Metrologic Barcode Scanner Desktop Installation

There is **only one model** of portable scanner that can be used with SMART – Metrologic Optimus S SP5500 (Worldwide Technology P/N MK5502-79B639).

It is highly recommended that you read through these instructions first, **before** attempting to install the scanner. If certain steps are not taken in the correct order, or user permissions are not granted, the install will not go smoothly and take much longer than needed.

If there are any questions during the install process, or you are in need of troubleshooting help, contact a Records Analyst or Electronic Records Archivist in the Records Management Division in the Office of the Secretary of State. Contact information for Analysts and Archivists can be found on the Secretary of State's website at:
http://www.sos.mo.gov/records/recmgmt/contact.asp

WARNING: Do NOT install the USB cradle for the Metrologic Optimus SP5500 scanner until AFTER the software has been installed. If you have already plugged in the USB cradle, unplug the cradle and restart the computer.

  a. The individual following these steps **must** be logged in as an administrator or have full administrator privileges. Someone with administrator privileges must create a folder named **barcodes** on the workstations **workstations C: drive**.
  b. After creating the barcodes folder, right click on the folder and select properties.
  c. Click on the Security tab.
  d. Make sure that each user or group has the "allow" checkboxes checked.
  e. If you make any changes click on Apply, then OK.
  f. Restart the computer.
  g. Even though an administrator has created the folder, the correct permissions are not always automatically applied.

2. Run **OptimusInstall.exe** from the CD-ROM that was supplied with your scanner.

3. Connect cradle to workstation by using the supplied USB cable. The computer should automatically recognize the cradle. Windows 7 users may need to update the driver. If the cradle has been properly recognized by your computers operating system, move to step 5.
    If you are using Windows 7 follow the steps below:
    a. Go to the Start menu and choose Control Panel
    b. Choose System
    c. Click on Hardware
    d. Click on Device Manager
    e. Locate the driver in the list of devices. The cradle will most likely appear under Universal Serial Bus Controllers.

f. Right click on the cradle and choose Update Driver Software

g. Choose Browse my computer for driver software

h. Click on Browse and navigate to the folder containing the driver. Depending upon the version of the scanner software, this will be found under Program Files (x86) > Metrologic **or** Program Files (x86) > Honeywell

i. Click on Next, Windows will install the driver

j. Close the Update Driver Software Window

k. Restart your computer

4. Determine which COM port the cradle has been assigned to.
   a. Go to the **Start** menu and choose **Control Panel**
   b. Choose **System**
   c. Click on **Hardware**
   d. Click on **Device Manager**
   e. Find **Ports (COM & LPT) and** expand this option by clicking the plus sign. If you do not see this option the cradle is not plugged into the workstation. Check the connection between the cradle and workstation.
   f. Find the Optimus WHQL Bridge Controller. **Write down** which comport is being used.
   g. Close out of the Device Manager, System Property and Control Panel windows.

5. Turn on the scanner.
   a. Place the **OptimusSInflolinxHoneywell.opt (this file can be obtained from Records Management)** file on the computer desktop.
   b. On the computer go to Start > Program Files > Optimus > Utilities > OP_Load
      i. If you cannot find the OP_Load file search for it in Windows search utility (Start menu > Search).
   c. The file type is **Opt files** and use the browse button to select the OptimusSInfolinxHoneywell.opt file.
   d. Download via **Cradle-IR**, set the COM port – see **step 5f** and set the baud rate to **9600**.
   e. On the scanner, select **Get Program** usually found under **Transfer Files**
   f. Set the scanner in the cradle
   g. Click **OK** on the OP_Load window. The scanner will download the Opt file changing the scanners menus.

6. Turn on the scanner. The menu will give you three options. Choose option **3. Utilities.**
   a. Press **5. Settings**
   b. Press **1. View Settings**
      i. The scanner settings must read:
         1. Upload: Cradle
         2. Download: Cradle

3. Speed: 9600
Other settings are optional. If any of these settings are different go into the settings menu and change to match that above. If you are unsure how to do this contact your agency's Records Analyst or Electronic Records Archivist.

7. Set up the Optimus software to communicate with the computer.
    a. Using the scanner, select option **1. Collect data.** Find random barcodes around the office. Soda cans, books, etc. When done press escape.
        i. Choose Option **2. Send Data**
        ii. Place the scanner in the cradle. Nothing will happen for the moment.

    b. Go to the Start menu > Programs > Optimus Software > Utilities > Data_Read and create a shortcut on the users' desktop.
        i. If more than one user will be using the computer, a shortcut will need to be created for each user.
        ii. Open the Data_Read.exe program using the shortcut.
    c. The Data read software window will appear listing a number of options.
        i. In the **File Property** section, delete any existing information and type in **C:\barcodes**
        ii. The **File name** field needs to be changed to **barcodes.txt**
        iii. **Save mode** should have **Overwrite** already filled in.
        The **Communication Parameters section** should contain the following:
            Interface: **Cradle-IR**
            COM port: Enter the number you wrote down in **step 6f.**
            Change the Baud rate to **9600**.
            Click OK.
    d. The scanner should download the scanned barcodes to the Directory listed on the File Properties of the Data_Read program (the barcodes folder) and ask if you would like to view the files. Choose **yes** and make sure there is information. Close the file.

The scanner installation is now complete.

Using the Barcode Scanner

The portable scanner is designed solely for the transfer of items from one location to another. Transfers made with a portable scanner are not recognized by SMART until the scanner is docked and data uploaded to the system.

Printing action barcodes

To transfer files to boxes, a special **action barcode** must be used. This action barcode must be printed from the Reports page in SMART.

To print action barcodes for use:
1. Click on **Reports** in the Top Level Menu
2. Scroll to the Action barcodes report in the Activity group
3. Click **view**. A PDF will open in a separate window.
4. Click on the printer icon 🖨 on the Acrobat tool bar to print the document.

The **Make Location** action barcode is the only action barcode compatible with the portable scanner. It is only needed when transferring files to boxes.

Transferring files into boxes

1. Scan the **Make Location** barcode
2. Scan the **barcode of the box** the files will be going into.
3. Scan the **barcodes of the files** that will be going into the box.
4. **Rescan** the Make Location barcodes before moving onto another box.
5. When finished, place the scanner in its docking station. It should automatically go into transfer mode.

Transferring a box to a shelf, place or user

1. Scan the barcode of the **destination.**
2. Scan the boxes that will be going to this location.
3. When finished, place the scanner in its docking station. It should automatically go into transfer mode.

After items have been scanned

1. To upload scanned barcodes click on the Data_Read.exe shortcut on your desktop.
    a. A menu will appear. Click OK, you do not need to change anything.
    b. The barcodes will download and a message will appear asking if you want to review them. Reviewing is unnecessary as the barcodes are difficult to read in this format and you will get a chance to review them in SMART. Click No.
    c. In the Data_Read.exe menu click Cancel.
    d. In SMART, go to the Utility button in the Navigation bar along the top of the screen.
    e. Click the Portable Transfer link.

f. Click on the Choose File button. A screen will appear asking you to find the barcodes file. The file is on your C: drive, in the barcodes folder.
g. Select the file named barcodes.txt and either double click on the file **or** click on the file and select open.
h. Click on the Upload button.
i. Your downloaded barcodes will appear on the screen.
j. If the information is correct click on the Transfer button.

Troubleshooting	
Error	**Solution**
Failure to find Comport	The USB cradle may change COM Ports when a computer is restarted. To find which COM Port the cradle is on go to Start > Control Panel > System > Hardware > Device Manager. View **Ports (COM & LPT).** The cradle should be listed as a device, most likely as Optimus WHQL Bridge Controller. **Write down** the COM Port number it is assigned to. Click on the Data_Read.exe shortcut on your desktop. Make sure the COM Port number matches the what you wrote down. If not, update the information in the Data_Read.exe program. Why did this happen? When you start your computer, it may recognize usb devices in a different order.
Unable to configure IR device	The computer does not recognize the scanner cradle. Make sure the cradle is plugged in to the computer, and that the power cable is plugged in to an outlet. If the cradle is plugged in and is powered on, then the computer does not recognize the device. Check the Device Manager by going to: Start > Control Panel > System > Hardware > Device Manager. View **Ports (COM & LPT).** The cradle should be listed as a device, most likely as Optimus WHQL Bridge Controller. If not, check the Universal Serial Bus devices, or other Unknown devices. Unplug the cradle's USB connection to see if the unknown device disappears. If it does, then the driver needs to be updated. Plug the cradle's USB connection back into the computer and follow the instructions for step 4 even if you are not running Windows 7.
Failed to Create File	The barcodes.txt file is not being created and/or overwritten. Check the permissions settings on the barcodes folder. Full permission must be granted to users. If full permissions have been granted check the settings in step 8c.

Barcodes have a ",1" at the end and system notifies you of Unknown barcodes	Obtain the file OptimusSInfolinxHoneywell.opt from Records Management. Go to page 7, step 6 in these directions.
ScanPal startReceiving File not Found	The scanner needs to be programmed to generate the correct format for the barcodes.txt file. Obtain the file OptimuSInfolinxHoneywell.opt from Records Management. Go to page 7, step 6 in these directions.