

## A Practical Guide for Setting up the VS-100 Spot Vision Screener

With a little pre-screening preparation, vision screening using the Welch-Allyn VS-100 Spot Vision Screener can be relatively simple, straightforward, and efficient. A key factor in the efficiency is to preload the roster of students into the camera prior to the start of the screening process.

**Building the Student Roster.** For a typical elementary school screening, our Lion Vision Screening coordinator (Keith Keller) meets with the school nurse and sets a date for the screening. At this meeting, the Lion provides the school nurse with a USB drive and requests that she load it with the following student data (student name, grade, teacher) in excel (.xls) format.

A	B	C	D	E	F	G	H
	Last Name	First Name	Age	Gender	Grade	Teacher	Results
	Bailey	John	6	M	1	Miller	
	Smith	Mary	6	F	1	Miller	
	Davis	Frank	6	M	1	Miller	

- **Column A** will be used to assign the student an ID# in the camera and on the Student Roster.
- **Column B** is the student's last name.
- **Column C** is the student's first name.
- **Column D** is the age of the students. (note: the camera has several age groupings that it uses to assess the data it collects with the screening. The actual date of birth is not an absolute requirement, but the age of the student is needed. For example, if you are screening a student in the 3<sup>rd</sup> grade, most likely, that student will be 8 years old. An input of 07/15/2011 for DOB will put that student in the correct age grouping.)
- **Column E** is the student's gender.
- **Column F** is the student's grade (i.e. 1<sup>st</sup>, 3<sup>rd</sup>, 5<sup>th</sup>, etc.)
- **Column G** is the student's teacher. (note: for most schools, students are grouped by their class (i.e. teacher) for their screening. The printed Student Roster makes identifying the student easy, simply find the class being screened by the Teacher name, then find the student in that class via alphabetical order.)
- **Column H** shows the results of the screening. If the student's vision is within acceptable parameters, the column is left blank. If the student's vision is not within acceptable parameters, the Lion running the Roster writes "Refer", indicating this student should be referred to an optometrist or ophthalmologist for further screening.

Next, two modifications are made to the Student Roster (shown in red). First, the student ID# is added. Second, the age (in years) is converted to a "generic" DOB.

A	B	C	D	E	F	G	H
<b>ID#</b>	Last Name	First Name	Age	Gender	Grade	Teacher	Results
<b>101</b>	Bailey	John	<b>07/15/2013</b>	M	1	Miller	
<b>102</b>	Smith	Mary	<b>07/15/2013</b>	F	1	Miller	
<b>103</b>	Davis	Frank	<b>07/15/2013</b>	M	1	Miller	

Save this file as an excel file as the StudentRoster.xls. As an added improvement to the Student Roster file, I usually insert a banner at the top of each class to differentiate between grades. This is an example of a Student Roster file used this year for Town Creek Elementary School screening:

SOUTHPORT LIONS CLUB VISION SCREENING - NOVEMBER 5, 2019							
TOWN CREEK ELEMENTARY SCHOOL							
GRADE 1							
Nurse - Jazmine Jenkins							Southport Lions Club Vision Screening Program PO Box 10187 Southport, NC 28461
#CODE	Last Name	First Name	DOB	GENDER	GRADE	TEACHER	VISION RESULTS
101	Saban	Nick	7/15/2013	F	1	Bryant	
102	Smith	Mary	7/15/2013	M	1	Bryant	

We generally make four copies of the roster; the school nurse receives a copy, the person assigned to the entrance of the screening area, where the student is matched by the student name and ID# on the Student Roster. At this point, the student ID# is written on a sticky-note and given to the student who proceeds to the screening area and seated in front of the camera. A second Lion is given a Student Roster and matches the student ID# with name and the sticky note with the ID number passed to the camera operator. The ID# is used to pull-up the student's info page that is already loaded in the camera. The student is asked their name, and the screening is completed. The whole process from the time the student enters the screening room to exit from the screening is 20-40 seconds.

**Formatting the Camera Load file.** Taking the data that you have now generated in the Student Roster; you will need to do the following steps to get it ready to load into the camera. First, open a new excel spreadsheet and copy the data in Columns A, B, C, D, and E into the new spreadsheet. (Note: you do **NOT** need Columns F, G, or H).

A	B	C	D	E	F	G
101	Jones	Sally	7/15/2013	F		
102	Smith	Danny	7/15/2013	M		
103	Rogers	Roy	7/15/2013	M		

Save this file in excel format (.xls) as CameraLoadExcel.xls and then SAVE IT AGAIN in .csv (comma delimited) format as CameraLoad.csv. Save this file (CameraLoad.csv) to the USB flash drive.

Now that you have created the .csv file with the student information in proper format, you are ready to load it onto the VS-100 Spot Vision Screener.

**Preparing the Camera.** The first step is to prepare the camera to accept the student data. Prior to loading your student data on the camera, you want to make sure the Queue and History data files on the camera are empty.

- First, power-up camera and wait until the "homepage" shows on the screen. On the bottom left of the homepage, you have the following icons: Queue, History, and Tools.
- Tap the Queue icon and the screen will change to a data page with previous student names listed. At the bottom of the page, you will have History, Search, Location, Clear All, and Home icons.

- If data are present on the page, you can erase the old data by tapping the “Clear All” icon.
- Next, follow the same procedure for the History files on the camera. Tap the History icon to see whether the History file is populated or empty. If populated, then tap the Delete All icon on the bottom of the screen.

Once you have determined that the Queue and History are both empty, tap the Home icon to go back to the homepage screen.

**Loading the Student Data into the Camera.** The next step is to actually load the data that you generated to build your Student Roster and saved on the USB flash drive as CameraLoad.csv.

- At your homepage, tap the Tools icon. This brings up the “Tools” page on the screen. At the top right-hand corner is the Import/Export icon.
- Tap the Import/Export icon to go to the next screen which shows on the left, an image of the camera with the word Import underneath and on the right, an image of the USB flash drive with the word Export underneath.
- Insert the USB flash drive containing the CameraLoad.csv file into the USB slot on the underside of the camera. The camera will detect the CameraLoad.csv file and prompt you to transfer the file to the camera. Tap the camera icon to save the CameraLoad.csv file to the camera.
- When the file has loaded, you can exit the Import/Export page by tapping the X located in the top left-hand corner of the screen. This takes you back to the “Tools” page. Tap the X in the top left-hand corner of the screen again, and you return to the “Homepage”.

**Checking the Student Data in the Camera.** Now, it is advisable to check to make sure your student data has properly loaded onto the camera.

- To do this, tap the “Queue” icon at the bottom left of the homepage screen “Tools” icon. A new page replaces the homepage and should be populated with the student data information that corresponds to your Student Roster.
- Try a quick Search – tap the Search icon and a search page appears. Type in 102 and OK and student with the ID# 102 should come up on the screen. Try a few more Student ID #s to satisfy yourself that the data in the camera and data on the Student Roster match.
- You are now ready to screen students!

**Best Practices for Student Vision Screening.** The Student Roster is a critical part of the screening process to ensure a simple, straightforward, and efficient screening experience. Providing the student with a sticky-note having their ID# results in fast and relatively foolproof system for properly identifying the student being screened with the previously loaded student data page in the camera. The students are generally brought to the screening area in groups defined by “teacher”. The Student Roster is also built in groups per “teacher”. Hence, matching student Name with ID#s is a relatively simple task and moves them through the process fast and efficiently.

**Completion of Vision Screening and Data for School Nurse.** When all of the students have been screened, the complete data set from the screening process (normal as well as referrals) is stored in the camera under the title “History”. This data set is provided to the school nurse so that it can be stored in her files and referred to at a later date. This is how to export the data:

- At the homepage, tap the Tools icon. This brings up the “Tools” page on the screen. At the top right-hand corner is the Import/Export icon.

- Tap the Import/Export icon to go to the next screen which shows on the left, an image of the camera with the word Import underneath and on the right, an image of the USB flash drive with the word Export underneath.
- Insert the USB flash drive into the USB slot on the underside of the camera. The camera will detect a file for download and prompt you to transfer the file to the USB flash drive. Tap the USB flash drive icon to save the data files to the flash drive.
- When the file has completely transferred to the flash drive, you can exit the Import/Export page by tapping the X located in the top left-hand corner of the screen. This takes you back to the “Tools” page. Tap the X in the top left-hand corner of the screen again, and you return to the “Homepage”.
- The USB flash drive is then removed from the camera and provided to the school nurse.
  - When the nurse opens this file on her computer, she will find two data files named Spot\_27268 and Spot\_2019xxxx\_xxxxxx
  - When the Spot\_27268 file is opened it contains one file called db.
  - When the db. file is opened, it contains two excel files with complete data results from the screening for all of the students that are screened.
- The second file that was transferred to the USB flash drive is labeled Spot\_27268\_2019xxxx\_xxxxxx. When this file is opened, several files are shown including db., import, license, log, pdf, and pgv.
  - Opening the db. file give the same data in excel format as shown above (Spot Results and Spot Results Extended)
  - The remaining files are self-explanatory except for the pdf file.
  - The pdf file provides pdf printouts for ALL students screened (both pass and referrals).