




Spot Vision Screener

A New Class of Vision Technology



- Engineered for today's vision assessment market
- Customized for large production
- Optimal performance & durability
- Solid ergonomics for ease of use
- Embedded operating system
- Efficient size, speed and power
- Portable camera and operating system combined
- WiFi  connectivity for data transfer and printing

Easy to Use

1

Launch



2

Begin Testing



Easy Capture Indicator



“Too Far”

*move camera
toward subject*

hold camera still

(about 3 feet away)

“Too Close”

*move camera
away from subject*

Easy Capture



- **Quick Capture Time**
One second or less
- **Device Design**
No Sharp Edges
Matte Black Finish
- **Soothing Sounds**
Volume Control
- **Visual Attention (Fixation)**
Visible LEDs “Twinkle”
Infrared Capture LEDs

A Immediate & Meaningful Results

"Spot has helped make us more efficient in our practice... In the past we have spent so much time on kids because it would take a long time to screen children, especially non-verbal children."

– Dr. Stephanie Lyons, Optometrist
Lyons Family Eye Care, Chicago, IL



On-Camera Results Provide Instant Feedback

Printed Results

"Spot is so quick and easy to use. It literally takes one second to screen a patient and provides accurate data."

- Tenafly Pediatrics
Tenafly, New Jersey

Vision screening does not replace a complete eye examination by an ophthalmologist or optometrist. **spot** Complete Eye Exam Recommended

VISION SCREENING SUMMARY

SUBJECT ID: 21081-13572
SCREENING: 01/17/2014 4:27 pm GENDER: F AGE: 3Y
FIRST NAME: Olivia
LAST NAME: Dylan

Vision screening should be conducted regularly as eyes may change over time. POTENTIAL CONDITION

6.0 7.7 6.0
OD OS

• Hyperopia (OD) [farsighted]
• Astigmatism (OD) [problem focusing]
• Anisometropia [unequal power]

RIGHT EYE LEFT EYE BOTH EYES

OUT OF RANGE IN RANGE

myopia
hyperopia
astigmatism
gaze dev.

anisometropia
gaze asymmetry

WelchAlllyn Spot

ID: 31872-12585
Name: Pat Smith
Age: 2y 3m Gender: F (-CYL)

OD(Right): +4.00 DS | -2.00 DC | @99° AX | +3.00 SE
OS(Left): +1.75 DS | -0.75 DC | @16° AX | +1.50 SE

Pupil Size: (6.8mm OD, 6.8mm OS) Pupil Distance: (77mm)
Gaze: (+4°, +1° OD), (-0°, +1° OS)

Potential Condition: Hyperopia(OD), Astigmatism(OD), Anisop
Date: 05/27/2012 3:38 pm (c) PediatricVision

8 1/2" x 11" REPORT

4 1/2" x 2 1/2" LABEL

- Demographic Information
- Analysis of Test
- Results for Each Eye
- Binocular Results
- Severity Index
- Call to Action
- Printing Options:
 - > Print to a Network Printer
 - > Save Data and Print later

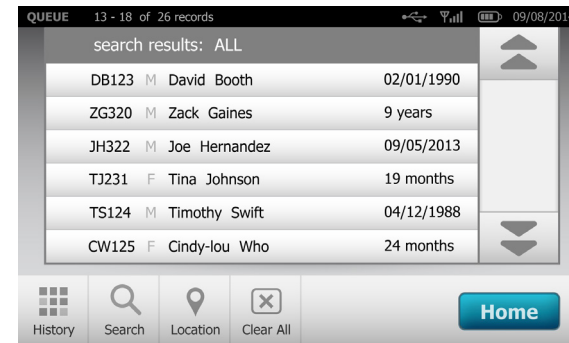
3 Data Entry Options

Instant Screening



Select age range to initiate screening

Select from Queue



Subject data can be preloaded prior to testing

Enter Subject Data



Subject information can be added before or after test

Binocular, Autorefractometer and Alignment

"I love Spot. I take it between my two offices and use it on many patients per day. It's very fast and unobtrusive...it's priceless."

– Dr. Bill Kegerize, Optometrist
Genoa Family Eyecare
Oregon, Ohio

The screenshot displays the Spot autorefractometer interface for patient Robert Smith on 08/18/2014 at 2:23 PM. The interface shows two eye images with various measurement indicators. The pupillary distance is 77 mm. The pupil size indicator is 6.0 mm. The alignment indicator shows 1° vertical and 4° horizontal. The refraction results are as follows:

Eye	SE	DS	DC	Axis
OD (Right Eye)	-0.25	+4.00	-2.00	@99°
OS (Left Eye)	+1.50	+1.75	-0.75	@16°

Below the refraction results, a red banner indicates a "Complete Eye Exam Recommended" due to Hyperopia (OD), Astigmatism (OD), and Anisometropia. The bottom navigation bar includes options for Mono, Edit, Summary, Retry, Print, and Home.

- alignment indicator
- degree:
 - ↕↗ vertical or
 - ↔↘ horizontal
- complete refraction
- SE = spherical equivalent
- DS = sphere
- DC = cylinder
- Axis = axis

Annotations on the screenshot include:

- pupillary distance
- pupil size indicator
- OD = Right Eye
- OS = Left Eye
- +/- cylinder convention

Results Selection: "Recommendation Hide"

Binocular Vision Screening

Spot screens for these common vision issues:

refractive errors

- Myopia (near-sightedness)
- Hyperopia (far-sightedness)
- Astigmatism (blurred vision)

amblyopic precursors

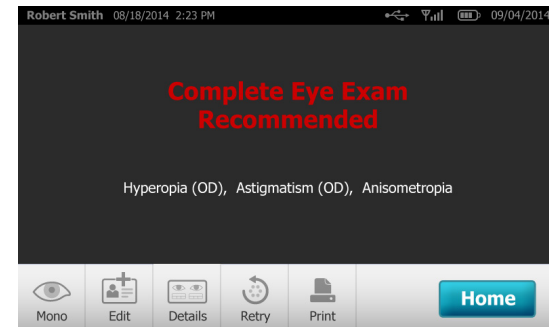
- Anisometropia (unequal refractive power)
- Strabismus (eye misalignment)

pupil abnormalities

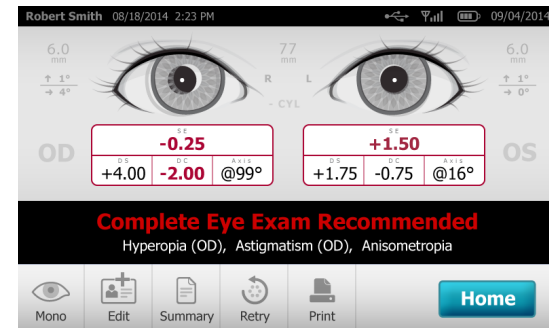
- Anisocoria (pupil size deviations)

*“We really love using Spot
- it’s very quick and easy to use.”*

– Ed Jenner, Bella Vista, Arkansas



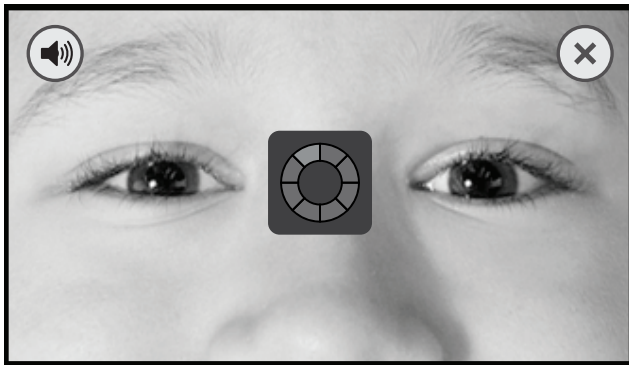
Results Selection: “Measurements - [Hide](#)”



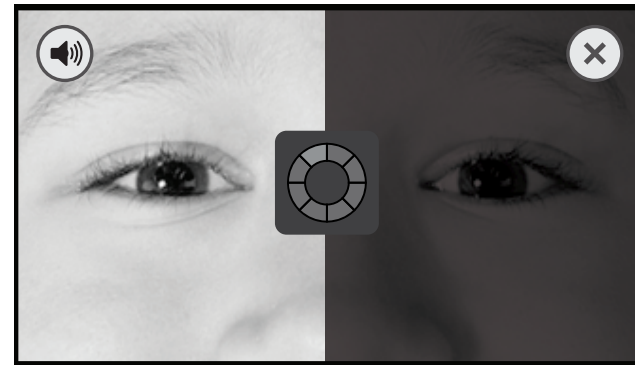
Results Selection: “Measurements - [Show](#)”

Binocular & Monocular Testing

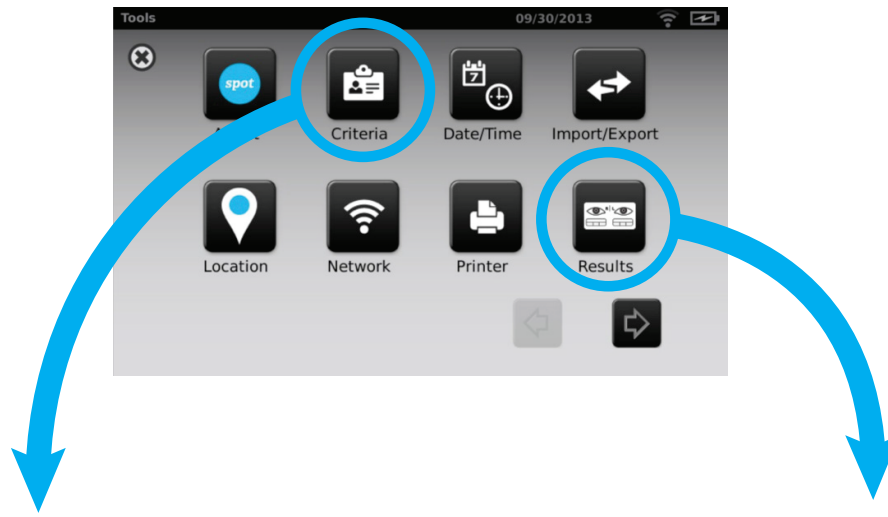
Binocular



Monocular



Configurable Options



CRITERIA

AGE (MONTHS)	6 - 12	12 - 36	36 - 72	72 - 240	240-1200
Anisometropia	0	1	2	3	4
Astigmatism	5	6	7	8	9
Myopia	10	11	12	13	14
Hyperopia	15	16	17	18	19
Anisocoria	20	21	22	23	24
Gaze Vertical	25	26	27	28	29
Gaze Nasal	30	31	32	33	34
Gaze Temporal	35	36	37	38	39
Gaze Asymmetry	40	41	42	43	44

Configurable Screening Thresholds

Results Options

Data Format Raw Formatted

Cylinder Convention Positive Negative

Measurements Show Hide

Recommendation Show Hide

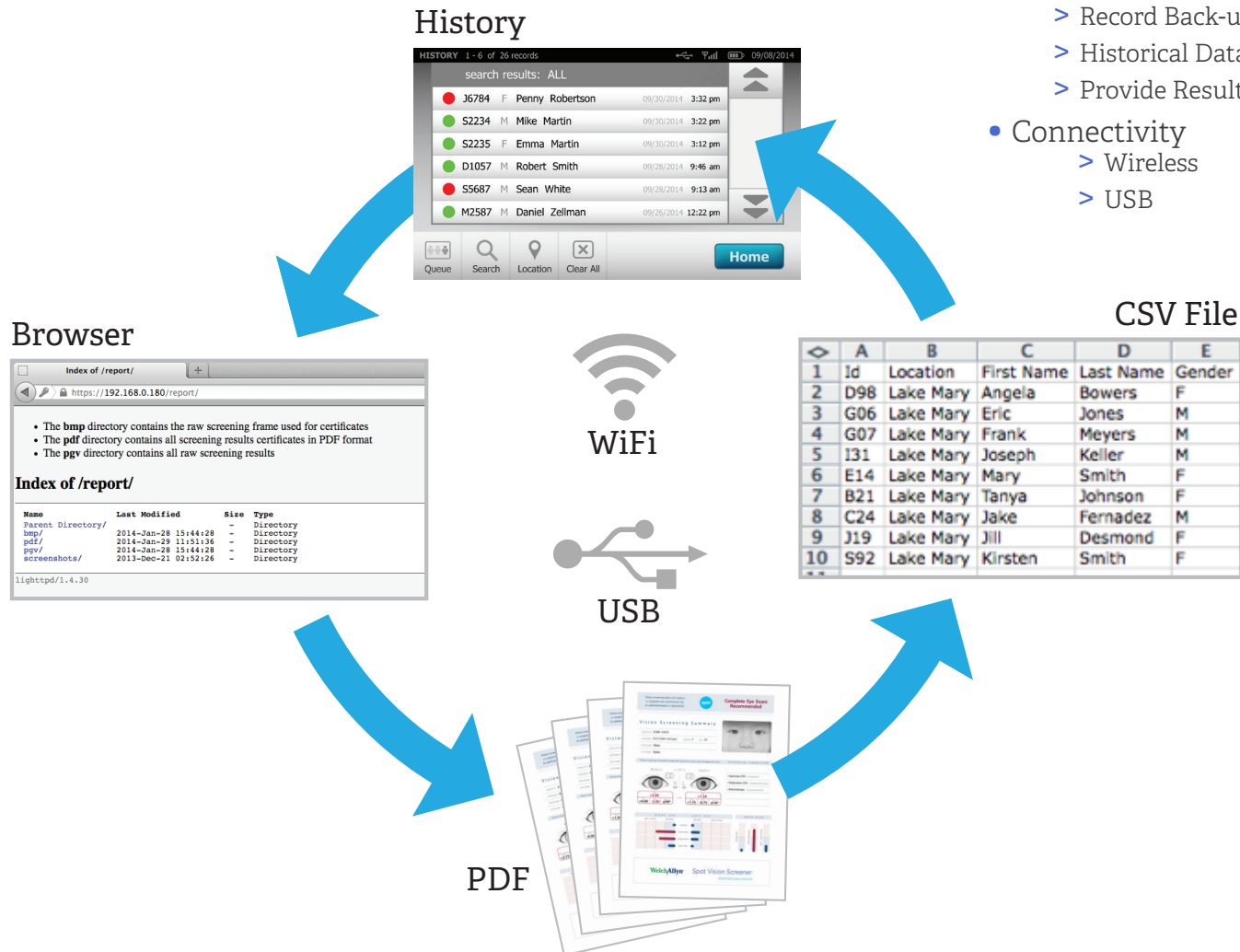
Default Screen Summary Details

Screening Time-out None 1 min 30 Sec 2 min

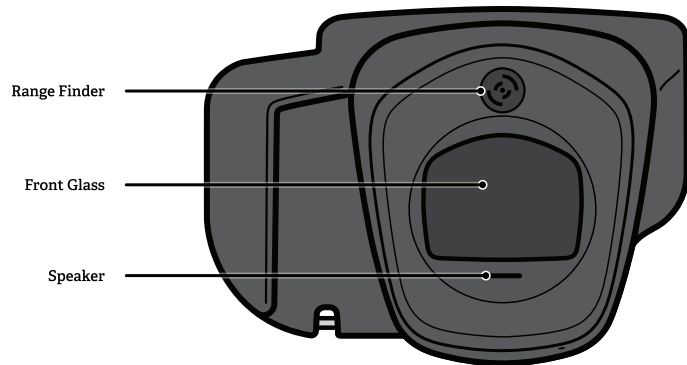
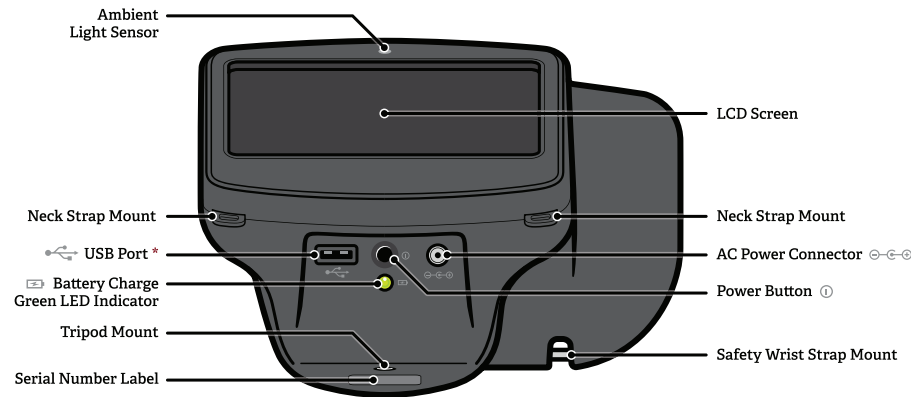
Configurable Results Options

Spot Data

- Results Saved on Device
- Export Data
 - > Physician EMR
 - > Record Back-up
 - > Historical Data & Reporting
 - > Provide Results to Patients
- Connectivity
 - > Wireless
 - > USB



Patent-Pending Technology



**Manufactured
in the USA**

• Specifications

Measurement distance: *~ 3 feet away*

Capture time: *One second or less*

Operating system: *embedded*

Interactive touchscreen

WiFi enabled

Battery use: *over 4 hours*

Weight: *~ 2.5 pounds*

• Measurement Range

Refraction (SE): *-7.50 D to +7.50 D*

Refraction (Cylinder): *0.00 D to 3.00 D*

Refraction (Cylinder Axis): *1 to 180 degrees*

Pupil size: *4.0 mm to 9.0 mm*

Gaze: *0 to 20 degrees*

Pupil distance: *35 mm to 80 mm*



For more information, visit: <https://www.schoolhealth.com/spot-vision-screener-and-accessories>