

Frequency Range	1-10Hz	11-34Hz	35-70Hz	71-100Hz	100+Hz
Muscle fibre activation	Twitch	Type I Fibres	Type II Fibres	Type IIa Fibres	Type IIb Fibres
Example Programmes	<p><b>Decontracture (1Hz)*</b> for reducing Muscle spasm</p> <p><b>Endorphinic (5Hz)*</b> for acute pain relief</p> <p><b>Capillarisation (8Hz)*</b> for increased circulation, venous return, lactate removal and lymphatic drainage</p> <p><b>Arterial Insufficiency (9Hz)</b> with pain at rest or with activity</p>	<p><b>Prevention of Disuse Atrophy (30-40Hz)</b> prevention of reflex inhibition and muscle volume loss</p> <p><b>Cardio Training (10Hz)</b> for patients with reduced exercise capacity eg Cardiac failure</p> <p><b>Endurance (10-14Hz)</b> to increase aerobic capacity in the stimulated muscles</p>	<p><b>Disuse Atrophy (35-45Hz)</b> Maximum tetanic contractions of Type I fibres (suggested for 2 weeks rehab, progressing on to Type II fibre training)</p> <p><b>Venous Insufficiency (50Hz)</b> promoting venous return (with and without oedema)</p> <p><b>Resistance (50-60Hz)</b> to increase capacity for lactate anaerobic type work</p>	<p><b>Reinforcement (75-85Hz)</b> to strengthen previously atrophied muscles that now, have normal volume</p> <p><b>Potentiation (10-75Hz)</b> to increase speed and power used &lt;10 minutes prior to event</p> <p><b>Strength (75-90Hz)</b> to increase strength and speed of contraction</p>	<p><b>Explosive strength (104-111Hz)</b> to promote maximum force in stimulated muscles for explosive actions such as jumping</p>
Comments	*Combining these three programs provides <b>Active Recovery</b> for post training		The optimal protocol for Disuse Atrophy is two treatments per day	TENS 80-100Hz for pain relief	As with Strength use during rehab to maintain adapted fibres while injured
Example work/rest times	Arterial insufficiency 7s/7s	Cardio 20s/20s Endurance 8s/2s	Disuse Atrophy 6s/7s Resistance 7s/7s	Reinforcement 4s/8s Strength 4s/27s	Explosive 3s/32s



Workshops available for clinical and practical applications. To learn more, visit [www.DJOed.co.uk](http://www.DJOed.co.uk)

Contact DJO Global at [ukmarketing@DJOGlobal.com](mailto:ukmarketing@DJOGlobal.com)