### **PHYSIOTHERAPY & REHAB**

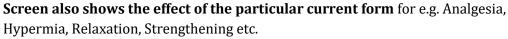
### 1. Interferential, TENS, Electro-stimulator, Combination Therapy

PhySys= Ultimate Combination Therapy with 12" colour touch screen from Zimmer Germany



All low & medium frequency currents & multi frequency U/s

2 Independent Channels- Parallel - Separate- Alternate with Channel Inversion





**Current for Sports Rehab-** General Muscle Strengthening, Improvement of muscle endurance, Strengthening of fast-twitch fibre muscles, endurance training, fast-twitch fibre muscle training, Explosive strength training, Sequence training- warm up- train-relaxation etc.

**Special Treatment-** Vein Strengthening, Psoriasis, Electro-Sleep, Lymph Oedema and Hyperhidrosis etc

**Currents for Urology/ Gynaecology-** Pelvic floor stimulation, Incontinence Treatment

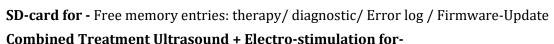
## Paralysis diagnosis & Paralysis treatment

Lange Test, Neofaradic test, Fischgold test

Rheobase, Chronaxie, accommodation quotient and I/T curve plotting

#### **Ultrasound:**

- Sono Swing Choice of penetration depth (Zimmer Patent)
- ➤ Choice of Mechanical & Thermal effect



Hyperaemia, metabolism stimulation, pain control, muscle relaxation, trigger point treatment



# SOLEO LINE- COMBO, Electrotherapy &Ultrasound 8" colour touch screen from Zimmer



Soleo SonoStim-Combination Therapy = Soleo Galva + Soleo Sono

Dual Channel for All medium & Low frequency currents & multi frequency Ultrasound All low & medium frequency currents & multi frequency Ultrasound Therapy



Screen also shows the effect of the particular current form for e.g. Analgesia, Hypermia, Relaxation, Strengthening etc.



**Current for Sports Rehab**- General Muscle Strengthening, Improvement of muscle endurance, Strengthening of fast-twitch fibre muscles, endurance training, fast-twitch fibre muscle training, Explosive strength training, Sequence training- warm up- train-



## 2. Ultrasound Therapy

# SOLEO SONO Ultrasound 8" colour touch screen from Zimmer



**Soleo Sono Ultrasound Therapy unit** - Multi Frequency U/s Head offering choice of penetration



**Ultrasound: Zimmer Patent 5** Choice of penetration depth



Ultrasound Frequency of 0.8 MHz for deep and 2.4 MHz for superficial effects and possibility of combining two frequencies in single treatment for multiple choice of penetration depth.

Ultrasound head has audio & Visual contact feedback with coupling % displayed on screen as well

Ultrasound head offers under water treatment option on screen SD Card for memory, software upgrade and service facility



#### Sono One Ultrasonic therapy unit from Zimmer Medizin Germany Features

- •Multi frequency, 1 MHz: deep effect / 3 MHz: superficial effect
- •Transducer head with visual contact indicator.
- •Colour touch screen monitor for better control.
- •Continuous & Pulsed: Pulse frequencies 10, 20, 50, & 100 Hz

### 3. Multiwavelength High Power Laser Therapy Unit



OPTON PRO 25W, 15W & 10W, therapeutic Laser for deep penetration & instant effect from Zimmer Germany

12" Colour touch screen

Operating mode - Continuous, Serial pulse, Burst, Single pulse

Integrated Visual analogue scale- VAS provides information about the patient's pain perception.

Thermal threshold test assists with calculation of the required dosage in combination with the skin type and the required penetration depth & prevents overdosing



## 3 Wave Lengths 810nm, 980nm, 1064nm

Therapy with 3 wavelengths enables stimulation of different target sites: Pain receptors at the surface as well as deeper tissue structures are stimulated at the same time. Wavelength of 1064 nm having lowest scatter in the tissue promotes penetration of the radiation into the deep layers of tissue.





## 2 Wave Lengths 810nm & 980nm

## Therapy Assistant Mode-



It's Easy – Select body region > Select skin type > Determine therapy area By determining the therapy area, the course of the disease and the skin type, the following information is automatically saved:

- ✓ Program parameters
- ✓ Amount of energy to be applied
- ✓ Therapy time



Laser applicator with manual switch - the laser light is now emitted continuously, without any further action needed

Integrated Skin temperature measurement sensor enables the skin temperature to be monitored during the therapy.

## 4. Cryoflow Cryotherapy Unit



Cryo6 from Zimmer Germany, "World largest Manufacturer of Cryo"

-35 °C Cold Air Cryotherapy for Pain and Inflammatory Treatment

#### **Indications:**

Painful acute and chronic conditions of the musculoskeletal system Pain relief in rheumatic disorders

Neurological disorders, reduction in spasticity

Prevention of edema and hematomas

Targeted treatment of muscle trigger points in combination with stretching. Vascular training,

**As pre-treatment of CPD** (complex physical decongestion) in chronic lymph edema **Glass touch pad. No Consumables** 

## 5. High Energy Inductive Therapy- Magneto-therapy @ 3 Tesla Power

## Power of MRI for Physiotherapists EmField Therapy Unit @ 3 Tesla from Zimmer Germany



Exposure to natural energy fields is a requirement of human life. These energy fields interact with our cells, and are necessary for homeostasis & maintaining our bodies at an optimal level.

Zimmer Medizin Systeme GmbH Germany introduces High Energy Inductive Therapy unit "emFieldPro" for healing in a natural way by Earth's magnetic field (**EmField Therapy**)

The **emFieldPro** generates a magnetic field of **3 Tesla**, which is about 600 times stronger than a normal magnet bar.



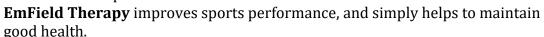
This strong magnetic field stimulates nerve cells, muscles, and blood vessels consequently as this application of energy results in a physiological change and/or stimulation which is used to achieve therapeutic effects.

## EmField Therapy ADVANTAGES:

- Non invasive.
- Totally safe procedure applied from distance without contact
- Easy and fast application even over clothing
- Short treatment duration
- Low operation cost without any consumables



**EmField Therapy** offers a safer and more comfortable alternative for urinary incontinence to prior treatments.

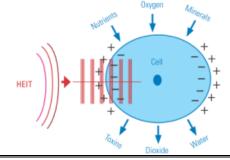


**EmField Therapy** stimulates muscles, connective tissues, intestines, tendons and cartilage, the brain and peripheral nerve sites.

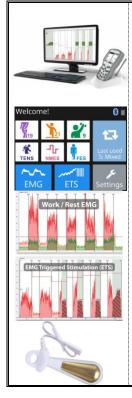


#### **INDICATIONS:**

Spinal Injuries/Disorders, Chronic/Acute Lumbago Chronic/Acute Ischialgia, Spondylitis, Nerve Disorders, Damaged Peripheral Nerves, Degenerative Arthritis, Rheumatoid Arthritis Cervical Syndrome, Frozen Shoulder, Prostate Pain



## 6. EMG Biofeedback System/ Pelvic Floor REHAB



# MyoPlus, from Verity Medical U.K

## 2 Channel EMG and 4 Channel NMES + ETS

Successfully used to treat conditions including Incontinence,

Patello-fermoral Pain, Myofascitis, Myofascial Pain, Phantom Limb Pain, Neck & Shoulder Girdle Pain and Repetitive Strain Injury.

Pre-set programs for Neuromuscular Rehab, Sports Rehab, Urology/ Gynaecology

**EMG Triggered Stimulation mode (ETS)** - is especially useful for stroke rehabilitation and Pelvic Muscle improvement. ETS is a combination of voluntary contractions with stimulation.

The graph shows the muscular eort and the stimulation is triggered automatically to support the effort.

## Produces and prints comprehensive patient progress reports

- > EMG Range: Up to 2000 μV RMS (continuous)
- > Sensitivity: 0.l μV RMS
- Selectable Band pass filter Wide & Narrow
- ➤ Work / Rest periods: Up to 99 seconds
- Number of Trials: Up to 99

### STIM (Neuromuscular Stimulation)

**Urinary Incontinence** 

### 7. Balance Evaluation & Training System





**Humac Balance** - computerized Balance Measurement and Training System **M/s CSMI Solutions, USA** 

The HUMAC Balance System includes the following Measurement & Training Routines: Random Motion, Limits of Stability, M-CTSIB, Centre of Pressure, Weight Shift, Curves, Roadway, Weight Bearing

- ➤ **Limits of Stability** the ROM protocol exercise measures the maximum sway and (a) symmetry of the movement.
- ➤ **Centre of Pressure-** to establish and document if a subject is at increased risk of falling.
- ➤ **Weight Shift -** Patients must control their centre of gravity and shift their weight back and forth between two targets
- ➤ **Weight Bearing-** for bilateral comparison

MODIFIED CLINICAL TEST OF SENSORY ORGANIZATION AND BALANCE (MCTSIB)-measure a person's ability to maintain equilibrium on a firm surface and a soft surface with eyes open and eyes closed.

The HUMAC provides numerical results for torque, position, and time data & reports parameters: •Directional Control, •Stability Index, •Sway Index, •Peak Force, •Time to Peak Torque, •Time Peak Torque Held, •Time to Half Peak Torque, •Percent on Target • Coefficient of Variation, •Maximum Deviation, •Coefficient of Variance

#### CLINIMETRIC BALANCE SYSTEM



**Sensbalance MiniBoard** - with Measure, Exercise and Game Software Collect data regarding your balance & core stability training and visualize progression in time.

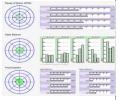
Range of Motion- Measures max sway and asymmetry of movement.

Static Balance- To document if a subject is at increased risk of falling

Proprioception- Subjects with pathologies affecting somatosensory feedback (like stroke, peripheral neuropathies and others)

**Reaction-** To quantify the subject's ability to quickly and accurately shift his/her body weight to the desired position

**Coordination-** Data are recorded during a controlled and smooth movement along the FRONT-BACK axis or the LEFT-RIGHT axis.



Miniboard with BMS, 10deg tilting acc, balance level med and farm game

#### 8. Cervical ROM Evaluation & Training System

## 3D CERVICAL TRAINER



"Sens-coordination 3D Cervical Trainer with Measure, Exercise and Game Software Including Max ROM test and JPE test by M/s. Sensamove, The Netherlands The product is worn with an headband and measures all spatial movements of the head:

Cranio-cervical Flexion and Extension, Lateral Flexion, Rotation Protraction and Retraction

**Targeting:** Arm, neck, shoulder complaints, Postural control Whiplash, Degenerative diseases, Vertebral dysfunction, Dystrophy

## 9. Postural Evaluation & Training System

## POSTURE TRAINER



**Sensbalance Therapy Cushion** 

Balance, reactive power and coordination are trained in both standing and sitting positions.

The analysis software allows to help the patient learn various pelvic movements and to increase mobility in the lower back area.



Also learn how to reach, use and train the smaller muscles around the spinal column instead of the larger muscles.

The Sensbalance Therapy Cushion can be used for: pelvic problems, lower back problems, regain control and feel in the lower back, posture correction, balance, and relaxation and concentration exercises.

## 10. Active Passive Trainer for Upper & Lower

## **MOVEMENT THERAPY (ACTIVE PASSIVE THERAPY)**



**Professional Movement Therapy Unit-** Stimulates the metabolism, helps strengthening muscles, helps bone density and enhance physical & mental well being. The medBike in Passive Mode helps to loosen and strengthen muscles and reduce spasticity.

Motion training is also highly effective in assisting neurological rehab.

**Active Mode-** Based on user strength input

Passive Mode- Based on Motorize movement output

**Dual Mode-** Combination of user strength input & motor output The big 10" touch screen TFT display

- •Speed control 10-90 RPM
- •Watt control 1- 120 Watt

Upper Trainer- simple add-on for arms, shoulders and back training

