RPW Shockwave Therapy
Chattanooga & JOG

Chattanooga is a brand of JOG Global Inc. JOG Global provides solutions for musculoskeletal health, vascular health and pain management. Our products help prevent injuries or rehabilitate after surgery, injury or from degenerative disease, enabling patients to regain or maintain their natural motion. Visit www.JOGglobal.eu

Our Intelect® line of products contributes to better treatment outcomes in hospitals, clinics and home settings worldwide. We lead the physiotherapy industry by example, through continuous innovation, providing real-world solutions for clinicians and their patients.

Radial Pressure Waves

Therapeutic shockwaves were introduced as a medical treatment for eliminating kidney stones without causing skin injury, over 20 years ago. Some of the side effects discovered while using this treatment, were the bone healing and accelerated tissue healing results on the areas submitted to shockwave treatment. Today the use of radial shockwaves or Radial Pressures Waves (RPW) has been successfully extended to other therapeutic and wellness applications such as:

- Shoulder calcifications
- Insertional tendonitis
- Myofascial trigger points
- Muscle and connective tissue activation

Radial Pressure Waves is an excellent non invasive treatment method with very few negative side effects, for indications that are normally very difficult to treat. For these indications we now know that RPW is a treatment method that reduces pain as well as improves function and quality of life.
**Chattanooga RPW Technology**

Chattanooga Intelect RPW and Mobile RPW are compressed air-ballistic shockwave generators. The shockwaves for both devices are generated with a precision ballistic mechanism in the handpiece which accelerates a projectile by compressed air. The motion and weight of the projectile produce kinetic energy which translates along with the transmitter into sound energy in the form of an acoustic wave. The acoustic wave is transmitted into the tissue via a coupling gel and collectively this is known as “Radial Pressure Wave Therapy”. The propagating acoustic waves functionally stimulate increased blood flow and metabolic activity within the cell.

**D-Actor® Applicator**

- **Acoustic Shockwave**
- **Ballistic projectile**
- **Hand grip**
- **Activation button (Trigger)**
- **Compressed air line from main unit**
- **A variety of transmitters are available for different areas of use**

**Intelect RPW**

**Mobile RPW**
Physical effects of Radial Pressure Waves
Radial pressure waves offer a non invasive treatment solution for long term insertion and soft tissue pathologies. Local treatment of the affected area will enhance and reset the healing pattern. Today there are several working hypotheses for the physical effects of radial pressure waves:

- Shockwaves create increased cell membrane permeability metabolically which allows old, damaged and weakened cells to be removed and replaced with healthy viable cells.

- And neurologically, Shockwaves produce a counter irritation at the dorsal root ganglion actually modulating the amount of nociceptive activity and decreasing the pain signal and actually closing the theoretical pain gate.

- Vascular changes such as increased blood circulate in tissues which increases the oxygen content and significantly reduce the concentration of carbon dioxide in the tissue which may stimulate the healing process.

- Based on the hypothesis towards associative pain memory (Wess), afferent pain signals are transmitted through the central nervous system by multiple synaptic junctions which eventually cause efferent fibers to control muscle tone. The reflex mechanism works just like a regulatory circuit.
Indications

Radial Pressure Wave therapy is indicated for:

- Myofacial Trigger Points
- Activation of muscle and connective tissue
- Disorder of tendon insertions
DJO is proud to introduce their current Shockwave offerings. Decades of experience in rehabilitation device manufacturing has resulted in radial pressure units that are revolutionary in design, style and application. DJO Shockwave devices come with an abundance of features not found on other radial pressure wave units in the market. Despite the list of impressive features, the user interface is remarkably intuitive and simple to use. DJO has developed a radial pressure wave unit with proven cutting-edge technology which establishes our RPW units as the new global standard in radial Shockwave therapy.
Features
- Full color LCD touch-screen interface
- State-of-the-art navigation features enable you to access the desired functions at the touch of a finger
- Treatment setup via Quick-link Indications, Clinical Protocols™ or manual adjustment
- 200 user-defined protocol storage slots
- Over 80 clinical protocols on board
- Clinical Resources include:
  - Full color graphics library of anatomical images and pathologies
  - Hand piece placement images
  - Radial pressure wave rationale
  - Radial pressure wave contraindications
- 2 channels allow connection of 2 hand pieces
- Unique optimal energy level adjustment feature that allows gradual ramping of the intensity during treatment
- Convenient storage platform allows secure and easy access of hand pieces, transmitters and gel
- 360° swivel rotation of interface
- Large storage drawer for storage of clinical supplies
- Multilingual software
- Patient documentation of treatment sessions, pre and post treatment patient pain scales, pain mapping and pain types all captured on Patient Data Cards
- 3 year warranty
Easy-to-use Interface

Intelect® RPW incorporates touch screen technology to ensure a high degree of simplicity. The easy-to-use menu-driven user interface guarantees reliable selection of all necessary parameters for treatment set-up as well as during patient treatment. All essential parameters always remain under control.

Unique optimal energy level adjustment

An automatic ramp-up feature, that allows a gradual increase of the intensity, at the start of the treatment, to provide an automatic and smooth intensity increase in tune with your patient. The patient's pain threshold can be recorded and treatment can be managed at the optimal painless energy level.
Interface and Navigation

Clinical Protocols

Quick Link Indications

User Protocols

Clinical Resources Libraries:
- Anatomical/Pathological Library
- Hand Piece Placement Library
- Radial Pressure Wave Rationale
- Radial Pressure Wave Contraindications
- Patient Pain Profile Information
ORDERING INFORMATION:
2082 Intelect® RPW unit - 100 V
2073 Intelect® RPW unit - 120 V
2074 Intelect® RPW unit - 230 V

Standard Accessories:
28700 - Standard accessory kit that includes the following:
  - 28699 D-ACTOR® Hand piece applicator
  - 28736 Projectile (x3)
  - 17638 R15 15 mm ESWT transmitter
  - 28724 D20-S D-ACTOR® 20 mm transmitter
  - 28737 Sealing set
  - 28738 Guide tube (x2)
  - 28739 Cleaning brush
4248 - Conductor™ transmission gel 250 ml (8.5 oz) bottle (x1)
27465 - Patient data card (x1)
28668 - User manual on CD

Optional Accessories:
28725 - D35 D-ACTOR® 35 mm transmitter
28726 - F15 Focus-Lens 15 mm transmitter
28728 - D115 Deep Impact® 15 mm transmitter
28729 - C15 CERAma-x® ESWT 15 mm transmitter
28730 - V- ACTOR® hand piece applicator kit that includes the following:
  - 28740 - V25 V- ACTOR® 25 mm vibration transmitter
  - 28741 - V40 V- ACTOR® 40 mm vibration transmitter
### TECHNICAL SPECIFICATIONS:

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mains Power:</strong></td>
<td>100 V ~, 50/60 Hz (Model 2082)</td>
</tr>
<tr>
<td></td>
<td>120 V ~, 60 Hz (Model 2073)</td>
</tr>
<tr>
<td></td>
<td>230 V ~, 50 Hz (Model 2074)</td>
</tr>
<tr>
<td><strong>Power Consumption:</strong></td>
<td>840 VA (Model 2082)</td>
</tr>
<tr>
<td></td>
<td>780 VA (Model 2073)</td>
</tr>
<tr>
<td></td>
<td>610 VA (Model 2074)</td>
</tr>
<tr>
<td><strong>Compressed Air Output:</strong></td>
<td>1.4 - 5 bar</td>
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<tr>
<td><strong>Power Increment Settings:</strong></td>
<td>0.2 bar</td>
</tr>
<tr>
<td><strong>Power Indication:</strong></td>
<td>Maximum and average power</td>
</tr>
<tr>
<td><strong>Pulse Amplitude:</strong></td>
<td>Approx. 2 mm at 3 bar, idling (without coupling)</td>
</tr>
<tr>
<td><strong>Pulse Width:</strong></td>
<td>Approx. 6 - 12 ms</td>
</tr>
<tr>
<td><strong>Pulse Frequency:</strong></td>
<td>0.5 - 35 Hz</td>
</tr>
<tr>
<td><strong>Pressure Vessel Volume:</strong></td>
<td>0.3 L</td>
</tr>
<tr>
<td><strong>Mode:</strong></td>
<td>Single or continuous</td>
</tr>
<tr>
<td><strong>Fuses:</strong></td>
<td>Two 6.3 A time lag 5 x 20 mm (not user serviceable)</td>
</tr>
<tr>
<td><strong>Electrical Class:</strong></td>
<td>CLASS I</td>
</tr>
<tr>
<td><strong>Electrical Type:</strong></td>
<td>TYPE B</td>
</tr>
<tr>
<td><strong>Regulatory Risk Class:</strong></td>
<td>IIa according to MDD 93/42/EEC</td>
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</tbody>
</table>

### Dimensions

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Width:</strong></td>
<td>42 cm (16.5&quot;)</td>
</tr>
<tr>
<td><strong>Depth:</strong></td>
<td>41 cm (16.14&quot;)</td>
</tr>
<tr>
<td><strong>Height:</strong></td>
<td>114.3 cm (45&quot;)</td>
</tr>
<tr>
<td><strong>Standard Weight (with 1 handset):</strong></td>
<td>32.66 kg (72 lbs)</td>
</tr>
</tbody>
</table>
When the need for a powerful yet portable Radial Pressure Wave device is called upon in the clinic or the athletic sports field, the Chattanooga Mobile RPW is the ideal choice. Its lightweight and compact design, together with its quiet, built-in compressor makes it perfect for portable use.

User friendliness is at the heart of the Mobile RPW’s design. The simple, ergonomically laid out controls enable all of the key parameters to be easily changed, while an illuminated LED display clearly indicates pressure, frequency and number of pulses. Initiation of the pulses is via a trigger mechanism on the hand piece.
When the need for a powerful yet portable Radial Pressure Wave device is called upon in the clinic or on the athletic sports field, the Chattanooga Mobile RPW is the ideal choice.
**ORDERING INFORMATION:**

2805 Mobile RPW unit

**Standard Accessories:**
28699 - D-ACTOR® Hand piece applicator
17638 - R15 15mm ESWT transmitter
28724 - D20-S D-ACTOR® 20mm transmitter
28701 - Accessory kit that includes the following:
- 28737 Sealing set
- 28738 Guide tube (x2)
- 28736 Projectile (x2)
13-5182 - Conductor™ transmission gel 250 ml (8.5 oz) bottle
0938 - Clinical Guide
13-5183 - CD User Manual

**Optional Accessories:**
28745 - Carrying Bag
28725 - D35 D-ACTOR® 35 mm transmitter
28726 - F15 Focus-Lens 15 mm transmitter
28728 - DI15 Deep Impact® 15 mm transmitter
28729 - C15 CERAma-x® ESWT 15 mm transmitter
28730 - V-ACTOR® Hand Piece
**TECHNICAL SPECIFICATIONS:**

- **Dimensions (W x H x D):** 49 x 29 x 40 cm
- **Weight:** Approx. 9 kg
- **Mains input voltage:** 100 - 240 VAC
- **Mains frequency:** 50/60 Hz
- **Power consumption:** Max. 150 VA
- **Classification to MDD:** Class IIa device
- **Trigger button:** Located on handpiece
- **Display:** LED displays with selector buttons
- **USB Connectivity:** Yes
- **Pressure:** 1-4 Bars of pressure, infinitely variable with precise adjustments of 0.1 increments.
- **Shock:** Single and Continuous shocks
  - **Frequency D-actor:** 1 - 15 Hz
  - **Frequency V-actor:** 1 - 21 Hz
**D-ACTOR® Applicator**

The D-ACTOR® applicator can be used with a variety of transmitters for the generation of shockwaves. Each transmitter has its own characteristic effect and area of use. The majority of transmitters generate shockwave, whereas the D20 and D35 transmitters generate both shockwaves and vibrations.

<table>
<thead>
<tr>
<th>Transmitter</th>
<th>Data</th>
<th>Indications</th>
<th>Energy Flux Density / Penetration depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>C15, 15 mm, CERAmix® ESWT Transmitter</td>
<td>Elastic pressure waves</td>
<td>Gel free, elastic pressure wave therapy for all tendinopathies</td>
<td><img src="image1.png" alt="Image" /> 0.45 mJ/mm² 0 - 40 mm</td>
</tr>
<tr>
<td>R15, 15 mm, EWST Transmitter</td>
<td>Radial spreading</td>
<td>Radial pressure wave therapy, all tendinopathies</td>
<td><img src="image2.png" alt="Image" /> 0.38 mJ/mm² 0 - 40 mm</td>
</tr>
<tr>
<td>D20-S, 20 mm, D-ACTOR® Transmitter</td>
<td>Radial pressure waves and vibration pulses</td>
<td>Myofascial trigger therapy, muscle and connective tissue, dissolution of fibrosis, treatment of deep-seated muscles</td>
<td><img src="image3.png" alt="Image" /> 0.48 mJ/mm² 0 - 50 mm</td>
</tr>
<tr>
<td>D35, 35 mm, D-ACTOR® Transmitter</td>
<td>Radial pressure waves and vibration pulses</td>
<td>Myofascial trigger therapy, muscle and connective tissue back muscles, skin elasticity, trigger-diagnosis, dissolution of fibrosis, treatment of deep-seated muscles</td>
<td><img src="image4.png" alt="Image" /> 0.46 mJ/mm² 0 - 50 mm</td>
</tr>
<tr>
<td>D15, 15 mm, Deep Impact® Transmitter</td>
<td>Energy focused beam</td>
<td>Deep-seated diseases, trigger, chronic conditions, high energy requirements</td>
<td><img src="image5.png" alt="Image" /> 0.63 mJ/mm² 0 - 60 mm</td>
</tr>
<tr>
<td>F15, 15 mm, Focus-Lens Transmitter</td>
<td>Energy focused area</td>
<td>Close to surface pain areas, facial muscles, neck, head, individual triggers</td>
<td><img src="image6.png" alt="Image" /> 0.16 mJ/mm² 0 - 20 mm</td>
</tr>
</tbody>
</table>
Standard Equipment

D-ACTOR® Applicator

Applications:

- Localizing and Deactivating Trigger Points: Triggers are localized at the low energy level (approximately 2 bar) by passing the transmitter over the muscle region being treated (increased sensitivity to pain) and then deactivated using a higher energy level (approximately 3 bar).
- Increasing Circulation: Promotes blood flow through the tissue and boosting metabolism.
- Pulse Vibration Massage: Soothing relief from muscle strain and stress.
- Plantar Fasciitis, Heel Pain, or Heel Spur: Plantar Fasciitis is an inflammatory condition of the foot caused by excessive wear to the plantar facia that supports the arch.
- Tendinosis Calcarea / Supraspinatus-Tendon: Shoulder calcifications and chronic shoulder pain.
- Radial and Ulnar Humeral Epicondylitis: Tennis elbow, inflammation of tendon attachments on cubital or radial part of elbow joint (humeral)
- Achillodynia: Pain due to inflammation of Achilles tendon or the bursa associated with it.
- Retropatellar Pain Syndrome: Pain in the front of and around the kneecap
- Tibial Edge Syndrome: Pain located along or just behind the medial edge of the tibia
- Proximal Iliotibial Band Friction Syndrome / Trochanteric Insertion Tendonitis: Pain or aching on the outer side of the knee or hip.
V-ATOR® Applicator
The V-ATOR® applicator is an ideal complement to Radial Pressure Wave therapy.

Available for both Intelect RPW and Mobile RPW devices
Applications:
- Increasing Circulation: Promotes blood flow through the tissue and boosting metabolism.
- Pulse Vibration Massage: Soothing relief from muscle strain and stress.