KM Admin Tool

User Manual

HDC21381 Rev. 1.0

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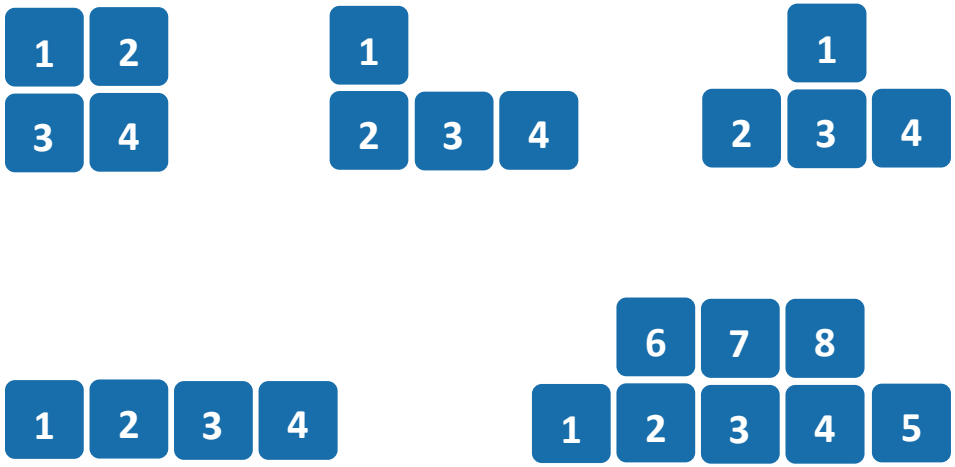
INTRODUCTION

The High Sec Labs (HSL) KM switch is a solution for users, like financial traders or command & control operators, who need to avoid:

- Constantly switching from one display to another (KVM), by letting them view multiple computers simultaneously
- Juggling between multiple mice and keyboards, by enabling them to switch control between computers with only one mouse and keyboard set

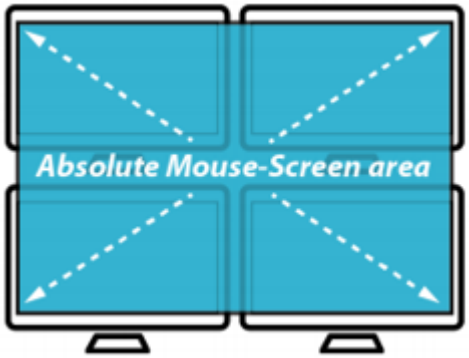
The KM supports any display layout defined by the user. This enables users to align displays in in any physical layout they want and configure the KM to support this layout.

Layout examples:

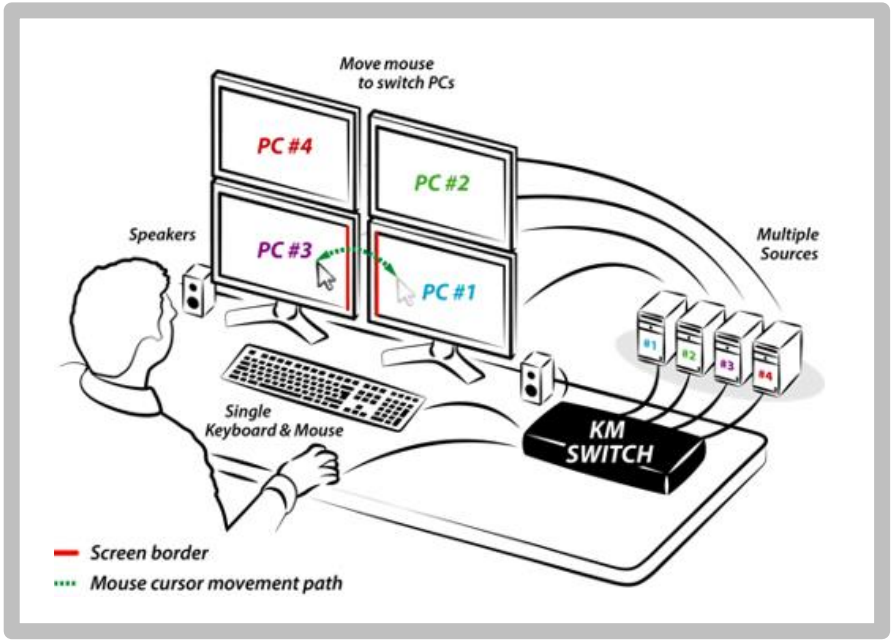


Once configured to the desired layout, the KM is set to reflect the specific layout and display borders. This helps the KM to:

- Associate the mouse cursor with each computer, based on its respective display position
- Consider all displays as one absolute screen area to enable Virtual Display Technology (VDT)



The KM's VDT enables automatically switching control from one computer to another, by sliding the mouse cursor over the computer's display border. The other shared peripherals (keyboard, audio, USB) move to the next computer, once the mouse cursor passes the display border. The VDT eliminates the need to press the front-panel buttons.



Many of the VDT layouts can be quickly set, using the following table of pre-configured keyboard shortcut presets:

The purpose of this manual is to explain how to use the KM Admin Tool to set custom layouts.

Using the admin tool requires several steps:

- Create a config file representive of the user's requested screen layout
- Loading the config file on the target KM switch
- Directing the KM switch to use the config file loaded.

Creating a Custom Layout File Using the KM Admin Tool

As stated earlier, a display layout that does not appear in the table of presets, needs to be created. The first step is to create a custom layout file using the KM Admin Tool.

Note: Before creating a custom layout file, make sure to note the screen size and resolution of all monitors to be connected to the KM.

This procedure uses the following custom layout example:

This layout consists of three computers, as follows:

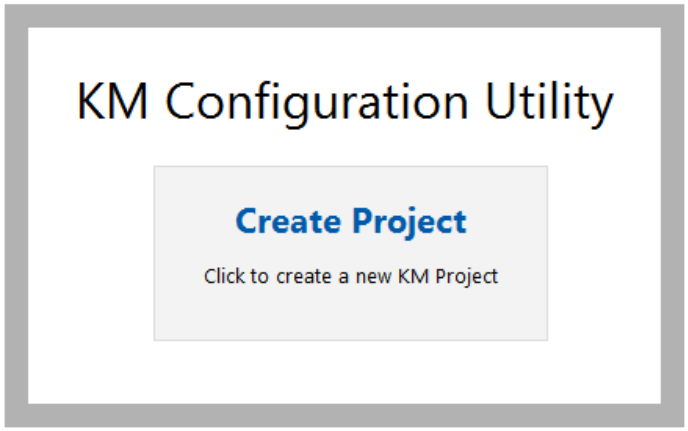
- In the top row are Computer #1, on the left and Computer #2, on the right.
- In the bottom row are two displays of Computer #3, including the:
    - Secondary display, on the left, AND –
    - Primary display, on the right

In this example, the:

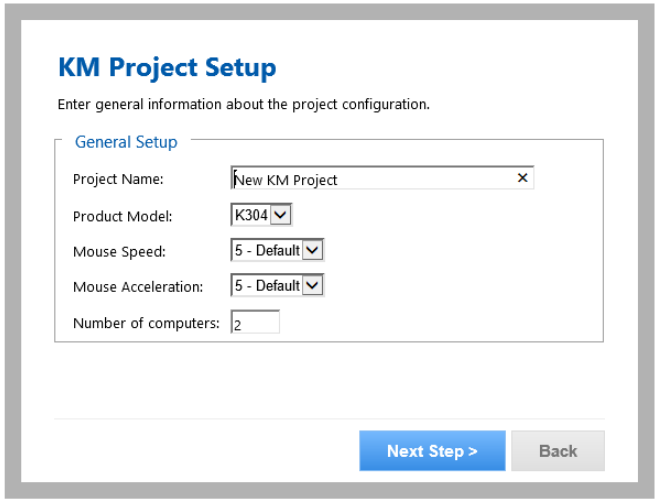
- Size of all displays is 24”
- Resolution of all displays is 1920 x 1080

To create a custom layout file:

1. On an Admin PC, from the following link: http://www.highseclabs.com/support/downloads/?rid=1, download and install the KM Admin Tool.
   This creates the KMC Creator icon on the desktop.
2. Double-click on the KMC Creator icon.
   The KM Configuration Utility dialog opens:



3. Click **Create Project**.
   The KM Project Setup dialog opens:

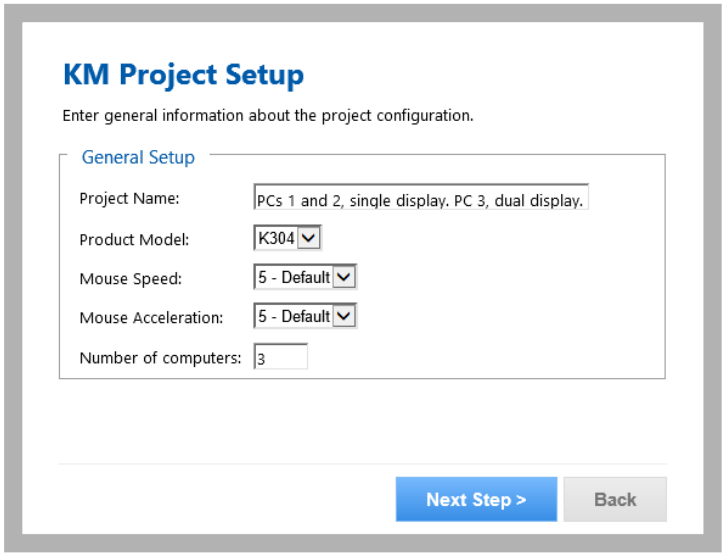


4. Fill in the General Setup fields.

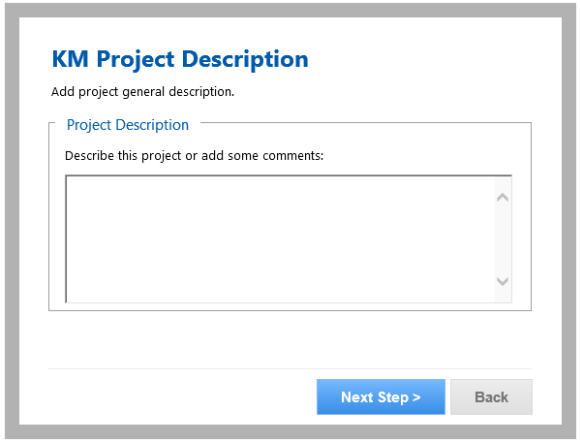
   - Project Name: Use a descriptive name. In this example, PCs 1 and 2, single display. PC 3, dual display.
   - Product Model: The product model can be found on the back sticker of the KM switch. In this example, select **K304** (4-port KM).

Note:
- K304 represents all 4-port switches.
- K308 represents all 8-port switches.
- 2-port switches cannot be configured.

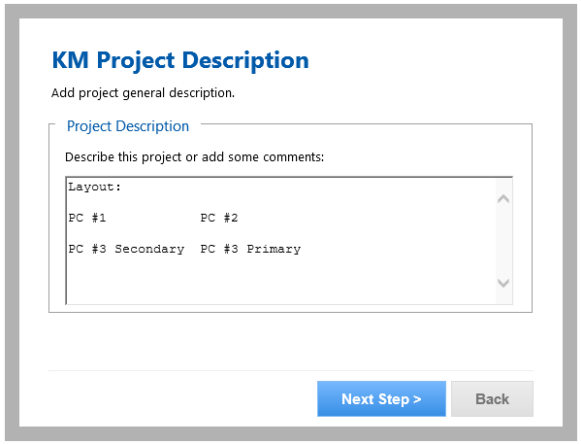
- Mouse Speed: Makes mouse movements faster or slower. In this example, select **5 – Default**.
- Mouse Acceleration: Makes mouse accelerate faster or slower. In this example, select **5 – Default**.
- Number of computers: In this example, type 3.



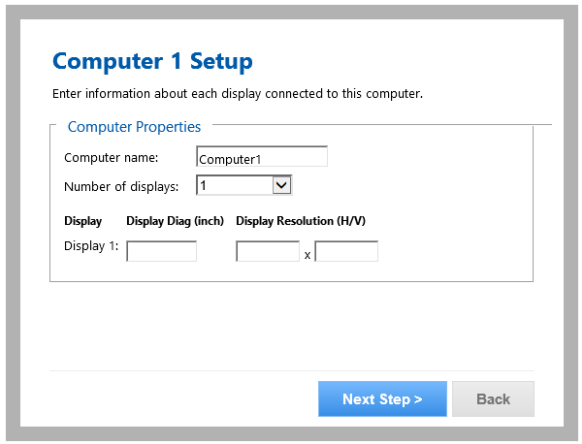
5. At the bottom, click Next Step.
   The KM Project Description dialog opens:



6. Type a description that explains the custom layout. In this example, fill out as follows:

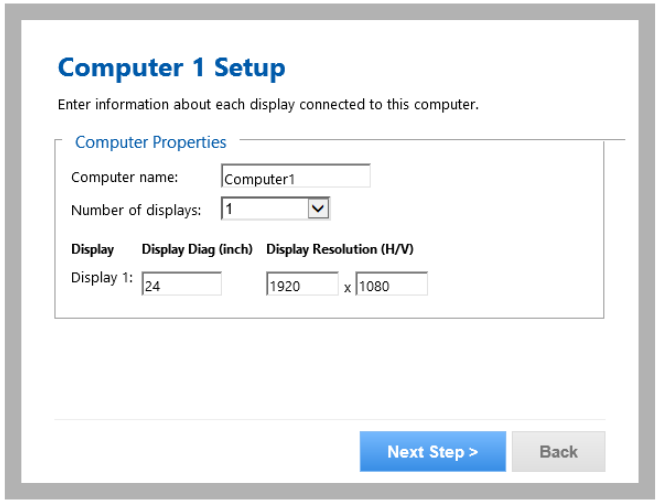


7. At the bottom, click Next Step.
   The Computer 1 Setup dialog opens:

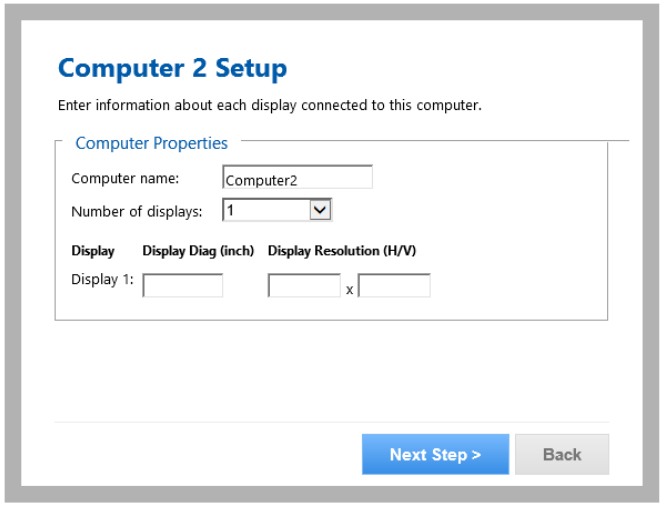


8. In this example:
   - Computer 1 has one display, so for Number of displays, select 1
   - The display is 24” in diagonal, so for Display 1, type 24
   - The Display Resolution (H/V) is 1920 (horizontal) x 1080 (vertical) resolution, so type 1920 and then 1080

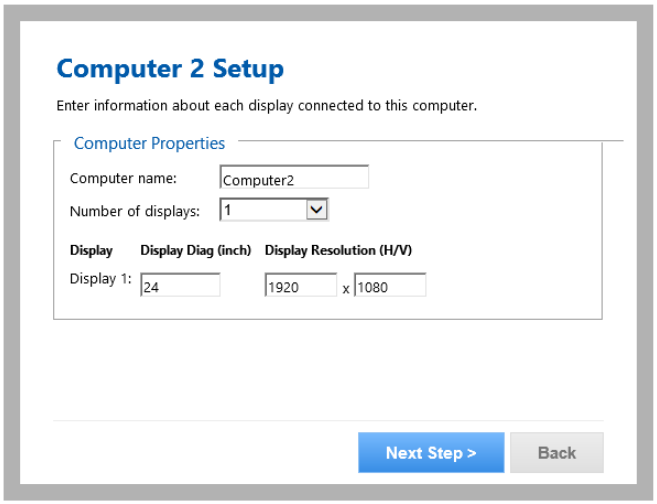
Fill out as follows:



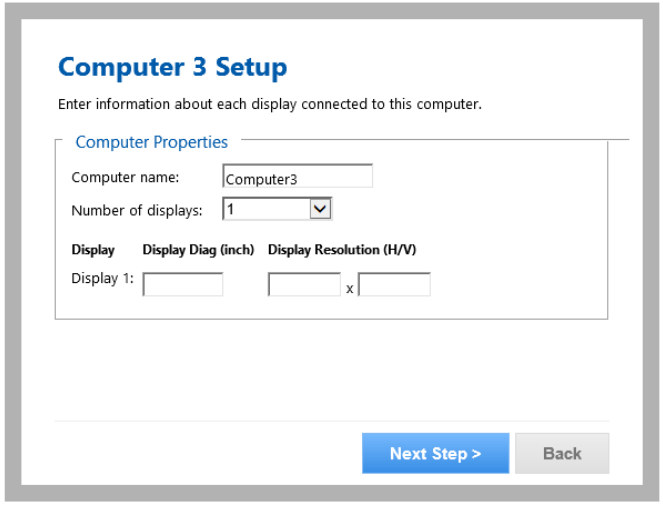
9. At the bottom, click **Next Step**.
   The Computer 2 Setup dialog opens:



10. In this example, fill out like for Computer 1, as follows:

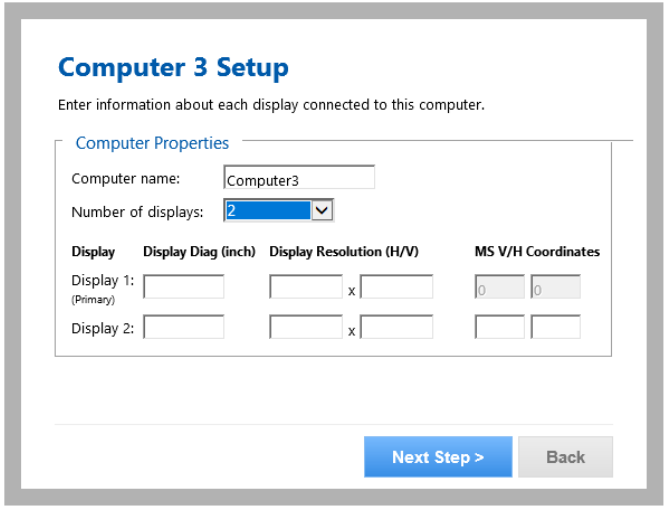


11. At the bottom, click **Next Step**.
    The Computer 3 Setup dialog opens:

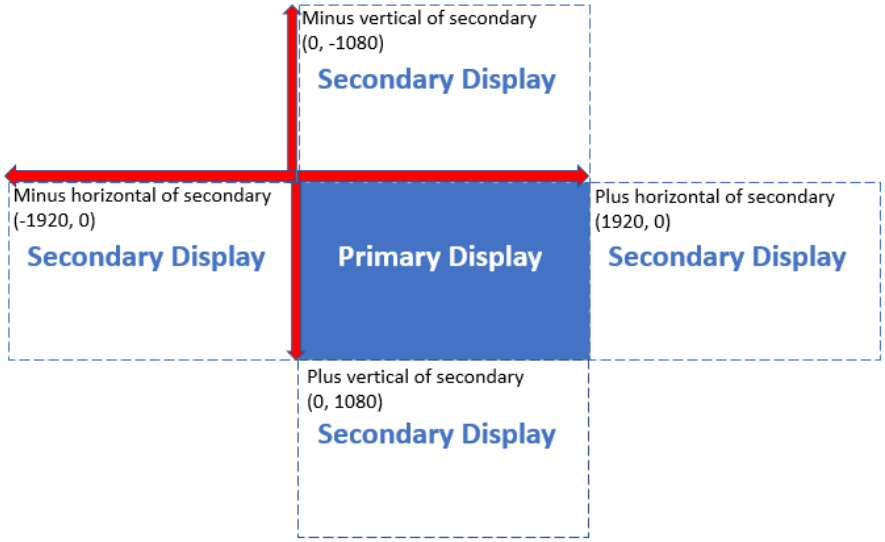


12. In this example, Computer 3 has two displays, the first for the primary display and the second for the secondary display. So, in the Number of displays field, select **2**.
Two rows for entering the display parameters open.
In addition to the Display Diag and Display Resolution (H/V) parameters, are the MS H/V Coordinates. The MS H/V Coordinates enable setting the position of the primary display relative to the secondary display.

Note: Due to an error, the dialog shows MS V/H Coordinates instead of MS H/V Coordinates. When entering these coordinates, use the H/V order.



Note: To set the MS H/V Coordinates, use the following diagram:



The following examples show how to make the MS H/V Coordinates settings for different primary-secondary relative positions:

Left

If the secondary display (=1920 x 1080) is to the LEFT of the primary display, type the SECONDARY display's HORIZONTAL value as: (minus) -1920 and the VERTICAL value as: 0.

Display	Display Diag (inch)	Display Resolution (H/V)	MS V/H Coordinates
Display 1: (Primary)	24	1920 x 1080	0 0
Display 2:	24	1920 x 1080	-1920 0

Right

If the secondary display is to the RIGHT of the primary display (=1920 x 1080), type the PRIMARY display's HORIZONTAL value as: (plus) 1920 and the VERTICAL value as: 0.

Display	Display Diag (inch)	Display Resolution (H/V)	MS V/H Coordinates
Display 1: (Primary)	24	1920 x 1080	0 0
Display 2:	24	1920 x 1080	1920 0

Above

If the secondary display (=1920 x 1080) is ABOVE the primary display, type the SECONDARY display's HORIZONTAL value as: 0 and VERTICAL value as: (minus) -1080.

Display	Display Diag (inch)	Display Resolution (H/V)	MS V/H Coordinates
Display 1: (Primary)	24	1920 x 1080	0 0
Display 2:	24	1920 x 1080	0 -1080

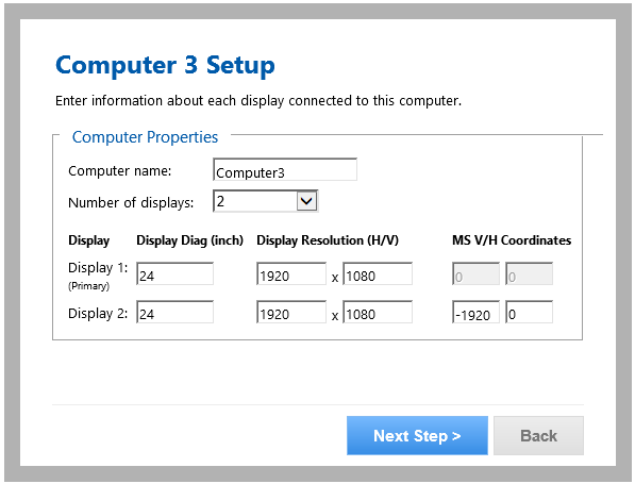
Under

If the secondary display is UNDER the primary (=1920 x 1080), type the PRIMARY display's HORIZONTAL value as: 0 and VERTICAL value as: (plus) 1080.

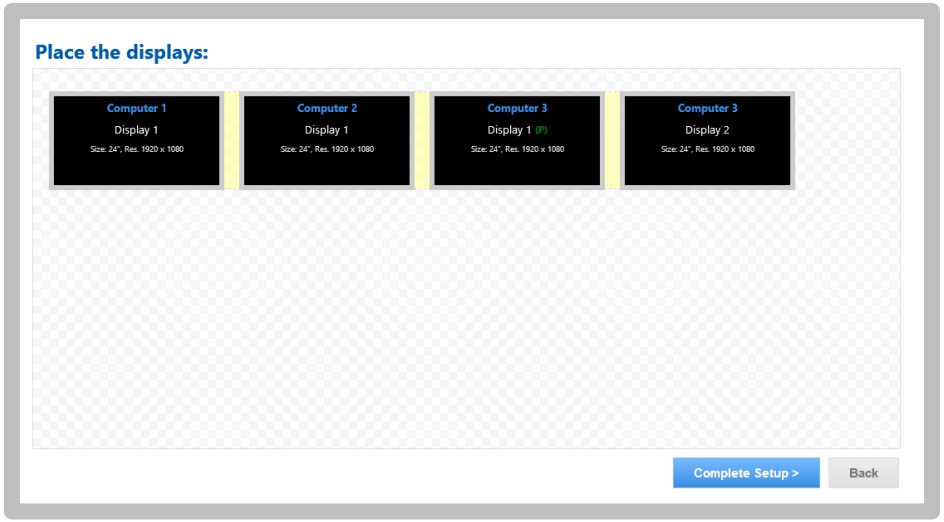
Display	Display Diag (inch)	Display Resolution (H/V)	MS V/H Coordinates
Display 1: (Primary)	24	1920 x 1080	0 0
Display 2:	24	1920 x 1080	0 1080

13. In this example, fill in as follows:

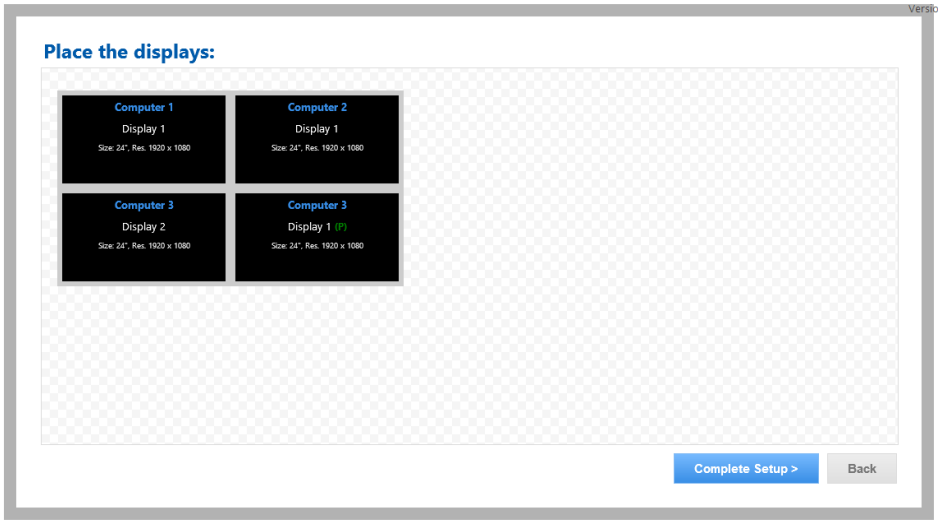
    - For Display 1 (Primary), type 24 for Display Diag and 1920 and 1080 for Display Resolution (H/V). The MS H/V Coordinates for Display 1 (Primary) are: 0 and 0. This is because their point of reference is the starting point, at the top left corner of the primary display.
    - For Display 2 – the secondary display – type 24 for Display Diag and 1920 and 1080 for Display Resolution (H/V). The secondary display is to the LEFT of the primary display, so, for Display 2, type the SECONDARY display's HORIZONTAL value as: (MINUS) -1920 and the VERTICAL value as: (PLUS) 0.



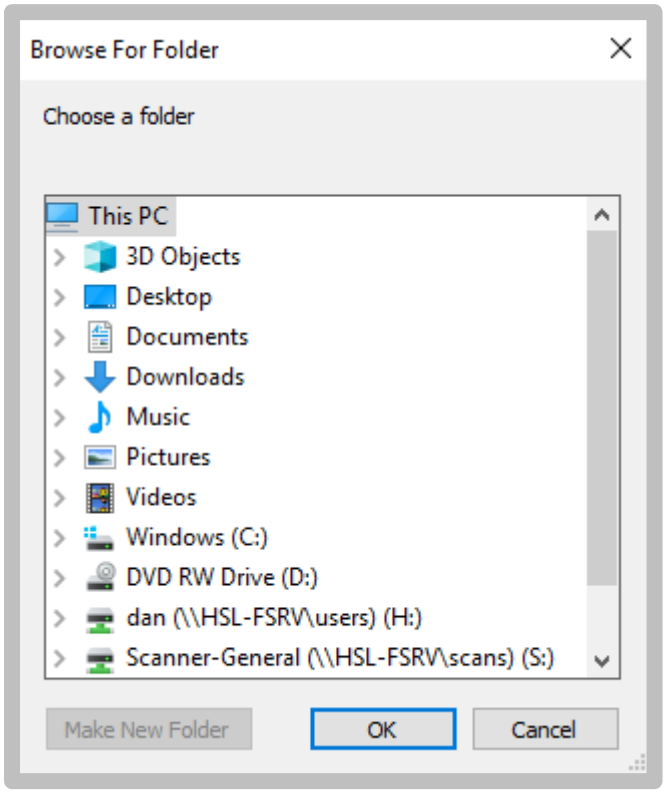
14. At the bottom, click **Next Step**.
    The Place the displays dialog opens, showing all computers configured:



15. Using the mouse cursor, drag the displays to look like the desired layout. Note: When dragging each display to its adjacent display, make sure it turns red. Then, move it backwards so that it "sticks", without being red.
    In this example, it should look as follows:



16. At the bottom, click **Complete Setup**.
    The Browse for Folder dialog opens:



17. Select a folder to save the file to, and note this location for future reference.

Uploading a Custom Layout File Using the KM Loader Tool

This procedure shows how to upload the custom layout file, created in the previous procedure, to the KM.

Required Hardware:

- An Admin PC running Windows 7/8/10 OS

  Note: An admin PC is only needed for the initial configuration of the KM with a kmc file. Once configured the KM can be disconnected and used by a user without an admin PC.

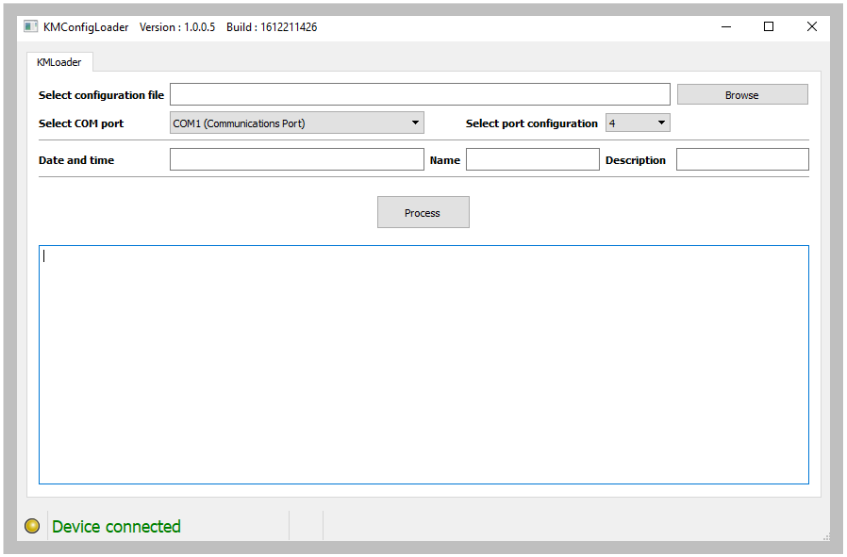
- A HighSecLabs KM (in this example, the 4-port SM40N-3)
- An A-A USB cable
- Standard keyboard

Required Software:

- KM config file (.KMC) created in the previous procedure
- KM Loader Tool ver. 1.0.0.5

To upload a custom layout file:

1. Power on the KM and connect it to the Admin PC.
2. Connect an A-A cable between a vacant USB port on the Admin PC and the KM console's mouse port. Note: If that doesn't work, connect to the keyboard port.
3. Connect the keyboard to the KM console's keyboard or mouse port (this "talks" directly to the KM).
4. Press **LEFT CTRL** | **RIGHT CTRL** | **L** to enter loading mode. The LEDs start flashing.
5. On the Admin PC, from the following link http://www.highseclabs.com/support/downloads/?rid=19, download and install the KM Loading Tool. This creates the KM Loading Tool icon on the desktop.
6. Double-click on the KM Loading Tool icon. The KMConfigLoader dialog opens:



7. Click **Browse** and locate and select the .KMC configuration file created in the previous procedure.
8. From the Select COM port list, select the COM.

   Note: Make sure the correct COM port is selected. To locate the correct COM port, on the Admin PC, right-click on **This PC** and select **Manage**. Under **Computer Management**, select **Device Manager**. In the window that opens, click on the arrow next to **Ports (COM & LPT)** and locate the port that is connected to the KM.

9. From the Select port configuration list, select the KM's number of ports. In this example, select 4.
10. Click **Process**.
11. Power cycle the **KM**.
12. Press **LEFT CTRL** | **LEFT CTRL** | **F11** | **F12** to apply the new settings.
13. If any of the computers in the custom layout have a primary and secondary display, from the following link: http://www.highseclabs.com/support/downloads/?rid=19, download and install the KM Multi Display Drivers onto the relevant computers. In this example, install the KM Multi Display Drivers onto Computer 3 (it has a primary and secondary display).
14. Power cycle and test that the mouse properly switches control between adjacent displays in the configuration.

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