Technovision TM212

Quick Reference Guide

Revision 2021

F/W 1.1

www.technovision.com

Audio Output
6W per channel with 4 Ohm load and 12V power supply

Supported File Types
MP3 (MPEG-1 LEVEL 3 up to 44.1KHz, ISO 11172-3 compliant)

Trigger Input
12 inputs for push buttons, motion sensors, or 3Vdc to 24Vdc logic

Max. Number of Sound Files
12 in direct or 12x99 in sequential mode

Flash Card Type
Up to 2GB for SD formatted FAT/FAT16
Up to 32GB for SDHC formatted with FAT32

Supply Voltage
10 ~ 15 VDC regulated

Typical Standby Current
30 mA (amp disconnected) or 100 mA (amp connected)

Physical Dimensions (including mounting wings) (W x D x H)
128mm x 90mm x 35mm

Connectors

SD Card Slot on the side
Both SD (FAT16) and SDHC (FAT32) cards are supported. Files on the flash card should be properly numbered (see Numbering Files section). Be sure to turn the unit off before Inserting the card (face up). To remove the card, push it again.

Connectors on the front

Button Inputs
Each Row has 6 button inputs (T1 to T6 and T7 to T12) and a ground.

RS (Reset)
Grounding this terminal (minimum of 100ms) will reset the unit.

BY (Busy Output)
This open collector output from a transistor is activated during audio playback. Maximum load is 100 mA. This output can be used to turn on an external relay that further controls a device such as a motor or a light.

GND is the GROUND from the power supply

V+ is the DC Power Input (9 to 15 VDC)
Be sure the supply voltage is within the specifications or the unit may be damaged.

Line Out Jack (TIP = LEFT CHANNEL)
The output (level set by volume knob) from this 3.5mm stereo phone jack can be used to feed an external power amplifier.

BALANCE
The knob controls the balance between the two channels.

VOLUME
Turn the knob clockwise to increase the output level. It affects both the speaker output AND the LINE OUT.

Speaker Outputs
The speaker outputs are single ended. Load impedance is 4 to 8 Ohms.

Numbering Files on the SDHC card

In direct mode, sound files must be numbered consecutively starting from 001 for button 1, 002 for T2, all the way up to 00C for button 12. The 3-digit file number must be added at the beginning of the filename, e.g. "**001**_Anyname.mp3" or "**00B**_file11.mp3".
In sequential mode, sound files are played according to the numbering sequence. The first trigger of button 1 plays file 101, the second trigger plays file 102 all the way up to 199. For the rest of the buttons, the trigger for button # plays file #01…up to #99. When the next file number is missing, the sequence restarts from 001.

Background Music
If there are files called "M01.mp3"..."M99.mp3" on the flash card, the player will automatically loop these file but it can be interrupted by a trigger. After the trigger selected file is played. the TM212 will resume with the next background file to play.

System Configuration (MODE.TXT)

The system can be configured for different modes of operation by adding a simple text file named MODE.TXT on the flash card. Put only **UPPERCASE** letters in the file (as described below) and save the file as a "text document". If there is no MODE.TXT on the flash card, the system will operate in the default, DNC mode.

First Configuration Letter (D,S,R)
"D" = Direct mode. Single Priority with T1 being the highest.
Trigger 1 always plays file 001.mp3, TRIG# always plays 00#.mp3
"S" = Sequential mode
Trigger will play 101..199 for trigger 1, #01..#99 for trigger #
"R"=Round Robin
Similar to Direct except if multiple triggers are active, it will handle them one after the other.

Second Configuration Letter (H, I or N)
"H" = Holdable
The playback only plays when a trigger is provided.
"I" = Interruptible
The playback can be interrupted by a new trigger.
"N" = Non-interruptible
The playback cannot be interrupted by a new trigger.

Third Configuration Letter (O, C, M or B)
"O" = Open.
A constant trigger is provided when the trigger is HIGH (open).
"C" = Closed.
A constant trigger is provided when the trigger is LOW (grounded).
"M" = Make.
A single trigger is provided when trigger goes HIGH to LOW
"B" = Break.
A single trigger is provided when the trigger goes LOW to HIGH.

Fourth Configuration Letter (R mode)
By placing a R as the fourth character, the left channel output will not be inverted. Normally the left channel is inverted to create a more powerful output when using a **MONO** file and a **SINGLE** speaker is attached to the LEFT+ and RIGHT+ speaker outputs.

Additional Notes:

If you need to loop multiple files
Name the sound file(s) **001.mp3, 002.mp3**…**099.mp3** and put the text "**SNO**" into the MODE.TXT file.