



## Sound Card 2 (Part number 1-478)

The sound card 2 is an extended version of our original Sound Card (1-480). It provides the following features:

- ? Up to 4 minutes recording time (extended times to special order)
- ? Integral 7 watt (music) mono amplifier with volume preset
- ? Line output socket
- ? Line input recording socket
- ? Playback under manual selection or RS232 control
- ? Normal, Sequential or Random message playback modes

### Controls- Connections

Power socket:	9-15V DC at 500mA, centre +ve pin
RS232:	9600 baud, 8N1 commands in on pin3, status information sent on pin 2
Control Jumper	Set to L position for local (manual control). Set to R for RS232 control in Playback mode.
Mode Jumper	Set to P for Playback, set to R for Recording
LEDs	Indicate Mode status
Jumper pins 1-6	Short required pin-set to re-play a particular track when in Playback and Local control modes. Short and hold any pin pair to record when in Local and Record modes. Pins are 5V TTL logic, pulled low to activate.
Volume preset	Controls amplifier volume, does not adjust line output signal
Line input	3.5mm mono jack socket. 320mV p-p for maximum volume.
Line Output	3.5mm mono jack socket. 1V p-p buffered output.
Speaker	4 or 8 ? impedance
Board size:	112 (L) x 53 (W) x 35 (H) mm.

### Recording

Ensure any RS232 connection is removed before starting recording- recording may

only be performed under manual control.

Up to 9 tracks may be recorded with a limit on the total duration of 4 minutes. All tracks must be recorded within the same session- it is not possible to eg change track 2 as a single action. All tracks, including the new track 2 must be recorded.

Set the Control jumper to L (local)

Set the Mode jumper to R (record)- the red led will begin to flash.

Connect a suitable audio source to the line input socket. Do not overload the input as this may cause audio distortion.

Short and keep shorted, any of the pin pairs 1 through 6 to record audio. The red led will light continuously to indicate recording. Release the pin pair to pause recording (red led flashes). Select the next audio source to be recorded and again short and keep shorted a pin pair to record that track.

Repeat until all the required tracks are recorded.

If the limit of 4 minutes is exceeded, the red led will flash with the pin-pair shorted.

**Set the Mode jumper to P(playback) to quit recording mode. This must be done to store the number of messages recorded for either Sequential or Random playback modes.**

## **Playback**

### **Local- using the on-board pin pairs**

#### **Normal Mode**

Ensure any RS232 connection is removed and the Control jumper set to L (local).

Ensure that pin pairs 1 through 6 are not shorted together.

Connect power to the module- it is now in Normal playback mode.

Ensure the Mode jumper is set to P (playback)- the green led will flash.

Short pin-pair 1 to play track 1.

Playback will continue until the end of track 1 or until the mode jumper is briefly reset to R (record).

At the end of track 1, select another pin-pair to play that particular track.

#### **Sequential Mode**

With power disconnected, place a jumper over pin-pair 6.

Re-connect power: the module is now in Sequential playback mode.

Shorting pin-pair 1 will play message 1. Further shorting of pin pair 1 will play the next message in the sequence they were recorded. The module will return to the first message after the last message.

#### **Random Mode**

With power disconnected, place a jumper over pin pair 5

Re-connect power- the module is now in Random playback mode.

Short pin pair 1 to playback one of the recorded messages in a random order.

### **Remote – using an RS232 control signal**

Ensure the Control jumper is set to R

Connect a suitable RS232 command source (9600 8N1) eg Hyperterminal or equivalent.

Send ASCII 1 through 9 to play track 1 to 9

Send ASCII s to stop playback at any point.

## **ISD Chip**

The supplied ISD chip has a frequency response up to 3.4kHz