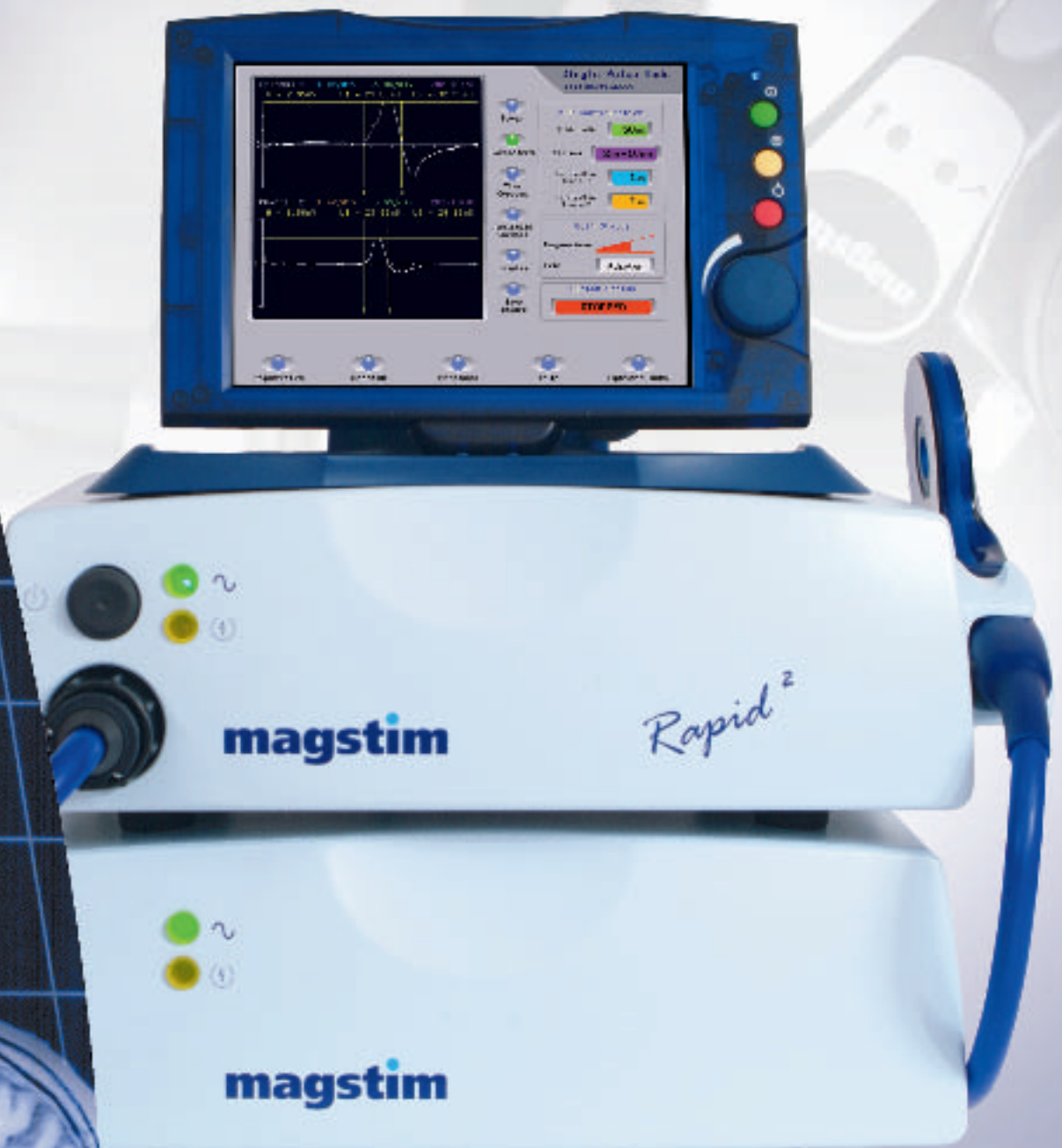


magstim[®]

Rapid²

Rapid Rate Magnetic Stimulators



PIONEERS IN NERVE STIMULATION AND MONITORING

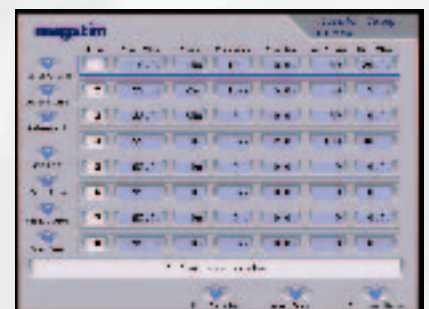
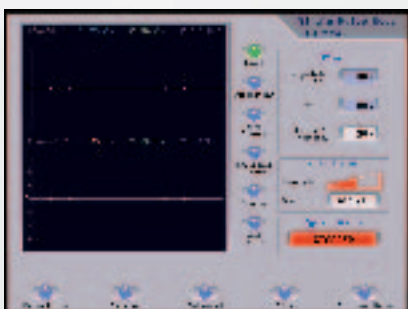
MAGSTIM RAPID² - VERSATILE MAGNETIC STIMULATION...

Repetitive Transcranial Magnetic Stimulation (rTMS) works by inducing electrical currents in tissue using a non-invasive stimulating coil at frequencies of up to 100Hz. The stimulating coil is placed near the intended site of stimulation and trigger pulses initiate brief magnetic pulses. The magnetic fields can pass through clothing, tissue and bone to reach otherwise inaccessible areas. One feature of magnetic stimulation is that it is less likely to stimulate pain fibres at the skin surface, reducing the discomfort when compared with conventional electrical stimulation.

Magstim Rapid² magnetic stimulators combine stimulation frequencies from 1Hz to 100Hz with a touch screen interface which controls every aspect of the stimulator's control and operation.

This new range of rapid rate stimulators replaces the well established Magstim Rapid and Super Rapid and has been developed as a result of extensive consultation with existing users throughout the world, both in the clinical and research arenas.

- Consistent pulse amplitude delivery during stimulation trains, making good clinical results easy to achieve.
- 1Hz to 100Hz stimulation frequency achievable (100% output up to 25Hz, 50% output at 50Hz, 30% output at 100Hz).
- Flexible software built on years of Magstim Rapid users' experience. All controls operated via dedicated TFT/VGA touch-screen.
- Sophisticated patient information management, enabling patient details and protocol information to be stored both internally and on removable media.
- Single pulse, repetitive and session modes.



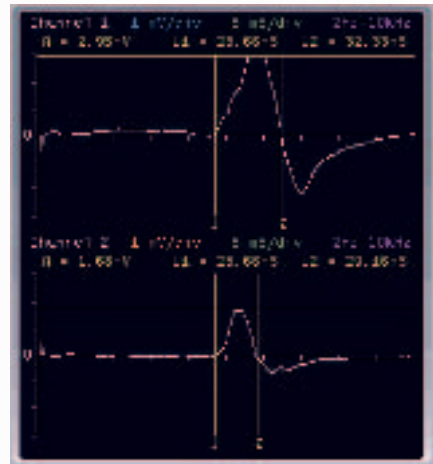
- Integrated 2 channel EMG with acquisition software including latency and amplitude cursors.¹

- Designed to meet the needs and expectations of those individuals working within the research, therapeutic and diagnostic fields.

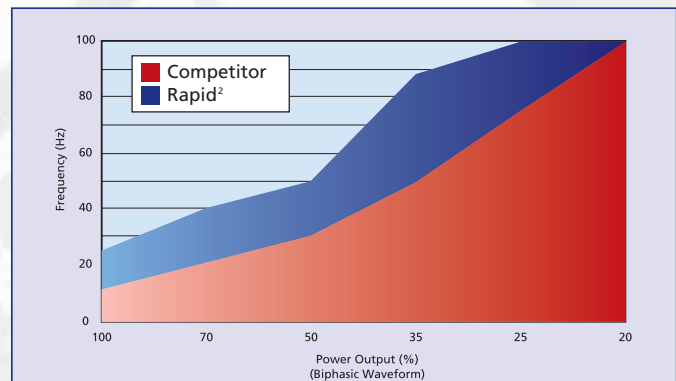
- Designed for use in:

- Depression
- Rehabilitation
- Epilepsy
- Movement disorders
- Functional brain mapping
- Cognition

magstim



- Attractive, modern, modular design to maximise flexibility in use and provide future upgrade paths.
- Backward compatibility with existing Magstim coils through dedicated hardware.
- Complies with Safety Standard EN60601-1, CE Marked.



The graph shows the respective output frequencies at given power settings for both the Magstim Rapid² and competitor stimulators. As can be seen Rapid² can achieve higher power output at higher frequency than those achievable from competitor devices.

The Rapid² - driving magnetic stimulation forward...

¹ Risk and Safety of Repetitive Transcranial Magnetic Stimulation: Report and Recommendations from the International Workshop on the Safety of rTMS - Eric M. Wasserman, June 1996

SPECIFICATION

	Rapid²	
Peak Magnetic Field	0.5 - 3.5 Tesla @ 100% output*	
Repetition Rate	Single PSU • 50Hz @ 30% output • 30Hz @ 50% output • 18Hz @ 80% output • 15Hz @ 100% output	Dual PSU • 100Hz @ 30% output • 50Hz @ 50% output • 30Hz @ 80% output • 25Hz @ 100% output
Train Duration	User selectable in 0.1s increments	
Output Type	Biphasic	
Pulse Width	400µs	
Upper Frequency	Single PSU - 50Hz	Dual PSU - 100Hz
Minimum Pulse Interval	Single PSU - 20ms	Dual PSU - 10ms
Maximum Frequency at Maximum Power	Single PSU - 15Hz	Dual PSU - 25Hz
Mode of Operation	Continuous	
Trigger Input / Output	TTL, Active low or high (via D-type connector)	
Software Features	<ul style="list-style-type: none"> • Integrated colour 'touch screen' display. • Integrated 2 channel MEP recording.[†] • Highly intuitive multi parameter software controlling three modes of system function: <ol style="list-style-type: none"> 1. Single Pulse 2. Repetitive 3. Session • Internal Secure Digital (SD) memory card slot to enable system data to saved and interrogated externally. • Patient Data Storage. • Data Acquisition Software. • Easy upgrade path to future software releases. • Integrated File Management Software. 	

* Stimulating coil dependant † Customer option

For further information on clinical applications or product specifications please contact your local distributor or Magstim direct at info@magstim.com

All products carry the CE mark, comply with Medical Device Directive 93/42/EEC, and are manufactured under a Quality System certified to **ISO 13485**

Cortical Magnetic Stimulation is currently considered investigational in the USA
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 All specifications are subject to change. All material within this literature is produced in good faith.



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