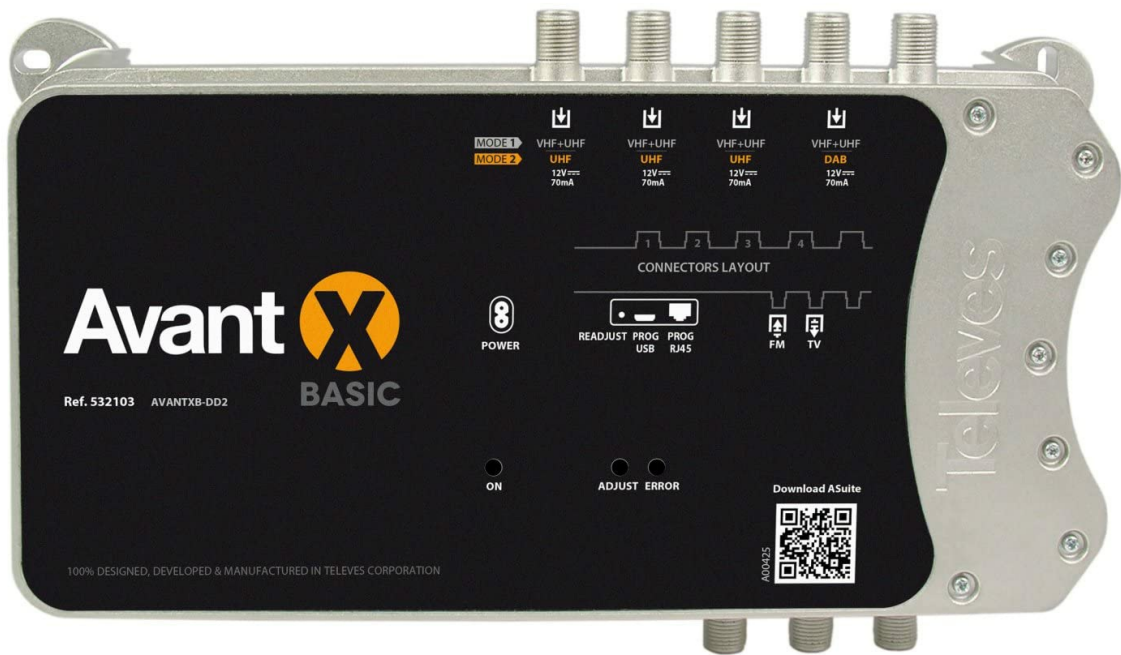


Figure 1: Front view of the TELEVES Avant X Basic Programmable Headend. This image displays the unit's casing, indicating the various input and output connectors for signal management.

Key Features:

- 5 Inputs: Configurable for FM-4xVHF/UHF or FM-DAB-3xUHF distribution modes.
- 32 Digital Filters: Programmable for precise signal selection and amplification.
- Automatic Gain Control (AGC): Ensures stable output levels.
- LTE Filtering: Automatic detection and suppression of LTE700 (Channel 48) interference.
- ASuite Compatibility: Easy programming via Android or Windows application.
- RED Compliant: Meets European regulatory standards.

Input/Output Ports:

- **Inputs:** 5 (e.g., 1x FM, 4x VHF/UHF or 1x FM, 1x DAB, 3x UHF)
- **Outputs:** 1 (Main RF Output)

- **Programming Port:** For connection with ASuite application.

5. SETUP AND INSTALLATION

5.1 Mounting the Unit

1. Choose a dry, well-ventilated location, away from direct sunlight and heat sources.
2. Mount the unit securely to a wall or suitable surface using appropriate fasteners. Ensure sufficient space around the unit for cable connections and heat dissipation.

5.2 Connecting Antennas and Cables

1. Connect your terrestrial antennas (FM, DAB, VHF, UHF) to the corresponding input ports on the Avant X Basic unit.
2. Connect the main RF output of the Avant X Basic to your distribution network or directly to the first amplifier/splitter in your system.
3. Ensure all F-connectors are securely tightened to prevent signal loss.

5.3 Power Connection

1. Connect the power cable to the unit's power input.
2. Plug the power cable into a suitable electrical outlet (220-230 Vac).
3. The unit will power on, and indicators will illuminate.

6. OPERATING INSTRUCTIONS

6.1 Initial Configuration and Programming

The TELEVES Avant X Basic is programmed using the ASuite application, available for Android devices and Windows computers.

1. Download and install the ASuite application from the official TELEVES website or your device's app store.
2. Connect your programming device (smartphone/tablet via Bluetooth or PC via USB) to the Avant X Basic unit.
3. Launch the ASuite application. The application will guide you through the process of scanning available terrestrial signals and configuring the digital filters.
4. **Filter Programming:** Program up to 32 digital filters to select and amplify specific channels from your VHF+UHF inputs.
5. **Input Configuration:** Select the desired distribution mode (FM-4xVHF/UHF or FM-DAB-3xUHF) based on your antenna setup.
6. **Gain and Equalization:** Adjust the amplification and equalization levels for each input to optimize signal quality and balance output levels. The unit features Automatic Gain Control (AGC) for stable output. Manual adjustments can be made within a specified range.
7. **LTE Filtering:** The unit automatically detects and filters LTE700 signals (Channel 48 and above) to prevent interference with DTT signals. No manual configuration is typically required for this feature.
8. Save your configuration to the device once programming is complete.

6.2 Monitoring Operation

After programming, the unit will continuously process and amplify the selected signals. You can use the ASuite application to monitor signal levels and device status if needed.

7. MAINTENANCE

- **Cleaning:** Disconnect power before cleaning. Use a soft, dry cloth to wipe the exterior of the unit. Do not use liquid cleaners or abrasive materials.
- **Ventilation:** Ensure that the ventilation openings are not blocked to prevent overheating.
- **Firmware Updates:** Periodically check the TELEVES website for firmware updates for the Avant X Basic unit and the ASuite application to ensure optimal performance and access to new features.

8. TROUBLESHOOTING

| Problem | Possible Cause | Solution |
|--|--|--|
| No signal or poor signal quality | <ul style="list-style-type: none"> ◦ Loose or faulty cable connections. ◦ Incorrect antenna alignment. ◦ Incorrect programming of filters or gain. ◦ Antenna power not supplied (if required). | <ul style="list-style-type: none"> ◦ Check all RF cable connections for tightness and integrity. ◦ Verify antenna direction and position. ◦ Re-program the unit using ASuite, ensuring correct filter settings and gain levels. ◦ Ensure 12V power is enabled for inputs requiring it (if configured). |
| Unit does not power on | <ul style="list-style-type: none"> ◦ Power cable not connected. ◦ No power from the outlet. ◦ Faulty power supply. | <ul style="list-style-type: none"> ◦ Ensure the power cable is securely connected to the unit and the outlet. ◦ Test the electrical outlet with another device. ◦ Contact TELEVES support if the power supply is suspected to be faulty. |
| Interference from mobile signals (LTE) | <ul style="list-style-type: none"> ◦ Strong LTE700 signals in the area. | <ul style="list-style-type: none"> ◦ The Avant X Basic has automatic LTE filtering. Ensure the unit's firmware is up to date. If issues persist, consult with a professional installer. |

9. TECHNICAL SPECIFICATIONS

| General | |
|------------------------------|---------------------------------|
| Brand | TELEVES |
| Model Number | 532103 |
| Number of Inputs | 5 |
| Number of Outputs | 1 |
| Programmable Digital Filters | Up to 32 |
| Channels per Filter | 1 to 4 |
| LTE Filtering | Automatic (LTE700 / Channel 48) |

| General | |
|-------------------------|---------------|
| Power Supply Voltage | 220 - 230 Vac |
| Max Current Consumption | 130 mA |
| Max Power Consumption | 14 W |
| Protection Index | IP20 |
| Operating Temperature | -5 to 45 °C |
| Item Weight | 800 g |

| Parameter | FM (87-108 MHz) | DAB (174-230 MHz) | UHF (470-694 MHz) |
|-------------------------------|---------------------|---------------------|---------------------|
| Gain | 29 dB | 75 dB | 75 dB |
| Gain Adjustment Range | 0 - 25 dB | AGC | AGC |
| Manual Adjustment (after AGC) | -5 to 5 dB | -5 to 5 dB | -3 to 3 dB |
| Slope Adjustment | N/A | N/A | 0 to 5 dB |
| Input Level | 76 - 101 dB μ V | 40 - 100 dB μ V | 40 - 100 dB μ V |
| Output Level (DIN45004B) | 122 dB μ V | 122 dB μ V | 122 dB μ V |
| Output Level (EN50083) | 126 dB μ V | 126 dB μ V | 126 dB μ V |
| Programmable Output Levels | 80 - 105 dB μ V | 87 - 112 dB μ V | 90 - 115 dB μ V |
| Noise Figure | 7 dB | 7 dB | 6 dB |
| Selectivity | > 20 dB | > 65 dB | > 65 dB |
| Input Power (12Vdc) | N/A | 12 Vdc | 12 Vdc |
| Max Input Current (12Vdc) | N/A | 70 mA | 70 mA |

10. WARRANTY AND SUPPORT

For warranty information, please refer to the documentation provided with your purchase or visit the official TELEVES website.

For technical support, product inquiries, or service, please contact TELEVES customer support through their official channels.

- **Official Website:** www.televes.com
- **Contact Information:** Refer to the "Contact Us" section on the TELEVES website for regional support details.