The Next Generation of Premium Vision Screening

TITMUSi400

SPERIAN
Protection you can trust
As the manufacturer of the preferred vision screening instrument for visual health professionals, TITMUS, now Sperian, introduces the latest in innovation with the TITMUSi400 vision screening instrument. This new instrument features an ergonomic design for patient comfort, natural line of sight testing, membrane control panel for operation, standardized fluorescent test illumination, and an integrated foldable handle for ease-of-transport.

The contemporary compact design and added ergonomic features make the TITMUSi400 more efficient and easier to operate, while maintaining the recognized tradition of quality, durability, and ease-of-use that made TITMUS, now Sperian, the industry standard. The TITMUSi400 is the screener of choice for the next generation.

Innovative Design

Designed to meet the unique needs of the 21st century, the TITMUSi400 introduces several new features making it more user-friendly and the clear choice for consistent and dependable performance. With over 50 years’ experience, TITMUS, now Sperian, continues to deliver the best instrument possible, emphasizing accuracy in the testing of visual performance in adults and children.

The TITMUSi400 features a new ergonomic design that incorporates the unique TITMUSComfort height adjustment to easily accommodate adults and children of varying heights. The TITMUSi400 includes a versatile membrane control panel that puts complete command of the instrument at your finger tips. Test administration is effortless with the use of the sensitive membrane keys. Unique for the TITMUSi400 is the new Natural Line of Sight Testing, a feature designed to test at the best line of sight for progressive or multi-focal lens users.

The TITMUSi400 incorporates a new fluorescent light source that significantly improves slide illumination, closely replicating actual daylight conditions and providing true color testing. The fluorescent light source will give years of extended service and is placed in a module designed for easy replacement. This improvement, in conjunction with newly redesigned test slides, provides the most reliable test results available.

Designed with a foam headrest that can be easily cleaned, the need for messy replacement tissues is eliminated. The TITMUSi400 features an integrated foldable handle and comes with an optional soft-sided carrying case, making the delivery of vision screening services highly portable and effortless.
TITMUSi400 Vision Screener with Membrane Control Panel

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Portability
Foldable handle, rear mounting control panel, side pockets for easy transport

Accessibility
Removable cover for easy access to slides and light module

Foam Headrest
For comfortable support and proper head positioning; easily cleaned

Head Sensor
To recognize correct head positioning; ability to override sensor

Test Distance
Vision screening at Far (20') and Near (14")

Natural line-of-sight testing

Side pocket for storage

Patent Pending
Natural Line-of-Sight Testing

Testing done at the natural line-of-sight: looking straight ahead for distance and downward for near vision. By turning the knob, a progressive lens wearer can be tested at the optimal line-of-sight.

Comfort Height Adjustment

Unique design for patient comfort, to accommodate both children and adults, either standing or seated. This is essential for efficient and accurate testing.

Membrane Control Panel

A ▲ Light source condition
B ▲ Peripheral vision screening
C ▲ Day or night illumination condition
D ▲ Slide advance/reverse
E ▲ Slide position
F ▲ Reset
G ▲ Head position indicator/sensor deactivate
H ▲ Occlude each eye, light indicates eye being tested
I ▲ Test distance – near, intermediate or far

TITMUSi400 Additional Features

New Light Source
Meets the ANSI and ISO standards for illumination using a true white light source to give years of extended service. Light module has a warranty of three (3) years.

Peripheral Vision Testing
Can perform peripheral vision testing in the horizontal visual field at 85°, 70°, 55° and nasal 45° for each eye.

Night Vision Testing
Can screen vision at night driving conditions.

Available Tests
A variety of tests are available for the TITMUSi400 instrument to screen for visual acuity, muscle balance (horizontal and vertical phoria), depth perception, color perception, and binocular vision.

Intermediate or Plus Lenses (Optional)
Five additional lenses are available to identify vision problems at actual working distance (intermediate vision) of 19, 22, 26, 32 and 40 inches (50, 57, 67, 80 and 100 cm). Plus lenses with values of +1.00, +1.50, +1.75 and +2.25 are also available for testing children’s vision.

Carrying Case (Optional)
An optional soft-sided carrying case with wheels and convenient pull strap is available for the TITMUSi400.
Results calibrated at 20/20, 20/30, 20/40, 20/50, 20/70 and 20/100. Tests can be administered binocularly or for each eye.

**Slides for Professional Model**

**Used by:** Family Physicians; General Practitioners; Pediatricians  
**For:** Screening adults and children  
**Age group:** School-aged children, adults of all ages

**Test No. 1, SA-APS-1:** Allen Picture Test

**Test No. 2, SAS-2:** "E" Acuity Right & Left Eye

**Test No. 3, SPS-3:** Heterophorias

**Test No. 4, SCD-1:** Color Perception

**Test No. 5, SA-BRL-4:** Visual Acuity

**Test No. 6, SLP-1:** Lateral Phoria

**Test No. 7, SVP-1:** Vertical Phoria

**Test No. 8, SA-BRL-2A:** Visual Acuity

**Test No. 9, SCD-1:** Color Perception

**Test No. 10, SVP-1:** Vertical Phoria

**Test No. 11, SLP-1:** Lateral Phoria

**Test No. 12, SCD-1:** Color Perception

**Test No. 13, SVP-1:** Vertical Phoria

**Test No. 14, SLP-1:** Lateral Phoria

**Test No. 15, SA-BRL-2A:** Visual Acuity

Line 1—Binocularity—tests performance of both eyes together. Lines 2, 3, 4—Acuity—Right and Left Eyes. Calibrated 20/30, 20/40 and 20/50.

Conventional Tumbling "E" symbol. Child states which way the "E" points. Acuity levels of 20/20, 20/30, 20/40 and 20/50.

Muscle balance, vertical and lateral is tested at predetermined pass/fail levels.

Consists of six accurately reproduced Ishihara Pseudo-Isochromatic plates. Detects color deficiency but does not classify.

Results calibrated at 20/20, 20/30, 20/40, 20/50, 20/70 and 20/100. Tests can be administered binocularly or for each eye.

Measures horizontal muscle balance in 1 prism diopter steps.

Measures vertical muscle balance in 0.5 prism diopter steps.

Results calibrated at 20/20, 20/30, 20/40, 20/50, 20/70 and 20/100. Tests can be administered binocularly or for each eye.

**Slides for Occupational Model**

**Used by:** Occupational Health Nurses; Clinics; General Practitioners  
**For:** Screening vision for various job functions  
**Age group:** Adults of all ages

**Test No. 1, SF-1:** Binocularity Both Eyes

**Test No. 2, TNO-B:** Acuity Both Eyes

**Test No. 3, TNO-R:** Acuity Right Eye

**Test No. 4, TNO-L:** Acuity Left Eye

**Test No. 5, SSD-1:** Stereo Depth

**Test No. 6, SCD-1:** Color Perception

**Test No. 7, SVP-1:** Vertical Phoria

**Test No. 8, SLP-1:** Lateral Phoria

**Test No. 9, SF-2:** Binocularity Both Eyes

**Test No. 10, SF-3:** Acuity Both Eyes

**Test No. 11, SF-4:** Acuity Right Eye

**Test No. 12, SF-5:** Acuity Left Eye

**Test No. 13, SCD-1:** Color Perception

**Test No. 14, SVP-1:** Vertical Phoria

**Test No. 15, SLP-1:** Lateral Phoria

**To determine whether both eyes are being used together.**

This pattern of Landolt rings provides a precise measure of acuity with literates or illiterates. The direction of the opening in the ring is to be identified.

Similar to Both Eyes Test with different directions and image omitted for the left eye.

Similar to Both Eyes Test with different directions and image omitted for the right eye.

Is a precise measure of one of the important factors of depth perception. It provides an excellent measure of binocular skill.

Consists of six accurately reproduced Ishihara Pseudo-Isochromatic plates. Detects color deficiency but does not classify.

Measures vertical muscle balance in 0.5 prism diopter steps.
Warranty
The TITMUSi400 has a warranty for a period of three (3) years against defects in materials and workmanship from date of purchase. Warranty includes the light module.

Standard Accessories
- 8 Test Slides made from high grade photographic film sealed between optical-quality glass
- Training Manual (technical support available via the internet)
- Record Forms – pad of 100 forms to record test results
- 10 Lens Cleaning Wipes
- Package of 3 Fog Eliminator Cloths
- Accessory Case for storing lens cleaning wipes, fog eliminator cloths, and lenses
- Dust Cover for instrument storage

Optional Accessories
- Carrying Case – soft-sided, ergonomically designed with wheels, for easy transport of vision screener
- Intermediate Lenses – 19, 22, 26, 32 and 40 inches (50, 57, 67, 80 and 100 cm)
- Plus Lenses with values of +1.00, +1.50, +1.75 and +2.25 are available for testing children’s vision

Electrical Standards
The TITMUSi400 meets the CE, UL, and CSA Standards
Europe: EN 60601.1-2
USA: UL 60601-1
Canada: CSA-C22.2, No. 601.1-M90,
Class I Device

Technical Data
Power Supply: 110-240 VAC, 0.4-0.2 A, 50/60 Hz
Fuse Rating: 2 A, 250 V
Illumination: As per ISO 8596 and ANSI Z80.21 Standards
Dimensions: W x L x H units (closed condition)
12.25 x 16.5 x 12.75 inches
31 x 42 x 32 cm
Weight: 18 lbs/8.5 kg
Temperature: +50°F to +100°F (+10°C to +40°C)
Humidity: 30% to 75%

TITMUSiSeries Model Comparison

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