



Operating Manual A 1741B Message Player

The A 1741B is an MP3 based message player and tone generator designed for public address, security, customer direction or emergency evacuation announcements.

1.0 INSTALLATION

Power requirements: The A 1741B requires a minimum of 12VDC at 300mA to work correctly with a maximum working voltage of 30VDC. Do not exceed 30VDC as it will cause permanent damage to the unit. A good working voltage is between 12VDC and 24VDC. The power is connected via the 2.1mm (tip positive) DC socket on the rear of the unit (see fig 1).

Output: Output is via the stereo RCA connectors on the rear. Output level is nominal 500mV but is related to the recorded level of the MP3.

Input triggers: The input triggers are activated by closing contacts on the rear of the unit whether by a normally open switch or a timer or controller. (Note: These triggers have a common ground).

Trigger Switches: The messages can also be activated by pressing the switches on the front of the unit. Note: The Alert and Evac buttons must be held down for 3 seconds before they activate. This reduces the chance of accidental triggering.

Switched output: The switched output terminal is triggered when any zone is activated. The voltage is the same as the power supplied to the unit. ie if the A 1741B is powered by 12V, the switched output voltage will be 12V.

2.0 PLAY MODES

Alternate: When the A 1741B is in Alternate mode (DIP1 switch1 OFF) (see Fig 3) the closing contact must be held for the duration of the MP3 play time, if it is released before the MP3 ends the MP3 will stop playing immediately. If the contact is held closed continually the MP3 will continue to loop over and over until the contact is released.

Momentary: In Momentary mode (DIP1 switch1 ON) (see Fig 3) a momentary closing contact or pulse on the trigger pins will activate the MP3. The A 1741B will continue to play the MP3 till it finishes and will stop playing and wait for another trigger activation.

To stop an MP3 playing when in Momentary mode the Cancel trigger or Cancel switch is used. A momentary closing contact on the Cancel trigger or closure of the Cancel switch will stop the MP3 playing (it is recommended that the Cancel contact or switch be held up to 2 seconds to ensure the MP3 stops playing)

3.0 FRONT PANEL CONNECTIONS

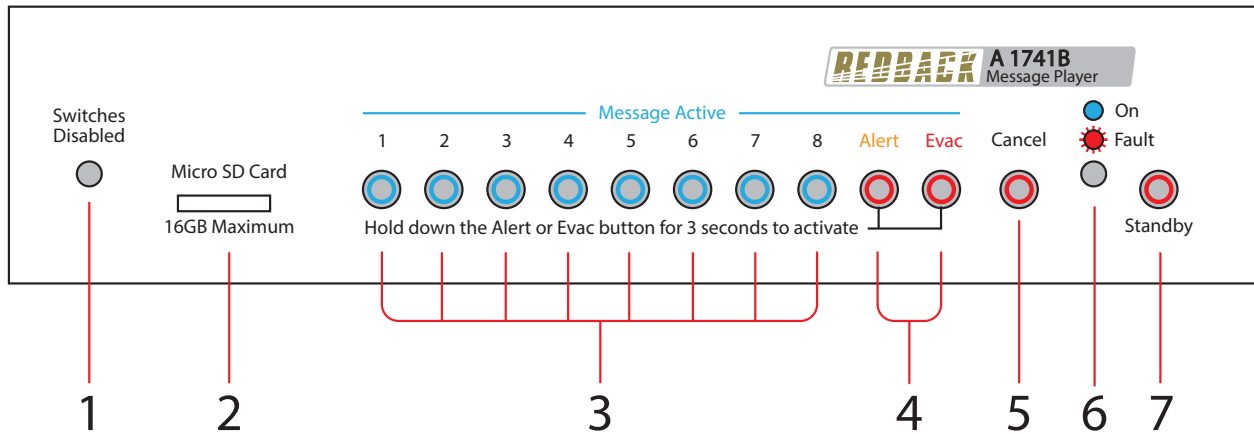


Fig 1

1 Switches Disabled Indicator

This LED illuminates when the front switches are set to be disabled via the DIP switches on the rear of the unit. (See Fig 2 for DIP Switch location).

2 Micro SD card slot

The Micro SD card which has the messages (in MP3 format) to be played is inserted here. The Micro SD card can be a maximum of 16GB.

3 Message Active Switches and Indicators

These switches are used to trigger the messages 1-8. The LED's inside the switches indicate when the associated message is playing. The messages can also be activated by using the triggers on the rear of the unit. (See Fig 2 for details.) NOTE : If DIP switch 3 on the rear of the unit is set to "OFF" the front switches will not operate and the "Switches Disabled" LED will illuminate.

4 Alert and Evac Switches and Indicators

These switches are used to trigger the Alert and Evacuation tones (which conform to AS1670.4). The LED's inside the switches indicate when the associated message is playing. The tones can also be activated by using the Alert and Evac triggers on the rear of the unit. (See Fig 2 for details.) NOTE : If DIP switch 3 on the rear of the unit is set to "OFF" the front Alert and Evac switches will not operate and the "Switches Disabled" LED will illuminate. The Alert and Evac tones can also be disabled from the rear triggers by setting DIP switch 2 to the "OFF" position. (See Fig 2 for details.)

5 Cancel Switch

Use this switch to cancel any MP3 which is playing. (This may need to be held down for 2 seconds to cancel). The Cancel option can also be activated by using the Cancel trigger on the rear of the unit. (See Fig 2 for details.) NOTE : If DIP switch 3 on the rear of the unit is set to "OFF" the front Cancel switch will not operate and the "Switches Disabled" LED will illuminate.

6 Status Led

This LED indicates whether the unit is ON or has a Fault condition. If the LED is "steady blue" the unit is receiving power. If the LED is "flashing red" then a fault has occurred with the unit.

7 Standby Switch

When the unit is in standby mode this switch will illuminate. Press this button to switch the unit ON. Once the unit is ON the On indicator will illuminate. Press this switch again to put the unit back in standby mode.

4.0 REAR PANEL CONNECTIONS

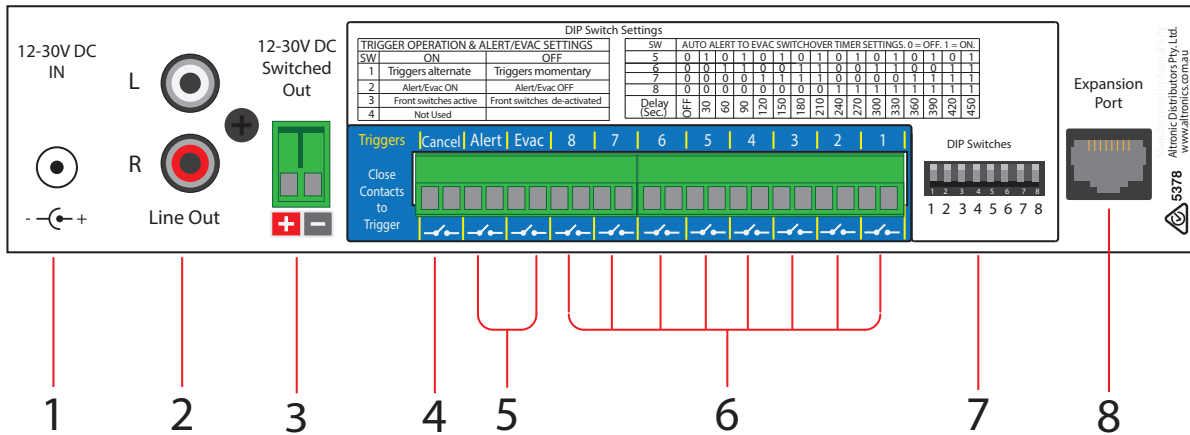


Fig 2

- 1 DC Input**
Power is supplied to the unit via a 2.1mm (tip to positive) DC socket. The input voltage must be between 12-30V DC.
- 2 RCA Stereo Line Output**
Connect these outputs to the output amplifier. Output level is nominal 500mV but is related to the recorded level of the MP3.
- 3 Pluggable 12-30VDC switched output**
Connects via Euroblock screw terminals. Please observe correct polarity when connecting. The switched output terminal is triggered when any message or tone is activated. The output voltage is the same as the power supplied to the unit. ie if the A 1741B is powered by 12V DC, the switched output voltage will be 12V DC.
- 4 Cancel Trigger**
The cancel trigger is activated by closing contacts on the rear of the unit whether by a normally open switch or a timer or controller. The trigger can be set to Momentary or Alternate triggering. See DIP SW settings.
- 5 Alert and Evac Triggers**
The Alert and Evac triggers are activated by closing contacts on the rear of the unit whether by a normally open switch or a timer or controller. The triggers can be set to Momentary or Alternate triggering. See DIP SW settings. (Note: These triggers have a common ground).
- 6 Message 1-8 Triggers**
The message triggers are activated by closing contacts on the rear of the unit whether by a normally open switch or a timer or controller. The triggers can be set to Momentary or Alternate triggering. See DIP SW settings. (Note: These triggers have a common ground).
- 7 DIP Switches**
These DIP switches are used to:
Set the triggers as either momentary or alternate action. (Refer to Fig 3)
Set the Alert and Evacuation tones to either "ON" or "OFF". (Refer to Fig 3)
Disable or Enable the front switches for use. (Refer to Fig 3)
Set the delay between the Alert and Evacuation tones. (Refer to Fig 4)
- 8 Expansion Port**
Not currently used.

5.0 DIP SWITCH SETTINGS

(DIP SW 1) Momentary or Alternate triggering

Alternate: When the A 1741B is in Alternate mode (DIP switch1 ON) the closing contact must be held for the duration of the MP3 play time, if it is released before the MP3 ends the MP3 will stop playing immediately. If the contact is held closed continually the MP3 will continue to loop over and over until the contact is released.

Momentary: In Momentary mode (DIP switch1 OFF) a momentary closing contact or pulse on the trigger pins will activate the MP3. The A 1741B will continue to play the MP3 till it finishes and will stop playing and wait for another trigger activation.

To stop an MP3 playing when in Momentary mode the Cancel trigger or Cancel switch is used. A momentary closing contact on the Cancel trigger or closure of the Cancel switch will stop the MP3 playing (it is recommended that the Cancel contact or switch be held up to 2 seconds to ensure the MP3 stops playing).

(DIP SW 2) Alert/Evacuation Tones ON or OFF

When switch 2 is set to "OFF" the Alert and Evac tones cannot be triggered either by the front switches or the rear terminal contacts. If switch 2 is set to "ON" the Alert and Evac tones can always be triggered via the rear terminal contacts. However the front switch triggering is dictated by DIP Switch 3.

(DIP SW 3) Front Switch Activation

When switch 3 is set to "OFF" the front switches become de-activated from use. When these switches are de-activated the "Switches Disabled" LED on the front of the unit will illuminate. This function disables all the switches including the cancel, alert and evac.

(DIP SW 4)

Not currently used

TRIGGER OPERATION & ALERT/EVAC SETTINGS		
SW	ON	OFF
1	Triggers alternate	Triggers momentary
2	Alert/Evac ON	Alert/Evac OFF
3	Front switches active	Front switches de-activated
4	Not Used	

Fig 3

(DIP SW 5-8) Alert/Evacuation Tones change over option

The Alert and evacuation tones conform to Australian Standards AS1670.4 and are used to notify building occupants of an emergency situation.

The Alert tone comes with a change over option which forces the A 1741B to switch from the Alert to the Evacuation tone after a prescribed time. DIP switches 5-8 set these change over times from 30 seconds to 450 seconds in 30 second intervals. If all DIP switches are set to "OFF" the changeover is disabled.

SW	AUTO ALERT TO EVAC SWITCHOVER TIMER SETTINGS. 0 = OFF. 1 = ON.															
5	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
6	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1
7	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1
8	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
Delay (Sec.)	OFF	30	60	90	120	150	180	210	240	270	300	330	360	390	420	450

Fig 4

6.0 PUTTING MP3'S ON TO THE PLAYER

You will first need to remove power from the A 1741B then remove the SD card from the front of the unit.

To remove the SD card push the card in and it will eject itself.

The SD card will then need to be connected to a PC. You will need a PC equipped with a SD card reader to do this (not supplied).

Step by step guide to put a MP3 into Trigger1 with a Windows installed PC

Step 1: Make sure the PC is on and card reader connected and correctly installed. Then insert the SD card into the reader.

Step 2: Go to "My Computer" (figure 2) and open the SD card which is usually marked "Removable disk".

In this case it is named "Removable disk (G:)"

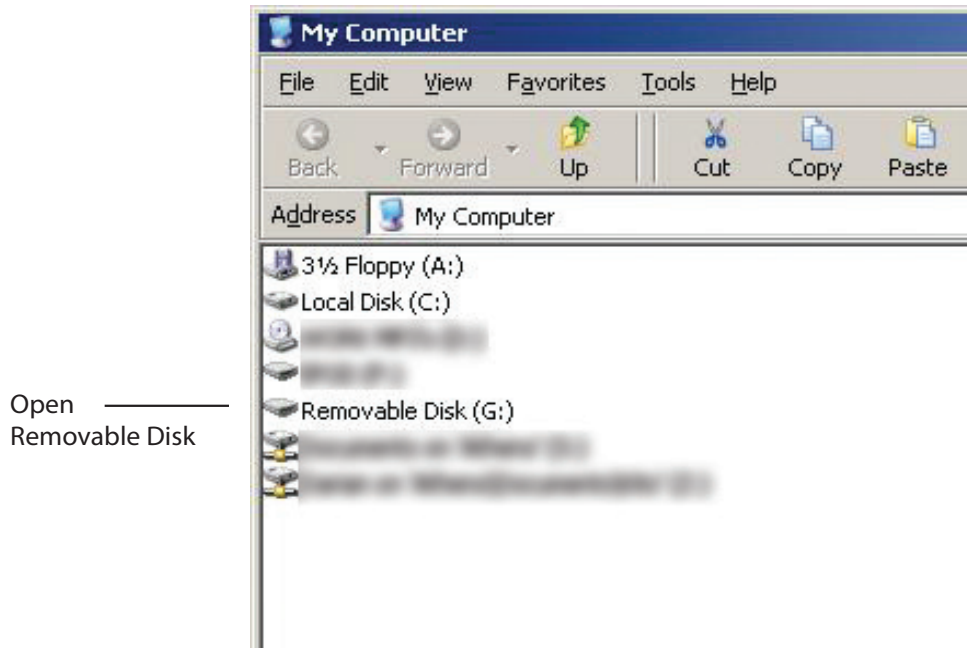


Fig 5

You Should get a window that looks like figure 6.

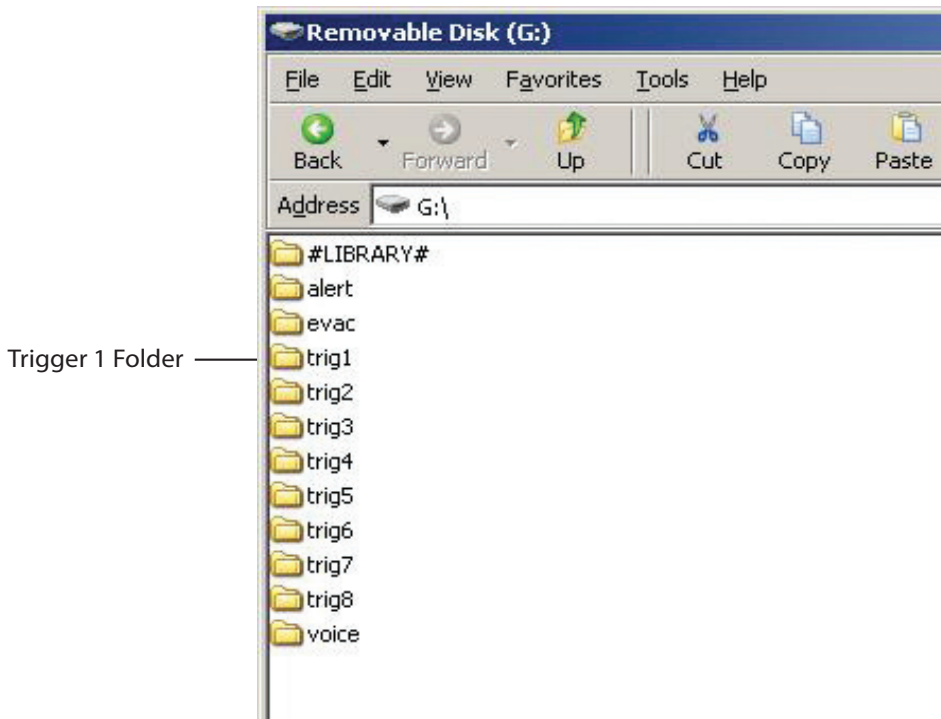


Fig 6

Redback® A 1741B Message Player

Step 3: Open folder named "trig1" and you should get a window that looks like figure 7.

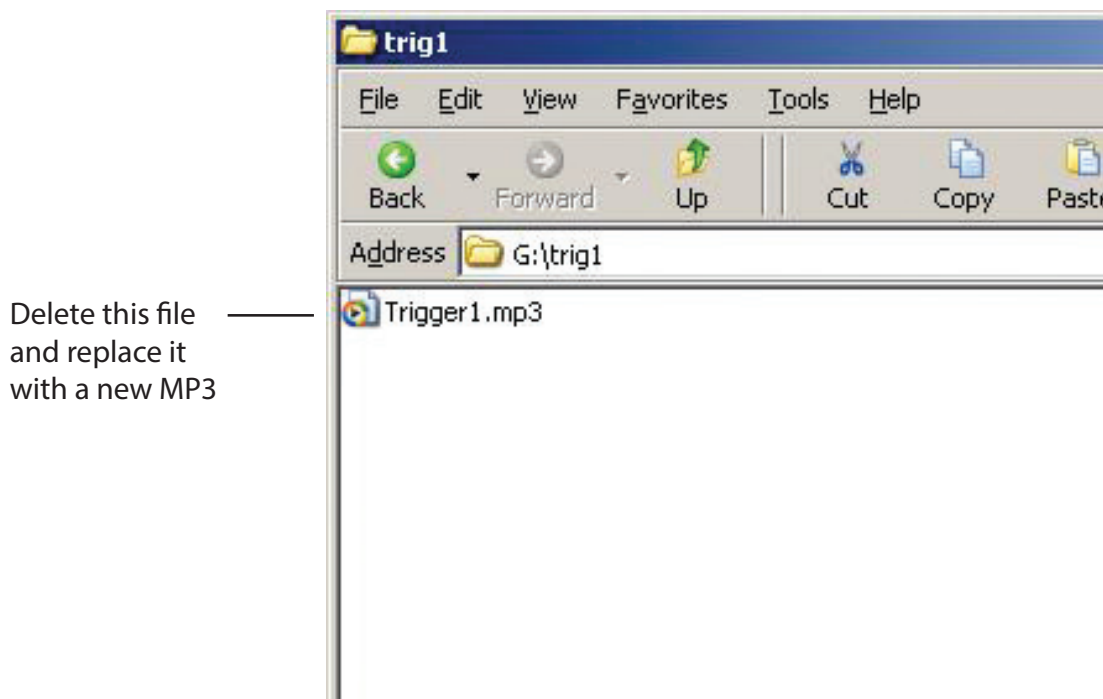


Fig 7

Step 4: You should see an MP3 file XXXXXX.MP3 if you have never changed the trig1 MP3 file then it will be named Trigger1.MP3.

This MP3 file needs to be deleted and replaced by the MP3 file you want to play when you activate trigger1. The MP3 file name is not important only that there is one MP3 file in the trig1 folder. Make sure you delete the old MP3! The folder should look something like figure 8.

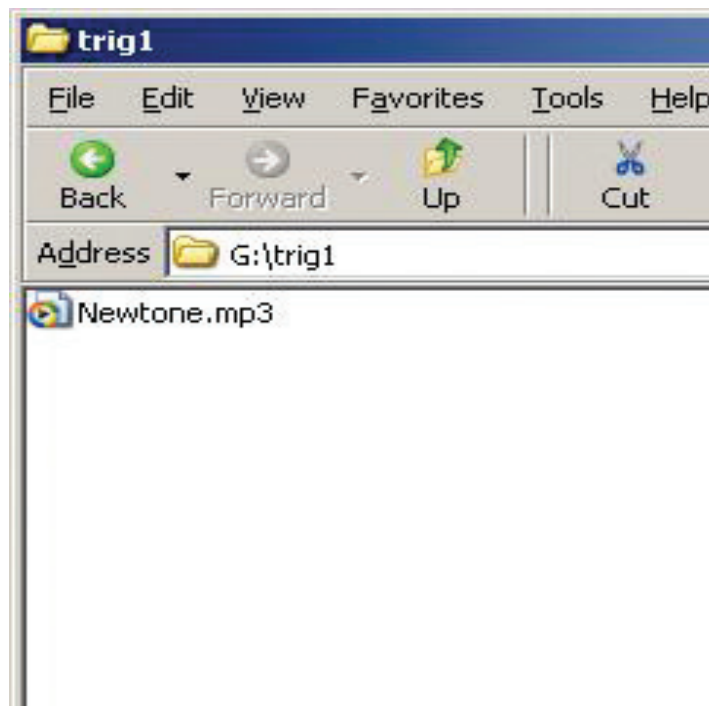


Fig 8

NOTE the new MP3 file cannot be "Read only" to check this right click on the MP3 file and scroll down and select Properties, you will get a window that looks like figure 9. Make sure the "Read Only" box has no tick in it.



Fig 9

The new MP3 is now installed on the card and the card can be removed from the PC following windows safe card removal procedures. Make sure the A 1741B is OFF and insert the Micro SD card into the slot in the front; it will click when fully inserted.

The A 1741B is ready to go on Trigger1.

Repeat these steps for Trigger2 to Trigger8 if you need to.

Please note: that the ALERT and EVAC folders and the MP3 files inside these folders should not be deleted or renamed in anyway as this will cause the A 1741B to stop responding.

Emergency tones (Alert and Evacuation)

The Alert and evacuation tones conform to Australian Standards AS1670.4 and are used to notify building occupants of an emergency situation.

Alert: The Alert tone is activated by a closing contact on the ALERT trigger or by pressing the Alert button on the front of the unit and can be used in Alternate or Momentary setup as mentioned in section 2.0 and the Dip Switch settings. The Alert tone comes with a change over option which forces the A 1741B to switch from Alert to the Evacuation tone after a prescribed time. Use DIP switches 5-8 to adjust this time or switch off completely (see Fig 4).

Evacuation: The Evacuation tone is activated by a closing contact on the Evac trigger or by pressing the Evac button on the front of the unit and can be used in Alternate or Momentary setup as mentioned in section 2.0 and the Dip Switch settings.

Evacuation message: A message (repeated twice) can be inserted every three evacuation cycles as per the Australian Standards. Voice message could be something like "please evacuate the building by the closest exit". To install a Evacuation message on the A 1740 follow the Step by step guide to put a MP3 into Trigger1 with a Windows installed PC but replace Trigger1 with Voice i.e. put the message into the Voice folder on the SD card and delete any other MP3 file located in the voice folder.

Priority: The Emergency tones have priority over other triggers (1 to 8) and if activated will stop any other MP3 and activate the selected emergency tone. Evacuation also has priority over Alert.

7.0 TROUBLESHOOTING

NO Power (Power LED does not illuminate):

Check power supply DC jack is 2.1mm and not 2.5mm size.
Check the power supply voltage is 12-30VDC.
Check the power supply is a DC output, not AC.

Message active 10 LED flashes all the time:

This is an indicator that the Micro SD card is not inserted correctly or is not formatted. Make sure all folders on the Micro SD card are as per figure 6.

Emergency tones do not work:

Switch DIP switch 2 ON to activate emergency tones.

8.0 FIRMWARE UPDATE

It is possible to update the firmware for this unit by downloading updated versions from www.altronics.com.au or redbackaudio.com.au.

To perform an update, follow these steps.

- 1) Download the Zip file from the website.
- 2) Remove the Micro SD card from the A 1741B and insert it into your PC. (Follow the steps on page 5 to open the Micro SD card).
- 3) Extract the contents of the Zip file to the root folder of the Micro SD Card.
- 4) Rename the extracted .BIN file to update.BIN.
- 5) Remove the Micro SD card from the PC following windows safe card removal procedures.
- 6) With the power turned OFF, insert the Micro SD card back into the A 1741B
- 7) Turn the A 1741B ON. The unit will check the micro SD card and if an update is required the A 1741B will perform the update automatically.

9.0 SPECIFICATIONS

Power supply: 12VDC to 30VDC 300mA (idle/maximum current draw 150mA) tip positive
Output: Stereo RCA 500mV nominal
MP3 File Format: 128kbps, 44.1kHz, 32bit, VBR or CBR, Stereo (even better as mono)
SD card size: 256MB to 16GB
Trigger activation: Closing contact
Switched output: 12-30VDC out (supply voltage dependant)

* Specifications subject to change without notice.

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