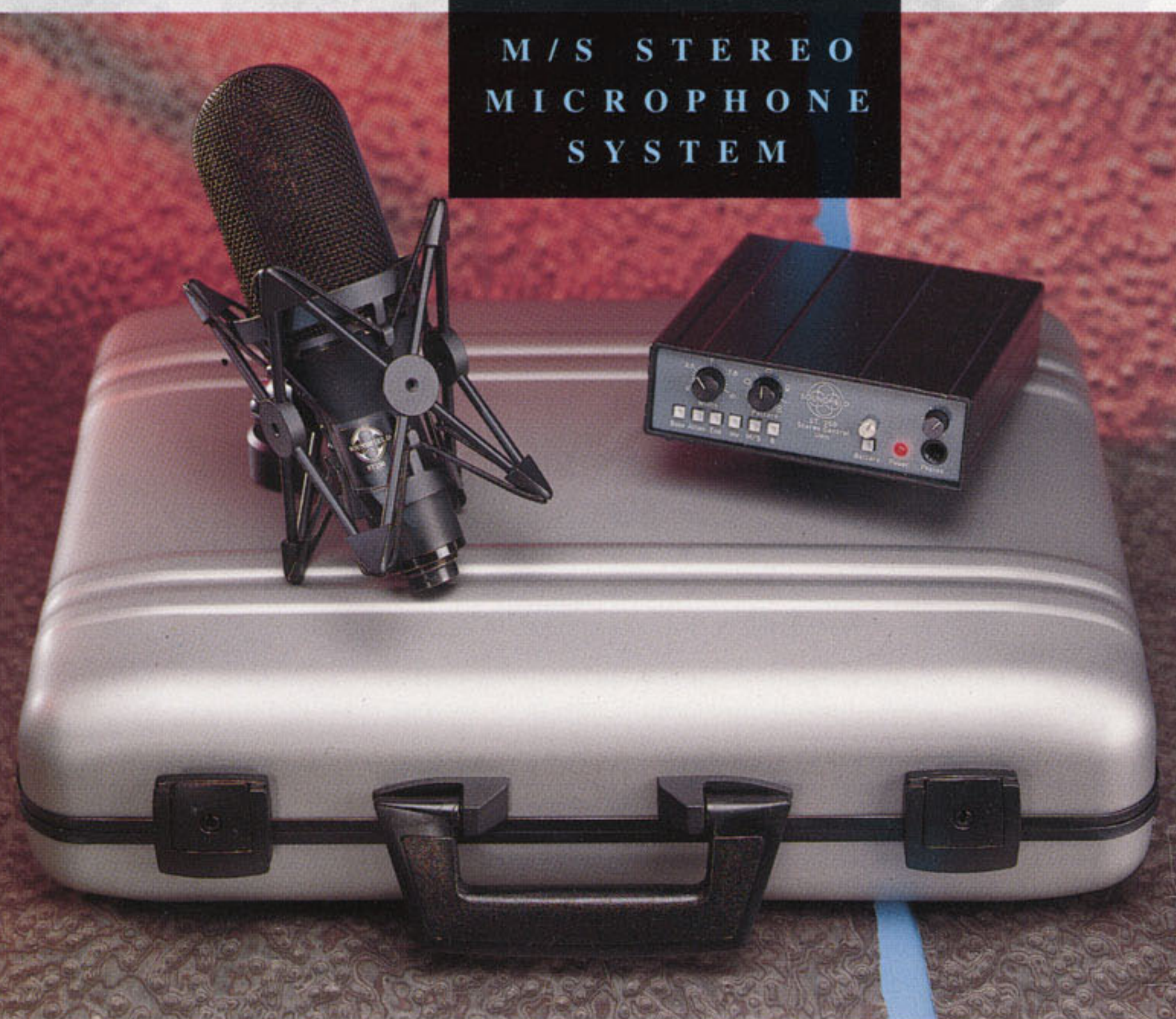


SOUNDFIELD

ST 250

**M/S STEREO
MICROPHONE
SYSTEM**



SOUNDFIELD TECHNOLOGY

The SoundField range of microphones are based on a fully patented design of four separate capsules in a tetrahedral array and a control unit incorporating advanced electronic circuitry. They are the result of many years research by audio engineers, scientists and mathematicians in conjunction with the National Research Development Corporation of Great Britain and stem from the most exhaustive study ever conducted into psychoacoustics

The SoundField ST250 uses the same tetrahedral capsule array as the SoundField MKV, making it the most advanced stereo microphone system in the world. Surface mount component technology is employed to achieve a

compact reliable unit with an uncompromised specification and each system is hand-assembled and individually calibrated.

The ST250 produces the most accurate stereo image available, and offers several unique and practical features: A separate control unit enables the engineer to experiment with all the front panel settings, after microphone placement, from a control room listening position or via headphones. Its ability to switch remotely from X-Y to M-S stereo outputs, and from vertical to end-fire with total remote control over the effective capsule angle and polar patterns, allows this microphone to be used in virtually any application for stereo or mono recording. The control unit has the facility for mains, phantom or battery powering, allowing unrestricted use both in the studio and on location.

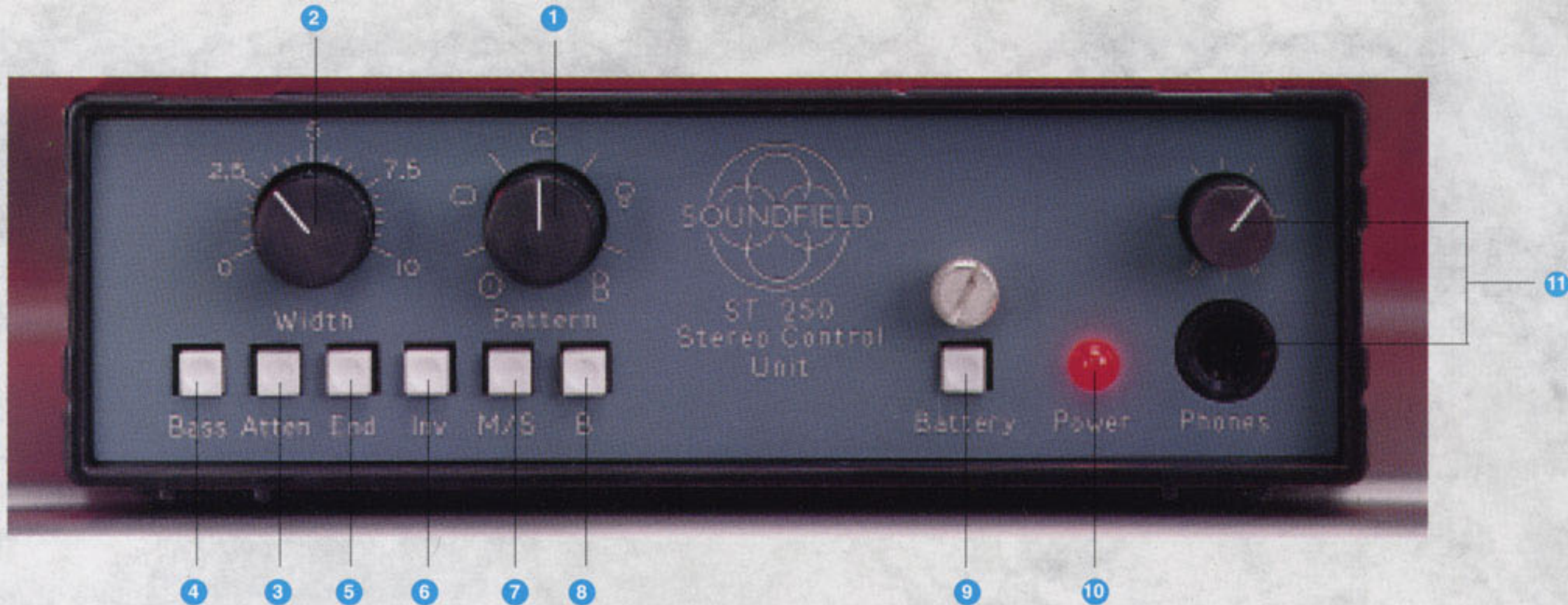
MAIN FEATURES

- Truly coincident stereo imaging
- The most accurate polar patterns in the world
- Equally level frequency response to both on and off axis sounds
- Battery powering for portable use
- Total remote control over the effective capsule angle and polar patterns
- Remotely switchable for vertical or end-fire use
- Remotely switchable X-Y, M-S outputs
- Remotely controlled bass roll-off
- Perfect mono compatibility from the stereo output
- Extremely low noise for digital recording
- Frequency response 20Hz - 20kHz

MAIN APPLICATIONS

- Recording Studios
- Broadcasting
- Drama Studios
- Location recording
- Film





All controls for the ST250 microphone are situated on the Control Unit, allowing total adjustment of the microphone after placement. The Width, Pattern and Headphone Volume controls are "push in" type, and self-lock flush with the front panel to avoid accidental parameter changes during portable use.

THE CONTROLS

- 1 POLAR PATTERN** The polar pattern of the **M** (middle) signal can be adjusted from omni through all the cardioid patterns to a figure of eight. The design is such that a sound source in front of the microphone will have a constant level irrespective of the polar pattern chosen. If the **Pattern** control is adjusted in conjunction with the **Width** control it allows the user to achieve any crossed pair response e.g. 0-180 degrees cardioids, crossed figure of eight, or just a mono cardioid etc. In the **M-S** mode the polar pattern adjusts only the centre response of the microphone and in conjunction with the **Width** control allows the user to achieve the ultimate stereo image for each particular application.
- 2 WIDTH** The effective angle between capsules can be adjusted from 0-180 degrees allowing the user to control the **Width** of the stereo image. Mono can be achieved by setting this control to 0. The **Width** control does not affect the centre 'mono' image of the microphone, retaining complete compatibility in broadcasting for the mono listener. Using the **Width** control in conjunction with the **Pattern** control offers a flexibility of operation that is unrivaled by other stereo microphones.
- 3 ATTEN** For use when recording very high signal levels. This button pads the input of the microphone to avoid distortion.
- 4 BASS** Rolls off the bass response of the microphone from 120HZ to reduce wind noise or low frequency ambient signals.
- 5 END** This switches the ST250 for end-fire use. In end-fire mode the **Width** and **Pattern** controls operate in the same way as when the microphone is used in the vertical mode.
- 6 INVERT** As is normal with stereo microphones **X-Y** or **M-S**, if the microphone itself is physically positioned upside down, left and right outputs are effectively reversed. The **INVERT** switch on the ST250 Control Unit allow the user to maintain a true configuration of the L-R channels by reversing the L-R channel outputs if depressed. This is especially useful in film and television applications.
- 7 M-S** Switches the outputs of the ST250 from **X-Y** to **M-S** format. (M = Left Output, S = Right Output.)
- 8 B** Allows the user to record a '**B format**' four channel surround sound signal via the special ST-CB3 cable.
- 9 BATTERY** Switches batteries in circuit (housed in the control unit) for self powering. Using standard C cells, the expected operational life for the batteries is up to 24 hrs.
- 10 POWER LED** illuminates when mains, phantom or battery power is applied. The power LED will flicker when overload is approached.
- 11 PHONES** A standard stereo 6.3mm (1/4") jack output monitors the XY output at all times regardless of front panel settings. A

SPECIFICATION

Output levels are measured with a high impedance load.

		with 20 dB attenuator
Front sensitivity at 80 SPL (fixed)	-27dB	-47dBV
Maximum variation of M with pattern	±1.5dB	
S sensitivity at 80dB SPL (maximum)	-27dBV	-47dBV
W output 80dB SPL	-30dBV	-50dBV
X,Y,Z output 80dB SPL	-27dBV	-47dBV
Frequency range	20Hz-20kHz (±2dB)	
with bass cut	100 Hz-20kHz	
Noise (M cardioid or omni)	17dB SPL A weighted (anechoic measurement)	
Maximum sound level	115dB SPL	135dB SPL
Powering	a) Mains 240V/110V set by internal link b) Battery (2 alkaline C cells, 5hrs minimum powering) c) Phantom powering from 48V powering ±5V current drawn 4x5mA impedance less than 4K7 per line.	
Output connections	Two balanced male XLR connectors.	
Output impedance	220R M-S, X-Y balanced	
B - Format	750R unbalanced	

Specifications subject to change without notice

ST250 Studio Version

ST250 Stereo Microphone
ST250 Control Unit
Foam Windshield
Shock Mount Assembly
20 Metre 12 Pin Microphone Cable

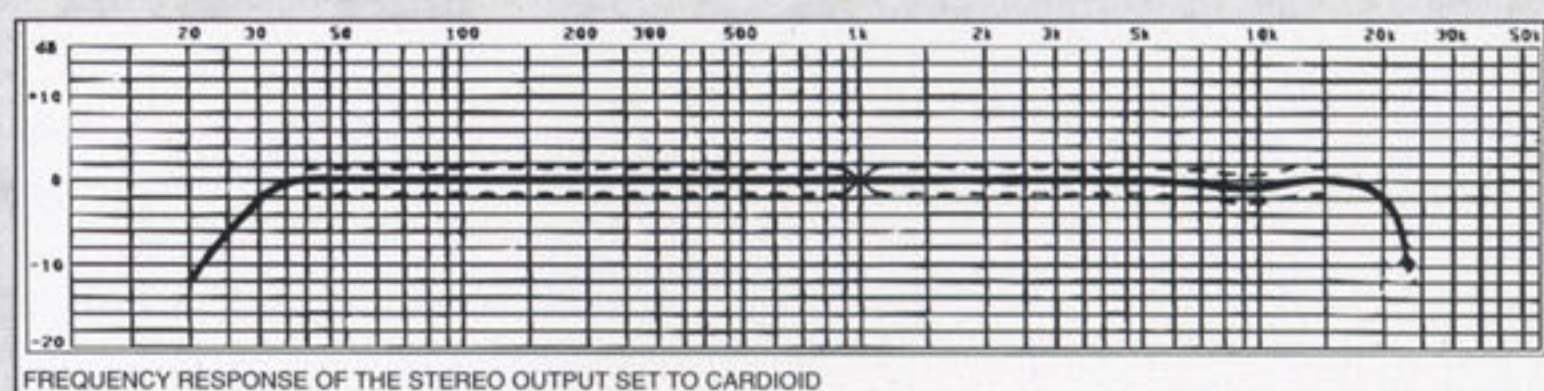
Optional Extras

Field Shoulder Case for Control Unit
10, 20, 50, 100 metre cable
ST-CB3 B Format cable

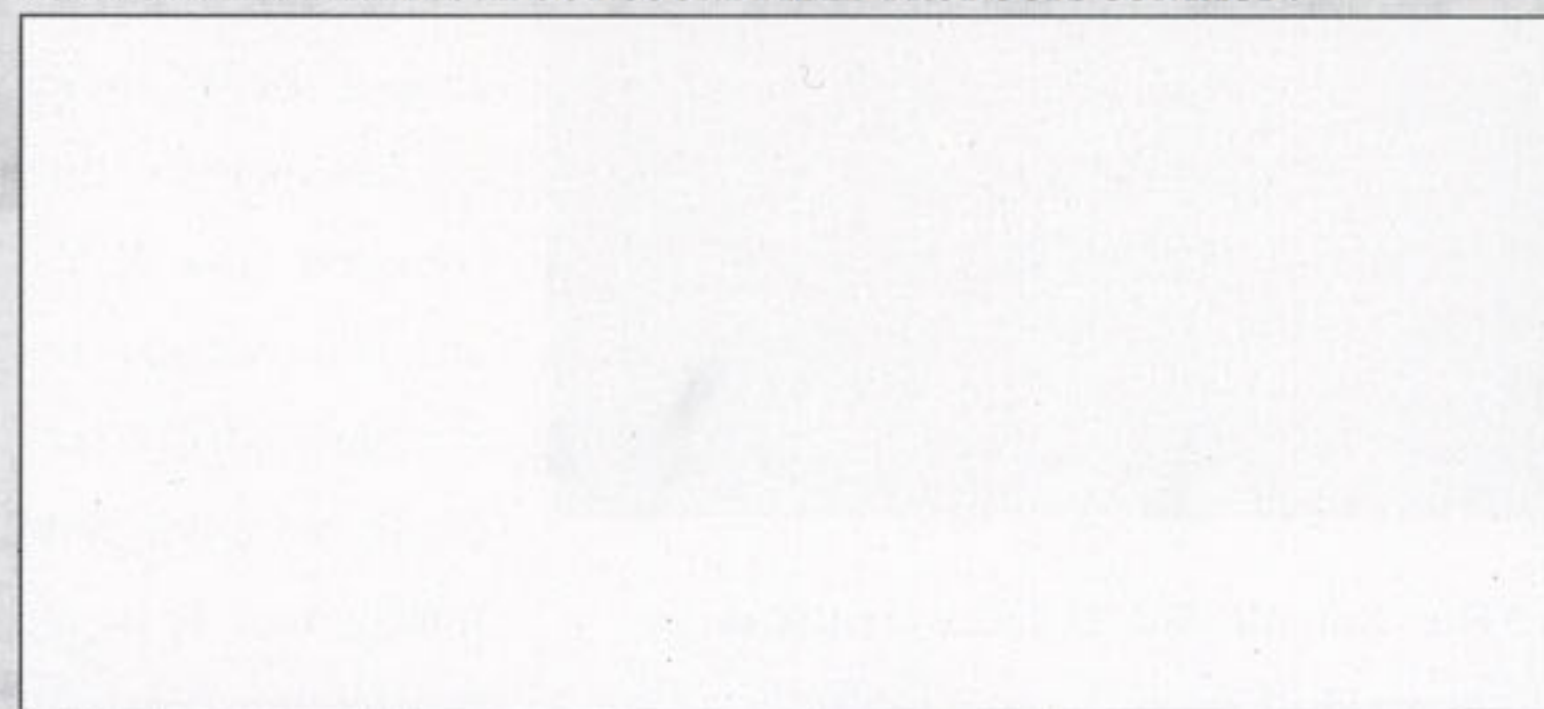
ST250 Portable Version

ST250 Stereo Microphone
ST250 Control Unit
Foam Windshield
Aluminium Field Case
5 Metre 12 Pin Microphone Cable

Shock Mount
Rycote Windshield, Windjammer, Pistol Grip & Mount
Aluminium Field Case



FOR FURTHER DETAILS ABOUT SOUNDFIELD PRODUCTS CONTACT :-



SoundField

Charlotte Street Business Centre
Charlotte Street, Wakefield, England WF1 1UH

Tel: 01924 201089 Fax 01924 201618