Technical Pro H502URBT

Technical Pro H502URBT Digital Hybrid Amplifier User Manual

Model: H502URBT

INTRODUCTION AND OVERVIEW

The Technical Pro H502URBT is a versatile digital hybrid amplifier designed to deliver powerful and clear audio performance. It integrates a preamp tuner, USB and SD card playback, Bluetooth connectivity, and FM radio, making it suitable for a wide range of audio applications from home entertainment to professional setups. This manual provides detailed instructions for setting up, operating, and maintaining your amplifier to ensure optimal performance and longevity.

Figure 1: Front view of the H502URBT Amplifier.

TECHNICAL PRO H3502URBT AMPLIFIER

FRONT-PANEL

BACK - PANEL

Figure 2: Rear view of the H502URBT Amplifier, showing connections.

KEY FEATURES

The H502URBT amplifier is equipped with a comprehensive set of features to enhance your audio experience:

- **High Power Output:** 3500 watts peak power for robust sound delivery.

- **Multiple Audio Inputs:** RCA (2 audio sources), USB, SD Card, MP3 (3.5mm) for diverse connectivity.

- **Versatile Outputs:** Banana binding post (4 speakers), push button (surround sound speakers), RCA (record line, preamp, 2 mono to subwoofer), Headphone (3.5mm).

- **Digital Media Playback:** Plays .mp3, .wav, .wma files from USB drives and SD Cards (max 32GB).

- **iPod/iPhone Compatibility:** USB input allows direct connection for iPods.

- **Recording Function:** Records .wav files onto USB Flash Drive or SD Card from Tuner & RCA inputs (128 kbps / 44.1 KHz sampling rate).

- **Bluetooth Connectivity:** Features Bluetooth v2.0 with EDR (2.4 GHz) for wireless connection to A2DP stereo Bluetooth devices, with a range of 30 feet.

- **Integrated Tuner:** AM/FM digital tuner.

- **Microphone Inputs:** Dual 1/4" mic inputs with independent volume, echo, bass, and treble controls.

- **Audio Controls:** Bass, treble, and balance controls, separate gain control for preamp and subwoofer outputs.
- **Display:** Digital FL readout with spectrum display.
- **Convenience:** Built-in Speaker selector, cooling speed fan, removable rack-mount brackets, wireless remote included.

FEATURES OF TECHNICAL PRO H3502URBT

Bluetooth compatibility allows for wireless connection to any A2DP stereo Bluetooth device

Plays .mp3, .wav, .wma files from USB drives and SD Cards iPod compatible
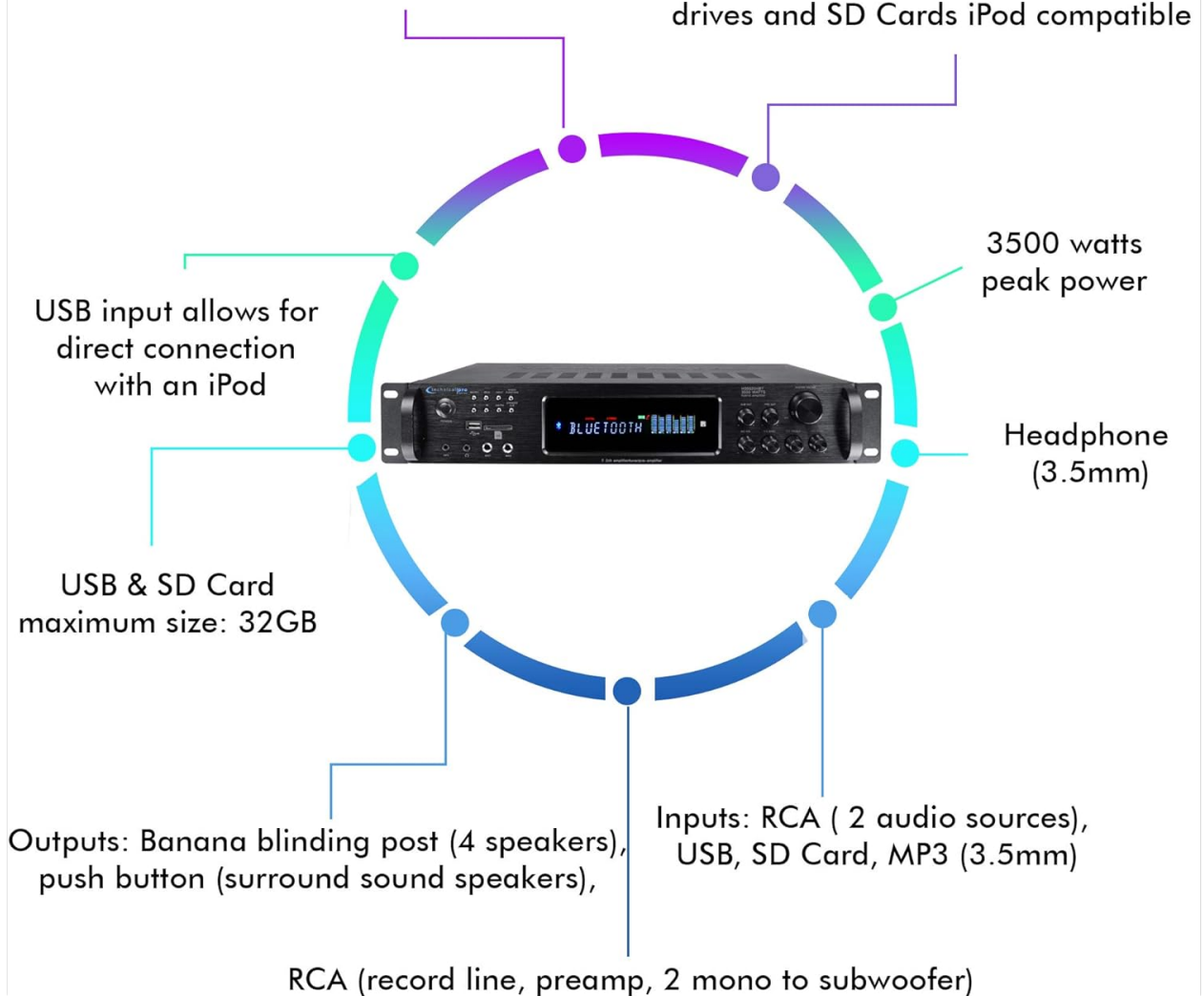
3500 watts peak power

USB input allows for direct connection with an iPod

Headphone (3.5mm)

USB & SD Card maximum size: 32GB

Outputs: Banana blinding post (4 speakers), push button (surround sound speakers),

Inputs: RCA (2 audio sources), USB, SD Card, MP3 (3.5mm)

RCA (record line, preamp, 2 mono to subwoofer)

Figure 3: Key features and connectivity options.

PHYSICAL OVERVIEW

Front Panel Controls and Indicators

Figure 4: Front Panel Layout.

- **Power Button:** Turns the unit on or off.

- **Input Selector:** Cycles through RCA, USB, SD, MP3, Bluetooth, and FM inputs.

- **USB/SD Card Slots:** For playing media files from USB drives and SD cards.

- **MP3 Input (3.5mm):** Connect external audio devices.

- **Headphone Output (3.5mm):** For private listening.

- **Microphone Inputs (1/4"):** Connect up to two microphones.

- **Mic Volume/Echo/Bass/Treble Controls:** Adjust microphone audio.

- **Master Volume:** Controls the overall output volume.

- **Bass/Treble/Balance Controls:** Adjust audio tone and channel balance.

- **Digital FL Readout:** Displays current status, track information, and spectrum analysis.

Rear Panel Connections

TECHNICAL PRO H3502URBT AMPLIFIER

FRONT-PANEL

BACK - PANEL

Figure 5: Rear Panel Connections.

- **RCA Audio Inputs (L/R):** Connect external audio sources like CD players, DVD players, or other audio devices.

- **Speaker Outputs (Banana Binding Post):** Connect main speakers.

- **Surround Sound Speaker Outputs (Push Button):** Connect surround sound speakers.

- **RCA Record Line Output:** For connecting to a recording device.

- **RCA Preamp Output:** For connecting to an external power amplifier.

- **RCA Subwoofer Outputs (Mono):** Connect to powered subwoofers.

- **FM Antenna Input:** Connect the included FM antenna for radio reception.

- **Power Input:** Connect the AC power cord.

SETUP

1. Connecting Speakers

1. Ensure the amplifier is turned off and unplugged from the power outlet.

2. Connect your main speakers to the "SPEAKER OUTPUT" banana binding posts on the rear panel. Ensure correct polarity (red to red, black to black).

3. If using surround sound speakers, connect them to the "SURROUND OUTPUT" push button terminals, observing polarity.

4. For powered subwoofers, connect them to the "SUB OUT" RCA outputs.

2. Connecting Audio Sources

1. For external audio devices (e.g., CD player, TV), connect their RCA audio outputs to the "RCA INPUT" jacks on the rear panel.

2. For portable devices, use the 3.5mm MP3 input on the front panel.

3. For USB drives or SD cards, insert them into the respective slots on the front panel.

4. Connect the FM antenna to the "FM ANTENNA" terminal for radio reception.

3. Power Connection

1. Once all audio and speaker connections are made, plug the amplifier's power cord into a standard AC power outlet.

TECHNICAL PRO H3502URBT DIGITAL HYBRID AMPLIFIER WITH USB / SD CARD

Figure 6: Example of a typical home audio setup.

OPERATING INSTRUCTIONS

1. Power On/Off

Press the **POWER** button on the front panel or the remote control to turn the amplifier on or off. The digital display will illuminate when the unit is powered on.

2. Input Selection

Press the **INPUT** button on the front panel or the remote control to cycle through the available audio sources: RCA, USB, SD, MP3, Bluetooth, and FM. The selected input will be displayed on the digital readout.

3. Bluetooth Operation

1. Select the **Bluetooth** input using the Input Selector.
2. On your Bluetooth-enabled device (e.g., smartphone, tablet), enable Bluetooth and search for available devices.
3. Select "Technical Pro H502URBT" from the list of devices to pair.
4. Once paired, you can stream audio wirelessly from your device to the amplifier.

4. USB/SD Playback

1. Insert a USB flash drive or SD card (up to 32GB) containing .mp3, .wav, or .wma files into the corresponding slot on the front panel.
2. Select the **USB** or **SD** input.
3. The amplifier will automatically begin playing the media. Use the playback controls (Play/Pause, Next/Previous Track) on the front panel or remote. Track title, number, and elapsed time will be displayed.

5. Microphone Usage

1. Plug 1/4" microphones into the **MIC1** or **MIC2** inputs on the front panel.
2. Adjust the **MIC VOL**, **MIC ECHO**, **MIC BASS**, and **MIC TREBLE** knobs to achieve the desired sound.

6. Recording Function

The amplifier can record audio from the Tuner or RCA inputs directly to a connected USB flash drive or SD card as .wav files. To record, ensure a USB drive or SD card is inserted, select the desired input source, and initiate recording via the appropriate control (refer to the full manual for specific recording button location if not explicitly labeled).

7. Tone and Volume Controls

Use the **MASTER VOLUME** knob to adjust the overall sound level. The **BASS**, **TREBLE**, and **BALANCE** knobs allow you to fine-tune the audio output to your preference.

MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your amplifier.

- **Cleaning:** Disconnect the power before cleaning. Use a soft, dry cloth to wipe the exterior of the unit. Do not use liquid cleaners or aerosol sprays, as they may damage the finish or internal components.
- **Ventilation:** Ensure that the ventilation openings on the amplifier are not blocked. Adequate airflow is crucial to prevent overheating.
- **Storage:** If storing the unit for an extended period, keep it in a cool, dry place away from direct sunlight and extreme temperatures.

TROUBLESHOOTING

If you encounter issues with your amplifier, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No power	Power cord not securely connected; Power outlet not active; Unit fuse blown.	Check power cord connection; Test outlet with another device; Consult a qualified technician for fuse replacement.
No sound output	Incorrect input selected; Speaker wires loose or incorrectly connected; Volume too low; Mute function active.	Select correct input; Check all speaker connections and polarity; Increase Master Volume; Ensure unit is not muted.
Bluetooth not connecting	Amplifier not in Bluetooth mode; Device too far; Device already paired with another unit.	Ensure amplifier is on Bluetooth input; Move device closer; Disconnect device from other Bluetooth connections and try again.
USB/SD playback issues	Unsupported file format; USB/SD card corrupted; Card size exceeds 32GB.	Ensure files are .mp3, .wav, or .wma; Try a different USB/SD card; Use a card within the 32GB limit.
Distorted sound	Volume too high; Speaker impedance mismatch; Poor cable connection.	Reduce volume; Ensure speakers match amplifier impedance; Check all audio cable connections.

SPECIFICATIONS

Detailed technical specifications for the Technical Pro H502URBT Digital Hybrid Amplifier:

Feature	Detail
Peak Power	3500 Watts
Product Dimensions	19.1 x 14 x 18 inches
Item Weight	14.9 pounds
Model Number	H502URBT
Connectivity Technology	RCA, Bluetooth, USB

Feature	Detail
Controller Type	Android (compatible)
Compatible Devices	Speaker, iPod, iPhone
Audio Output Mode	Mono (for subwoofer), Stereo
Surround Sound Channel Configuration	7.2 Channel up conversion
USB & SD Card Max Size	32GB
Recording Format	.wav (128 kbps / 44.1 KHz)
Bluetooth Version	v2.0 with EDR
Bluetooth Range	30 Feet
Color	Black

DIMENSIONS

Figure 7: Product Dimensions.

WARRANTY AND SUPPORT

Technical Pro products are manufactured with high standards and undergo rigorous quality control. This product is covered by a manufacturer's warranty against defects in materials and workmanship. For specific warranty terms and conditions, please refer to the warranty card included with your purchase or visit the official Technical Pro website. For technical support, troubleshooting assistance, or service inquiries, please contact Technical Pro customer service. Contact information can typically be found on the Technical Pro website or in your product packaging.