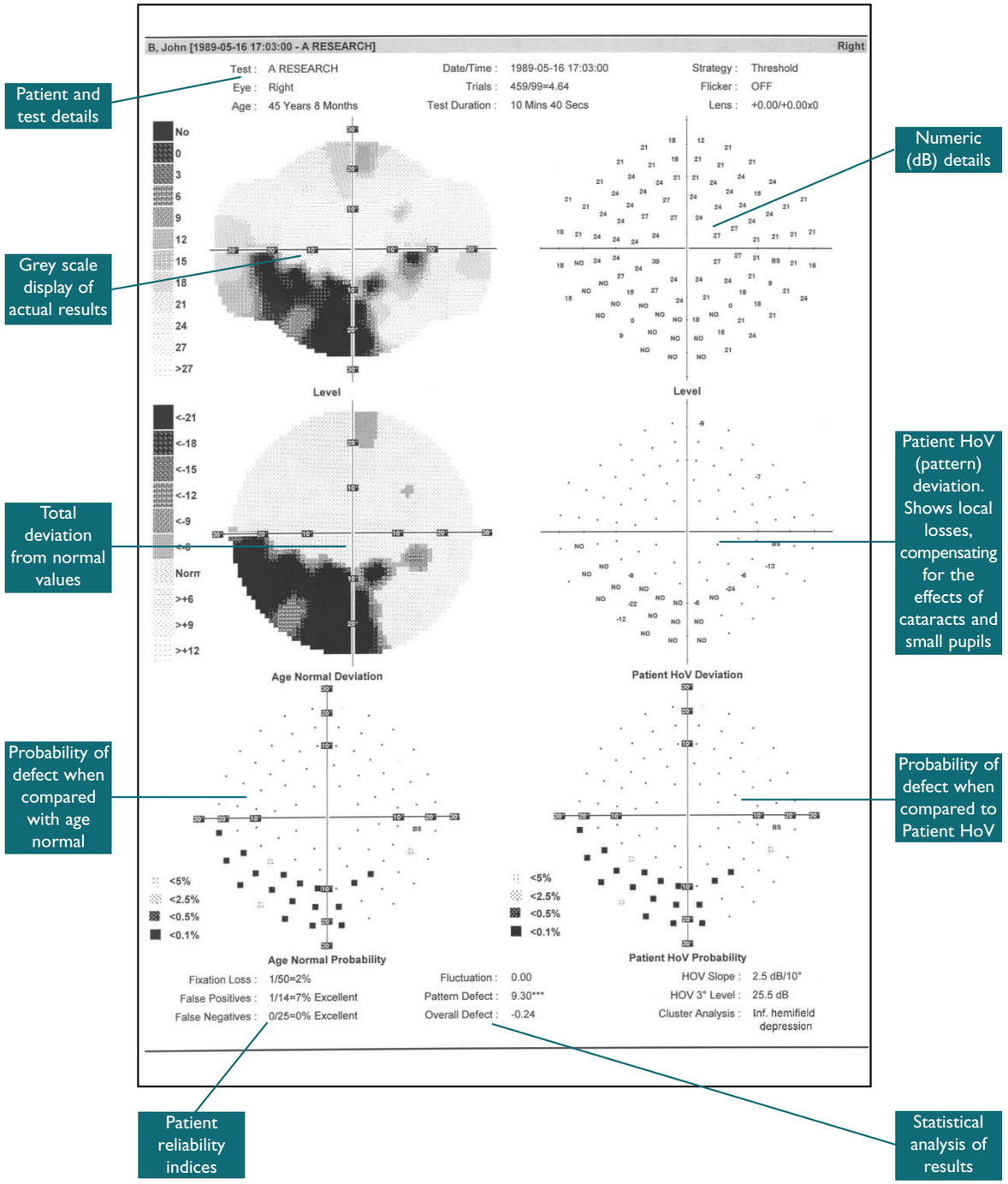

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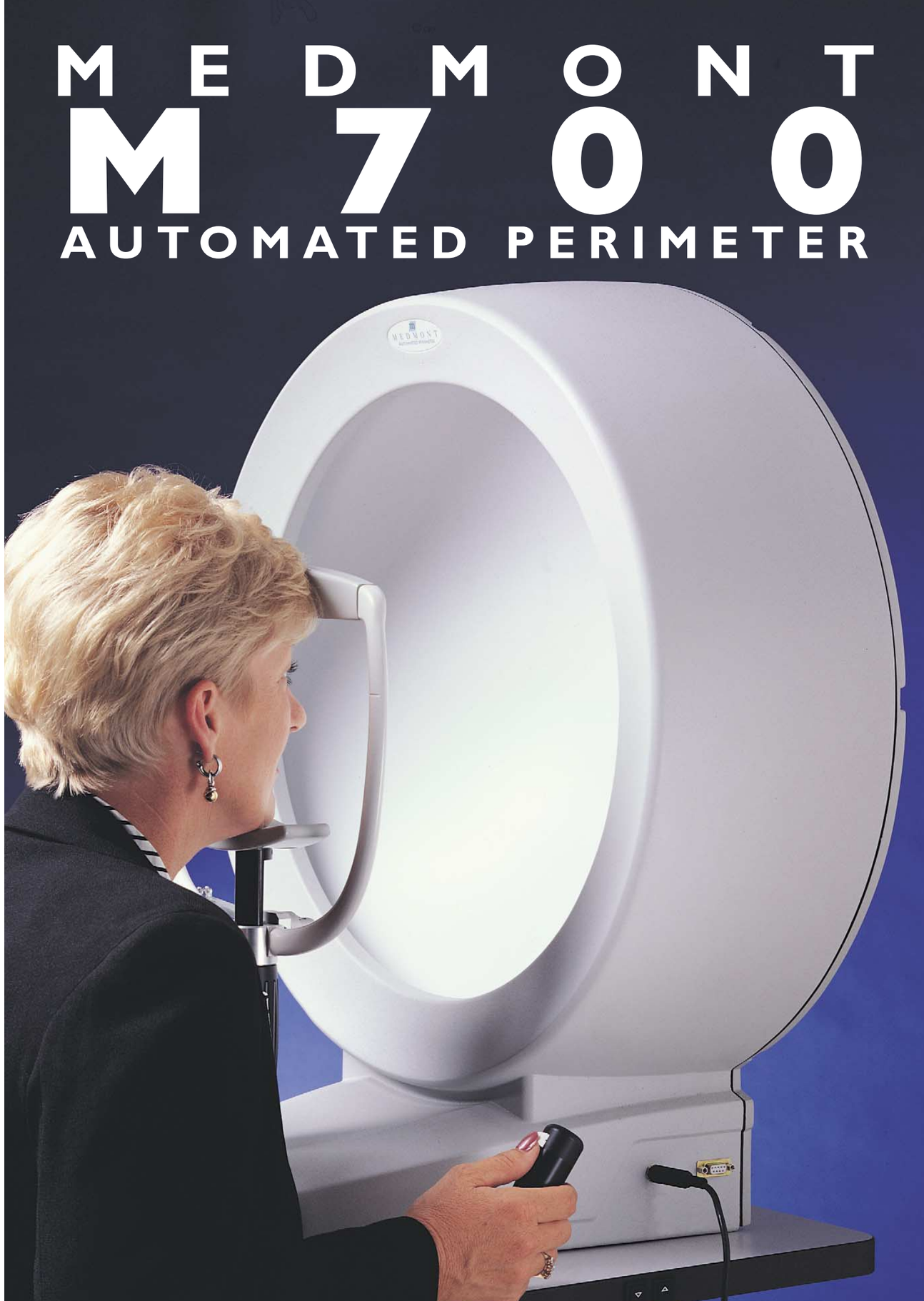
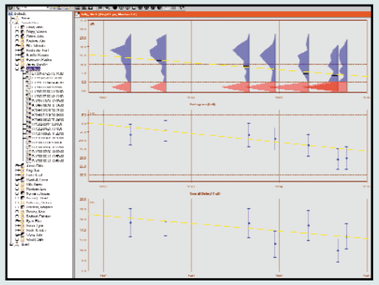
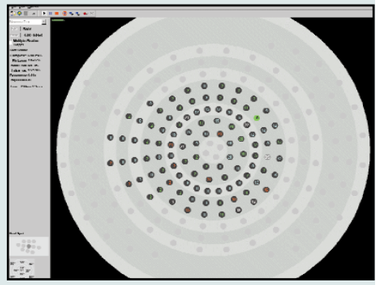
MEDMONT M700

AUTOMATED PERIMETER

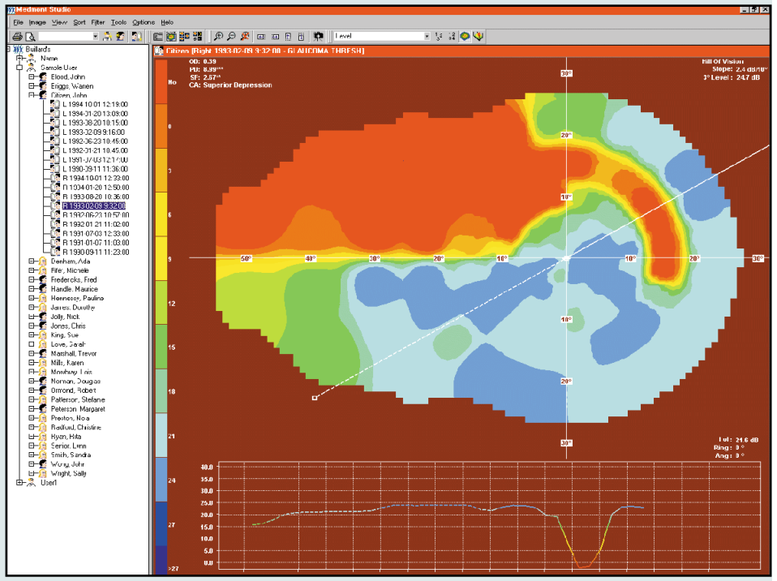




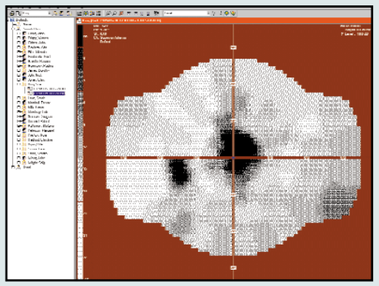
Regression analysis - graph shows a field loss and reducing overall sensitivity.



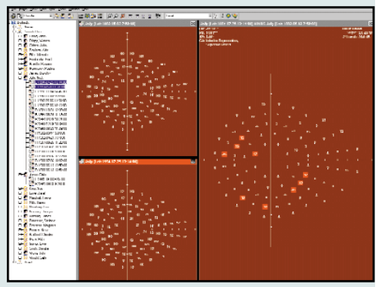
Test screen - showing a glaucoma test field pattern.



Colour display of an arcuate/nasal step visual field defect.



Shaded display presentation of a macula visual field defect.



Numeric comparison of two results, highlighting significant losses.

High Precision

The concentric test point density, which increases towards the fovea, facilitates accurate determination of field loss, particularly for arcuate and small macula defects. In the standard Central 30° field, 100 test points are typically used with a macula region point density of 3°.

Fast

A new, fast threshold test strategy is now available. With the use of advanced predictive logic algorithms, a 30° field can be completed in as little as 3 minutes per eye. Screening examinations require only 1.5 minutes per eye. Defects are automatically qualified.

Full Field Capability

With a test capability extending to 80°, the M700 provides a complete diagnosis of a patients' visual field, allowing peripheral defects that are not associated with the central field to be explored.

Flexibility/Database and Practice Management Integration

Database integration with practice management systems and other Medmont products is now possible utilising Medmont Studio. This negates the need for multiple patient entry and improves markedly the efficiency of the practice. The multimedia capabilities* of the M700 provide a wide range of audible warning tones for specific events (eg fixation loss, end of test) that may occur during an examination. Several M700 units can operate on a network sharing a single database.

Unique Test Facilities

Binocular Driving Test: Meeting worldwide standards to check a drivers visual field, this new test covers 160° of a patients binocular field.

Flicker Test: Tests with a flickering stimulus provide improved sensitivity and earlier detection of field loss over normal static tests. The M700 offers this facility with a special test strategy which requires the patient to respond to the presence of flicker in the stimulus.

Diplopia Test: The M700 provides a unique diplopia test where targets are presented in a sequence requiring a progressive change in the direction of gaze by the patient. Indication of a double image results in automatic detailed examination of that area of gaze.

*Sound card required.

Custom Fields

Create a new test region quickly and easily. Use the mouse to select a region and you are ready to commence testing.

Defect Verification

Using the mouse you can retest completed points or add new test locations at the periphery of a field while the test is still running, enabling any suspect field defects to be verified and fully explored without undertaking a new test.

Sophisticated Testing

The new spatially adaptive test initially utilises a sparse field. If the software finds an area of concern, additional points will be tested, this offers a new, faster method of defining a large defect. For all tests patient reaction time is continuously monitored and the speed of the stimulus presentation is adjusted accordingly.

Operational Simplicity

With an easy-to-use but comprehensive menu operating under Microsoft Windows™ no previous computer experience or detailed perimetry knowledge is required to operate the M700.

Advanced System Analysis

- New 3D HoV display
- Global statistics
- Regression and histogram analysis
- HoV profile analysis
- Difference analysis
- Full patient history via thumbnails

System Maintenance

The fully electronic stimulator unit, with no moving parts, together with standard computer hardware, results in low maintenance requirements for the M700. There are no routine service requirements for the M700.

Patient Comfort

The open, modern, ergonomic design of the M700 overcomes the claustrophobic problem and lack of ventilation often experienced in full bowl perimeters. Improved patient comfort will result in more reliable field tests.

SPECIFICATIONS

Stimulator Screen:
Part hemispherical bowl,
radius 30cm integrated diffusing surface

Test Fields:
Central 30° : 100 points
Full 50° : 164 points
Peripheral 30° - 50° : 73 points
Macula 10° : 49 points
Glaucoma 22° / 50° : 104 points
Neurological 50° : 164 points
Quickscan 22° / 30° : 40 points
Driving 50° / 80° : 106 points
Binocular 30° / 40° : 21 to 128 points
Binocular Driving Test 160° : 124 points
Spatially Adaptive Test 50° : 40 points

Stimulus Source:
Rear projection light emitting diode

Stimulus Colour:
Pale Green - wavelength 565nm,
half bandwidth 28nm

Stimulus Size:
Goldmann Size III (0.43°)

Stimulus Intensity:
0.03 asb to 1000 asb
in15 x 3dB steps / 45 x 1dB steps

Stimulus Duration:
Adjustable: 0.1 to 9.9 sec. (nom. 0.2 sec)

Patient Response Time:
a) Adaptive to patient speed
b) Operator selection of normal or slow ranges
c) Adjustable: 0.1 to 9.9 sec (nom. 1.1 sec)

Minimum Inter-stimulus Delay:
Adjustable: 0.1 to 9.9 sec (nom. 0.4 sec)

Background Illumination:
10 asb (3.2cd/m^2), automatic level control

Test Lens Diameter:
38mm

Fixation Method:
"Heijl-Krakau" blind spot method,
automatic tracking during test with visual and audible warning of fixation errors
Optional video camera

Processor Unit:
IBM-compatible computer, with hard disk and SVGA display, Microsoft Windows™, bubblejet/laser printer

Stimulator Unit Dimensions:
626mm wide x 438mm deep
x 713 mm high

Stimulator Unit Weight:
16kg approx

Stimulator Unit Power:
110/220/240 VAC
50/60Hz 30W

N2100 CE 0120

Note: These specifications are subject to change without notification. © 8/12/2000

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