

KM Admin Tool User Manual



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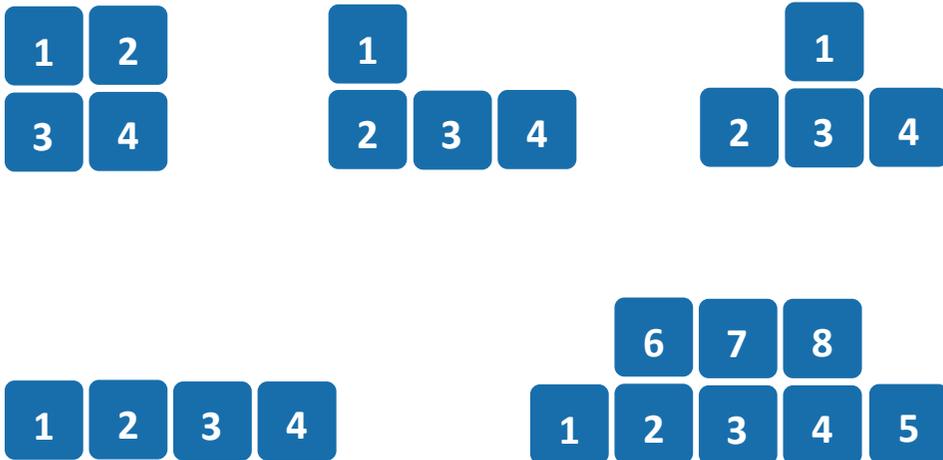
INTRODUCTION

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

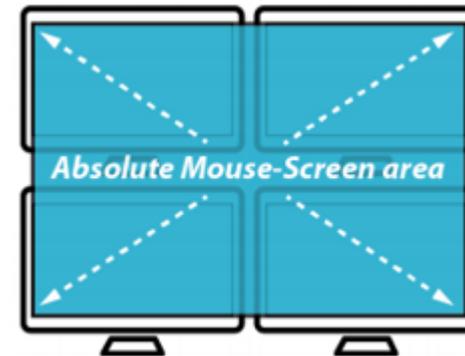
The KM supports any display layout defined by the user. This enables users to align displays in any physical layout they want and configure the KM to support this layout.

Layout examples:



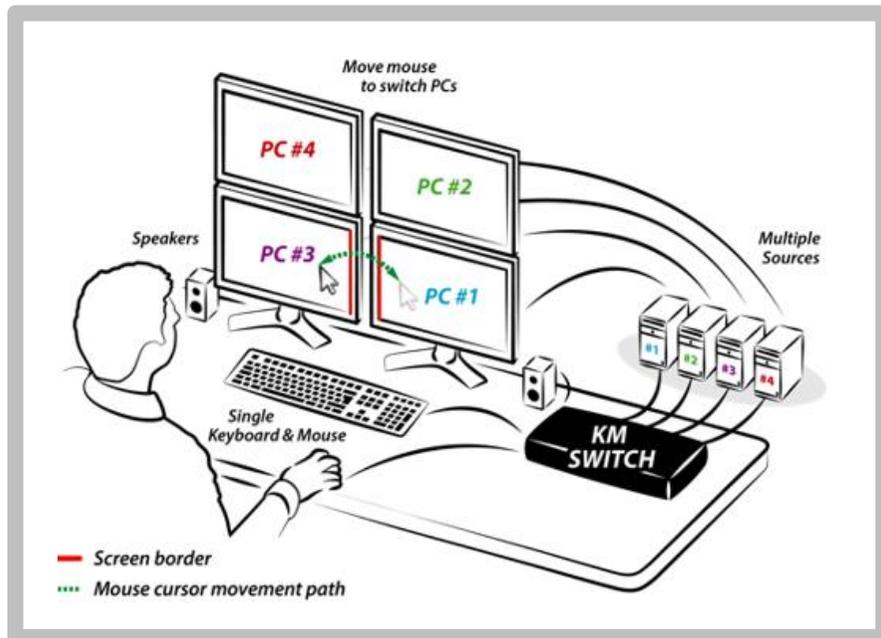
Once configured to the desired layout, the KM is set to reflect the specific layout and display borders. This helps the KM to:

- 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)



INTRODUCTION

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:

Table of Presets			
F11 F1 1 2 (Factory Default) 3 4	F11 1 1 2 3	F11 2 1 2 3P 3S	F11 3 1 2S 1P 1S 3
F11 F2 1 2 3 4	F11 1 2 1 2 3	F11 2 2 3P 1 3S 2	F11 3 2 1 2 3 4 5 6 7 8
F11 F3 1P 1S 3P 3S	F11 1 3 1 2 3	F11 2 3 2 3 4 1P 1S	F11 3 3 (8-Port Only) 5 6 7 8 1 2 3 4
F11 F4 1P 3P 1S 3S	F11 1 4 1 2 3	F11 2 4 3P 3S 1P 1S 3	F11 3 4 (8-Port Only) 1 2 3 4 5
F11 F5 1 2 3P 3S	F11 1 5 1 2 3	F11 2 5 1 2	F11 3 5 (8-Port Only) 5 6 1 2 3 4
F11 F6 1 2P 2S 4	F11 1 6 1 2 3 4	F11 2 6 1 2	F11 3 6 (8-Port Only) 4 5 6 1 2 3
F11 F7 1P 1S 3 4	F11 1 7 1 2 3 4	F11 2 7 1 2 3	F11 3 7 1P 1S 2 3 4 5
F11 F8 1P 1S 3P 3S	F11 1 8 1 2 3 4	F11 2 8 3 1 2	F11 3 8 (8-Port Only) 1 2 3 4 5 6
F11 F9 1 2 3	F11 1 9 1 2 3P 3S	F11 2 9 1 2 3	F11 3 9 (8-Port Only) 1 2 3 4 5 6 7
F11 F10 1 2 3 4	F11 1 0 3P 3S 1 2	F11 2 0 3 1 2	F11 3 0 (8-Port Only) 5 6 7 8 1 2 3 4 5

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 representative 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:

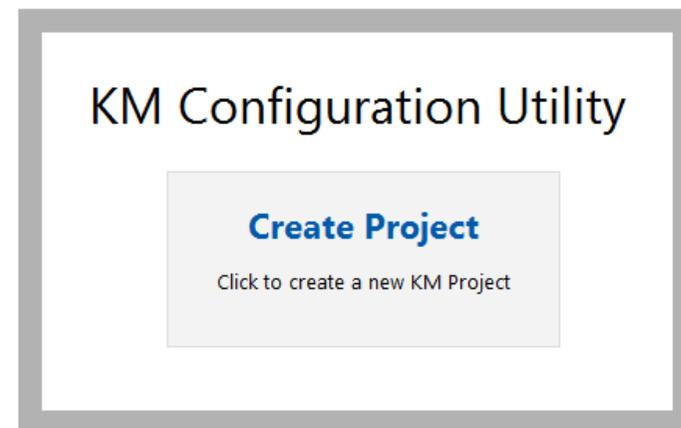
- Secondary display, on the left, AND –
- Primary display, on the right

In this example, the:

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

To create a custom layout file:

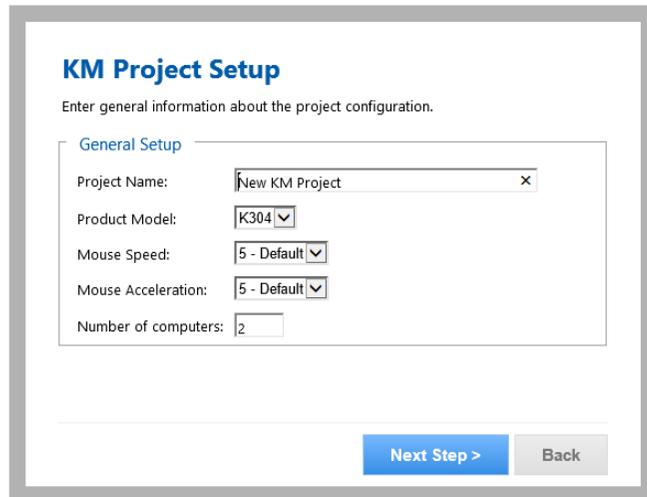
1. On an Admin PC, from the following link: <http://www.highseclabs.com/support/downloads/?rid=1>, download and install the KM Admin Tool. This creates the KMC Creator icon on the desktop.
2. Double-click on the KMC Creator icon. The KM Configuration Utility dialog opens:



Creating a Custom Layout File Using the KM Admin Tool

3. Click **Create Project**.

The KM Project Setup dialog opens:



KM Project Setup
Enter general information about the project configuration.

General Setup

Project Name:

Product Model:

Mouse Speed:

Mouse Acceleration:

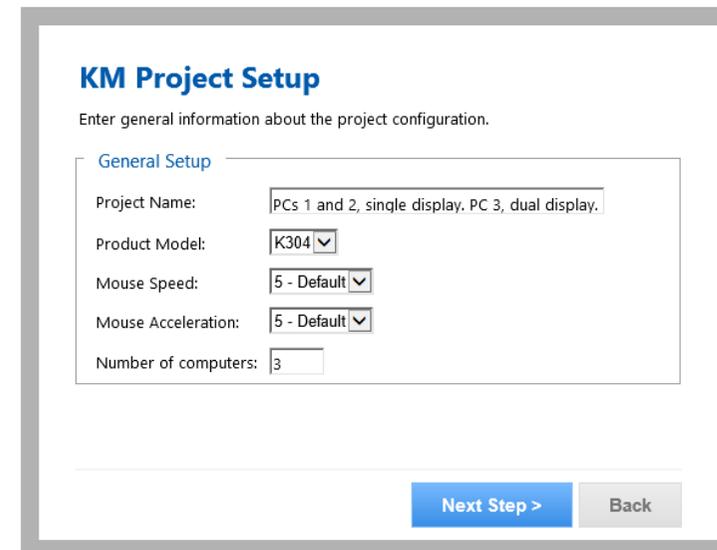
Number of computers:

[Next Step >](#) [Back](#)

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).

- **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.



KM Project Setup
Enter general information about the project configuration.

General Setup

Project Name:

Product Model:

Mouse Speed:

Mouse Acceleration:

Number of computers:

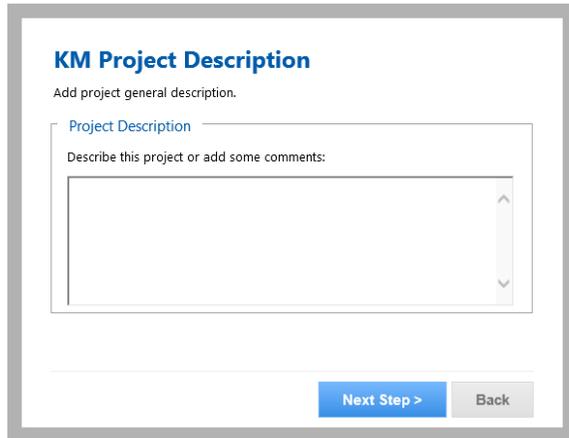
[Next Step >](#) [Back](#)

Note:

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

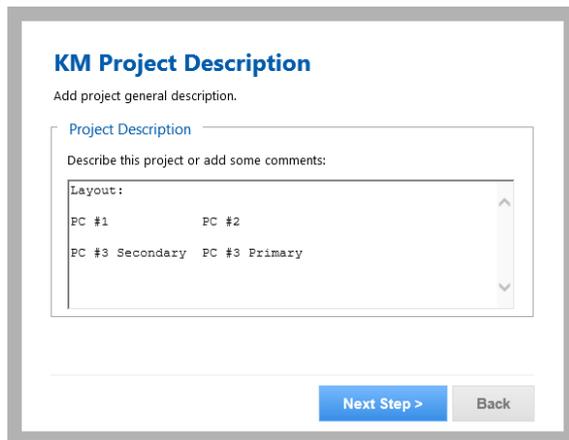
Creating a Custom Layout File Using the KM Admin Tool

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



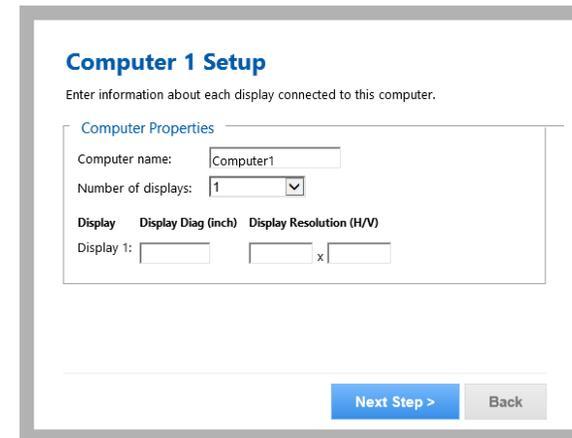
The screenshot shows the 'KM Project Description' dialog box. It has a title bar with the text 'KM Project Description' and a subtitle 'Add project general description.' Below the subtitle is a text area labeled 'Project Description' with the instruction 'Describe this project or add some comments:'. The text area is currently empty. At the bottom of the dialog, there are two buttons: 'Next Step >' and 'Back'.

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



The screenshot shows the 'KM Project Description' dialog box with the same title and subtitle as in step 5. The text area now contains the following text:
Layout:
PC #1 PC #2
PC #3 Secondary PC #3 Primary
At the bottom, the 'Next Step >' button is highlighted in blue, and the 'Back' button is greyed out.

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

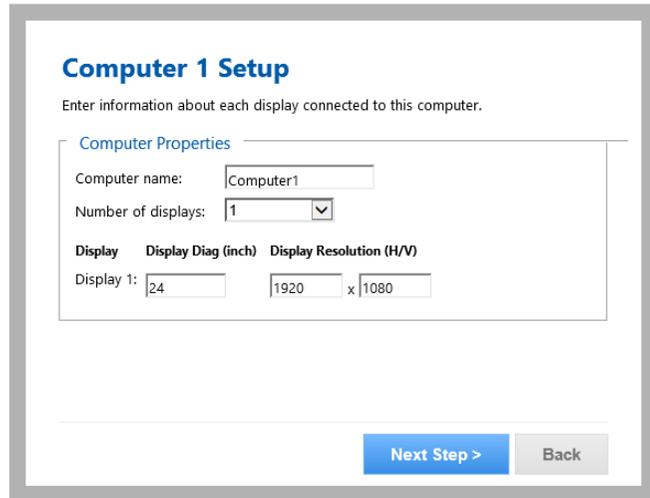


The screenshot shows the 'Computer 1 Setup' dialog box. It has a title bar with the text 'Computer 1 Setup' and a subtitle 'Enter information about each display connected to this computer.' Below the subtitle is a section titled 'Computer Properties' containing the following fields:
Computer name: Computer1
Number of displays: 1
A table with the following headers: Display, Display Diag (inch), Display Resolution (H/V).
The first row of the table is: Display 1: [] x []
At the bottom of the dialog, there are two buttons: 'Next Step >' and 'Back'.

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

Creating a Custom Layout File Using the KM Admin Tool

Fill out as follows:



Computer 1 Setup
Enter information about each display connected to this computer.

Computer Properties

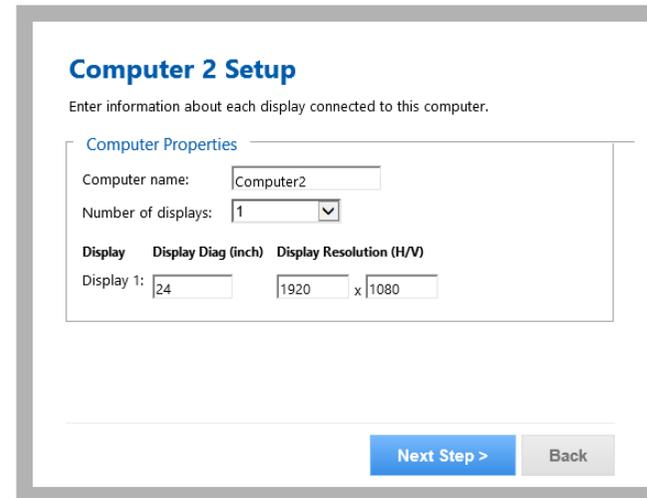
Computer name:

Number of displays:

Display	Display Diag (inch)	Display Resolution (H/V)
Display 1:	<input type="text" value="24"/>	<input type="text" value="1920"/> x <input type="text" value="1080"/>

[Next Step >](#) [Back](#)

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



Computer 2 Setup
Enter information about each display connected to this computer.

Computer Properties

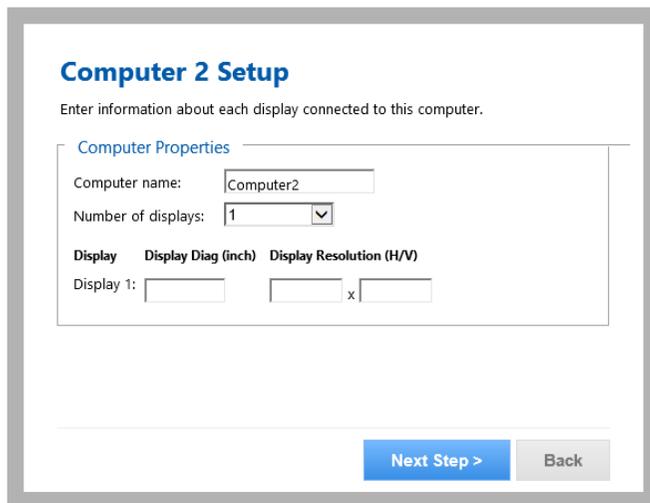
Computer name:

Number of displays:

Display	Display Diag (inch)	Display Resolution (H/V)
Display 1:	<input type="text" value="24"/>	<input type="text" value="1920"/> x <input type="text" value="1080"/>

[Next Step >](#) [Back](#)

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



Computer 2 Setup
Enter information about each display connected to this computer.

Computer Properties

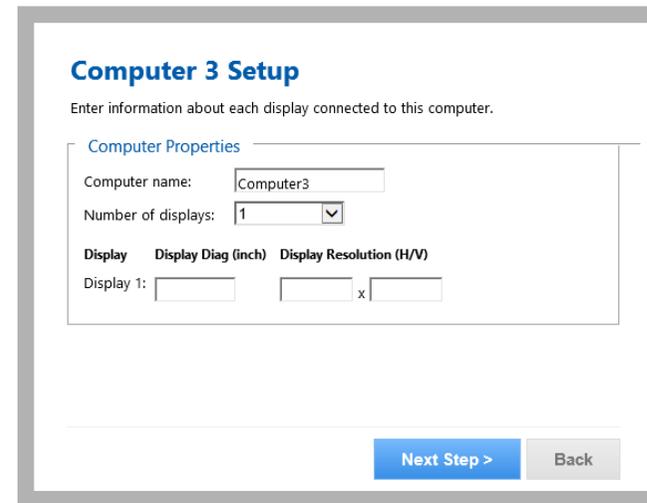
Computer name:

Number of displays:

Display	Display Diag (inch)	Display Resolution (H/V)
Display 1:	<input type="text"/>	<input type="text"/> x <input type="text"/>

[Next Step >](#) [Back](#)

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



Computer 3 Setup
Enter information about each display connected to this computer.

Computer Properties

Computer name:

Number of displays:

Display	Display Diag (inch)	Display Resolution (H/V)
Display 1:	<input type="text"/>	<input type="text"/> x <input type="text"/>

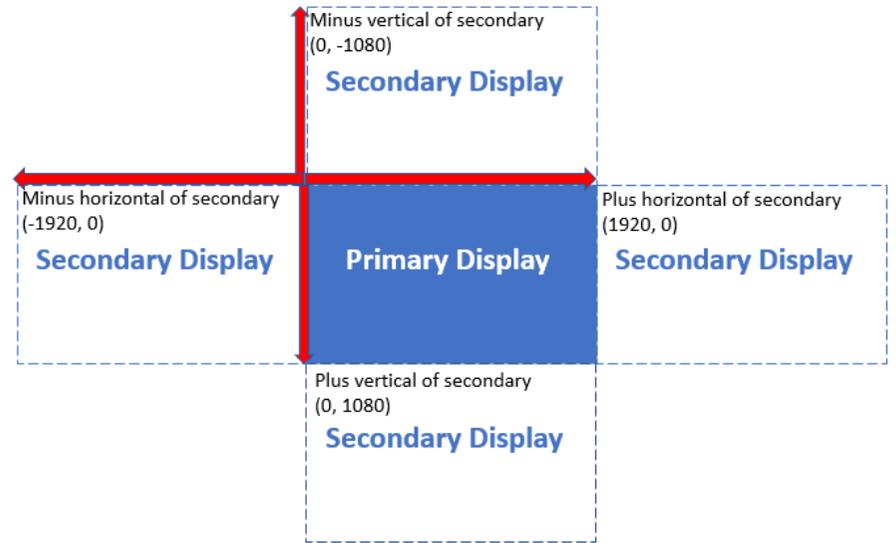
[Next Step >](#) [Back](#)

Creating a Custom Layout File Using the KM Admin Tool

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:



Computer 3 Setup
Enter information about each display connected to this computer.

Computer Properties

Computer name:

Number of displays:

Display	Display Diag (inch)	Display Resolution (H/V)	MS V/H Coordinates
Display 1: (Primary)	<input type="text"/>	<input type="text"/> x <input type="text"/>	<input type="text"/> <input type="text"/>
Display 2:	<input type="text"/>	<input type="text"/> x <input type="text"/>	<input type="text"/> <input type="text"/>

Creating a Custom Layout File Using the KM Admin Tool

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)	<input type="text" value="24"/>	<input type="text" value="1920"/> x <input type="text" value="1080"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Display 2:	<input type="text" value="24"/>	<input type="text" value="1920"/> x <input type="text" value="1080"/>	<input type="text" value="-1920"/>	<input type="text" value="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)	<input type="text" value="24"/>	<input type="text" value="1920"/> x <input type="text" value="1080"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Display 2:	<input type="text" value="24"/>	<input type="text" value="1920"/> x <input type="text" value="1080"/>	<input type="text" value="1920"/>	<input type="text" value="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)	<input type="text" value="24"/>	<input type="text" value="1920"/> x <input type="text" value="1080"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Display 2:	<input type="text" value="24"/>	<input type="text" value="1920"/> x <input type="text" value="1080"/>	<input type="text" value="0"/>	<input type="text" value="-1080"/>

Under

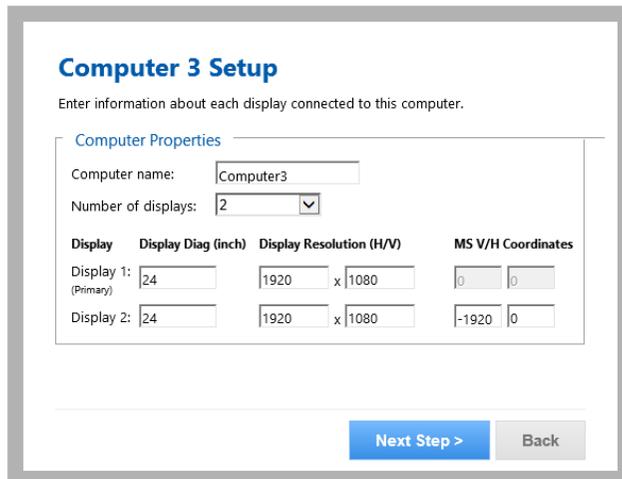
If the secondary display is UNDER the primary (=1920 x 1080), type the PRIMARY display's HORIZONTAL value as: 0 and VERTICAL value as: (plus) 1080.

Display	Display Diag (inch)	Display Resolution (H/V)	MS V/H Coordinates	
Display 1: (Primary)	<input type="text" value="24"/>	<input type="text" value="1920"/> x <input type="text" value="1080"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Display 2:	<input type="text" value="24"/>	<input type="text" value="1920"/> x <input type="text" value="1080"/>	<input type="text" value="0"/>	<input type="text" value="1080"/>

Creating a Custom Layout File Using the KM Admin Tool

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.



Computer 3 Setup

Enter information about each display connected to this computer.

Computer Properties

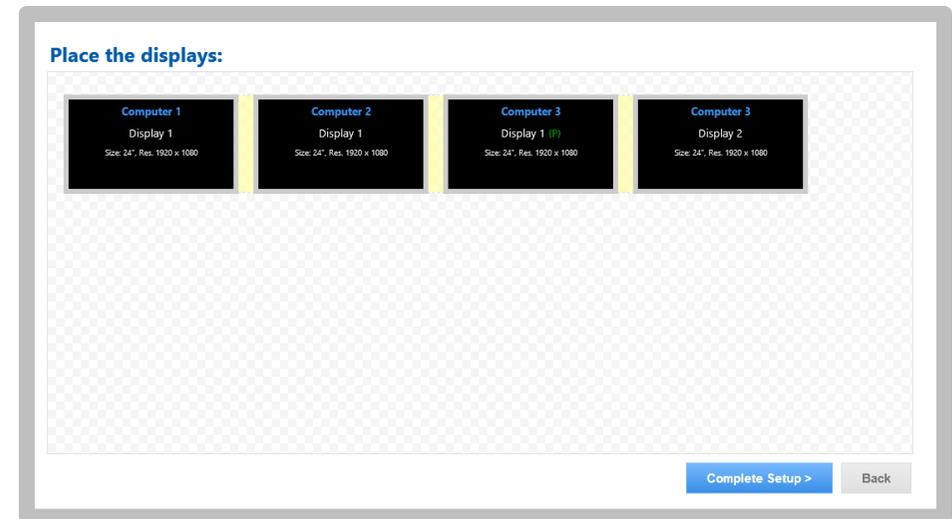
Computer name:

Number of displays:

Display	Display Diag (inch)	Display Resolution (H/V)	MS V/H Coordinates
Display 1: (Primary)	<input type="text" value="24"/>	<input type="text" value="1920"/> x <input type="text" value="1080"/>	<input type="text" value="0"/> <input type="text" value="0"/>
Display 2:	<input type="text" value="24"/>	<input type="text" value="1920"/> x <input type="text" value="1080"/>	<input type="text" value="-1920"/> <input type="text" value="0"/>

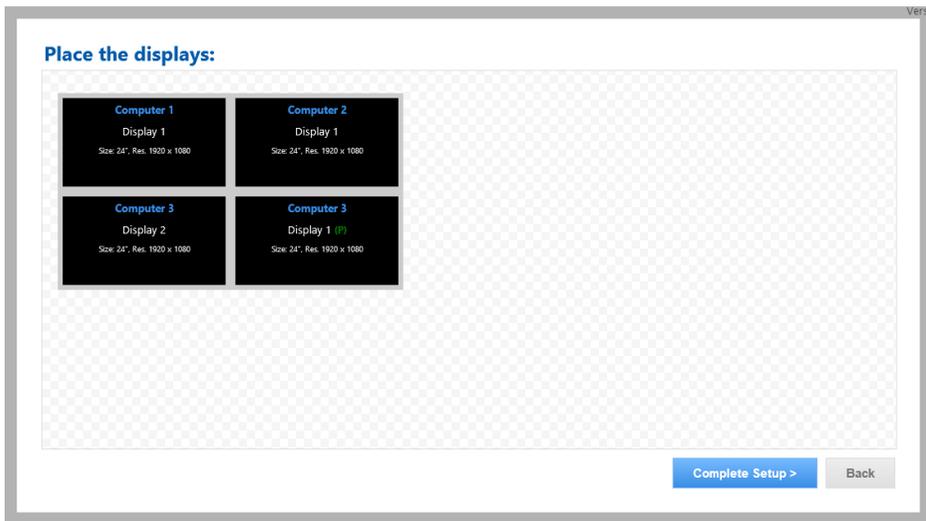
14. At the bottom, click **Next Step**.

The Place the displays dialog opens, showing all computers configured:

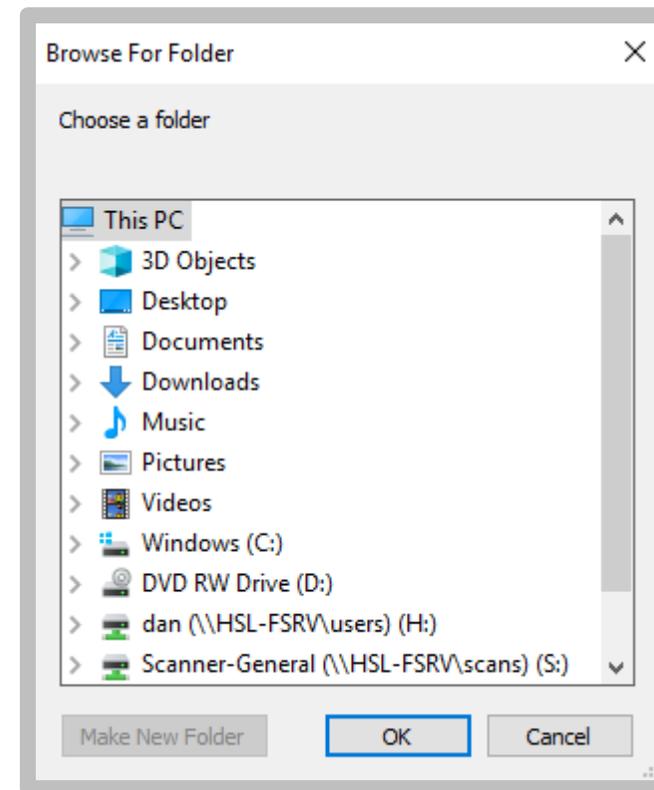


15. Using the mouse cursor, drag the displays to look like the desired layout. Note: When dragging each display to its adjacent display, make sure it turns red. Then, move it backwards so that it “sticks”, without being red. In this example, it should look as follows:

Creating a Custom Layout File Using the KM Admin Tool



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

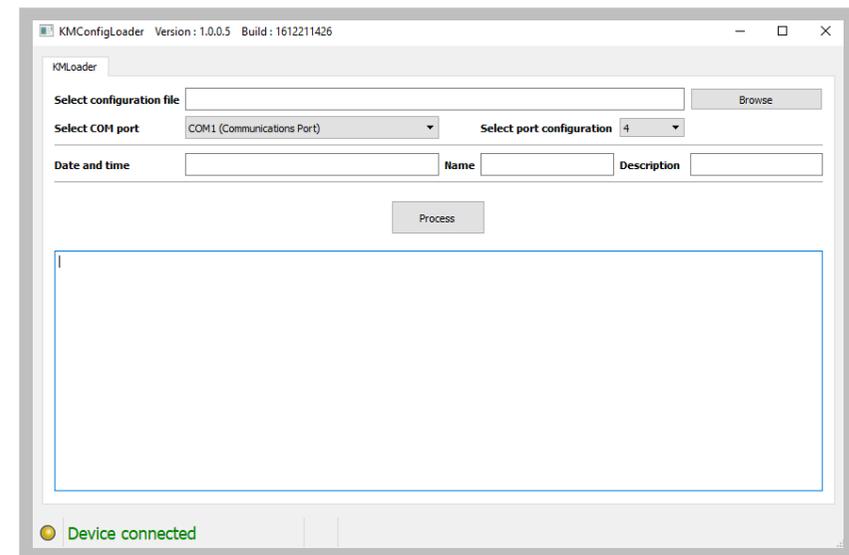
Required Software:

- 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:



Uploading a Custom Layout File Using the KM Loader Tool

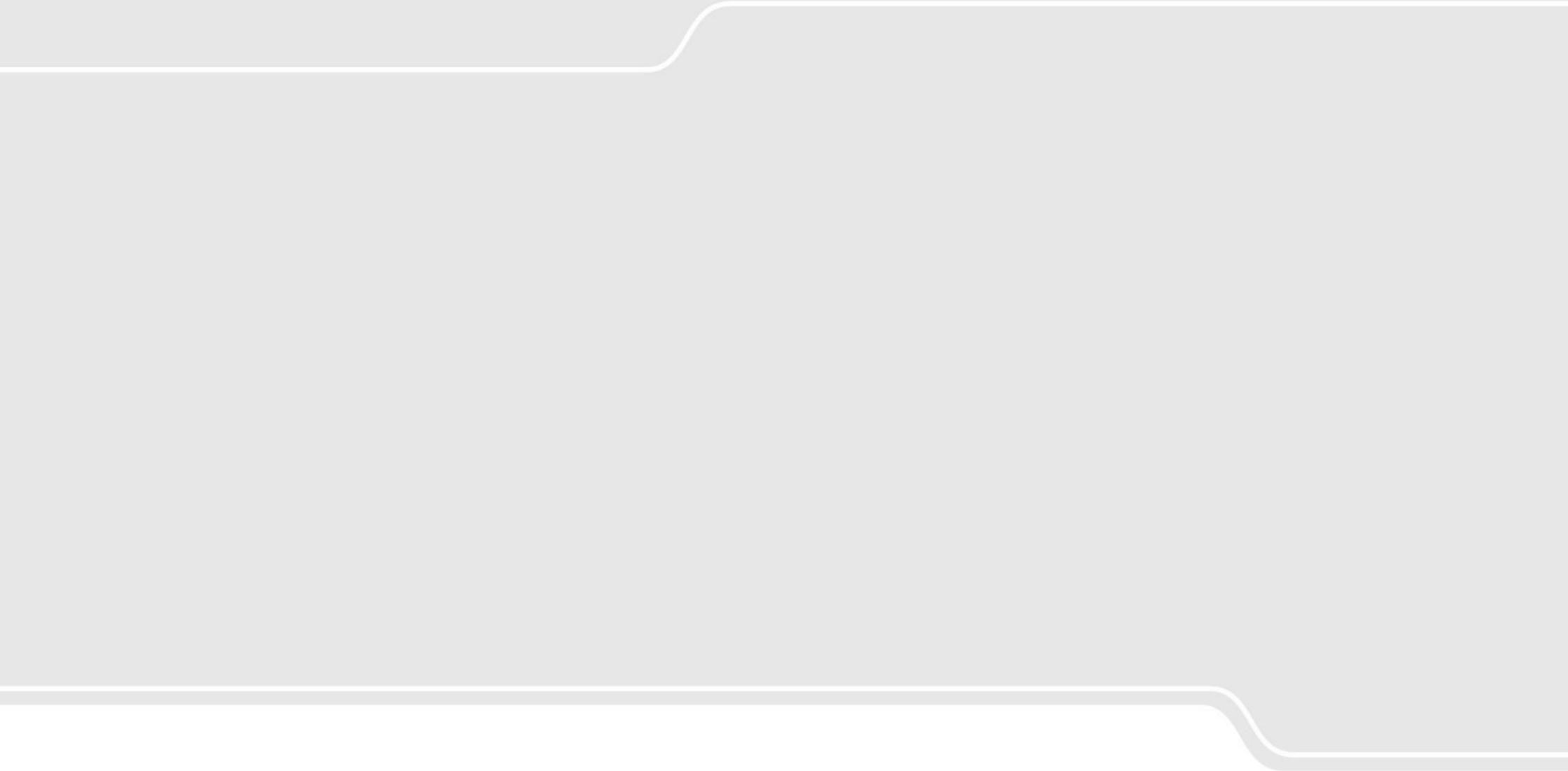
7. Click **Browse** and locate and select the .KMC configuration file created in the previous procedure.
8. From the Select COM port list, select the COM.

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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