

SEPA-P Secom system for psychophysical analysis



SEPA-P Secom system is a portable kit suitable for evaluating people's psychophysical reactions in a objective manner.

This kit can easily and immediately define:

- reaction times
- consistency of response
- nervous tension

of a person exposed to acoustic and visual stimuli. Moreover system SEPA is in a position to controlling the psychophysical reactions and the psychomotor coordination (and the evolution in the time) of patients as a result of:

- Ictus, paresis, semiparesis
- Physical Deficiency
- Car crash
- Labour accident

What is SEPA-P system composed of?

From the outside this kit looks like a solid case divisible in two parts:

the first part contains one notebook, two testing buttons (one for the right hand and one for the left hand), the LAN port and a USB 2.0 port. This half case may be located on any surface so that the subject can press the buttons.

The second half of the case consists of two pedals on an inclined plane. These pedals test a subject's reaction times to visual and acoustic stimuli.

How does it work?

The candidate must respond to the stimuli by pressing buttons and pedals as soon as they receive them.

By analysing an examinee's reaction times, it is possible to define whether they are able to perform particular actions correctly and safely, such as driving for instance.

Examples of reaction times, expressed in thousandths of second

(M.R.T. = Medium Reaction Time C.A.I.=consistency of answer index M.I.= mistake index N.T.= Nervous Tension)

Simple visual stimulus: RED

273	203	192	238	295	234	309	253	297	273
256	188	273	304	308	263	234	263	262	359

Results : M.R.T. = 273.2 (2) C.A.I. = 33 (3) N.T. = 0%

Comment : M.R.T. = (2) is a value below minimum as established by the National Health Service

Simple acoustic stimulus: a BELL

1286	311	224	219	233	237	238	214	254	225
320	911	578	364	212	213	244	293	207	282

Results : M.R.T. = 320.2 (1) C.A.I. = 127 (1) N.T. = 0%

Comment : M.R.T. = (1) is a value below minimum as established by the National Health Service

Combined Stimuli: YELLOW, RED, GREEN, RINGER, BELL, TRUMPET

1286	311	224	219	233	237	238	214	254	225
320	911	578	364	212	213	244	293	207	282

Results : M.R.T. = 238.2 (10) C.A.I. = 3497 (10) N.T. = 20%

Comment : best result obtainable as established by the National Health Service

Contents of SEPA-P KIT

- A case
- 1 Notebook
- 1 Push-button panel
- 1 pedalboard
- headphones
- connecting and power cables

SEPA-P KIT TECHNICAL DETAILS

Proprietary integrated system : Hw and SW Secom

Dimensions (cm) 14 x 50 x 40. Weight: about 20 kg

Power supply: battery-operated (3 hours running time) or 110/220 Volts A.C.