# **User Manual**

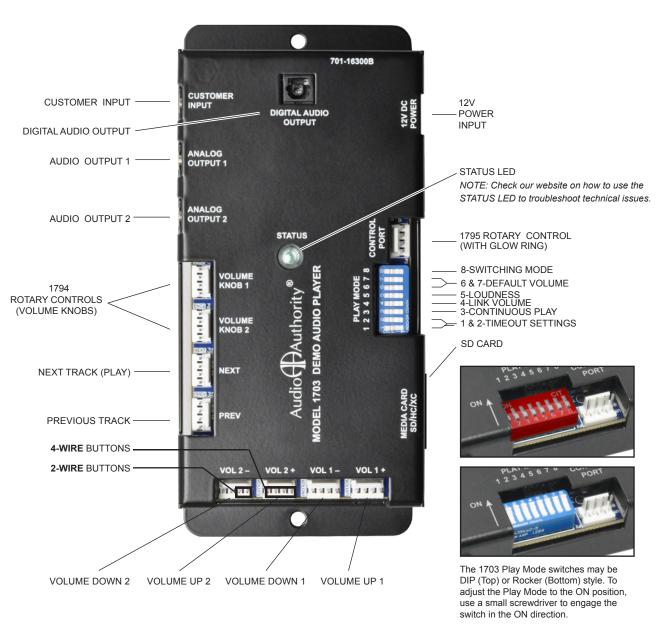
# Model 1703 Demonstration Audio Player





# **Model 1703 Demonstration Audio Player**

The 1703 plays MP3, FLAC, OGG, and WAV files for high fidelity audio demonstrations of headphones, speaker docks, and sound bars. It is ideal for use with one or more Audio Authority® audio distribution amplifiers. A Toslink® digital output with variable volume is available and two analog audio outputs may be adjusted individually or together. Push buttons and/or rotary control knobs allow track selection and volume adjustment at the player. The special Visual Volume™ knob provides visual feedback with its glow ring (Model 1795, purchased seperately).





Push-buttons (4-wire or 2-wire) may be used to adjust volume and select tracks. They are available in several styles and colors; pictured above is a stainless steel button illuminated with blue LED ring.



The 1794 Rotary Control knob rotates to control volume level and advances the track selection with a press. Available with black or silver knob.



The Visual Volume™ Model 1795 Rotary Control gives visual feedback with its glow ring, its brightness indicating changes in volume; a slow pulse highlights the knob during attract mode.

# **Button and Rotary Control Functions**

Volume may be controlled using a rotary control knob or up/down push-buttons. Digital Output and Analog Output 1 volume levels are always synchronized. To control volume on Output 1 and 2 individually, use two 1794 rotary controls or two sets of push buttons. To control all outputs with one control, any method may be used including Model 1795 (see Linked Volume).

Note: The Control Port is reserved for Model 1795; do not connect other controls.

- Volume Up and Down 1: Connect button to increase or decrease Output 1 volume.
- Volume Up and Down 2: Connect button to increase or decrease Output 2 volume.
- Next Track: Play the next track on the card; if no demo is playing, the first track starts.
- Previous Track: Play the previous track on the card; if no demo is playing, the first track starts.
- Rotary Control: Connect volume knob or knobs (PN 1794) to control player output (see *Linked Volume*).
   Push to play next track, and turn to adjust volume.
- Rotary Control with Glow Ring (PN 1795): Connect a 1795 knob to the Control Port. Push to play next track, and turn to adjust volume. A 1795 control may be used to control Analog Outputs 1 and 2 (see *Linked Volume*).

Note: In "Attract Mode" the 1795 glow ring pulses until a demo is activated (unless in continous play mode).

## Play Modes

Choose the desired features and select using the Play Mode Switches as shown. If a switch is shown with a dash, it can be ON or OFF while using the feature.

**TIMEOUT:** When Switch 1 and/or 2 is on, the demo ends after a period of inactivity. The timeout interval is the amount of time after the last button press or knob turn until the demo ends and attract mode begins. Adjust the length of the timeout interval using the settings below. The demo never stops playing when Switch 3 is ON. See also *Continuous Play*.

#### TIMEOUT ON = 1 MINUTE SWITCH SETTINGS:

1	2	3	4	5	6	7	8
OFF	ON	-	-	-	-	-	-

#### TIMEOUT ON = 2 MINUTES SWITCH SETTINGS:

1	2	3	4	5	6	7	8
ON	OFF	-	-	-	-	-	-

#### TIMEOUT ON = 3 MINUTES SWITCH SETTINGS:

1	2	3	4	5	6	7	8
ON	ON	-	-	-	-	-	-

#### NO TIMEOUT (OFF) SWITCH SETTINGS:

1	2	3	4	5	6	7	8
OFF	OFF	-	-	-	-	-	-

**CONTINUOUS PLAY:** When (3) Continuous Play is on, the player plays and repeats all tracks on the SD card, nonstop, at the volume last set. Default Volume and Timeout can be used with this mode, however when the demo times out the playback continues, but at the volume level selected on the Default Volume DIP switches.

#### **CONTINUOUS PLAY** SWITCH SETTINGS:

1	2	3	4	5	6	7	8
-	-	ON	-	-	-	-	-

**VOLUME RESET:** When Continuous Play and Timeout are on, the player returns to the chosen volume after a timeout, then continues to play at the default volume. See *Default Volume* below.

**LINKED VOLUME:** When Switch (4) is off (default), each output has separate volume controls. Turn on Linked Volume (4) to use any of the volume control interfaces to adjust both analog, and digital output, simultaneously.

#### LINKED VOLUME SWITCH SETTINGS:

1	2	3	4	5	6	7	8
-	-	-	ON	-	-	-	-

**LOUDNESS:** A DSP preset boosts bass frequency at 300Hz by +5dB and the treble frequency at 7 kHz by +5dB. Use to enhance audio when played at low volumes. Loudness (5) may be used with any other play modes.

#### LOUDNESS SWITCH SETTINGS:

1	2	3	4	5	6	7	8
-	-	-	-	ON	-	-	-

**DEFAULT VOLUME:** Switch 6 and 7 selects the level of Default Volume at initial power up and between demonstrations when Timeout is active.

#### QUIET -30dB VOLUME RESET SWITCH SETTINGS:

1	2	3	4	5	6	7	8
-	-	-	-	-	OFF	OFF	-

#### MEDIUM -20dB VOLUME RESET SWITCH SETTINGS:

1	2	3	4	5	6	7	8
-	-	-	-	-	OFF	ON	-

#### LOUD -10dB VOLUME RESET SWITCH SETTINGS:

1	2	3	4	5	6	7	8
-	-	-	-	-	ON	OFF	-

### FULL VOLUME 0dB VOLUME RESET SWITCH SETTINGS:

1	2	3	4	5	6	7	8
-	-	-	-	-	ON	ON	-

**FIXED VOLUME:** Turn 6 and 7 on to set the volume at the highest output so that it can be attenuated by an external device such as Model 1715 or 1725A distribution amplifiers.

**SWITCHING MODE:** Turn 8 on to demonstrate two products separately. Adjusting Volume 1 or 2 up/down via knobs or push-buttons selects that output.

# SWITCHING MODE SWITCH SETTINGS:

1	2	3	4	5	6	7	8
-	-	-	-	-	-	-	ON

# **Customer Input**

The 1703 accepts input from any device, such as an MP3 player, with a 3.5mm analog output. The 1703 automatically detects the device and overrides the internal player.

# **Digital Audio Output**

The 1703 digital audio output connects to any digital device that can accept PCM two-channel audio via an optical cable, such as the Audio Authority® 1725A Soundbar Demonstrator. The digital audio volume follows the settings of Analog Output 1.

#### **About SD Cards**

The 1703 is compatible with SD, SDHC or SDXC (2GB, 16GB, 32GB and 64GB) cards. Format in FAT-32 or exFAT (most SD cards are pre-formatted FAT-16) see instructions below. Do not put music in directories or folders.

#### Windows®:

- 1. Insert SD card into PC card slot.
- 2. Click on Start-> (My) Computer.
- 3. Right Click on the drive letter for the SD card.
- 4. Select Format from the drop down menu.
- 5. Select FAT-32 or exFAT as the File System from the drop down list.
- 6. Check the Quick Format box.
- 7. Click on Start.
- 8. Click Yes in the dialog box.

# Macintosh®:

- 1. Insert an SD card into the card slot.
- 2. Start Disk Utility.
- 3. Select the SD card in the left hand panel.
- 4. Choose Erase at the top right panel.
- 5. Select exFAT or MSDOS FAT from the drop down.
  - 6. Click the Erase button below the drop down.

# MP3, FLAC and WAV Audio File Information and Content Creation

To convert raw audio files use these tested encoders: FLAC: https://xiph.org/flac/, MP3: http://lame.sourceforge.net/, OGG: https://www.xiph.org/ogg/, WAV: Microsoft WAV (PCM + IMA ADPCM).

- · Audio files must be placed in the root directory of a compatible and properly formatted SD card.
- File name maximum length is 32 characters.
- File extensions must be .wav, .flac, .ogg, or .mp3.
- MP3 files may be variable or constant bit rate (up to 320 kbps / 48 kHz).
- WAV files must be PCM 16 bit, sample rates from 44 to 48kHz.
- OGG files can be up to 32 bit, 48 kHz, 10 quality.
- FLAC files can be 16 bit at 44 or 48 kHz, or 24 bit at 44 kHz.

Note: The 1703 does not play multi-channel audio files such as 5.1 or 7.1 audio (e.g. DTS® or Dolby Digital®).

# Installation

- Read these instructions and set the Play Mode switches for the desired demo behavior (see page 3).
- · Attach the player to a flat surface with the screws provided.
- Load audio files onto a compatible and properly formatted SD card (see above). Note: audio files may be MP3, FLAC, OGG or WAV files with any filename ending with ".mp3", ".flac", ".ogg", or ".wav".
- If play order is important, copy each track to the card one at a time.
- Connect any push-buttons desired for volume adjustment or track selection. Push buttons can be four-wire or twowire, and can be illuminated (2-5 volt LED).
- Connect 4-wire rotary controls (Audio Authority part numbers 1794 and 1795) for volume control and next track if desired.
- Connect power supply to AC power, then to the 1703 power port.
- For initial testing, connect audio output to headphones or other known audio device and test player for functionality and timeout settings.
- Connect audio output(s) to an amplifier, headphone amplifier or switching system if desired.
- · For troubleshooting tips check our website: audioauthority.com/product\_details/1703.



