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SmartRack 116 - Quick Start Guide



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www.tripplite.com/support

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1. Introduction

To take advantage of the full range of features, we recommend you read the softcopy User Guide after performing the Quick Start procedure. It's in PDF format on the supplied CD or on our website www.minicom.com in the Support section.

Access and control multiple multi-platform computers from one Keyboard, Video, Mouse (KVM) console with the SmartRack 116 Switch system. Connect up to 16 computers to the SmartRack 116.

The SmartRack 116 is based on Minicom's innovative ROC technology in which each computer / server is directly connected to the switch via a ROC using standard CAT5 cable at a distance of up to 30m/100ft in a star configuration. No external power is needed at the remote ROCs.

To access servers, just slide out the drawer and flip up its top to display the large, high resolution 17" TFT LCD display.

The display is (VGA/SVGA/XGA/SXGA compatible) with front-panel high-quality controls and Touchpad for easy adjustment.

1.1 Compatibility

The SmartRack 116 is compatible with:

- PS/2, and USB computers/servers
- DOS, Windows, Linux, UNIX, Mac and all other major operating systems

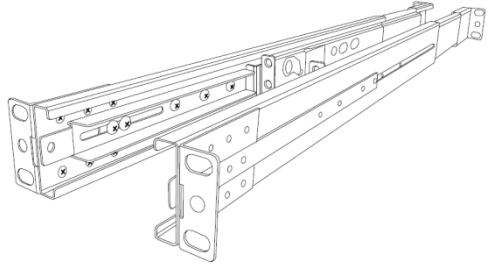
2. System components

The SmartRack 116 system consists of:

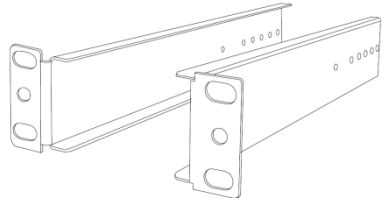
- SmartRack 116: Console + KVM Switch
- ROCs - PS/2, USB
- CAT5 cables (1.5m provided with ROCs)
- RS232 Download cable

2.1 Hardware kit contents

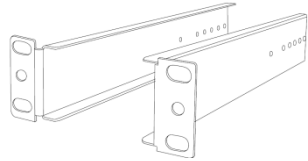
Rail with front and rear bracket x 2,
for rack depth of 614 ~ 800 mm.
Right and left sides are different.



Long bracket x 2. (For increased rack
depth of 905 ~ 990mm)



Medium bracket x 2. (For increased rack
depth of 800 ~ 905mm)



Short bracket x 2



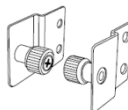
Bracket attachment x 2




Note! The short bracket and bracket attachment for a rack depth of 504~ 614 mm and without a KVM switch connected to the drawer.


Flat screws x 6 (for rail mount to console body) 

Screws x 6 



Bracket A with thumbscrew x 2

Screws x4 

Keys x 2. 

2.2 Pre-installation guidelines

- Switch off all computers
- Place cables away from fluorescent lights, air conditioners, and machines that are likely to generate electrical noise
- Ensure that the maximum distance between each computer and the SmartRack 116 does not exceed 30m/100ft

2.3 Connecting to a rack

Note! For increased rack depth of between 800 ~ 990mm, first change the bracket to the medium or long bracket, see section 2.4 on page 6.

Note! The illustrations below show the connections to one side of the SmartRack 116. The connections are the same for the other side.

1. Move the rail until two screws appear, see Figure 1.

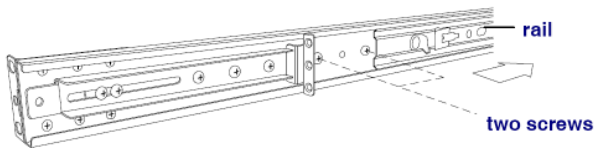


Figure 1 Exposing the 2 screws

2. Loosen slightly the 7 screws as shown below.

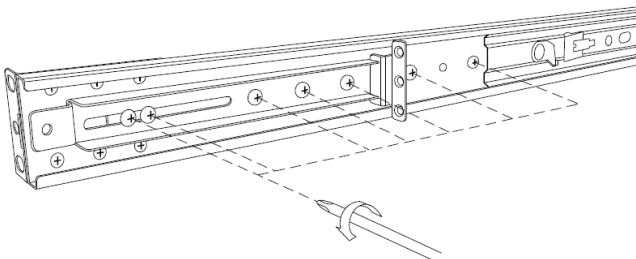


Figure 2 Loosen 7 screws

- Adjust the rear bracket to fit your cabinet, see below.

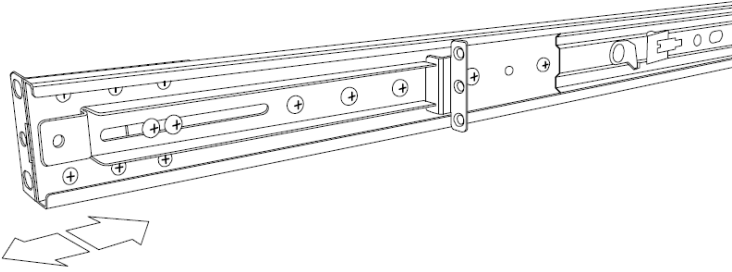


Figure 3 Adjusting the bracket

- Install the front and rear bracket onto the cabinet, see figure below.

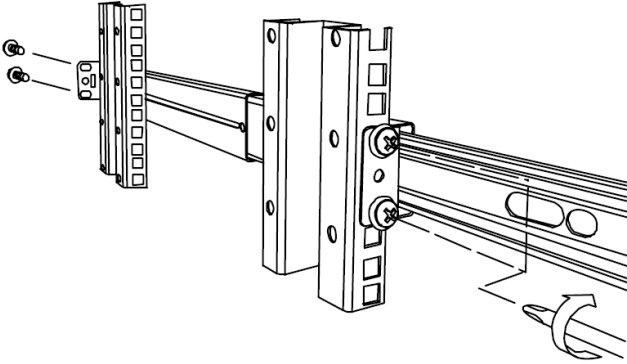


Figure 4 Installing front and rear bracket on cabinet

- Tighten the 7 screws as shown below.

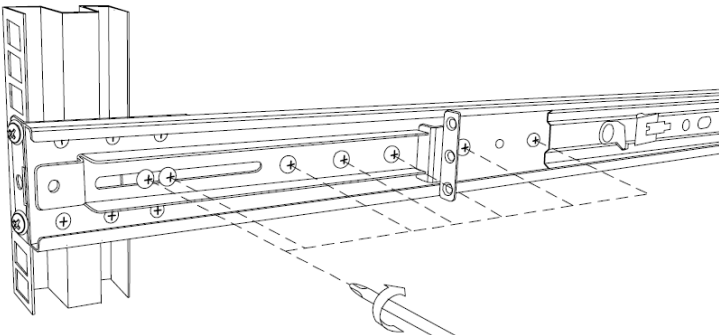


Figure 5 Tightening the 7 screws

- Repeat the steps above to connect the other rail to the other side of the rack.

- Slide the SmartRack console between the rails as shown below.

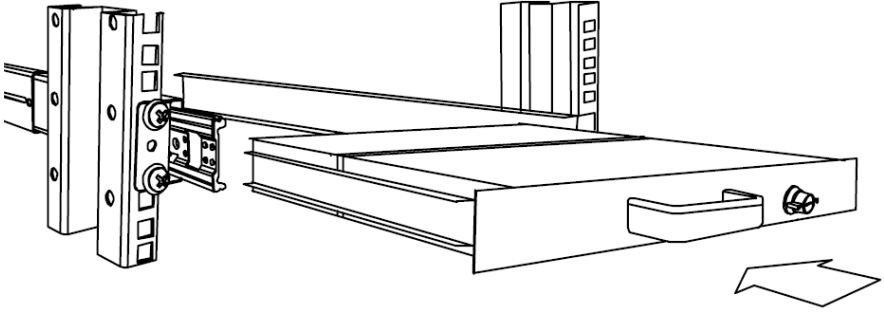


Figure 6 Sliding the SmartRack between the rails

- Unlock and pull both left and right rail-lock switches together – see below – and push the console all the way into the rack.

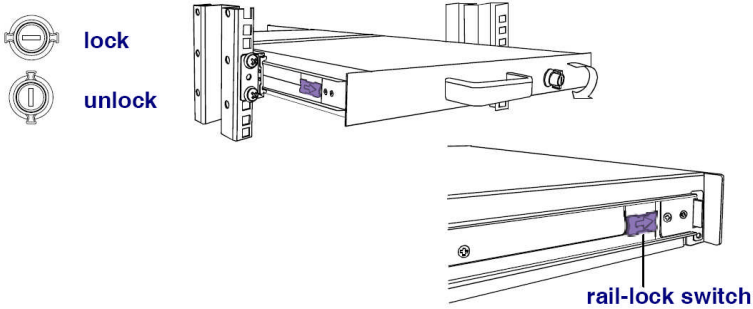


Figure 7 Rail-lock switch

- Connect three flat screws to the rear of the console on both sides. See figure below.

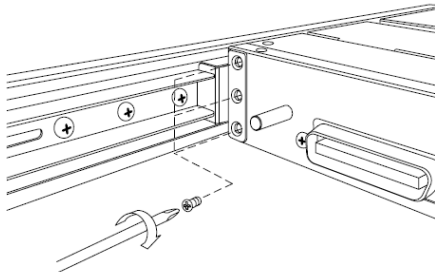


Figure 8 Connecting three flat screws to the rear of the console

The console now sits snugly in the rack, see Figure 9.

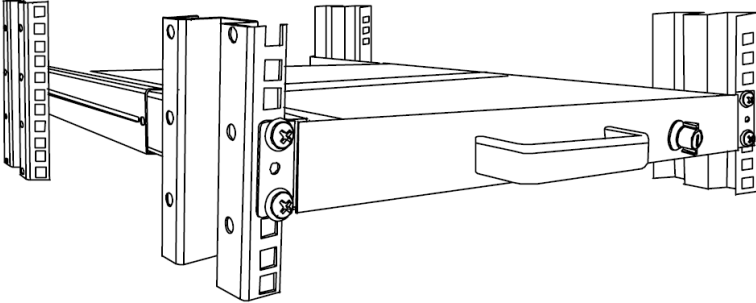


Figure 9 Console in the rack

2.4 Using the medium or longer bracket

For a rack depth of 800 ~ 905mm, use the medium bracket. For a rack depth of 905 ~ 990mm, use the longer bracket.

To replace the bracket with the medium or longer bracket:

1. Loosen the 7 screws as shown below.

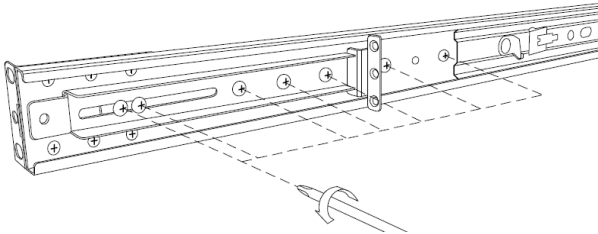


Figure 10 Loosening the 7 screws

Remove the six (different) screws as shown below.

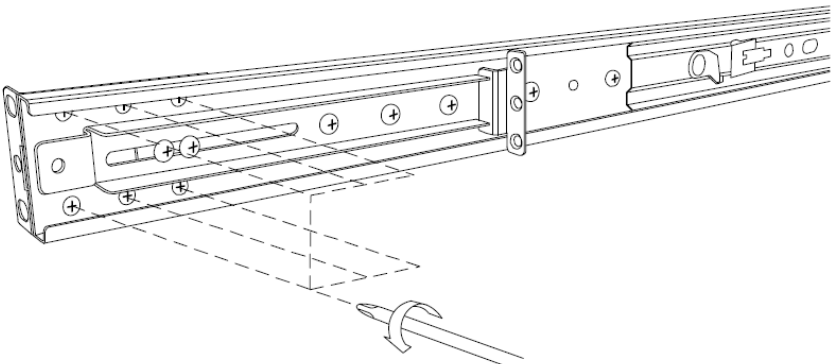
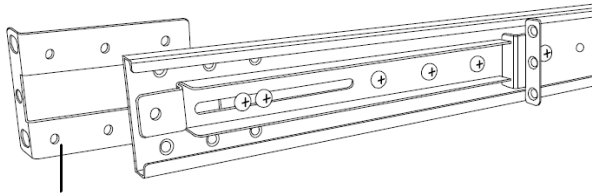




Figure 11 Removing the six screws

2. Take the rear bracket out, see below.



original bracket

Figure 12 Taking the rear bracket out

3. Insert the medium/long bracket into the rail then adjust the bracket to fit your cabinet.
4. Tighten at least 2~3 screws along the length you need. **Note!** For medium bracket use the round screws , and for the long bracket use the flat screws . See Figure 13.

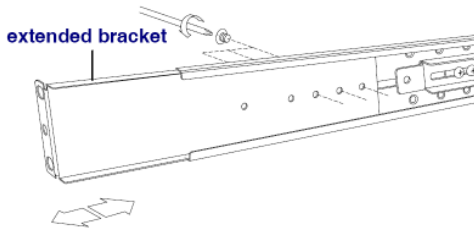


Figure 13 Inserting and tightening the medium/long bracket

5. Repeat the above steps for the other side.
6. Go to section 2.3 Connecting to a rack.

2.5 Connecting the KVM Switch 116

1. Connect the bracket A to the sides of the Switch using the two 6mm screws provided see figure below.

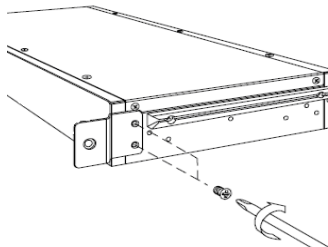


Figure 14 Connecting the bracket A to the sides of the Switch

- Slide the Switch 116 into the rail and into the back of the SmartRack console until you hear a click. See the figure below.

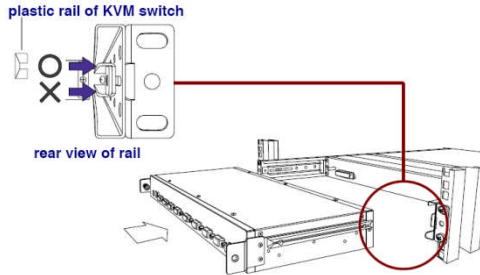


Figure 15 Slide switch into back of SmartRack

- Secure the Switch 116 to the rail by inserting the thumbscrews through the bracket and into the rail and tightening them, see Figure 16.

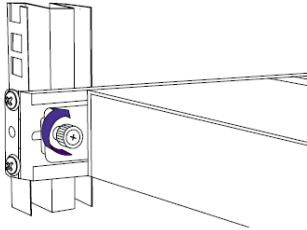


Figure 16 Tightening the thumbscrews

3. The SmartRack 116 system configuration

You connect servers to the SmartRack 116 via ROCs. Figure 17 illustrates the basic configuration of the 116 Switch.

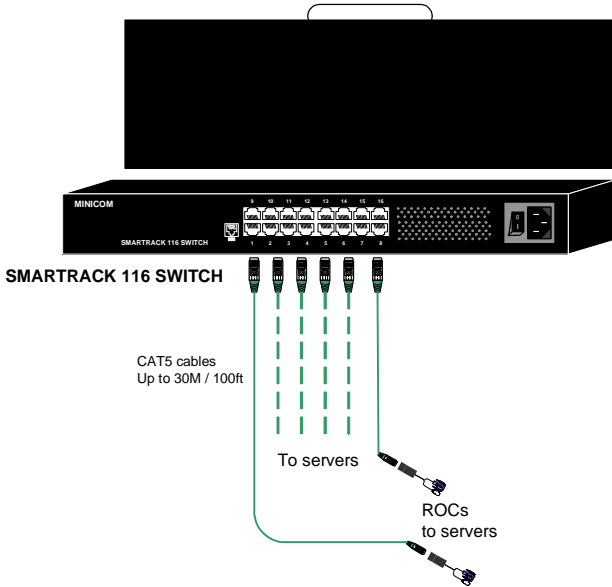


Figure 17 SmartRack 116 Switch system configuration

3.1 The KVM Switch 116

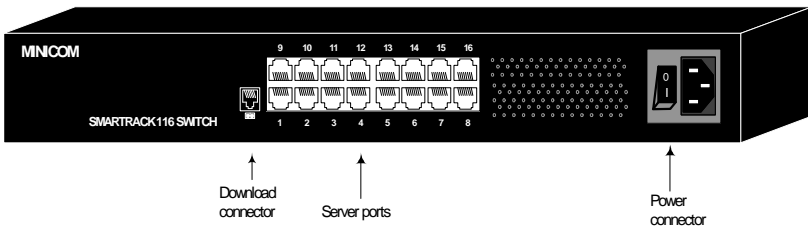


Figure 18 116 Switch ports

3.1.1.1 Connector table

Connector	Function
Download	To update firmware of the OSD, Switch and ROCs.
Server ports	Connect to servers via ROCs

3.2 Connecting ROCs to servers

Each computer/server is directly connected to the Switch 116 via the appropriate ROC using CAT5 cable in a star configuration. No external power is needed at the remote ROCs. The ROCs draw their power from the computer's keyboard port (ROC PS/2) or from the USB port (ROC USB). The figures below illustrate the ROC PS/2 and ROC USB.

3.2.1 Connecting a ROC PS/2

You can connect the ROC PS/2 to a powered on computer, but it must be in the following order:

1. Connect the Mouse connector to the computer's Mouse port.
2. Connect the Keyboard connector to the computer's Keyboard port.
3. Connect the Screen connector to the computer's Video port.

Failure to connect in the above order while the server is running, may lead to the mouse malfunctioning until the server is rebooted.

3.2.2 Connecting a ROC USB

The ROC USB supports Windows 98 SE and later, MAC, SUN, SGI and all modern Linux distributions.

To connect the ROC USB:

1. Connect the Screen connector to the computer's Video port.
2. Connect the USB connector to the computer's USB port.

3.3 Connecting the CAT5 cables

1. Connect one connector to the ROC's RJ45 port.
2. Connect the other connector to one of the SmartRack Switch Server ports.
3. Follow the above 2 steps for each computer.

3.4 Connecting the power supply

1. Connect the Switch to the power supply using the Power cord provided. Only use the Power cord supplied with the unit.
2. Power on the Switch.

4. Operating the SmartRack 116 system

Switch between the connected computers by either

- Keyboard hotkeys
- The OSD (On Screen Display)

The OSD is also the place to adjust various settings as explained below.

When switching computers the illuminated LED of the top bank indicates which computer is currently selected.

4.1 The keyboard hotkeys

To switch to the next computer forwards press **Shift** then, +. Release **Shift**, before pressing +.

To switch to the next computer backwards press **Shift** then, -. Release **Shift**, before pressing -.

Note! With a US English keyboard you can use the + key of the alphanumeric section or of the numeric keypad. With a Non-US English keyboard only use the + key of the numeric keypad.

4.2 Displaying the OSD

To display the OSD:

Press **Shift** twice. The OSD Main window appears. See Figure 19. Lines with blue text show active computers. Lines with grey text show inactive computers.

The Type column indicates whether a computer “C” or another switch “S” is connected to the port.

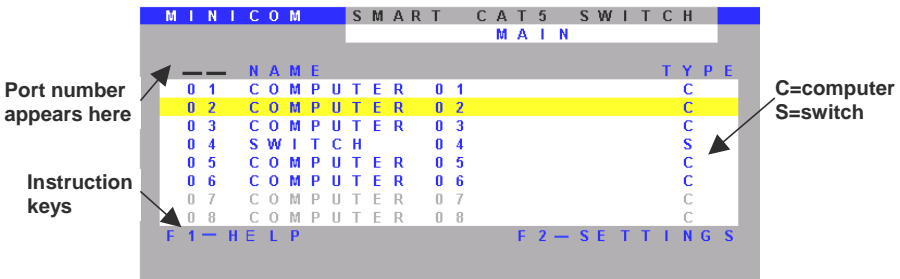


Figure 19 OSD Main window

4.2.1 Navigating the OSD

To navigate up and down use the Up and Down arrow keys.

To jump from one column to the next (when relevant) use the Tab key.

To exit the OSD or return to a previous window within the OSD press **Esc**.

4.2.2 Selecting a computer

To select a computer:

1. Navigate to the desired computer line.

Or, type the port number of the desired computer.

2. Press **Enter**. The selected computer is accessed. A confirmation label appears showing which computer is accessed.

Note! When the OSD is displayed you cannot select computers using the front panel Select buttons or the keyboard hotkeys.

4.2.3 The OSD HELP window – F1

To access the HELP window press **F1**. The HELP window appears see Figure 20.

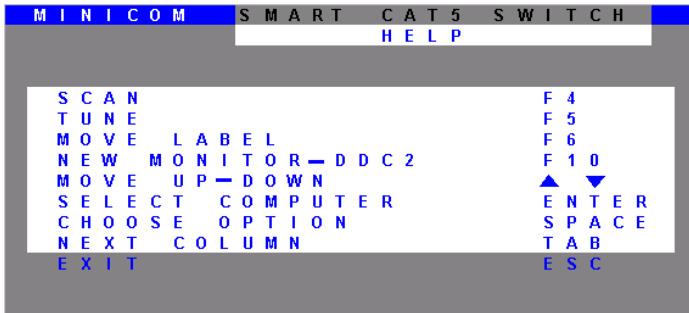


Figure 20 HELP window

Please note! All the functions set out in the Help window are performed from the Main window. The Help window is merely a reminder of the hotkeys and their functions.

4.2.4 Tuning – F5

You can tune the image of any remote computer screen from the Select Computer window.

To adjust the screen image:

1. Navigate to the remote computer you wish to adjust.
2. Press **F5**. The screen image of the selected computer appears, together with the Image Tuning label.
3. Adjust the image by using the **Right** and **Left** Arrow keys.
4. When the image is satisfactory, press **Esc**.

Note! Picture quality is relative to distance. The further away a remote computer is from the SmartRack 116, the lower the image quality, and the more tuning needed. So place the higher resolution computers closer to the manager unit.

For more detailed installation and operating instructions please see the softcopy User Guide on the supplied CD or on our website:

<http://www.minicom.com/supportuserguides.htm>

