10-Ch MP3 Audio / Relay / LED System

- MP3 Playback Controller and VM Music 2 Module
- Switch Board Connection Ribbon Cable
- MP3-Ch1-Ch10 Momentary Push Button X-(10)
- USB Drive (Audio Files)
- Push Button Connection Board X-(10)
- Audio Jack Cable
- Hook-up Wire
- Wall Power Supplies (9VDC, 24VDC)
- Relay -1 Connection Ribbon Cable
- MP3 Playback Controller Remote Switch Board
- 50W Audio Amp Board
- Relay -2 Connection Ribbon Cable
- Speaker Wire
- Speaker Wire
- Speaker Wire
- Speaker -1
- Speaker -2
- Audio Wire Connection Board
- Power Switch Relay Boards
- Remote Relay Board-1
- Remote Relay Board-2
- Power Distribution Adapter 2-Way

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10-Ch MP3 Audio / Relay / LED System - OVERVIEW SETUP

- **VMusic2 Module**
- **USB Drive**
- **Audio Jack Cable**
- **Speaker Wire**
- **4-8 Ohm Speaker**
- **Speaker No-1**
- **Speaker No-2**
- **MP3 Playback Controller**
- **Switch Input Board**
- **MP3 Audio Files**
  file000.mp3
  file001.mp3
  file002.mp3
  file003.mp3
  file004.mp3
  file005.mp3
  file006.mp3
  file007.mp3
  file008.mp3
  file009.mp3

- **50-W Audio Amp**
- **Connection Ribbon Cables**
- **Variable Push Button Switches**
- **Output Power Relay-1 Board**
- **Output Power Relay-2 Board**
- **LED Light Board**
  LED-1
  LED-2
  LED-3
  LED-4
  LED-5
  LED-6
  LED-7
  LED-8
  LED-9
  LED-10

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**Push Button Setup**

- **Ribbon Connector to Main Sound Board Controller**
- **Ribbon Connector to Remote Switch Board**
- **Cable Connector Orientation Notch**
- **Audio Playing LED**
- **Main Board Power LED Status**
- **MP3 Switch Board**
- **Switch No.1**
- **Switch 1 Connection Wires**
- **Switch PCB Board**
- **Wire Tie across wires**

**NOTE:** Disengage Switch to Install Pushbutton into Cabinet / Panel

---

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10-Ch MP3 Audio / Relay Controller

Push Button Setup

MP3 Control Board

MP3 Switch Board

Ribbon Cable to MP3 Main Sound Board Controller

Ribbon Cable to Remote Switch Board and MP3 Control Board

Switch No.5

Switch PCB Board

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10-Ch MP3 Audio / Relay Controller

**Relay Setup**

**LED Light**

MP3-Player
Ribbon Connector to Main Sound Board Controller
(Relay Connection 1-5 or 6-10)

MP3-Player Relay Board - 1

LED Light Setup to MP3 Playback Board

LED Light Board

LED PCB Front Side

LED PCB Back Side

Red Wire (+)

Black Wire (-)

Wire Tie across wires

MP3-Player

Power Source

Switched Power Source for Devices Connected to Relays (9 VDC @ 2Amp)

Wall Power / Battery Supply

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10-Ch MP3 Audio / Relay Controller

Wall Power / Battery
Supply
Switched Power Source for Devices Connected to Relay Board 1 and Board 2
(9 VDC @ 2Amp)

MP3-Player Relay Board - 1
Ribbon Connector to MP3 Main Sound Board Controller
(Relay Connection 1-5)
Relay Connection 1-5

MP3-Player Relay Board - 2
Ribbon Connector to MP3 Main Sound Board Controller
(Relay Connection 6-10)
Relay Connection 6-10

Relay 1
LED Light Board -1
LED Light Board -6

Relay 5
LED Light Board -5
LED Light Board -10

Power Input to RELAY BOARD 1
Power Input to RELAY BOARD 2
Power Distribution Cable (2-Boards)

Ribbon Connector to MP3 Main Sound Board Controller
(Relay Connection 1-5)
(Relay Connection 6-10)

Instruction
www.BPEsolutions.com

Pointing the Way to Solutions!
10-Ch MP3 Audio / AMP -50 Setup

Power Input to Amplifier Board

Wall Power / Battery Supply

Power Supply (24 VDC @ 2.0 Amp)

Audio Amplifier Board

Audio Cable

Volume Control LEFT

Volume Control RIGHT

MP3 Playback Controller

Audio Cables

LEFT Speaker

RIGHT Speaker

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Volume Controls: A pair of small trimpots on the Amp-50 are used to set the audio output level. You can adjust these pots using a small ‘trimmer’ screwdriver. These trimpots are smaller than you. Do not use a big screwdriver on them. Do not apply too much force. They will break!

Line Level Inputs: Two RCA line level inputs are available on the Amp. A line level audio signal from an audio MP3 player, pre-amplified microphone, CD player, video projector, or any other line-level audio source can be plugged into these two RCA jacks. Two trimpots can be used to adjust the levels of the mixer inputs.
10-Ch MP3 Audio / AMP-50 Setup

- Cut hole, Mount Speaker
- Speaker Wire Connection
- Speaker Wire Connection
- Speaker Wire Connection
- Speaker Wire Connection
- LEFT Speaker
- RIGHT Speaker

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This unique advanced MP3 controller system is designed to control the playback of 1 to 10 MP3 audio files that have been recorded by the user on a flash USB memory storage drive. The audio files can be selected individually by activating manual 1-10 remote push button switches or by the activation of dry closure contacts like relay outputs, sensors attached to the Switch Interface Board. The audio files can also be stepped through sequentially or selected randomly by a single remote push button switch or contact closure from a remote relay (Relay Outputs) on the Remote Trigger Connector located on the Switch Board or on the Main Controller Board test button.

Optional Relay Setup: When a audio file has been triggered for playback, an associated channel solid-state relay on the optional remote attached relay board will be activated ON/OFF at the same time. These relays can be used to switch ON/OFF other devices while audio is playing, like lighting, special effects boards, pneumatics, or activate other controller boards for as long as the audio file is playing. The controller will wait until the sound file has finished playing to turn OFF the solid-state relay channel and before it can be activated again to prevent broken playback of audio tracks and false triggering of the relay boards.

There are 2 different types of optional remote connected relay boards available that connect by cable to the controller board. One optional remote connected board has five - 2 Amp solid state relays acting as ON and OFF switches when triggered and the other optional connected board has five - 2 Amp solid state relays set up to pass VDC through each SS relay to connected devices when activated ON and OFF. All relays have an indicator LED and a test button associated with them to show when the relay is ON. The Switch Interface Board and the 2 remote relay boards are attached to the Main Board via flexible ribbon cables.

Set Up: (with / without optional relays)
Attach 1 or 2 of the optional Solid-State Relay Boards and the Switch Board to the Main Control Board via the ribbon cables (see drawings). The optional 1 or 2 Solid-State relay boards can be attached to either of the relay header connectors on the Main Board. (Note: connector can only go on one way, check orientation to make sure connected correctly, notch and block match up on headers of ribbon cables).

Attach remote switch 1-10 (see drawings) sensor or connect dry contact relays to the associated switch terminal blocks 1-10 on the Switch Board. Connect the Switch Board to the switch header connector on the Main controller board (Note: again, check orientation to make sure cable is connected correctly).

Connect the MP3 Module to the Main Controller (watch orientation of mini cable to main control board (Blue Wire) and Mp3 Module). Connect a stereo audio cable to the audio output jack on the MP3 player module on board the controller board and the other end to a powered amplifier / speaker for sound (see drawings).

Connect a regulated 9.0 VDC at 900 mA or more power supply to the power jack or Plus and Minus power wires to the terminal power block if not using the quick power jack connector.
Operation:
To use this MP3 Playback controller board, you must first store 1 to 10 true MP3 files of audio on a formatted (see USB formatting) USB flash drive. The audio files can be any length in time up to as big as the USB Drive is in memory.

These audio files on the drive must be named as follows: The first audio file must be named “file000.mp3”. The next file must be named “file001.mp3” and so on to the last audio file named “file009.mp3”. You can have as many or few audio files as you want up to 10. If you had 10 audio files, the last file would be named “file009.mp3”. (Remember you started at file000.mp3). When naming the audio files, do not skip any numbers. Remember the MP3 files can be of any audio length up to the total storage capacity of the USB flash drive (1 sec to multiple Hrs of audio playback).

Once you have recorded your files, you must set the File Number Indicator Switch (see drawings) located on the Main Controller Board to indicate to the on board micro processor how few or many files you have stored on the USB Flash drive up to 10 total. For example, if you only have 5 MP3 files on the drive, they would be named: “file000.mp3”, “file001.mp3”, “file002.mp3” “file003.mp3”, “file004.mp3” and you would set the File Number Indicator on main board to position 4 (0, 1, 2, 3, 4 = 5 files, Remember you started at file000.mp3).

Note (Yellow LEDs on boards are used to indicate Audio files loading, playback action occurring or audio file troubleshooting issues)
Operation Cont:

Insert the SanDisk USB flash drive into the USB connector on the **MP3-VM2 Module** (Gray Module) and turn on the power. You will see green, yellow LEDs on each of the remote relay boards and switch board come on if attached indicating that power is on and sound files are Loading (yellow LEDs). You will also see a flashing red and **green** LED on the MP3-VM2 (Gray Module) next to the inserted USB flash drive. This LED indicates that the MP3 module is initializing. When it glows a solid **green**, and the **yellow** LEDs turn OFF then the controller board is ready to use. The yellow audio playback LED's will turn ON indicating audio playback action is occurring and turn OFF when audio playback is completed on first startup and on any audio playback activity.

There are **three modes of playback operation**, (see setup mode drawing pages) which are selected by moving the selection Mod Jumper located on the main controller board. The three modes are: Individual, Sequential and **Random** playback.

**Individual Mode**: (Mod Jumper is moved to C-B position on main controller board) Pressing any one of the remote Channel Switches 1-10 will activate playback for that selected channel. The yellow audio playback LED's will turn on indicating audio playback is occurring and turn OFF when audio playback is completed. **NOTE**: The controller will wait until the audio file has finished playing for that selected channel and also turn OFF the optional SS relay if attached before another audio file can be activated by the remote attached switches.

**Sequential Mode**: (Mod Jumper is moved to C-B position on main controller board). Audio files are played starting at file1 (file000.mp3) and move to highest numbered file each time triggered. You will use a remote single push button switch or a remote relay contact closure attached to the Remote Trigger Terminal blocks on either the Main Board or the Switch Board. Every time the Remote Trigger is activated (Push button Switch, or optional remote Relay is activated, the controller board cycles through the audio files sequentially and plays it back to the attached powered audio amp / speaker module. When the last highest numbered audio file is reached in the play list, (10) (Max file = file009.mp3) then the next audio file triggered will restart at audio file1 (file000.mp3). The controller will wait until the audio file has finished playing and also turn OFF the optional SS relay selected channel if attached before it can be activated again.

**Random Mode**: (Mod Jumper is moved to A-B position on main controller board). You will use a single dry remote relay contact closure or a remote single push button switch attached to the Remote Trigger Terminal blocks on either the Main Board or the Switch Board. Every time the Remote Trigger is activated (push button switch, or optional external relay activated, the controller board picks an audio channel file randomly and plays it back to the attached powered audio amp / speaker module. Again the controller will wait until the audio file has finished playing and also turn OFF the SS relay before it can randomly select another audio file.

**Playback Options**: If you want the audio file / channel to play over and over, (looping) option in sequence or random, then simple short the remote push button switch channel needed together with a short piece of wire. The controller will playback and wait until the sound file has finished playing, turn OFF the SS relay before it will automatically step to the next audio channel or select a random number channel for playback until the wire loop is removed. This wire loop can be placed on any single channel or in the random / sequence wire terminal block on the main controller board or on the remote switch connection board.
MP3 Module Setup

Overview

SanDisk USB Flash Memory Drive
Flash Drive "Cruzer Fit"

Audio Files
file000.mp3
file001.mp3
file002.mp3
file003.mp3
file004.mp3

MP3 Module Connector

Color Names

MP3 Module Cable Connector

Blue
No Pin
Green
Brown
Black
Red
Orange

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**MP3 Module Setup Overview**

MP3 Module

Audio Output Jack
Audio connector output to audio amp speaker

1/8" miniplug Male

Audio Cable

Stereo Audio Cable

to Audio Amp to Speaker

Audio Cable

**Hint:**

Multiple Audio files can be stored on different USB drives and a different USB drive can be quickly exchanged in and out of the MP3 module for new audio to use.

SanDisk USB Flash Memory Drive
Flash Drive "Cruzer Fit"

**-OR-**

User -USB Flash Drive

**AUDIO FILES**

file000.mp3
file001.mp3
file002.mp3
file003.mp3
file004.mp3
file005......

USB Drive No.1

SanDisk

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10-Ch MP3 Audio / Relay Controller

Components

- MP3 Module
- Main Sound Controller Board
- Ribbon Connector Cable
- Optional USB Flash Memory Drive
- Ribbon Connector Cables
- 10-CH Remote Switch Board
- Optional Remote Relay Boards (2 Amp) (1-5) (6-10)
- Optional Remote Switches
- Optional Amp / Speaker and Audio Cable
- Power Switch Relay Board
- Switching Relay Board

SanDisk Flash Drive "Cruzer Fit"
-OR-
Mini Drive

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Main Control Board Setup

Overview

Player Board Controller (Main Controller)

Remote Relay Board No1 Ribbon Connection (Relays 1-5)

Remote Relay Board No2 Ribbon Connection (Relays 6-10)

Remote Switch Trigger (Random or Sequence Mode)

Mode Selection Jumper

Test Playback Button

Audio File Number selection Switch

MP3 Module Connector

ON / OFF Switch

Power LED

Power Connection 7.5 to 9Vdc

9Vdc @ 1 Amp Regulated Power Supply

Remote Switch Board Ribbon Connection (Switches 1-10)

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Main Control Board Setup

You must set the **File Number Indicator Switch** located on the Main Control Board to how many files you have stored on the USB Flash drive. For example, if you only have 5 MP3 files on the drive, they would be: "file000.mp3", "file001.mp3", "file002.mp3", "file003.mp3", "file004.mp3" and you would set the File Number Indicator switch to **position 4** (0, 1, 2, 3, 4 = 5 files. Remember you started at file000.mp3 (Switch Position 9 = 10 audio Files)

**Manual - Random - Sequence Playback Selection Jumper**

**PLAYBACK MODES**

- **Manual Mode (CH 1-10) (Jumper BC)**
  - Playback Channels 1-10 when Switch 1-10 are manually activated

- **Sequence Mode (Jumper BC)**
  - Random Playback Channels
  - When SINGLE Trigger Switch is Activated
  - also Manual channel selection Mode (CH 1-10)

- **Random Mode (Jumper AB)**
  - Sequence Playback Channels 1-10
  - When SINGLE Trigger Switch is Activated
Main Control Board Setup
Audio Output Connection

- OR -

Audio Output Jack Connector

- OR -

USB Flash Memory Drive

SanDisk USB Flash Memory Drive
Flash Drive "Cruzer Fit"

Audio Files
file000.mp3
file001.mp3
file002.mp3
file003.mp3
file004.mp3

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Overview

MP3 Module to Power Amp and Speakers

- file000.mp3
- file001.mp3
- file002.mp3
- file003.mp3
- file004.mp3
- file005.mp3
- file006.mp3
- file007.mp3
- file008.mp3
- file009.mp3

SanDisk Flash Drive
"Cruzer Fit"

USB Flash Memory Drive

Optional Audio Amp

12VDC Power Supply

Optional Speaker - L

Optional Speaker - R

Audio connector output to audio amp speaker

Audio Cable (Stereo)

Audio Cable

1/8" Audio miniplug Male

Audio Output Jack

1/8" Audio miniplug Male
**Overview**

Multiple MP3 Module to Power Amp, Mixer and Speakers

**MP3 Module Setup**

**Overview**

MP3 Module 1

MP3 Module 2

MP3 Module 3

MP3 Module 4

Audio Mixer

Audio Cables (Stereo)

Speakers

Optional Speaker - L

Optional Speaker - R

Audio Amp

Audio Cable (Stereo)

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10-Ch MP3 Audio / Relay Controller

Push Button Setup

Switch 10
Switch 9
Switch 8
Switch 7
Switch 6

Ribbon Connector to Remote Switch Board
Ribbon Connector to Main Sound Board Controller
Cable Connector Orientation Notch
Audio Playing LED
Main Board Power LED Status
Switch 1
Switch 2
Switch 3
Switch 4
Switch 5

Connection Wires
Not Used NC
Wires Soldered to Switch Contacts
Remote Trigger Switch

Trigger Test Switch
Used when Sound Board is in Random or Sequence Playback Mode only

Used only when Sound Board is in Random or Sequence Playback Mode

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Push Button Setup

Sound Playback Audio Channels 1-10
(Manual Selection Playback)
Channels 1-10

Switch - 10
Switch - 9
Switch - 8
Switch - 7
Switch - 6

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**Push Button Setup**

Sound Playback Audio Channels 1-10

( Random - Sequence Playback )

---

**PLAYBACK MODE**

- **OFF**
  - Manual Mode (Jumper Off)
  - Playback Channels 1-10 when Switch 1-10 is Activated

- **L**
  - Sequence Mode (Jumper Left)
  - Random Playback Channels When Trigger Switch is Activated or Manual Switch Mode Ch1-10

- **R**
  - Random Mode (Jumper Right)
  - Sequence Playback Channels 1-10 When Trigger Switch is Activated

---

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Push Button Setup

Optional Switch Setup

Common Wire

Sound Playback Audio Channels 1-10

(Manual Selection Playback)

Channels 1-10

C = Common Connection
S = Switch

Switch - 10
Switch - 9
Switch - 8
Switch - 7
Switch - 6

Switch - 1
Switch - 2
Switch - 3
Switch - 4
Switch - 5

Not Used

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10-Ch MP3 Audio / Relay Controller

Push Button Setup

Optional Sensor Setup
Channel - 2 Sound Trigger by Remote Sensor

Playback of Audio File No.2 on Switch Channel 2

Connection Wires

Switch 1

Switch 2

Switch 3

Switch 4

Passive IR Sensor

Wall Power Supply

Note: Any Triggering Sensor can be used

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**Push Button Setup**

Optional Sensor Setup

Sound Playback Audio Channels 1-10

*(Random - Sequence Playback)*

---

**PLAYBACK MODE**

**L**
Sequence Mode *(Jumper Left)*
Random Playback Channels
When Trigger Switch is Activated

**R**
Random Mode *(Jumper Right)*
Sequence Playback Channels 1-10
When Trigger Switch is Activated
Push Button Setup

Note: Any Triggering Sensor can be used

Optional Sensor Trigger Setup

- IR Sensor
- Step-Mat Switch
- Sound Sensor
- Light Sensor

Wizard Boards

- Magnetic HALL Sensor
- PIR Sensor
- Ultrasonic Sensor

REM Port

Note: Any Triggering Sensor can be used

- OR -

Manual Push Buttons

- OR -

FLEX Switch Sensor

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**Push Button Setup**

- **Wire Ribbon**
- **Location A**
  - **RF Receiver - 4 Channel**
  - (1) Sound theme - A
  - (2) Sound theme - B
  - (3) Sound theme - C
  - (4) Sound theme - D

- **Location B**

**Optional Remote Trigger Setup**

- **Manual Push Buttons**
- **RF Remote Control**

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**Version 1.0**

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10-Ch MP3 Audio / Relay Controller

Overview

Relay Setup

Ribbon Connector to Main Sound Board Controller

Relay Connection (6-10) (1-5)

MP3 Module

Main Controller Board

Switched ON / OFF Relay Board

Wire Terminal Connection Block

Device to be Controlled by Relay

Relay 1

Relay 2

Relay 3

Relay 4

Relay 5

Device Switched ON / OFF

Solid State Relays (2 Amp Load)

Optional Connector for Additional Relay Boards

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Relay Setup

Power Relay Board
(Power Source Switched ON / OFF)

Ribbon Connector to Main Sound Board Controller
(Relay Connection 6-10 or 1-5)

Optional Relay Board - 2

Red Wire (+)
Black Wire (-)

Device to be Controlled by Relay
Power Source
Device to be Controlled by Relay
Power Source
Device to be Controlled by Relay
Power Source

Source Power Switched ON / OFF

Switched Power Output

Power Source

Switched Power Source for Devices Connected to Relays
(1-24VDC @ 2Amp)

Power Input to Devices

Wall Power / Battery Supply
Example Relay Setup
LED Strips or LED's

Wall Power Supply / Battery
9 Vdc @ 1 Amp

Red Wire
Black Wire
Red Wire
Black Wire

LED-Light Bars

LED's
Resistor
330 Ohm
**Example Relay Setup**

* Use caution when working with AC Voltage. Touching or incorrectly wiring this circuit could cause serious personal injury or damage to equipment.

**Caution:**

- Use caution when working with AC Voltage.
- Touching or incorrectly wiring this circuit could cause serious personal injury or damage to equipment.

---

**AC Solid State Relay Control**

- **Power Transformer (6-12 VDC)**
- **Solid-State Relay Module**
- **Relay Contacts**

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Example Relay Setup
Water Valve Application

Power Supply
(12 Vdc @ 10 Amp)

Water Source IN

Relay Connection

Red Wire

Black Wire

Red Wire

Fountain Heads

Fountain Heads

Lawn Water Valve
(12 Volts dc)

Water Valve Channel 1

Water Valve Channel 2

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Example Relay Setup
Water Valve Application

Wall Power Supply / Battery
12 Vdc @ 5 Amp

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**Example Relay Setup**

*Small DC Motor Operation*

---

Wall Power Supply / Battery
6 / 9 Vdc @ 2 Amp

Motor
No. 1

5-9 Volt DC
Permanent
Magnet Motor

* NOTE:
You can change the motor rotation (CW/CCW) by switching the +/− wires connected to the motor.
Example Relay Setup

Wizard-1 Board Trigger
Servo Control - 4Ch

R/C Servo Connection
- Black
- Red
- Yellow / White

Standard +5 Vdc R/C Servo
**Example Relay Setup**  
**Wizard-11 Board Trigger**

**Servo Control and AutoTalk**

- Audio Cable
- Audio Input from Sound Board Channel 1-10
- AutoTalk Feature
- R/C Servo Connections - 5/6
- AutoTalk Servo Playback
- Wire
- Wire
- Wizard - 11 REM Connection

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NOTE: any number of file can be recorded from 1 to 10 audio files. The length of the recorded audio files available is determined by the size of the USB Flash Memory Drive.

Min number=1 file (file000.mp3) and the Max number=10 file (file009.mp3)

Audio File Size= As large as the USB Flash memory Drive capacity is.

(Yellow LEDs used to indicate Audio files loading, playback action occurring or audio file troubleshooting)

Troubleshooting / Hints Guide

Q. I have recorded my sounds, but nothing plays back when I activate the trigger switch or test button.
A. Check to see that you have named the audio files correctly. For example, if you only have 5-MP3 audio files on the drive, they would be named “file000.mp3” to “file004.mp3”

A. Check to see if your Hide File Extension display is turned ON in your computer, if so, then the files probably have double extensions added.”file000.mp3.mp3.” “file009.mp3.mp3. The second extension is incorrect, should be file000.mp3” to “file009.mp3, Turn Hide OFF and rename the files.

A. Check to see that the main board File Number Indicator switch is set to the correct number of files you have on the USB Flash Memory Drive: Remember you started at file000.mp3 so the File Number Indicator would be set to the position 4 (0, 1, 2, 3, 4 = 5 files ). Make sure Notch on Switch is correct position.

A. Check to see that the audio files you are using are not a different format, The audio file must be MP3 type.

A. Check to see that the audio files have been transferred onto the USB Flash Memory Drive.

Q. When you activate the remote switch, test button does the Yellow LED on the board go ON and then OFF.
A. This would indicate that the audio file has been triggered for playback, but that the sound may not be getting to the remote connected Amplifier / Speaker module. Make sure that the power to the Amplifier / Speaker is ON and the volume turned up. Check the stereo audio cable connected between the MP3 sound playback board audio jack output and the Amplifier / Speaker Module audio input jack, making sure that it is plugged in and that the audio cable is good. If the Yellow LED does not turn ON when the remote switch or test button is activated, then there may be a problem with the USB Flash Memory Drive or the MP3 audio files, names or audio format-type is not MP3.

A. Check the power supply and make sure that you are connected to the controller board and plugged into the wall outlet if using a wall adapter. Make sure that you have a regulated power supply (9.0 VDC power )

A. Make sure that the board power switch is ON (You should see a Green LED light when there is power to the sound controller board)

A. Check your USB Flash Memory Drive to see that it has been formatted as a blank drive, before adding you new sound files, Some USB Flash Memory Drives have a security or Auto Boot feature that prevents the MP3 player from using the sound files correctly even when formatted. Re-format your USB Flash Memory Drive removing any security or Auto Boot formats first. (Format USB Flash Drive as a MS-DOS FAT)

A. Try a different USB Flash Memory Drive type, as some manufacture brands operate different than others.

Q. I would like all the audio files to play once, and then start over automatically.
A. A. Connect a jumper wire across the remote terminal switch connector. The audio files will play as looping playback. The controller will wait until the sound file has finished playing before it will playback the next audio file.

A. I am using the optional Radio Shack Amp / Speaker module, but there is no sound from it.
A. Check to see that a 9v Battery has been installed, or if the battery is dead.

A. Audio Playback board is Extremely Hot and Stops working after a few minutes.
A. Check the power supply, use a regulated power supply of 9.0 Vdc at 800 mA only.

A. I am using a Macintosh Computer with OS X and the USB Flash Drive needs to be Formated.
A. See the handout on Formatting a USB Flash Drive for MP3 files using the MS-DOS FAT format (Recommended 8GB SanDisk USB Flash Drive)

Q. I have tried everything but the MP3 player will not work correctly.
A. Check to see that the File Number Indicator Switch has been set to the correct number of files on the USB drive. Check to see that the Notch on the switch is toward the correct number. Check the USB drive for the MP3 file names, make sure that the correct file wording has been used. (See info in this document about these settings and name for files) Check to see that the MP3 file is a real MP3 format.

A. Check the Mode switch to make sure it is in the correct jumper configuration for what you want the board to do. Re-Read the instruction manual, pay attention to the settings, and check the Sound board over for correct configuration.
Q. When I trigger the MP3 board the on board yellow LED flashes and then stays ON, but there is no sound played back, and the LED does not turn Off.
A. Check to see that you have named the audio files correctly. For example, if you only have 5-MP3 audio files on the drive, they must be named exactly (Example: “file000.mp3”, “file001.mp3”, “file002.mp3”, “file003.mp3”, “file004.mp3”.
Remember you must name the file exactly and us the word file000.mp3, Use a ScanDisk only

Q. I would like all the audio files to play once, and then start over automatically.
A. Connect a jumper wire across the remote terminal switch connector. The audio files will play as looping playback. The controller will wait until the sound file has finished playing before it will playback the next audio file.

Q. I am using the optional Amp / Speaker module, but there is no sound from it.
A. Check to see that a 9v Battery has been installed, or if the battery is dead. Turn On Audio Amp.

Q. Audio Playback board is Extremely Hot and Stops working.
A. Use a lower powered power supply 6 Vdc @800 mA, or place a cooling fan across the MP3 board.

Q. My USB Drive is not working, or appears to have problems and locks up on a audio file.
A. Use a ScanDisk only and format it, to a blank drive, before adding any audio files.
Use Audacity Software to Edit or Generate MP3 actual Formatted Audio Files
Troubleshooting / CAUTION

The MP3 Power Regulator will be Warm to Hot with normal operations. If you find that the Regulator is hotter than normal, the Audio Playback PC Board is Extremely Hot or the MP3 player module Stops working then use a lower powered power supply regulated to 9 VDC at 500 mA or a regulated 7.5 Vdc at 500 mA, regulated power supply. You might also try using a different USB drive module as some drives pull more power and get hot. If the controller is still warm after power changes, you may need to place a cooling fan across the MP3 board, or and stand up the Voltage Regulator and heat sink from off the board.