Chart2020® version 9 delivers a new standard for the assessment of visual acuity, binocularity, stereo acuity, contrast sensitivity and other eye performance tests. Chart2020 offers hundreds of test options and strategies yet all easily accessed with the 45 button remote, smart menu docks, the iPad® controller and mini monitor or a click of the mouse.

Run your exam room efficiently and accurately, adding high-tech appeal, reduce administration time, delegate, with instant reporting database for trends over time.

**Feature Overview**

- Visual acuity testing
- Astigmatism
- Binocularity
- Media and education
- Reporting
- Contrast acuity
- (e)ETDRS
- Stereo acuity
- Dyop® - dynamic optotype
- iPad controller
- Soft remotes
- Near VA
- Amsler 3D
**Visual acuity**

Extensive library of logMAR, Snellen and equally spaced letters, with classic functions to isolate, overlay and randomize letters. Includes standard optotypes, and the revolutionary dynamic optotype Dyop®

- Auto calibration to any size monitor
- Mirrored display
- Repeater monitor option
- Easy alternate test distance selector
- Displayed notation (feet/meters/decimal or LogMAR)
- Drag and drop real-time chart editor
- Pref LogMAR allows customization of displayed optotype sizes

**Contrast acuity**

Test your patient’s contrast sensitivity accurately with standardized outcomes, auto-guided test strategies. Test under different lighting conditions with real time luminance meter.

**Stereo acuity**

Measure your patient’s binocularity with some fun test strategies, either with a polarized or normal monitor.

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**Features**

- Auto-guided – Y|N test strategy
- 2 modes quick staircase
- Extensive (e)ETDRS ISO protocol
- High or low contrast
- 2 phases quick screening in log jumps precision
- Threshold determination
- Immediate alternate test distance
- Optotype selection - letters, numbers, pediatric

**Suitability**

- Pre-test rooms
- Self service vision booths
- School screener

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**Suitability**

- Ophthalmic clinics
- Clinical trial studies
- Low vision clinics
- Pre-testing exam rooms

**Hardware**

- Calibration device for screen luminance
- Real time ambient luminance

**Targets**

- Letters, numbers, pediatric optotypes
- Sine gratings (spatial frequency)

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**In-built monitor luminance calibration calibrates to 85cd/m2**

- Calibration insures standardized outcomes
- Automated Y|N test strategy allows for pre-testing PDF reports with age based graphical overlay helps justify surgery to insurance companies
- Test both eyes separately and together
- Luminance meter saves real-time luminance directed at patient (allows comparison of contrast acuity under different lighting conditions)
- **Quick testing** using using standard optotypes.
  - **Comprehensive testing** using the sine gratings, either showing a single target or a forced choice (pairs) target. Test at 1.5, 3, 6, 12, 18 cycles per degree. Repeater monitor or iPad real time display shows the answer to the doctor. Test the patient not the doctor!
- Quick start option to shorten test time
- Inter-target pause allows retina recovery time

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* Normative data infrastructure provided for age based overlay on report.

Data not supplied

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**Reporting**

Track trends over time for patient's visual acuity, contrast sensitivity and stereo vision.

PDF reports can be used for:
1. Justifying medical procedures to insurers
2. EMH | EMR records
3. Generating referrals

Report have your own logo and practice information, patient's information and detailed graphical and tabulated reports.

**Dyop® – short for dynamic optotype.**

- **A Dyop®** is a strobic visual target (optotype) whose uniformly moving/rotating calibrated gap and segment sizes, motion, color, and contrast provide a precise method for measuring visual acuity.

- Rotating segmented circular optotype
- Does not require patient literacy
- Minimizes fixation and decision fatigue
- Avoids over minusing and memorization
- Eliminates visual processing and perception
- Acuity end point determined when dyop appears static
- Faster and more accurate refractions
- Clinically validated - Dr Paul Harris SCO OD, FCOVD, FACBO, FAAO, FNAP PROFESSOR
- Eliminates guessing with similar shaped letters

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**Astigmatism**

- Fan with rotating selector
- Rotating block – variable angle
- Adjustable concentric circle thickness
- Adjustable showerhead dot sizes
- Synchronous fan to block axis refinement
- Cross cylinder

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**Binocular**

- Polarized

**Standard (red | green or red | blue)**

- Vertical & horizontal Coincidence
- Fixation disparity
- Worth 4 dot
- Duochrome balance

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**Chart 2020**

The Premier Visual Acuity and Ocular Performance Testing Solution
### Specifications

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### Configurations

- **Plug & Play**
  - Hardware, software and IR remote supplied
  - Just mount and start testing

- **Software only**
  - User supplies PC
  - Installation of software via internet or remote support
  - LITE, PRO or month to month versions
  - Accessories sold separately

- **Trolley Plug & Play**
  - Hardware, software and IR remote supplied on a mobile trolley.
  - Move trolley easily from room to room.
  - Move the trolley instead of the patient, to test at different distances.

### Purchase options

- **$29** MONTHLY
  - LITE

- **$795**
  - PRO

- **$1,295**
  - BUNDLED

- **$2,099**
  - BUNDLE
  - TROLLEY
  - MONTHLY

- **Price on request**
  - DYOP

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USA Office: 3994 w Hillsboro Blvd, Deerfield Beach, FL, 33442 | +1 954 246 0653

**Datacolor spyder calibration**
- Automated built in luminance calibration
- Standardized contrast acuity

**Patient luminance reader**
- Real time luminance reader placed at the patient
- Test acuity and contrast under glare

**Remote/Control options**
- 45 button infrared remote USB receiver
  - Simplicity Reliability Move from room to room
  - No pairing 6 month battery life
- iPad controller
  - Easy to pair via WiFi in-built repeater monitor
  - Gesture Control
  - Easy access to control all tests and functions
  - Helps to keep eyes on patient and not the monitor

**Polarized medical monitor**
- Circular polarized monitor
  - Stereo acuity auto-guided tests.
  - Polarized test library including binocularity and fixation disparity

**Hardware feature options/kits**
- Luminance monitor calibration
  - Automated built in luminance calibration
  - Standardized contrast acuity
Connect allows you to full over the Chart2020 application, via taps, gestures and more. It also serves as a repeat monitor, so you don’t have to turn your head to see the patient monitor. Keep your eyes on your patient not the technology!

- Connects via wifi
- One-button access to all tests
- Private doctor answer view for Contrast and Stereo
- Intuitive gestures for
  - Randomization
  - Masking
  - VA size changes
  - Moving through test sequences
- Multiple exam room setup

Near VA provides a near visual acuity test. Test charts are dynamically prepared based on a user's choice of settings.

- Test distances from 0.33 to 6 meters (14 inches to 20 feet)
- Gesture driven:
  - Larger - smaller optotypes
  - Randomization (double tap)
  - One touch, pop-up magnifier
- Masking options
  - Single lines (vertical + horizontal)
  - Single letter
- Notations
  - 20/xx, LogMar, Decimal, and Metric

Remote allows you to connect to the Chart2020 application using your mobile or your tablet.

- Replace your old Infra Red remote with this app.

TEST OPTIONS

- White, red or black grid
- Fixation diagonals
- Centre dot blink to assist to keep eye positioned correctly

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