ARTROMOT®
Continuous Passive Motion and Controlled Active Motion Devices
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Together in Motion™
ARTROMOT®

ARTROMOT CPM products are developed and manufactured in Germany by DJO Germany (Ormed GmbH), part of DJO Global. As the market leader in motorized CPM devices, DJO Germany has over 30 years of experience in designing leading edge CPM products. All products are classified MDD IIa and registered according to all current valid standards, for providing maximum safeness in clinical and rental usage.

DJO Global is a leading global developer, manufacturer and distributor of high-quality medical devices that provide solutions for musculoskeletal health, vascular health and pain management. The company’s brands address the continuum of patient care from injury prevention to rehabilitation after surgery, injury or degenerative disease.

ARTROMOT: THERAPY WITH MOTORIZED CPM EQUIPMENT

ARTROMOT CPM Devices Get You and Your Patients Going
ARTROMOT devices are primarily used in the post-operative treatment and rehabilitation process following joint surgery, using CPM (continuous, passive motion) therapy.

ARTROMOT CPM devices are available for
- The shoulder
- The knee and hip
- The elbow
- The ankle

Benefits at a Glance
- Prevents motion-limiting adhesion and joint stiffness (arthrofibrosis)
- Promotes healing of articular cartilage, tendons, ligaments and soft tissue
- Improves hematoma/fluid resorption
- Reduces pain
- Improves metabolism
- Reduces length of hospital stay and therapy duration

Recommended Therapy
ARTROMOT CPM devices are normally employed either directly after surgery or in the first post-operative week.
The daily treatment schedule may vary with the injury or condition to be treated:
- 3 to 4 hours (general recommendation)
- Up to 24 hours in the case of articular cartilage surgery or injury

Home Care / Rental Service
ARTROMOT CPM products are used in hospitals as well as in home care for out-patient treatment.
The ARTROMOT CPM devices may be prescribed by orthopaedic surgeons.
In many countries there is also the option of billing patients directly, via rental programs.
**Evidence-based therapy**

Excerpt from Prof. Kirschner’s meta-analysis*.

“Thanks to the overall benefits conferred, CPM must today be used as an essential treatment modality (…) in an inpatient as well as an outpatient setting because clear treatment advantages have been observed (…).”

Excerpt from an open, prospective, randomized clinical multi-center study involving patients with massive rotator cuff rupture:**

“Statistically significant results were obtained, attesting to the superiority of combination therapy comprising CPM and physiotherapy vs patient treatment based only on physiotherapy.

- In the CPM group 90° abduction was achieved much earlier
- Patients in the CPM group were able to resume occupational activities more quickly
- CPM therapy markedly reduced pain
- There was no evidence of complications or dangers posed by CPM treatment in the domiciliary setting”

**Results: CPM therapy with ARTROMOT**

<table>
<thead>
<tr>
<th></th>
<th>META-ANALYSIS*</th>
<th>MULTI-CENTER STUDY**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduces length of hospital stay and overall therapy duration</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Considerably reduces the rate of mobilization under anesthesia</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Improves articular cartilage healing</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Reduces risk of thrombosis</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Improves hematoma/fluid resorption</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Reduces pain</td>
<td>*</td>
<td>**</td>
</tr>
<tr>
<td>Improves joint functionality</td>
<td>*</td>
<td>**</td>
</tr>
<tr>
<td>Reduces length of disability</td>
<td></td>
<td>**</td>
</tr>
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</table>

  Der Unfallchirurg, Band 107, 4/04


“Effektivität der postoperativen Behandlung mit CPM-Bewegungsschienen in Kombination mit krankengymnastischer Therapie im Vergleich zu ausschließlich krankengymnastischer Therapie bei Patienten mit vollständiger Ruptur der Rotatorenanschette”
ORDERING INFORMATION

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<th>Part Number</th>
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<td>protocol: orange (only therapy protocols)</td>
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<td>0.0040.213</td>
<td>special: red (all functions)</td>
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<tr>
<td>5001558</td>
<td>Eraser for patient chip card</td>
</tr>
<tr>
<td>0.0040.100</td>
<td>Active-K strap set (4 straps)</td>
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<td>2.0037.024</td>
<td>Connection cable for muscle stimulator</td>
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<tr>
<td>80.00.056</td>
<td>Transport trolley</td>
</tr>
<tr>
<td>80.00.068</td>
<td>Transport trolley (modular)</td>
</tr>
<tr>
<td>TK-001</td>
<td>Transport box</td>
</tr>
</tbody>
</table>

TECHNICAL SPECIFICATIONS

Range of Motion Extension / Flexion

<table>
<thead>
<tr>
<th></th>
<th>Knee</th>
<th>Hip</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROM</td>
<td>10° / 0° / 120°</td>
<td>0° / 7° / 115°</td>
</tr>
</tbody>
</table>

Features

- ROM adjustment passively (by using the hand controller) or active ROM adjustment (by bending and stretching the leg)
- Pauses (Extension and/or Flexion) 1 – 59 s / 1 – 59 min
- Timer 1 – 59 min / 1 – 24h / continuous operation
- Warm up protocol Gradual progression to the maximum set ROM
- Speed 5 % - 100 % (separately for passive of active training)
- Reverse on load in steps 10 kg – 60 kg, patient safety feature in passive mode
- EMS control For an optimal combination of CPM treatment and electrotherapy
- New patient Activates the default setting for new patients
- Therapy documentation Graphic representation of the overall treatment cycle
- Key lock function 0 – 4 in steps, limits the changeable features and prevents accidental changes of the parameter setting
- Transport setting Moves the carriage to the transport position
- Set up For basic adjustments of the device (e.g. language set up, service menu, date/time)

ACTIVE-K
FOR THE KNEE AND HIP JOINT

Maximun Stabilization
means leg is securely guided from foot to thigh

Intuitive User Design with interactive hand controller display

The Active-K is a motorized physiotherapy unit that delivers a unique mix of rehabilitation therapies through a single device. Combining the benefits of CPM (Continuous Passive Motion), CAM therapy (Controlled Active Motion) and the onboard protocols, the patient is able to regain coordination and reduce proprioceptive deficit.

Using the Active-K allows patients to regain painless mobility of hip and knee joints at an early post-operative stage and stimulates the healing process. Additionally, the active component of the therapy unit is intended to enhance proprioception and functional stability (strength) as mentioned at an early stage and thus improve coordination following joint surgery.

FEATURES

- Lightweight (17 kg) robust design, able to withstand +/-30 kg of force
- Designed to ensure anatomically correct movements are maintained
- Can be secured to a treatment table or bed using the fold-out stabilization supports and/or optional straps
- Integral footplate sensor enables exercise forces to be measured
- Computer controlled motor for CAM and coordination therapies
- Fully adjustable to suit different patient sizes and heights
- Advanced, interactive hand controller incorporating a full color LED screen for instant patient feedback
- Controller features an easy to use icon based menu system
- Patient Chip Card for storage of therapy data
- A range of pre-programmed protocols for the 3 major indications (ACL/PCL, Cartilage repair, TEP) enables easiest usage
- 2 year warranty

The Active-K has the capacity to allow clinicians to perform therapeutic strengthening exercises by allowing muscular contractions using the following methods:

- Concentric
- Isokinetic
- Eccentric
- Isometric

Additional Therapeutic Benefits for Patients

- Enhancement of joint metabolism
- Prevention of joint stiffness
- Promotion and regeneration of cartilage and damaged ligaments
- Faster hematoma / re-absorption
- Improved blood & lymph circulation
- Prophylaxis for thrombus and embolism syndromes
- Bridging the gap from Passive motion to Active training with resistive therapy during rehabilitation
- Expedites coordination & sensory perception following surgery
**ARTROMOT®**

**Maximum Safety**
through specific controlled movements

**Latest Sensor Technology**
measures the exerted force

**High Stability**
thanks to the fold-out fixation wing and belt system (optional)

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**1 Passive (CPM)**

**Controlled and gentle mobilisation:**
- Reduce swelling and pain
- Prevent joint stiffness
- Regain mobility

**Function 2 Active (CAM)**

**Functional stabilization:**
- Smooth/controlled muscle reactivation and strengthening
- Further reduction of swelling and pain
- Regain functional stability

**Stabilizing exercise:**
- Muscle reactivation
- To train coordination / proprioception

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**TECHNICAL SPECIFICATIONS (Continued)**

**Additional features for active exercising**

- **Force (Extension and/or Flexion)**: Separately for each direction:
  - Concentric / eccentric training
  - Adjustable forces: from 0 kg (passive) to max. 30 kg

- **Active Zone**: Zone within the set ROM for active training (max. 0° / 0° / 90°)

**Coordination features**

- **Maintain force static/dynamic**: Enables isometric or limited isokinetic training
- **Find angle active/passive**: Increases the perception of the current knee angle position
- **Free training**: Active training against adjusted force resistance over entire possible ROM 10° / 0° / 120°

**Adjustable features within the therapy protocols**

- **Indication**: ACL/PCL, Cartilage, TEP
- **Extension/Flexion**: ROM adjustment passively (by using the hand controller)
- **Treatment level per indication**: 1 – 6, increasing activity rate (level 1 = 100% passive / level 6 = 1% passive)
- **Timer**: Duration of a level 20 min – 2 h
- **Demo**: Easy demonstration of a treatment level, to train the patient
- **Default setting**: e.g. language set up, service menu, reverse on load, new patient

**Dimensions**

- **Weight**: 17 kg
- **Dimensions***: 96 x 38 x max. 57 cm
- **Suitable for patient height**: approx. 135 – 205 cm
- **max. permanent load on carriage**: 30 kg
- **max. patient weight**: Approx. 275 kg

* Dimensions are listed as L x W x H
**ARTROMOT®-K1**

**FOR THE KNEE AND HIP JOINT**

*Making good things great!*

- ARTROMOT-K1 combines the best features of the time-tested ARTROMOT knee machine with state-of-the-art, trend-setting technology
- ARTROMOT-K1 was developed for the demanding use in clinics and home care/rental programs
- Using the ARTROMOT-K1 is made easy by intuitive operation of the handheld programming unit with self-explanatory symbols

**INDICATIONS**

- Arthroscopy and arthroscopy procedures in combination with synovectomy, arthrolysis
- Treatment following mobilization of joints in anesthetized patients
- Surgical treatment of fractures and pseudoarthrosis
- Exercise-stable osteosynthesis
- Operations on soft tissue in the joint area
- Patelllectomy
- Corrective osteotomy
- Meniscectomy
- Total knee/hip replacement
- ACL/PCL reconstruction
- Complex knee surgery
- Articular cartilage surgery, e.g. autologous chondrocyte transplantation (ACT)

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**ORDERING INFORMATION**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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<tr>
<td>80.00.045</td>
<td>ARTROMOT-K1 Classic</td>
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<tr>
<td>80.00.040</td>
<td>ARTROMOT-K1 Standard</td>
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<td>80.00.041</td>
<td>ARTROMOT-K1 Standard with chip card</td>
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<tr>
<td>80.00.042</td>
<td>ARTROMOT-K1 Comfort</td>
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<td>ARTROMOT-K1 Comfort with chip card</td>
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<td>80.00.055</td>
<td>Transport trolley</td>
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<tr>
<td>80.00.065</td>
<td>Transport trolley (modular)</td>
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<tr>
<td>TK-001</td>
<td>Transport box</td>
</tr>
<tr>
<td>0.0034.048</td>
<td>ARTROMOT chip card</td>
</tr>
<tr>
<td>2.0037.024</td>
<td>Connection cable &quot;muscle stimulation&quot;</td>
</tr>
</tbody>
</table>

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Handheld programming unit
ARTROMOT-K1 Classic

Handheld programming unit
ARTROMOT-K1 Standard and ARTROMOT-K1 Comfort

**TRANSPORT BOX**

**PATIENT CHIP CARD FOR STORAGE OF THERAPY DATA**
## TECHNICAL SPECIFICATIONS

### Range of Motion Extension/Flexion

<table>
<thead>
<tr>
<th>Joint</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knee</td>
<td>-10° / 0° / 120°</td>
</tr>
<tr>
<td>Hip</td>
<td>0° / 7° / 115°</td>
</tr>
</tbody>
</table>

### ARTROMOT-K1 Classic - Features

- **Pauses**
  - Extension and flexion: 0 - 59 s / 1 - 59 min
- **Speed**
  - 5% - 100%
- **Key lock function**
  - To prevent accidental changes of the parameter settings

### ARTROMOT-K1 Standard - Additional features

- **Timer**
  - 1 - 59 minutes / 1 - 24 hours / continuous operation
- **Pauses**
  - Extension and/or flexion: 0 - 59 seconds / 1 - 59 minutes
- **Reverse on load in steps**
  - 1 - 25 / patient safety feature
- **Warm up protocol**
  - Gradual progression to the maximum range of motion
- **Total therapy time**
  - Added sum of the therapy sessions
- **New patient**
  - Activates the default settings for new patients
- **Transport setting**
  - Moves the carriage to the transport position
- **Service menu**

### ARTROMOT-K1 Comfort - Additional features

- **EROM repeat**
  - (extension or flexion)
  - Exercises are performed at a higher rate in the end range of motion
- **Stretching**
  - (extension or flexion)
  - For gradual and smooth increase of the range of motion
- **Therapy documentation**
  - Graphic representation of the overall treatment cycle
- **EMS control**
  - For an optimal combination of CPM treatment and electrotherapy
- **Workout protocol**
  - Combines various functions of the comfort model in one protocol
- **Comfort protocol**
  - Warm up in the EROM of extension and flexion

### ARTROMOT-K1 with Chip Card - Additional features

- **Patient chip card**
  - Stores patient-specific therapy parameters

### Dimensions

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>11 kg (24.4 lb)</td>
</tr>
<tr>
<td>Dimensions</td>
<td>97 x 36 x 23 cm (38.1 x 14.1 x 9.0 in)</td>
</tr>
<tr>
<td>Suitable for patient height</td>
<td>Approx. 120 – 205 cm</td>
</tr>
<tr>
<td>max. permanent load on carriage</td>
<td>25 kg</td>
</tr>
<tr>
<td>max. patient weight</td>
<td>Approx. 230 kg</td>
</tr>
</tbody>
</table>

*Dimensions are listed as L x W x H*
Combining tested features, such as the patient chip card, the easy swift conversion, the anatomically correct motion, with a streamlined design, the ARTROMOT-S3 is one of the most ergonomically designed CPM devices for the shoulder.

It also features a handheld programming unit with LCD graphic display, which has a wide screen with large self-explanatory symbols and an intuitive menu navigation for ease of use.

INDICATIONS
- Arthrotomy and arthroscopy procedures in combination with synovectomy, arthrolysis
- Treatment following mobilization of joints in anesthetized patients
- Surgical treatment of fractures and pseudoarthrosis
- Exercise-stable osteosynthesis
- Endoprosthetic implants
- Surgical treatment of impingement syndrome
- Acromioplasty
- Decompression surgery
- Rotator cuff reconstruction

ORDERING INFORMATION

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<tr>
<td>80.00.024</td>
<td>ARTROMOT-S3 Comfort</td>
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<tr>
<td>0.0034.048</td>
<td>ARTROMOT chip card</td>
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The best choice for Shoulder Rehab!
### TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Range of Motion</th>
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</thead>
<tbody>
<tr>
<td>Adduction/abduction</td>
</tr>
<tr>
<td>Internal/external rotation</td>
</tr>
<tr>
<td>Elevation</td>
</tr>
<tr>
<td>Horizontal adduction/abduction (manual)</td>
</tr>
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<table>
<thead>
<tr>
<th>ARTROMOT-S3 - Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timer</td>
</tr>
<tr>
<td>Pauses</td>
</tr>
<tr>
<td>Speed (ABD/ADD)</td>
</tr>
<tr>
<td>Reverse on load in Steps (motor A and B separately)</td>
</tr>
<tr>
<td>Motor control</td>
</tr>
<tr>
<td>Synchronized motors</td>
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<td></td>
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<tr>
<td>Total therapy time</td>
</tr>
<tr>
<td>New patient</td>
</tr>
<tr>
<td>Transport setting</td>
</tr>
<tr>
<td>Patient chip card</td>
</tr>
<tr>
<td>Key lock function</td>
</tr>
</tbody>
</table>

### ARTROMOT-S3 Comfort - Additional features

- Head rest: For comfortable, optimal patient positioning
- Shoulder positioning: Prevents evading movements
- Oscillation: Higher rate of motion in the EROM
- Stretching (ABD or I-ROT or E-ROT): Careful and smooth increase of the ROM
- ISO ABD ROT protocol: For separate exercising in both directions
- Warm-up protocol: Gradual progression to the maximum ROM
- Therapy documentation: Graphic presentation of the overall treatment cycle

### Dimensions

- Weight: 25 kg (55.1 lb)
- Dimensions: 87.5 x 57.5 x 58 cm (34.4 x 22.6 x 22.8 in)
- Transport dimensions: 37 x 57.5 x 58 cm (14.5 x 22.6 x 22.8 in)
- Suitable for patient height: Approx. 120 – 210 cm
- max. permanent load on arm carriage: 12 kg
- max. permanent load on chair: 150 kg

*Dimensions are listed as L x W x H
Indicated in the post-op treatment and rehab process of various elbow and arm conditions, the ATROMOT-E2 offers many useful features, such as the patient chip card, the easy swift conversion, the anatomically correct motion (PNF pattern), and the forearm placement on a carriage with automatic length adjustment and sandwich straps (to prevent muscle contractions).

With its streamlined design, and its handheld programming unit with LCD graphic display (with large self-explanatory symbols and an intuitive menu navigation), the device is highly ergonomic and easy to use.

**INDICATIONS**

- Arthrotomy and arthroscopy procedures in combination with synovectomy, arthrolysis
- Surgical treatment of fractures and pseudoarthrosis
- Exercise-stable osteosynthesis
- Endoprosthetic implants
- Treatment following mobilization of joints in anesthetized patients
- Reconstructive surgery of biceps tendons
- Operations on soft tissue in the joint area
ARTROMOT®-SP3
FOR THE ANKLE JOINT

The new dimension in Ankle CPM therapy!

ARTROMOT-SP3 offers anatomically correct motions (PNF pattern).

Using the ARTROMOT-SP3 is made easy by intuitive operation of the handheld programming unit with self-explanatory symbols.

ARTROMOT-SP3 optimizes ease-of-use through simple mechanical settings and offers easy to disinfect leg support and footrest.

INDICATIONS
• Arthroscopy and arthroscopy procedures in combination with synovectomy, arthrolysis
• Surgical treatment of fractures and pseudoarthrosis
• Exercise-stable osteosynthesis
• Operations on soft tissue in the joint area
• Reconstrucitive ligament and tendon surgery
• Operations on cartilage lesions
• Achilles tendon reconstruction

ORDERING INFORMATION

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<td>Transport trolley</td>
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<tr>
<td>80.00.066</td>
<td>Transport Trolley (modular)</td>
</tr>
<tr>
<td>0.0014.048</td>
<td>ARTROMOT chip card</td>
</tr>
</tbody>
</table>

TECHNICAL SPECIFICATIONS

Range of Motion

| Plantar flexion / Dorsal extension | 50° / 0° / 40° |
| Inversion / Eversion               | 40° / 0° / 20° |

ARTROMOT-SP3 Standard - Features

| Timer               | 1 - 59 minutes / 1 - 24 hours / continuous operation |
| Pauses              | 0 - 59 seconds                                      |
| Speed               | 5 % - 100 %                                         |
| Reverse on load in Steps (motor A and B separately) | 1 - 25 / patient safety feature |
| Motor control       | ON/OFF for isolated motion of motor A and B, plantar flexion/dorsal extension or inversion/eversion |
| Synchronized motors | ON = PNF-like motion pattern OFF = Randomised, asynchronised motion |
| Total therapy time  | Added sum of the therapy sessions                  |
| New patient         | Activates the default settings for new patients    |
| Transport setting   | Moves the motors into the transport position       |
| Patient chip card   | Stores patient-specific therapy parameters         |
| (Optional)          |                                                      |
| Key lock function   | Prevents accidental changes of the parameter settings |
| Service menu        |                                                      |

ARTROMOT-SP3 Comfort - Additional features

| Stretching modes | For gradual and smooth increase of the range of motion |
| Therapy documentation | Graphic presentation of the overall treatment cycle |
| Warm-up protocol | Gradual progression to the maximum range of motion |
| ISO protocol     | For separate exercising in both directions           |

Dimensions

| Weight         | 11 Kg (24.4 lb) |
| Dimensions     | 78 x 42 x 39.5 cm (30.7 x 16.5 x 15.5 in) |
| Suitable for patient height | Approx. 120 - 210 cm (‘3’11” - ‘6’7”) |
| max. permanent load on carriage | 20 kg |
| max. patient weight | Approx. 200 kg |

* Dimensions are listed as L x W x H
INTRODUCTION

The Active-K is a motorized physiotherapy unit that delivers a unique mix of rehabilitation therapies through a single device. Combining the benefits of CPM (Continuous Passive Motion), CAM therapy (Controlled Active Motion) and the onboard protocols, the patient is able to regain coordination and reduce proprioceptive deficit.

Using the Active-K allows patients to regain painless mobility of hip and knee joints at an early post-operative stage and stimulates the healing process. Additionally, the active component of the therapy unit is intended to enhance proprioception and functional stability (strength) as mentioned at an early stage and thus improve coordination following joint surgery.

FEATURES

- Lightweight (17 kg) robust design, able to withstand +/- 30 kg of force
- Designed to ensure anatomically correct movements are maintained
- Can be secured to a treatment table or bed using the fold-out stabilization supports and/or optional straps
- Integral footplate sensor enables exercise forces to be measured
- Computer controlled motor for CAM and coordination therapies
- Fully adjustable to suit different patient sizes and heights
- Advanced, interactive hand controller incorporating a full color LED screen for instant patient feedback
- Controller features an easy to use icon based menu system
- Patient Chip Card for storage of therapy data
- A range of pre-programmed protocols for specific indications
- 2 year warranty

Additional Therapeutic Benefits for Patients

- Enhancement of joint metabolism
- Prevention of joint stiffness
- Promotion and regeneration of cartilage and damaged ligaments
- Faster hematoma / re-absorption
- Improved blood & lymph circulation
- Prophylaxis for thrombus and embolism syndromes
- Bridging the gap from Passive motion to Active training with resistive therapy during rehabilitation
- Expedites coordination & sensory perception following surgery
The Artromot® Active-K physiotherapy unit is an important supplemental adjunct to medical and therapeutic usage in hospitals, clinics, general practices and rental services. Physician, physical therapist and patient alike benefit from this new, improved quality in post-operative care.

The Active-K has the capacity to allow clinicians to perform therapeutic strengthening exercises by allowing muscular contractions using the following methods, depending upon the stage of rehabilitation:

- Concentric
- Eccentric
- Isokinetic
- Isometric

Clinical evidence suggests each one of these different methods of muscular contractions has a specific functionality in strengthening different aspects of the muscles.
ACTIVE-K CPM, CAM & COORDINATION

Active-K is a true world innovation: As the only motorised motion device on the market, it combines 3 therapy approaches: CPM, CAM and coordination.

Maximum Stabilisation
means leg is securely guided from foot to thigh

Intuitive User Design
with interactive hand controller display
Maximum Safety
through specific controlled movements

Latest Sensor Technology
measures the exerted force

High Stability
thanks to the fold-out fixation wing and belt system
(optional)

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COMPREHENSIVE REHABILITATION

Active-K offers special programs for regaining coordination abilities for comprehensive and effective motion therapy. These have been developed from existing physiotherapy treatment protocols.

MAINTAIN FORCE

to increase coordination ability:
- The patient must hold a randomly generated load in or against the current direction of movement at regular intervals
- The load must be held for 4 seconds

Maintain force statically:
- The patient must hold the required load for 4 seconds
- The device doesn’t move during this time – it is static

Maintain force dynamically:
- The patient must hold the required load for 4 seconds
- The motion device is actively moved during this time – it is dynamic

FINDING THE ANGLE

to increase awareness of the current knee angle position:
- Based on the angle reproduction test
- The patient must push the OK button when they reach different, pre-set knee angles

Finding the angle passively:
- The patient is asked about an angle after three motion cycles between extension and flexion
- Patient has three cycles to establish the position and confirm with the OK button

Finding the angle actively:
- Equivalent to the program “finding the angle passively”, only in active mode
- The patient must bend and stretch their knee

MONITORING

through feed-back:
- Deviations within the 10° tolerance range are considered successful – positive feedback on the display
- Deviations outside the 10° tolerance range are considered unsuccessful – negative feedback on the display

FREE TRAINING

Additional functions for active training:
without angle limitation, but against or with a set load.
- Display shows the active setting for the extent of motion
- Positive feedback is given when a larger angle is achieved in extension or flexion

APPROPRIATE TREATMENT AT THE TOUCH OF A BUTTON

1. SELECT PROGRAM

Pre-programmed treatment processes provide ease of use:
- Each therapy program comprises 6 levels
- Each level corresponds to about one week of therapy
- Each level lasts 40 minutes
- Program runs automatically with increasing activity rate (level 1 = 100% passive, level 6 = 1% passive)
- From level 3 and 4 the extent of motion is automatically set

Pre-set therapy program for the most common indications:
- Cruciate ligament rupture
- Cartilage damage
- Prostheses implants

2. ADJUST ROM

With its pre-installed therapy programs, Active-K enables treatment to be given in different operating modes and functions – all at the touch of a button!
## Range of Motion

| Extensor/Flexor "Knee" | 10° / 0° / 120° |
| Extensor/Flexor "Hip" | 0° / 7° / 115° |

## Functions

### Passive Mode
Configurable settings:
- Set extension/flexion as passive or active, therapy time, speed, reverse-on-load (safety/spasm switch), warm-up programme, pause extension and/or flexion, muscle stimulation.

### Active Mode
Adjustable loads, extension or flexion always separate:

<table>
<thead>
<tr>
<th>Load</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 kg</td>
<td>Passive mode in flexion/extension direction.</td>
</tr>
<tr>
<td>1 – 30 kg</td>
<td>Set the load the patient has to actively push so that the device extends or flexes.</td>
</tr>
<tr>
<td>-1 – -30 kg</td>
<td>Set the load the patient has to actively pull so that the device extends or flexes.</td>
</tr>
</tbody>
</table>

Configurable settings:
- Set extension/flexion as passive or active, therapy time, speed, reverse-on-load (safety/spasm switch), warm-up programme, pause extension and/or flexion, load extension, load flexion, active zone (max. 0° / 0° / 90°).

### Coordination Mode
Five different programmes for increasing coordination skills are available in Coordination mode.

<table>
<thead>
<tr>
<th>Programme</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintain load statically / dynamically</td>
<td>Configurable settings: Set extension/flexion as passive or active, treatment time, speed, reverse-on-load (safety/spasm switch), warm-up program, pause extension and/or flexion, extension load range, flexion load range, active zone (max. 0° / 0° / 90°).</td>
</tr>
<tr>
<td>Find angle active / passive</td>
<td>Configurable settings: Set extension/flexion as passive or active, treatment time, speed (passive), reverse-on-load (safety/spasm switch, passive), warm-up programme, active load extension, load flexion (active).</td>
</tr>
<tr>
<td>Free training</td>
<td>Configurable settings: Treatment time, load extension, load flexion.</td>
</tr>
</tbody>
</table>

## Special Functions

### Treatment Plans
Available for the three most common indications.

For rehabilitation after:
- A cruciate ligament rupture
- Cartilage damage
- Prosthesis implant.

Each treatment plan has 6 stages progressively developing from passive to active and coordination. The treatment time is 40 minutes per use (stage).

Configurable settings for each treatment plan: Range of passive extension/flexion, level 1 to 6.

### Key Lock
Prevents treatment parameters being accidentally adjusted.

### Therapy Documentation
Records overall treatment progress.

### New Patients
Default settings for new patients.

### Patient Chip Card
For saving individual treatment parameters.

### Settings Menu
Enables special settings such as language choice, transport setting.

## Dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Height</td>
<td>Approx. 135 to 205 cm</td>
</tr>
<tr>
<td>Product Dimensions (L/W/H)</td>
<td>96 x 38 x max. 57 cm</td>
</tr>
<tr>
<td>Shipping Dimensions (L/W/H)</td>
<td>106 x 42.5 x 420 cm</td>
</tr>
</tbody>
</table>

## Weight

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motion Device</td>
<td>17 kg</td>
</tr>
<tr>
<td>Hand Control</td>
<td>0.5 kg</td>
</tr>
<tr>
<td>Shipping Weight (incl. accessories)</td>
<td>23.5 kg</td>
</tr>
</tbody>
</table>

## Part Numbers

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>80.00.072</td>
<td>ARTROMOT® Active-K</td>
</tr>
<tr>
<td>0.0040.100</td>
<td>ARTROMOT® Active-K Belt Set (4 Belts)</td>
</tr>
<tr>
<td>2.0040.175</td>
<td>Patient Chip Card ARTROMOT® Active-K</td>
</tr>
<tr>
<td>0.0031.006</td>
<td>Marker Pen for Patient Chip Card</td>
</tr>
<tr>
<td>2.0037.024</td>
<td>&quot;Muscle Stimulation&quot; Connection Cable</td>
</tr>
<tr>
<td>80.00.056</td>
<td>Transport Trolley</td>
</tr>
<tr>
<td>TK-001</td>
<td>Transport Container</td>
</tr>
</tbody>
</table>