



Vision Monitor

MonPack^{One}

UNIVERSAL VISION STIMULATOR

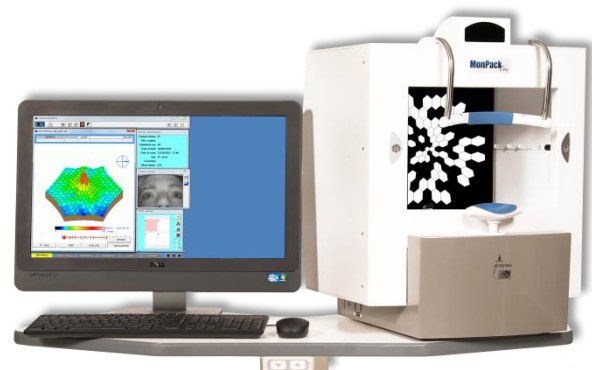
MonPack^{One} is a multifunction stimulator combining, in a compact system, all the tests needed for a complete, thorough evaluation of visual functions. Only one stimulator with an innovative design is needed for ganzfeld flash ERG and VEP, pattern ERG and VEP, multifocal ERG and VEP as well as sensory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

MonPack^{One} is compatible with the ISCEV standards for vision 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 MonCvONE stimulator to perform full field perimetry, the MonColor stimulator for advanced electrophysiology tests and the MonBaby stimulator for tests on young infants.

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

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



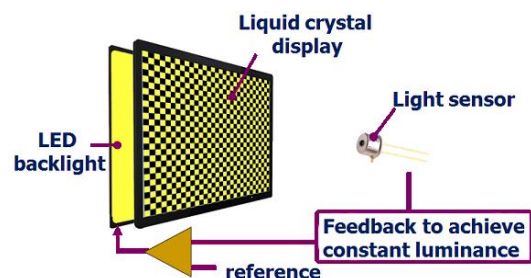
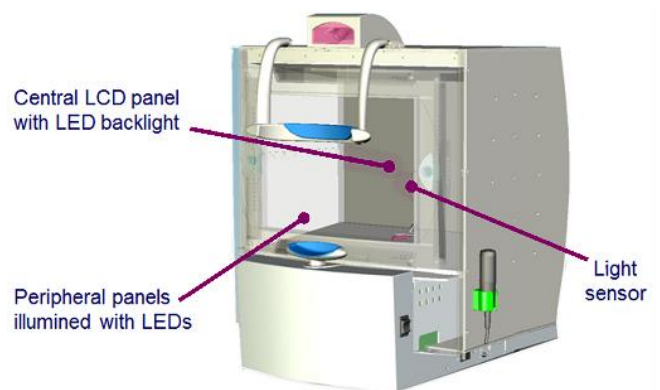
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A new technology for vision tests

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

The luminance output is constantly monitored by a light sensor that 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, even transient, 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 intensity**
Programmable from 0 to 15 cd.s/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, even transient, 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



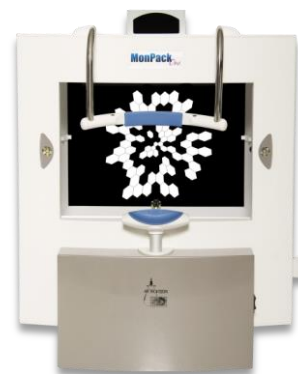
Pattern stimulations for sweep VEP

- 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 very precise stimulus timing (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

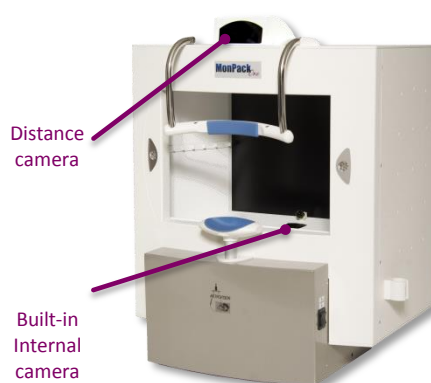
MonPack One includes 2 near infra-red video cameras: one built-in camera for tests performed at 30 cm and one optional camera for tests performed at a distance of 1 meter. The video can be recorded throughout the exam and can be used for verification in case of abnormal result.



Image from built-in camera



Image from distance test camera



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Vision 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](#)
- High speed camera (200Hz) [HVM-camera 200](#)
- Video recording [PVM-CF](#)

Vision psychophysical tests

- Contrast sensitivity [PVM-SC](#)
- Dark adaptometry [PVM-AO](#)
- Visual aptitudes and glare test [PVM-AC](#)
- Static perimetry [PVM-CV](#)
- Goldmann perimetry [PVM-CW](#)
- Attention visual field [PVM-UF](#)
- Macular pigment density [PVM-PI](#)
- Metamorphopsia [PVM-ME](#)

Oculomotor tests

- Electro-nystagmography [PVM-EO](#)
- Video-oculography [PVM-YE](#)
- Pupillometry [PVM-PU](#)
- Scan path analysis [PVM-SA](#)
- Visual pursuit test for babies [PVM-EN](#)

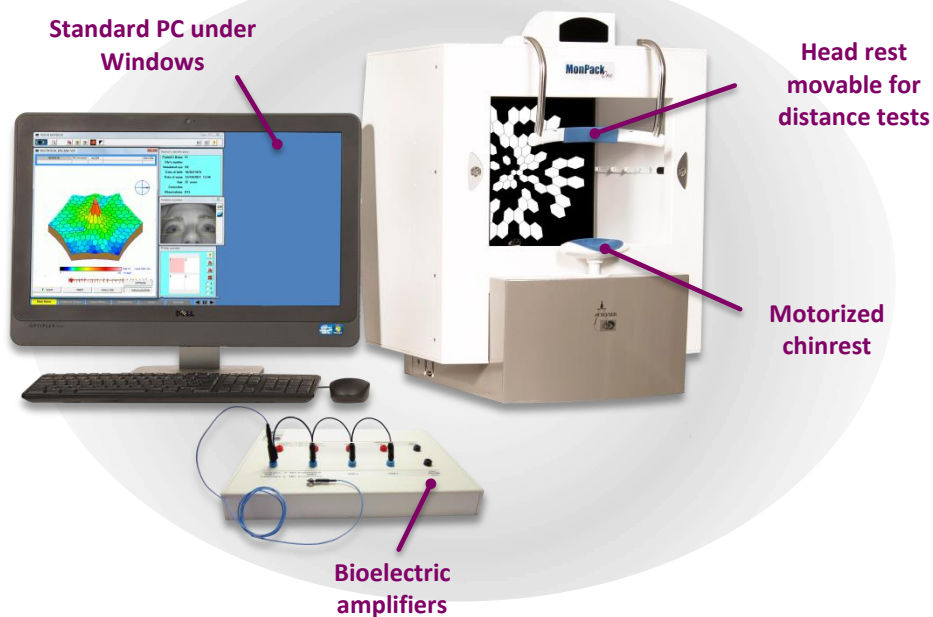
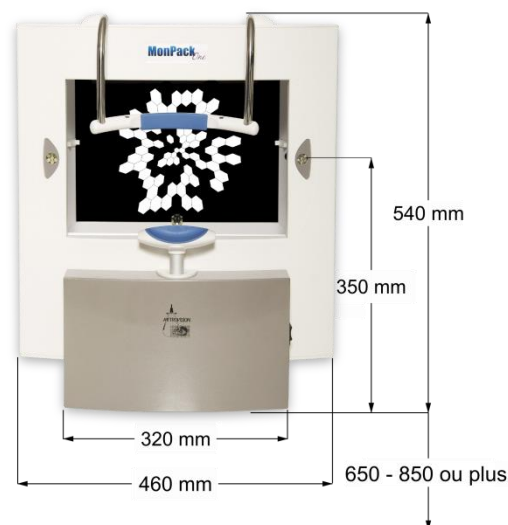
Electrical and mechanical specifications

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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