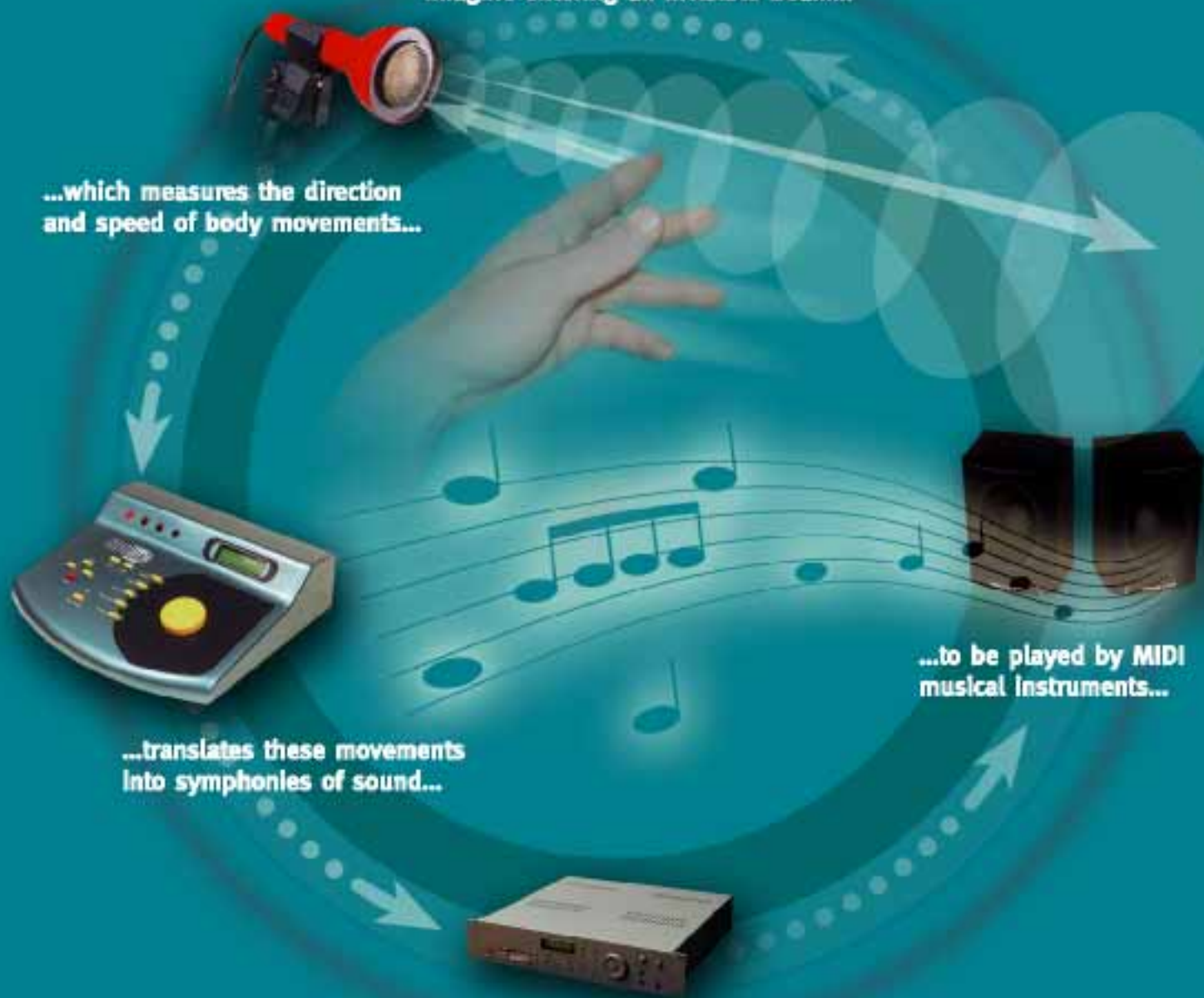


# SOUNDBEAM®

converts physical movements into sound

Imagine entering an invisible Beam...

...which measures the direction and speed of body movements...



...to be played by MIDI musical instruments...

...translates these movements into symphonies of sound...

the invisible, expanding keyboard in space

Music...Dance...Education...Performance...Exhibitions...Installations...Lighting...

## ► How Soundbeam Works

**Soundbeam** uses up to 4 independent ultrasonic sensors to detect information about movements in its invisible, cone-shaped beams.

The *Range* of each beam can be varied to a maximum of 6m. Together with 8 simultaneous channels of analogue and switch controls, this data can be used to create a dense, interactive sound environment via **Soundbeam's** MIDI output connected to a sound module\*, keyboard\* or sampler\*.

One of 100 *Pitch Sequences* - each containing a series of up to 64 notes or chords to be played on the user's chosen MIDI instrument - can be assigned to the information derived from each beam or switch. Any object moving in the beam triggers a sequence of notes selected from the current *Pitch Sequence* by the *Divisions* setting.

A number of different ways of articulating the sounds can be chosen by means of the *Trigger Mode* setting, while the two *MIDI Control Chains* can be used to select two of the instrument's basic expressive characteristics for independent realtime control - volume, for example, timbre, vibrato, pitchbend, reverb or decay.

With a maximum of 12 separate, independent 'instruments' under control from the 4 beams and 8 switches at any one time, **Soundbeam** allows a collection of all the settings for these to be saved as a *Set-up*, for instant recall. Material for performances with **Soundbeam** can be easily created, edited and retrieved. 30 factory-preset *Locked Set-ups* are provided to enable new customers with no previous knowledge of the system to enjoy making music with **Soundbeam**, whilst a further 98 *Set-ups* are available for their own programmable soundscapes.

However, music and sound are only two of the areas in which **Soundbeam's** MIDI output can be applied. It can also be used, for example, to control lighting systems in the theatre, and there are many other applications in the fields of dance, performance, special and mainstream education, and exhibition installations.

\*NB - One of these will be needed for making music with Soundbeam

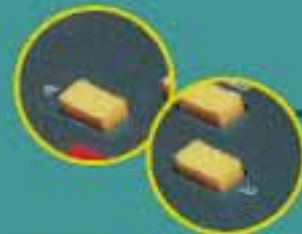
**Sensor** - Select one of 4 Beams or 8 Switches



**Set-up** - Select one of 128 complete collections of settings for Pitch Sequence, Range, Divisions, Trigger Modes, Transpose and MIDI Utilities assigned to each of the 12 Sensors.



**Exit** - Return to current Set-up Page



**Page Left, Page Right** - select alternatives to current Page

**Enter** - Confirm selection or re-definition of new Set-up or Pitch Sequence or other Setting



**MIDI Utilities** - Assign MIDI Program No. (sound/timbre) for selected Sensor, with access to choice of MIDI Channel No. and other utilities Pages



**Transpose** - Apply a Transposition of +/- 36 semitones to the Pitch Sequence currently assigned to the selected Sensor - or to all Sensors

**Indicator LEDs** -  
Indicate Interruptions of Beams

**Display** - Show page with  
settings to be modified by  
the Rotary Control Wheel

**Pitch Sequence** - Select one of  
100 Pitch Sequences of up to 64  
note/chords to interpret information  
from selected Sensor

**Range** - Vary the length of  
selected Beam from 0.56m to 6m

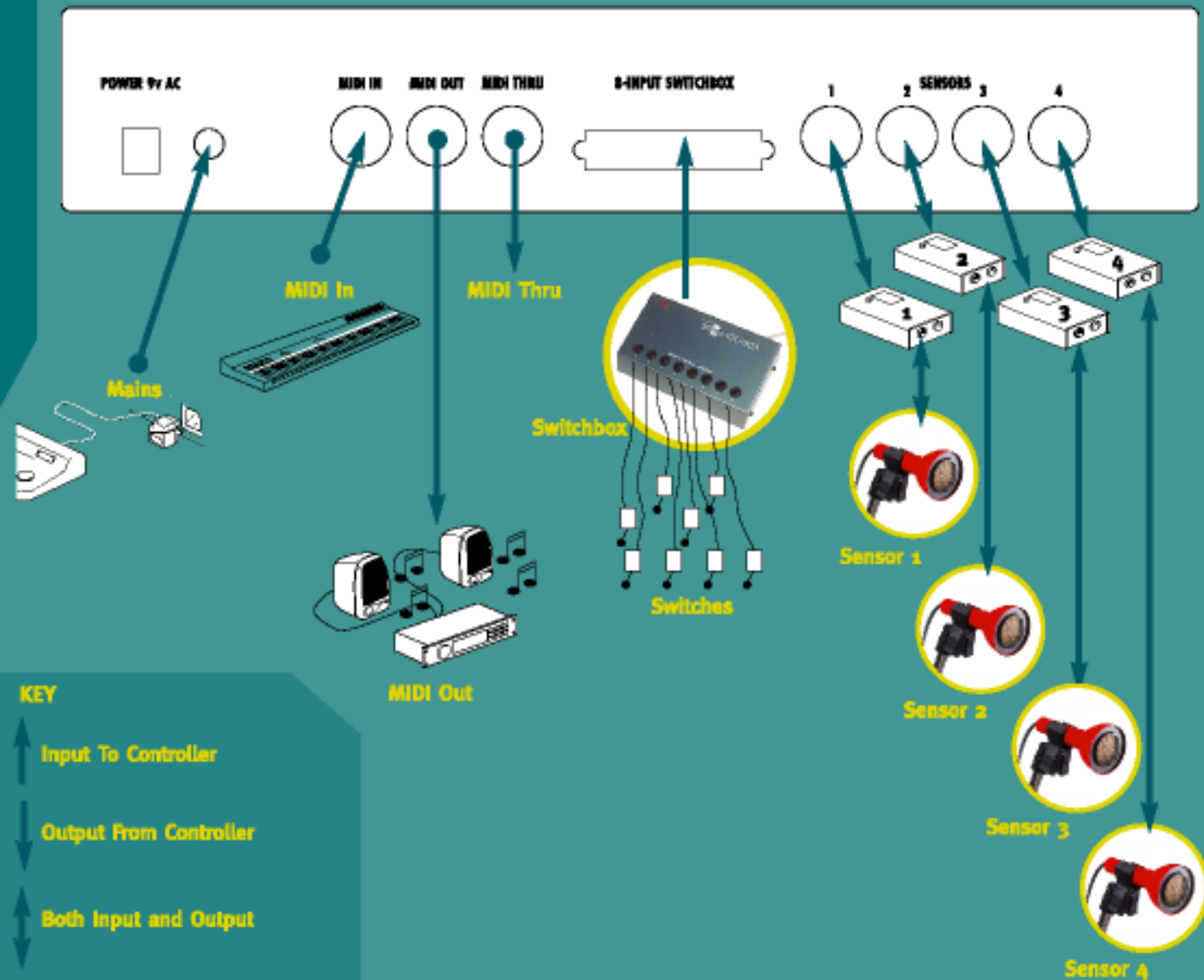
**Rotary Control Wheel** -  
Change settings on selected Page

**Divisions** - Select a number of Divisions (1 - 64)  
to which the note/chords of the selected Pitch  
Sequence have been assigned.

**Trigger Mode** - Select one of 7 ways of  
articulating sounds as a result of  
interruptions of the selected Beam

► "...one of the coolest pieces of British-built performance technology to be produced in recent years... its range, sensitivity and accuracy is quite astounding...there are other controllers available, but I guarantee that none are as versatile or respond in quite the same interactive way as Soundbeam 2."  
Chris Carter, Sound on Sound, October 2001

## Back Panel SOUNDBEAM 2



### ► SOUNDBEAM 2 specification

<b>Display</b>	2 x 16-character backlit LCD
<b>Panel Controls</b>	12 push buttons, 1 x rotary encoder
<b>Memories</b>	100 x 64 note/chord Pitch Sequences (30 Locked factory presets, 70 User definable)
	128 Set-ups (30 Locked factory presets, 98 User definable)
<b>MIDI</b>	Transmit settings, receive settings, clock, bulk send / receive
<b>Power Consumption</b>	38 watts (using 2 beams)
<b>Power Supply</b>	AC 9 volts
<b>Dimensions</b>	300(w) x 274 (d) x 86 (h) mm 11 7/8" (w) x 10 3/4" (d) x 3 3/8" (h) inches
<b>Weight</b>	1850 gm / 4lb 20z
<b>CE approvals</b>	Radiation emissions to EN 55011 Class B Conducted emissions to EN 55011 Class B Radiation immunity to EN 61000-4-3 Conducted immunity to EN 61000-4-6
<b>Switches</b>	Jack sockets for 8 On/Off or proportionate switches delivering 0 to 5 volts

*Specification subject to change without notice*

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**SOUNDBEAM**  
— adding something keyboard in space