



Vision Monitor MonPack^{One}

UNIVERSAL VISUAL STIMULATOR

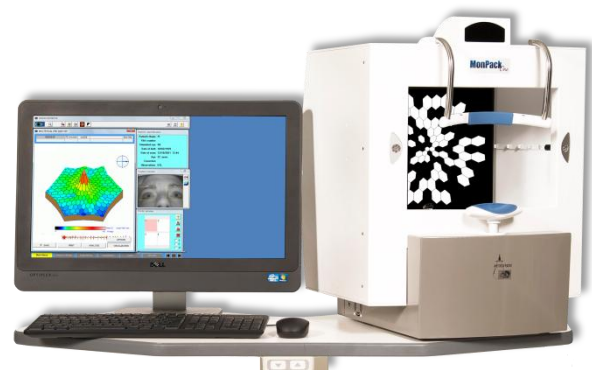
MonPack^{One} is a multifunction stimulator combining, in a compact system, all the tests needed for a complete, thorough evaluation of visual functions. Only one stimulator with an innovative design is needed for flash ganzfeld ERG and VEP, pattern ERG and VEP, multifocal ERG and VEP as well as sensory EOG.

MonPack^{One} is compatible with the ISCEV standards for visual electrophysiology. It includes a LED backlight with a luminance feedback (patented) insuring that the luminance of pattern ERG and pattern VEP stimulations remains constant.

MonPack^{One} can be combined with the MonColor stimulator to perform advanced electrophysiology tests and with the MonBaby stimulator for tests on young infants.

MonPack^{One} offers a large number of clinical applications not only for visual electrophysiology but also for visual psychophysical tests such as contrast sensitivity, dark adaptation as well as oculomotor tests such as pupillometry and electronystagmography.

MonPack^{One}, thanks to its modular design, can easily be configured to suit individual needs and is easily upgradeable.



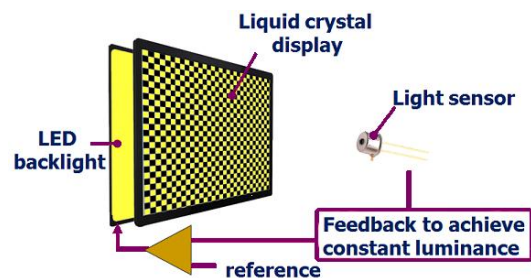
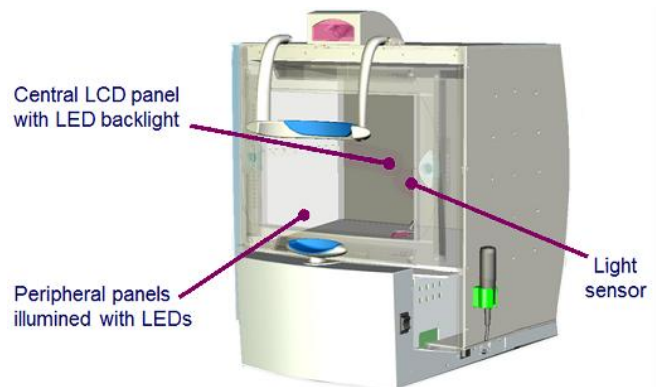
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A new technology for vision tests

MonPack^{One} presents a highly innovative design combining a central monitor with LED backlight surrounded by peripheral panels illuminated with LEDs.

The luminance output is constantly monitored by a light sensor and is used to control the LED backlight in order to achieve constant luminance and eliminate the luminance artifact generated by standard LCD monitors (patented).

Note : according to the ISCEV standard, pattern reversal and pattern on-off stimulations used for ERG and VEP should not present any change in average luminance.



Ganzfeld flash stimulations for ERG and VEP

Ganzfeld stimulation is obtained by switching the central LCD panel to transparent mode and generating light flashes with the LEDs from the backlight and from the periphery.

- **Ganzfeld background luminance**
Programmable from 0 to 100 cd/m²
(80 steps with a progression of 0.05 log units)
- **Ganzfeld stimulus luminance**
Programmable from 0 to 600 cd/m²
(80 steps with a progression of 0.05 log units)
- **Color**
White, red, blue, green and their combinations
- **Duration**
From 2 ms and up by steps of 1 ms



Pattern reversal and pattern on-off stimulations for ERG and VEP

- Luminance feedback avoiding the luminance artifact of standard LCD monitors (patented)
- Fully compatible with ISCEV standards for pattern ERG and pattern VEP (no change of the average luminance)
- Programmable hemifield and quadrant stimulations
- **Size** 48 cm in diagonal
- **Spatial resolution** 1024 x 768 (0.21 mm)
- **Frame frequency** 60 Hz



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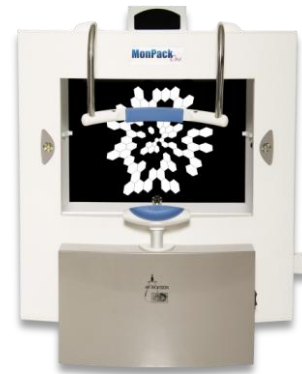
Pattern stimulations for sweep VEP

- Can generate rapidly changing sequences of pattern sizes (20 pattern sizes within 12 seconds) suitable for the sweep VEP exams used for the measurement of visual acuity in young infants and in malingering patients.
- Luminance feedback avoiding the luminance artifact of standard LCD monitors (patented).
- More details in our brochure relative to sweep VEP exams (reference PVM-SS).



Multifocal stimulations for MfERG and MfVEP

- Ultra high luminance stimulations (up to 600 cd/m²) allowing an excellent signal to noise ratio.
- Flashed backlight providing 1 ms appearance and disappearance times.
- Controlled background luminance.
- More details in our brochure relative to Multifocal exams (reference PVM-MU-ERG and PVM-MU-VEP).



Video monitoring

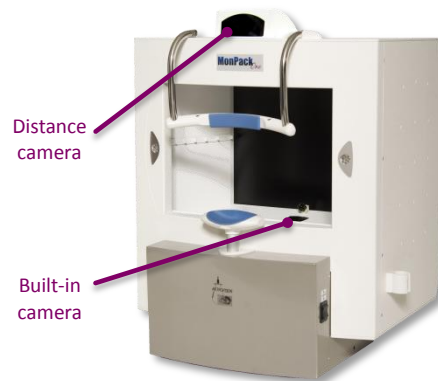
MonPack One includes 2 near infra-red video cameras: one built-in camera for tests performed at 30 cm and one optional camera for tests performed at a distance of 1 meter.



Image from built-in camera



Image from distance test camera



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Electrophysiology applications

- Flash and pattern VEP and ERG PVM-EL
- Sensory EOG PVM-ES
- Multifocal ERG PVM-MU-ERG
- Multifocal VEP PVM-MU-VEP
- Sweep VEP PVM-SS

Options

- Electric table HVM-TABLE
- Additional camera for distance tests HVM-CAMERA
- Set of large field refractive lenses HVM-OPTI
- Remote control HVM-REMOTE

Psychophysical tests

- Contrast sensitivity PVM-SC
- Dark adaptation PVM-AO
- Visual aptitudes and glare test PVM-AC
- Static perimetry PVM-CVS
- Goldmann perimetry PVM-CW
- Attention visual field PVM-UF
- Macular pigment density PVM-PI
- Metamorphopsia PVM-ME

Oculomotor tests

- Electro-nystagmography PVM-EO
- Pupillometry PVM-PU
- Scan path analysis PVM-SA
- Visual pursuit test for babies PVM-EN

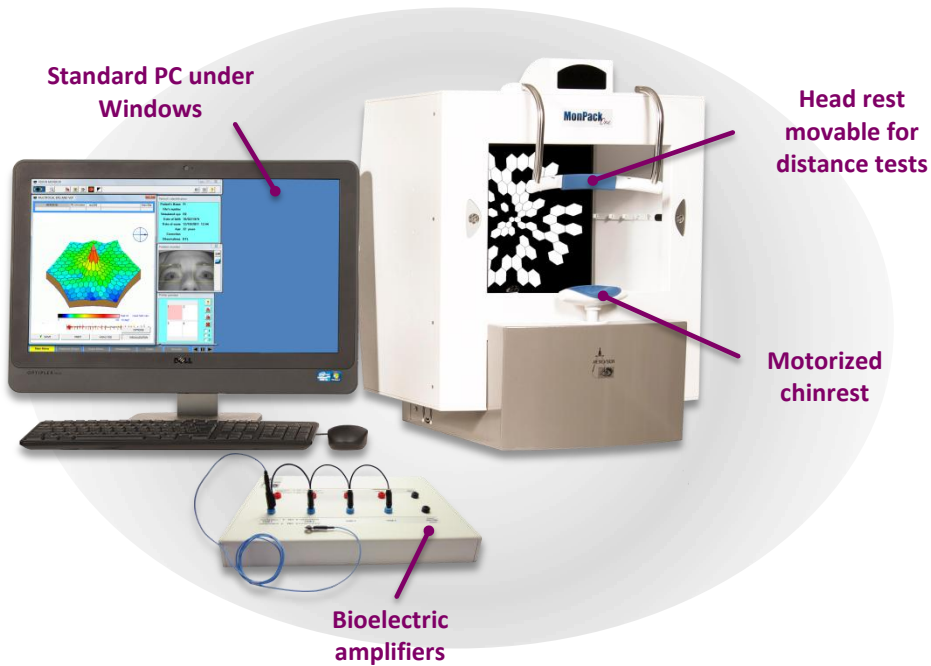
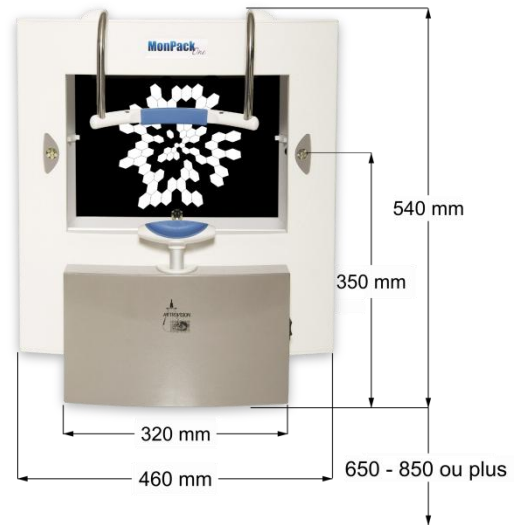
Electrical and mechanical specifications

The **MonPack^{One}** stimulator is classified as class I type B protection equipment.

To prevent electric shock, the instrument must be plugged into an earth grounded outlet.

The power requirements are 230V, 0.7A or 110V, 1.4A, 50 or 60Hz.

Weight = 25 kg
(without PC and electric table).



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The development of this product has been supported
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