

## Meet the new **ACX.Rehab** concept

### Central Therapist Workstation

Installed a software platform which provides interactive therapeutic programs with a modifiable difficulty level.

Possibility to add later in the station's database of other therapeutic devices from the supported manufacturers.

Optional possibility of connecting a video module to record the patient during the test and exercises

Patient database management: patient's defining and managing, with access passwords generating and individual trainings' assigning in the calendars of individual exercisers, full access to full report data, including general performance of patient

Provides real-time feedback ("BIOFEEDBACK") to the exerciser. Patient's permanent monitoring by the therapist and possibility to modify the parameters during patient's exercising.

Predefined segments of exercises supporting: divided attention, functional movements, memory, precision of movement, problem solving.

Generating of training templates for individual therapists, generate templates for a device, save own templates and templates individualized for a given person.

Defining a workout: use a predefined template, modifying it and saving it, or define own workout using an intuitive creator.

Specific exercises (games) allocation within a training session, control the number of repetitions of game sequences within a session, change session times, etc.

Quick definition of individual and/or group therapeutic plans, where for each day of therapy/classes can be defined a separate training adapted to the pace, content and level of difficulty to the needs of the exerciser. Definition of the number of exercises in a given day, the number of training days, etc.

Reports generating after tests and training in the form of ready-made sheets and multimedia reports, including replaying an exercise/test

Quick assigning of the last performed training, assign training defined in the form of a template (own or unit), assign entire training plan

Calendar with possibility to plan patient treatments and open last performed treatment





Difficulty level adjusting of game scenarios:

- adjustment of the anatomical range of motion
- game speed
- complexity level (ex: through the number of elements involved in the game, necessary to remember)
- during preparation of the protocol and live while patient is working

Full archiving of the obtained results and the possibility of sending them for further processing in the Windows environment format

Possibility to work in home therapy mode with online access and planning

Software available in: Arabic, Bulgarian, Chinese, Chinese traditional, Croatian, Czech, Dutch, English, German, Greek, French, Hebrew, Hungarian, Italian, Korean, Lithuanian, Polish, Romanian, Russian, Spanish, Swedish, Turkish, Ukrainian languages with possibility to work therapist and patient in different languages (optionally: a new language can be added on individual demand)

Wired & wireless connection and integration with patient workstations

Mobile stable stand on 4 wheels with brakes.

Monitor: touchscreen color display, minimum 21 inches (additional sizes available upon individual requests)

PC computer (more advanced parameters available upon individual requests):

- Windows 10, 64 bit
- Processor 2 GHz
- RAM: 8 GB
- Integrated graphics card
- Wi-Fi network card
- 2 x USB (3.0) / 2 x USB (2.0)
- wireless keyboard & mouse



## Meet the new **ACX.Rehab** concept

### **Alfa – Stabilometric platform with Patient Workstation**

Assures the assessment, balance & stability training in conditions of a stable surface ground

Evaluation and recording of COP (Center of Pressure)

Stabilometric test, Romberg test, dynamic test, load distribution test, Unterberger test available. All tests with available result's automatic reporting

Parameters registered during test related to the ability to maintain balance:

- *Romberg test*: average deviation X/Y, average velocity X/Y, path length, area, eyes open/closed, eyes closed/open + graphic representation of the test
- *Stability tests* - stability indicators in 2 planes, COP deviations X/Y, COP path length, surface area marked by COP, velocity X/Y
- *Unterberger test*: number of steps, angular change of body rotation per each step and per performance
- *Dynamic test*: time of achieving goals in individual quadrants of the support plane, reference of the path generated by the patient to the minimum value calculated by the software.
- *Lower Limb Load Test*: Percentage of load on the limb, percentage of test duration in which the limb was predominantly loaded



Graphic representation of the result on test reports

Position of the patient's feet on the platform is saved in the software, in the patient's file

Platform size: 55 x 55 cm, height 8 cm

Patient loading weight: up to 150 kg

Platform's support: 4 adjustable feet

The platform can be combined with a three-sided safety barrier, increasing the comfort of exercises and tests performed on the platform (dimensions 80 x 100 cm)

Video camera connected to computer via USB





Communication with the Patient Workstation PC and powering the platform: via a USB cable

Patient Workstation provides the integration into a single operation platform and the interconnection with Central Therapist Workstation for assessment, control and set-up of therapeutic sessions

Observation of the patient test's performance results in live time

Wired & wireless connection and integration with Central Therapist Workstation

Mobile stable stand on 4 wheels with brakes.

Monitor: color display, 40 inches or more (additional sizes available upon individual requests)

PC computer (more advanced parameters available upon individual requests):

- Windows 10, 64 bit
- Processor 2 GHz
- RAM: 8 GB
- Integrated graphics card
- Wi-Fi network card
- 2 x USB (3.0) / 2 x USB (2.0)
- wireless keyboard & mouse



## Meet the new ACX.Rehab concept

### Capri – upper limb (wrist & hand) active rehabilitation and training device in virtual reality environment with Patient Workstation

Capri is a ball-shaped device played by hand with additional handling attachments, which assures the rehabilitation of patients suffering from dysfunctions of hand control and accuracy, motor and movement coordination of hand. Its special design offers the possibility of hand's distal movements performing, training of pronation and supination as well as dorsal flexion and extension of the wrist.



#### Possibilities:

- evaluation of the amplitude (range) of motion
- dynamic exercises
- graphic representation of the result on test reports

#### The device allows to train following movements:

- dorsiflexion / palmar flexion
- pronation / supination



#### Device standard accessories:

- Wireless radio receiver
- License key
- Battery charger
- Attachment for training in 1 axis
- Silicone straps for hand stabilization
- Tool for additional grip type: 2 pcs

#### Optionally:

- arm unweighing support
- patient table





## Technical data:

- Diameter: 150 mm, height 115 mm
- Lower casing of the device with anti-slip cover part
- Weight: 1.3 kg
- Forward – backward tilt:  $+20^{\circ}/-20^{\circ}$
- Left – right tilt:  $+20^{\circ}/-20^{\circ}$
- Power supply: 2 x AAA rechargeable batteries (charger provided in set with device)
- Wireless communication of the device with Patient Workstation via delivered kit

Patient Workstation provides the integration into a single operation platform and the interconnection with Central Therapist Workstation for assessment, control and set-up of therapeutic sessions

Observation of the patient test's performance results in live time

Wired & wireless connection and integration with Central Therapist Workstation

Monitor: color display, 21 inches or more (additional sizes available upon individual requests)

PC computer (more advanced parameters available upon individual requests):

- Windows 10, 64 bit
- Processor 2 GHz
- RAM: 8 GB
- Integrated graphics card
- Wi-Fi network card
- 2 x USB (3.0) / 2 x USB (2.0)
- wireless keyboard & mouse



## Meet the new ACX.Rehab concept

**X-Cogni – therapeutic device for motor reeducation of upper extremities, eye-hand coordination and cognitive disorders training with built-in Patient Workstation**

Interactive multisensor table for active training of motor function of the hand, movement coordination and cognitive function disorders in virtual reality environment.

Active color sensoric screen for active rehabilitation of the upper limbs – enables the simultaneous detection of several contact points or objects, giving advantage of interactive intuitive therapy modalities.

Testing modes:

- range of motion (precision)
- Go/No-Go (reaction time)
- strength

Easy and fast change of working range of motion and strength

Load-resistant application part:

- supports load application up to 35 kg
- pressure (table horizontal position): center of screen 0 – 300 N
- pressure (table vertical position): center of screen 0 – 200 N

Technical data:

- dimensions: 1660 x 890 mm
- weight: 236 kg
- screen width: 42 inches
- power supply: ~ 230 V AC / 50 Hz
- protection level against the ingress: IP 20
- emergency stop button for immediate cessation of exercises
- mobility: 6 castors with brakes

Regulation of height and tilt of the screen:

- Height adjustment: 671 – 1321 mm
- Tilt adjustment: up to 85 degrees





Table height and tilt adjustment performed via motorized actuators

Adjustment via remote control



Keyboard with touchpad

Sound volume level: adjustable via control panel.

Possibility to connect the headphones for appropriate surrounding sound.

Tools for additional grip type (cup, roller, suction cup, rotator)

Possibility to build in 3-D camera for total body training or hand therapy

Built-in Patient Workstation provides the integration into a single operation platform and the interconnection with Central Therapist Workstation for assessment, control and set-up of therapeutic sessions

Observation of the patient test's performance results in live time

Graphic representation of the result on test reports

Wired & wireless connection and integration with Central Therapist Workstation PC



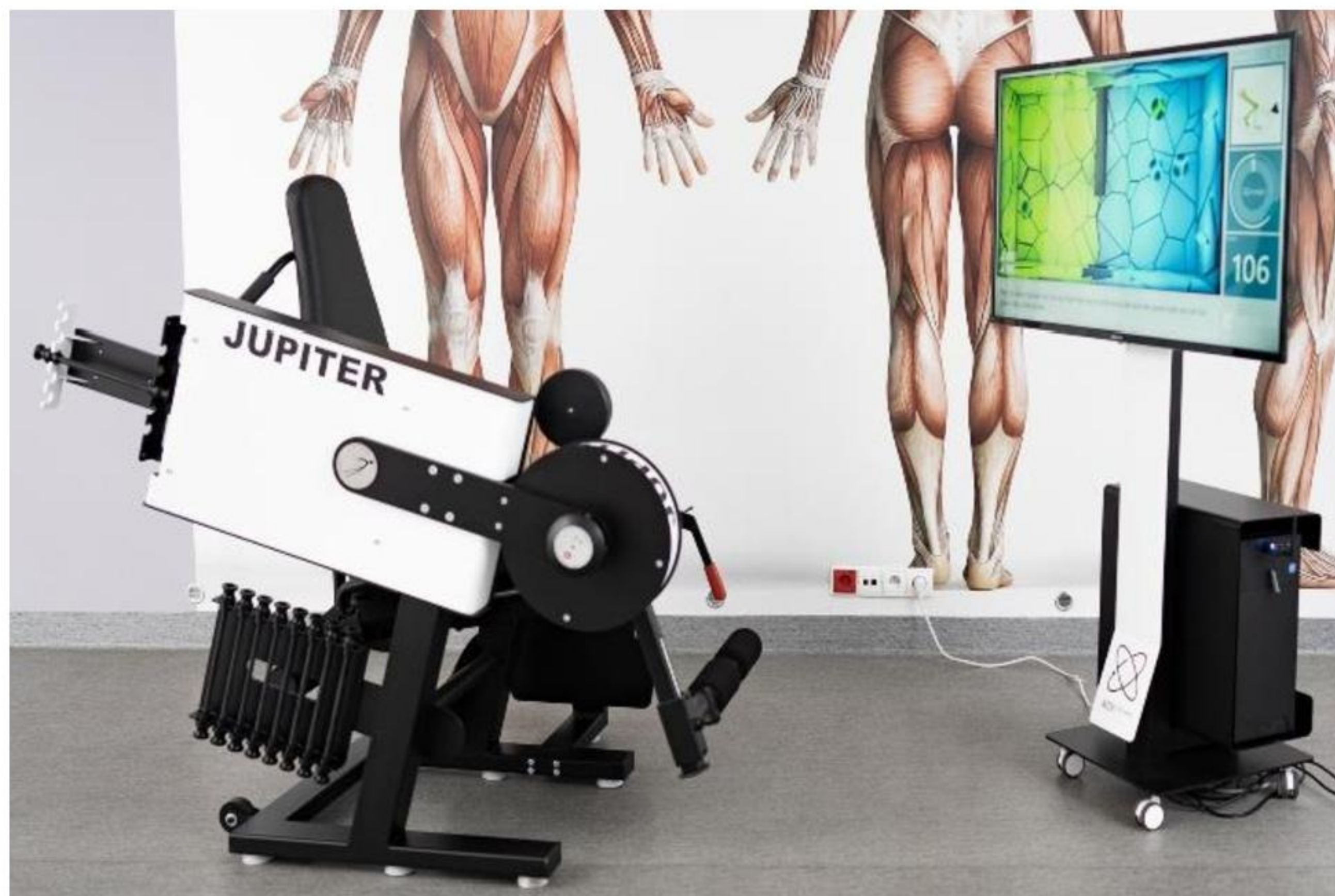
## Meet the new **ACX.Rehab** concept

### **Jupiter – lower limbs functional rehabilitation with Patient Workstation**

Assures the therapy of neuromuscular disorders based on active training of lower extremities in open kinematic chain in virtual reality environment and with elastic resistance by rubber elastomers

Possibilities:

- evaluation of the amplitude (range) of motion
- measurement of maximal strength
- dynamic & isometric exercises



Rubber elastomer resistance features:

- elimination of inertia applied force
- resistance is smoothly increasing during the movement, proportionally to motion amplitude
- reliability: rubber elastomer's long wearing out period 10 000 cycles

Load regulation with an easily replaceable set of two types of elastomers (rubbers)

Adjusting the device to the user's body:

- seat's tilt and position
- adjustment of the backrest angle up to lying position
- adjustment of starting angle
- adjustment of the lever length

Well thought-out design: equipped with

- a special stand for various types of elastic tapes
- an additional knee lock
- two wheels for easy relocation of the device

Device dimensions: 1400 x 950 x 1400 mm

Weight: 120 kg





Wireless communication of the device sensor with Patient Workstation

Patient Workstation provides the integration into a single operation platform and the interconnection with Central Therapist Workstation for assessment, control and set-up of therapeutic sessions

Observation of the patient test's performance results in live time

Wired & wireless connection and integration with Central Therapist Workstation

Mobile stable stand on 4 wheels with brakes.

Monitor: color display, 40 inches or more (additional sizes available upon individual requests)

PC computer (more advanced parameters available upon individual requests):

- Windows 10, 64 bit
- Processor 2 GHz
- RAM: 8 GB
- Integrated graphics card
- Wi-Fi network card
- 2 x USB (3.0) / 2 x USB (2.0)
- wireless keyboard & mouse