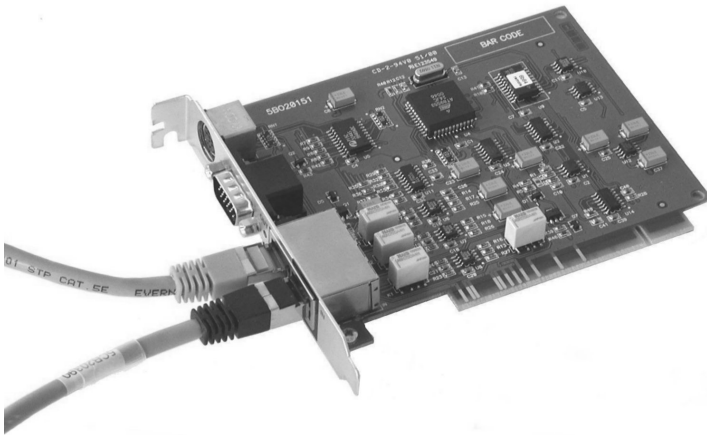




ClassWork Junior



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4. Todas las instrucciones de operación y uso deben ser seguidas.
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12. Precaución debe ser tomada de tal manera que la tierra física y la polarización del equipo no sea eliminada.
13. Los cables de la fuente de poder deben ser guiados de tal manera que no sean pisados ni pellizcados por objetos colocados sobre o contra ellos, poniendo particular atención a los contactos y receptáculos donde salen del aparato.
14. El equipo eléctrico debe ser limpiado únicamente de acuerdo a las recomendaciones del fabricante.
15. En caso de existir, una antena externa deberá ser localizada lejos de las líneas de energía.
16. El cable de corriente deberá ser desconectado del cuando el equipo no sea usado por un largo periodo de tiempo.
17. Cuidado debe ser tomado de tal manera que objetos líquidos no sean derramados sobre la cubierta u orificios de ventilación.
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 - A: El cable de poder o el contacto ha sido dañado; u
 - B: Objetos han caído o líquido ha sido derramado dentro del aparato; o
 - C: El aparato ha sido expuesto a la lluvia; o
 - D: El aparato parece no operar normalmente o muestra un cambio en su desempeño; o
 - E: El aparato ha sido tirado o su cubierta ha sido dañada.

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1. Introduction

The ClassWork Junior system from Black Box is a CAT5 based Distributed KVM Switching system for server Supervisor. Connect up to 64 computers in the ClassWork Junior system.

1.1 The ClassWork Junior system components

The ClassWork Junior system consists of the following:

- 1 internal PCI card Supervisor unit
- Internal PCI card Remote units
- Cables

1.2 Compatibility

The ClassWork Junior system is compatible with:

- IBM compatible computers
- VGA, SVGA, or XGA video standards
- IntelliMouse™, Logitech WheelMouse, and PS/2 mice
- Microsoft DOS, Windows 3.1, 95, 98, 2000, NT4, ME, XP and Windows 2003 Server. Novel, Linux, UNIX, HP UNIX, QNX

1.3 Features

The ClassWork Junior system gives you:

- Control and monitor mixed, multi-platform server environments of up to 63 remote computers from 1 Supervisor position
- Advanced On Screen Display Supervisor (including multi-layer security), and BIOS level access
- The option of working at the remote computer
- A distance of up to 110m/360ft between the Supervisor computer and the last connected Remote computer
- Pure hardware solution. No drivers. No IRQs. No interrupts

1.4 The ClassWork Junior configuration

Figure 1-1 illustrates the ClassWork Junior configuration.

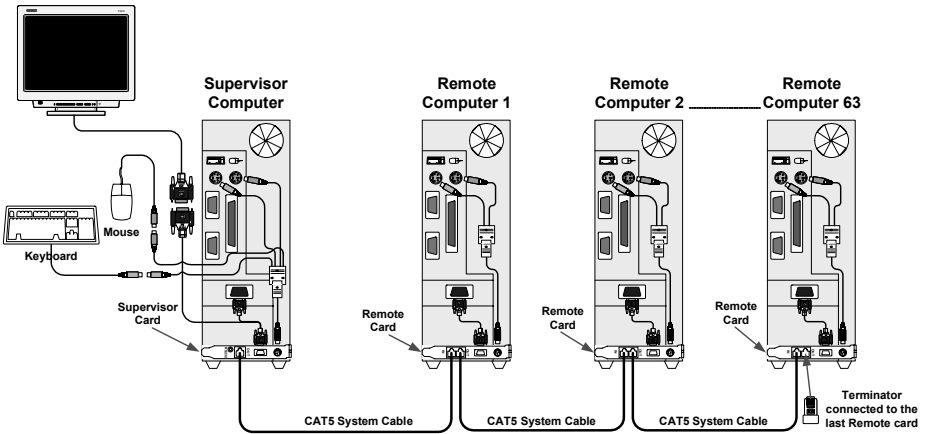


Figure 1-1 The ClassWork Junior configuration

2. Installing the ClassWork Junior cards

There are two different types of PCI cards. One for the Supervisor, and one for the Remote.

Figure 2-1, illustrates the Supervisor PCI card.

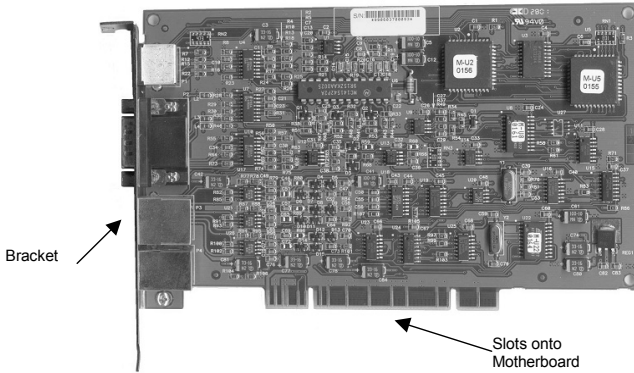


Figure 2-1 The Supervisor card

Figure 2-2 illustrates the Remote PCI card.

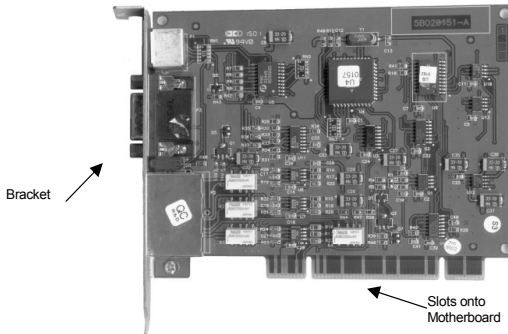


Figure 2-2 The Remote card

Prior to installing the card:

- Switch off all computers.
- Disconnect all power cords.
- In order to avoid electrostatic damage to the card; discharge any static electricity you may be carrying. You can do this by touching any grounded object.

To install the Supervisor and Remote cards:

1. Remove computer covers.
2. Insert the Supervisor card into any available PCI slot of the designated Supervisor computer.
3. Insert the Remote cards into any available PCI slot of the other computers.
4. Replace computer covers.

3. Connecting the ClassWork Junior system

Before connecting the system:

- Switch off all computers, and disconnect the power cords
- Place cables away from fluorescent lights, air conditioners, and machines that are likely to generate electrical noise
- Ensure that the total cable length between the ClassWork Junior Supervisor and the last Remote does not exceed 110m / 360ft
- Caution: For continued protection against risk of fire, replace with the same type and rating of fuse only.

3.1 Connecting the ClassWork Junior Supervisor card

Figure 3-1 below illustrates the ports on the Supervisor card.

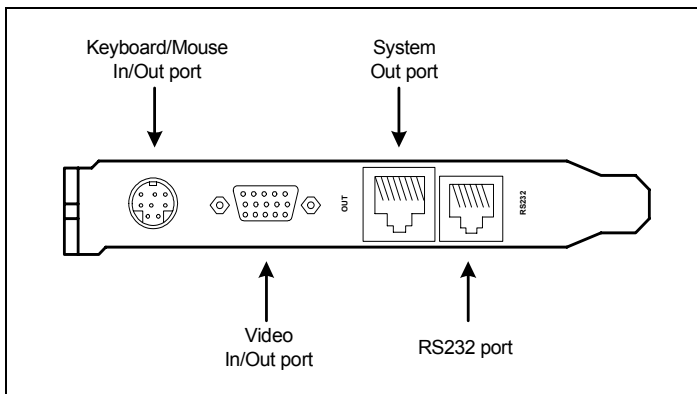


Figure 3-1 The Supervisor card

The following cables connect to the Supervisor card:

- Keyboard/Mouse In/Out cable - illustrated below
- Screen In/Out cable - illustrated below
- Shielded CAT5 FTP System cable

3.2 Connecting the Keyboard/Mouse In/Out cable

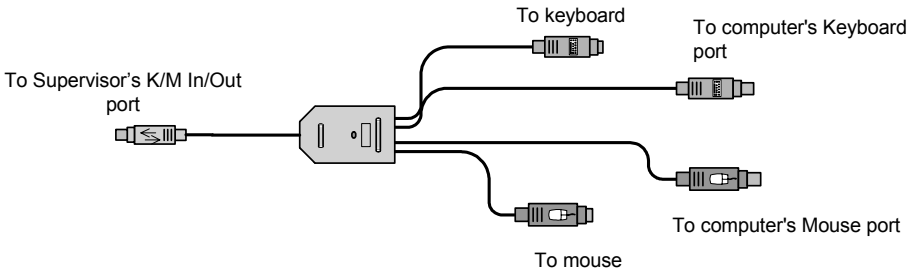


Figure 3-2 The Supervisor K/M In/Out Cable

To connect the Keyboard/Mouse In/Out cable:

1. Connect the MiniDIN8M connector to the Supervisor card's Keyboard/Mouse In/Out port.
2. Connect the MiniDIN6F Mouse Out connector to the mouse's connector.
3. Connect the MiniDIN6M Mouse In connector to the computer's mouse port.
4. Connect the MiniDIN6F Keyboard Out connector to the keyboard's connector.
5. Connect the MiniDIN6M Keyboard In connector to the computer's Keyboard port.

3.3 Connecting the Screen In/Out cable

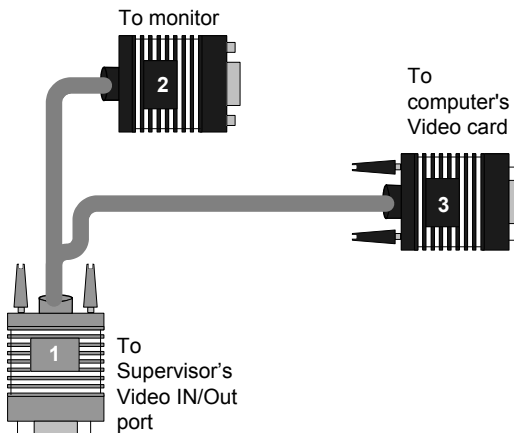


Figure 3-3 The Supervisor Screen In/Out Cable

To connect the Screen In/Out cable to the ClassWork Junior Supervisor:

1. Connect connector #(1) to the Supervisor's Screen In/Out port.
2. Connect connector #(2) to the monitor's connector.
3. Connect connector #(3) to the computer's Screen port.

3.4 The Supervisor PCI card Power supply

The Supervisor PCI card draws its power via the computer's motherboard.

3.5 Connecting the ClassWork Junior system

Connect the ClassWork Junior system using Shielded CAT5 FTP System cable. The Shielded CAT5 FTP System cable consists of a Shielded CAT5 FTP (Foil Shielded Twisted Pair) Solid Wire 2x4x24 AWG (America Wire Gauge) cable terminated with RJ-45M connectors.

Recommendation. Before installing the Shielded CAT5 FTP System cable, work out how to connect all the computers using the shortest possible length of cable. A shorter cable length increases video quality, and reduces noise.

Note

If the supplied Shielded CAT5 FTP System cable length is not appropriate for your configuration, a custom length cable can be substituted. If you choose to use a cable with a different length, make sure to use CAT5 FTP (Foil Shielded Twisted Pair) Solid Wire 2x4x24 AWG cable.

To connect the Shielded CAT5 FTP System cable to the ClassWork Junior Supervisor:

1. Connect one connector to the ClassWork Junior Supervisor's System Out port.
2. Connect the other connector to a ClassWork Junior Remote's System In port.

Connect the cables to the ClassWork Junior Supervisor card as illustrated in the figure below.

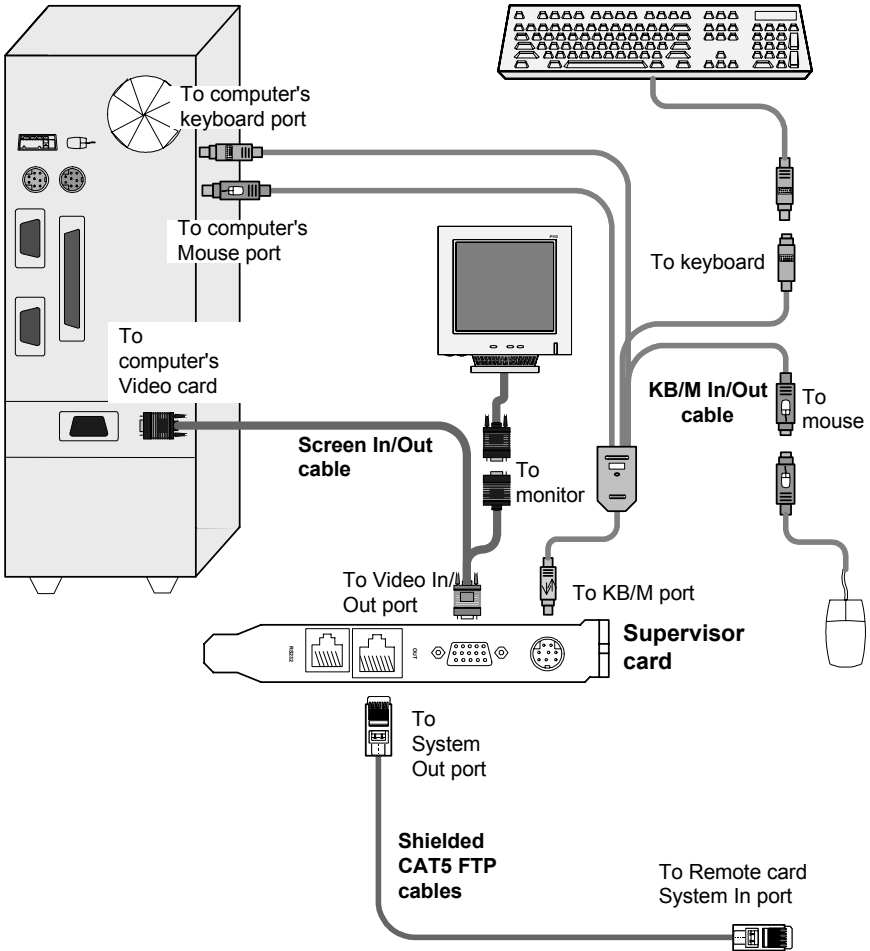


Figure 3-4 The ClassWork Junior Supervisor card connections

3.6 Connecting the ClassWork Junior Remote cards

Figure 3-5 illustrates the ports on the ClassWork Junior Remote card.

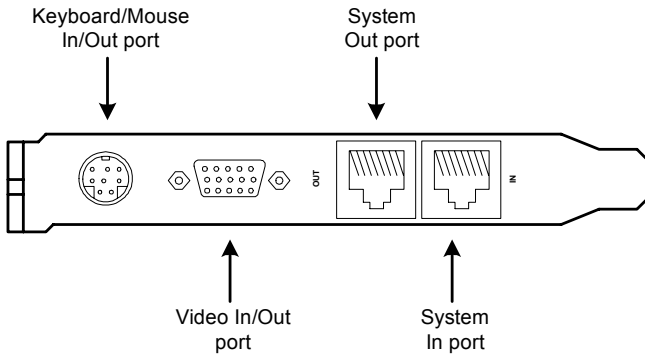


Figure 3-5 The Remote card

The following cables connect to the ClassWork Junior Remote card:

- Keyboard/Mouse In/Out cable
- Screen In/Out cable
- Shielded CAT5 FTP System cables

3.7 Connecting the Keyboard/Mouse In/Out cable

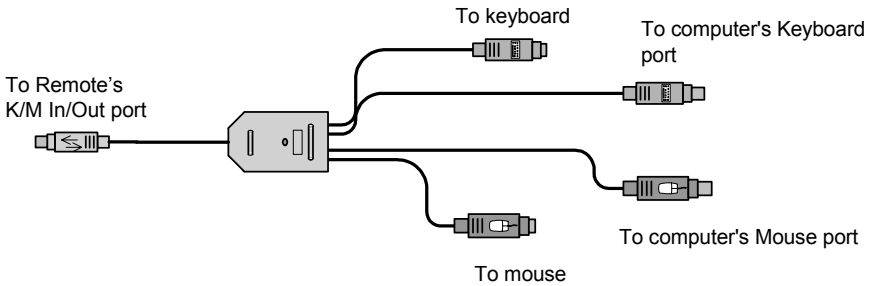


Figure 3-6 The Remote K/M In/Out cable

To connect the Keyboard/Mouse In/Out cable:

1. Connect the MiniDIN8M connector to the Remote card's Keyboard/Mouse In/Out port.
2. Connect the MiniDIN6F Mouse Out connector to the mouse's connector.
3. Connect the MiniDIN6M Mouse In connector to the computer's mouse port.
4. Connect the MiniDIN6F Keyboard Out connector to the keyboard's connector.
5. Connect the MiniDIN6M Keyboard In connector to the computer's Keyboard port.

3.8 Connecting the Screen In/Out cable

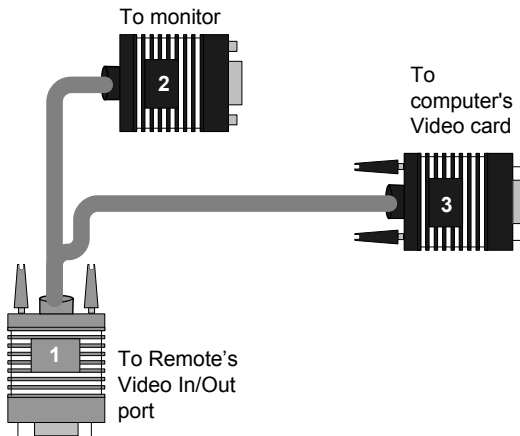


Figure 3-7 The Screen In/Out Cable

To connect the Screen In/Out cable to the ClassWork Junior Supervisor:

1. Connect connector #(1) to the Remote card's Video In/Out port.
2. Connect connector #(2) to the monitor's connector.
3. Connect connector #(3) to the computer's Screen port.

3.9 The Remote PCI card Power supply

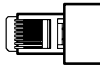
The Remote PCI card draws its power via the computer's motherboard.

3.10 Connecting the ClassWork Junior Remote cards to the system

Connect the ClassWork Junior Remote cards to the system using Shielded CAT5 FTP System cables. The cable links the ClassWork Junior Supervisor and Remotes in a daisy-chain pattern.

To connect the Shielded CAT5 FTP System cable to each ClassWork Junior Remote:

1. Connect one connector to the first Remote's System Out port.
2. Connect the other connector to the next Remote's System In port.
3. Connect all the ClassWork Junior Remotes in this way.
4. Connect a Terminator – illustrated below – to the System Out port of the last Remote in the chain.



Connect the cables to each Remote card and computer as illustrated in the figure below.

The figure below illustrates the Remote card connections.

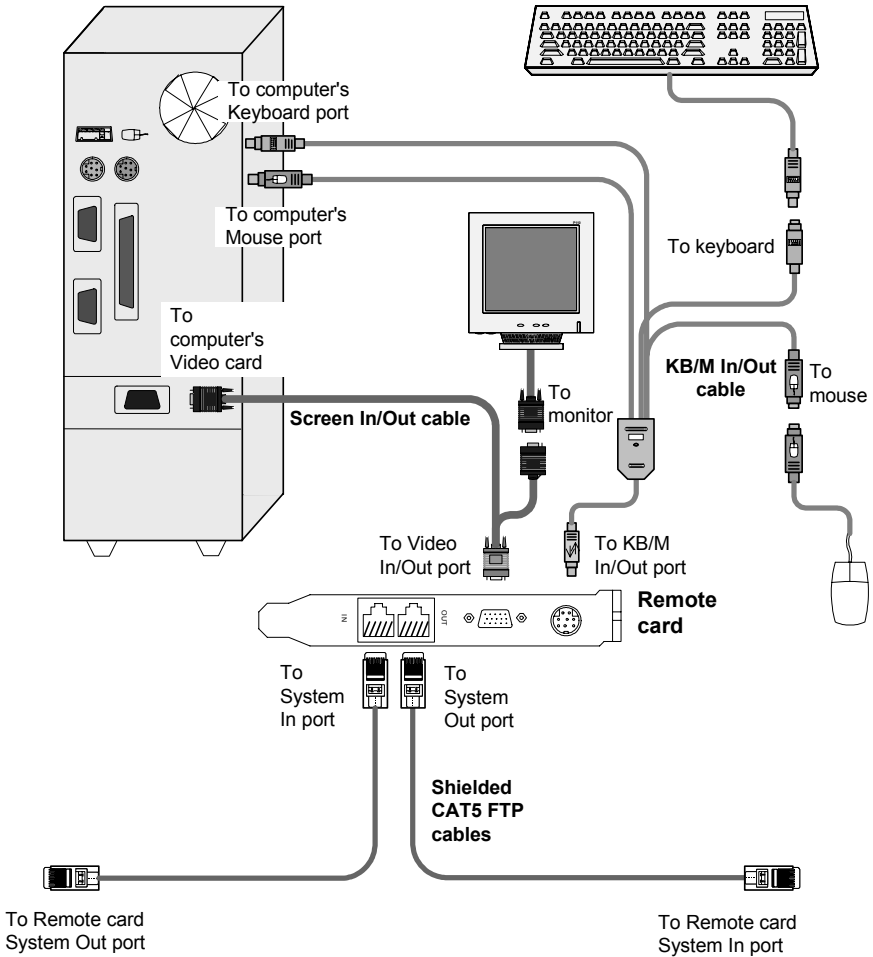


Figure 3-8 The Remote card connections

4. Making the ClassWork Junior system operational

Before you can operate the system, you must:

- Number the Remote cards
- Configure keyboard settings

4.1 Numbering the Remote cards

Fully connect the system as explained in chapter 3. For Auto numbering to work properly **ALL** connected computers **MUST** be switched on.

Connect the RS232 Serial cable to the Supervisor card and computer. Figure 4-1 illustrates the RS232 Serial cable.



Figure 4-1 The RS232 Serial cable

To connect the RS232 Serial cable:

1. Connect the cable's RJ11 connector to the ClassWork Junior Supervisor card's RS232 connector. (See Appendix A for the Service Connector Pin-out).
2. Connect the cable's DB9F connector to a Serial port on the computer's rear panel.

The figures below illustrate the connections.

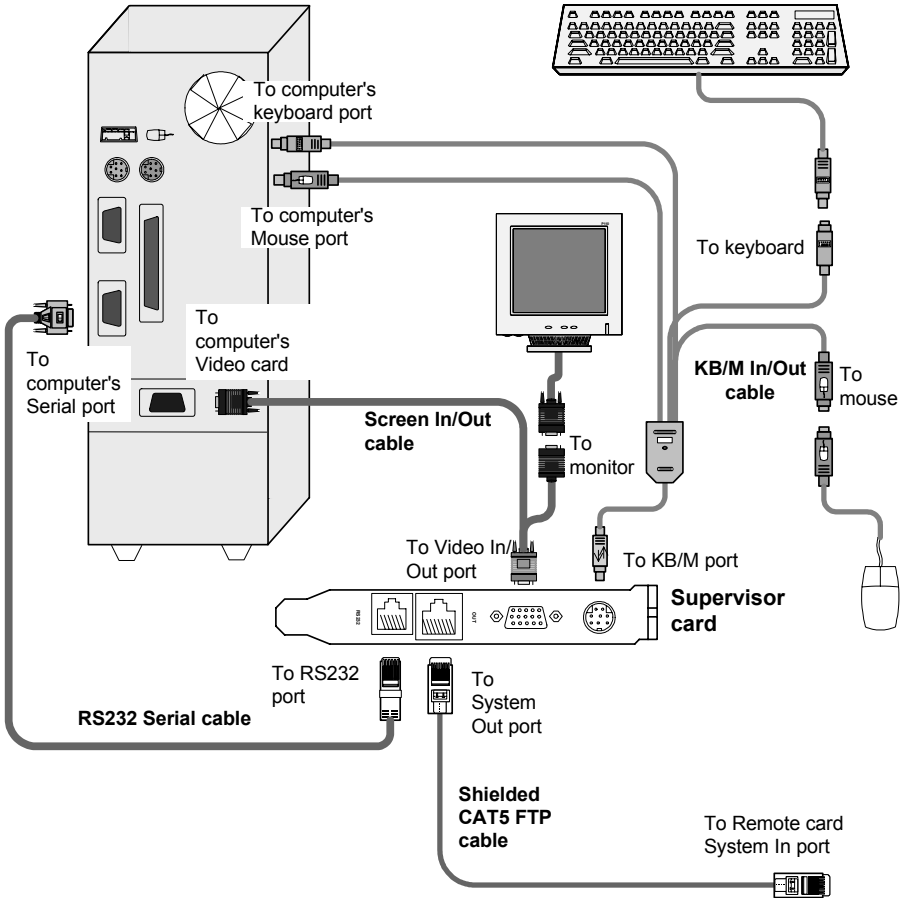


Figure 4-2 The RS232 Serial cable connections

Figure 4-3 The ClassWork Junior Supervisor PCI card with the RS232 Serial cable

4.2 Auto numbering

Auto numbering gives each ClassWork Junior Remote a sequential ID number. This is done through the Supervisor (On-Screen Display) OSD.

To perform Auto numbering:

1. On the Supervisor keyboard, press **Shift, Shift**. The OSD appears. See Figure 4-4.

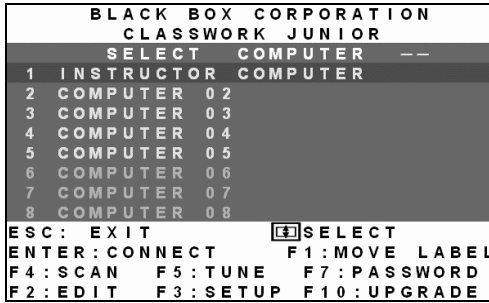


Figure 4-4 The Select Computer window

At this stage random rows will be colored yellow or may be blinking, continue to step 2.

2. Press **F7**. The Enter Password box appears. See Figure 4-5.



Figure 4-5 The Enter Password box

3. Type the default password 'ADMIN', and press **Enter**. The Password window appears.

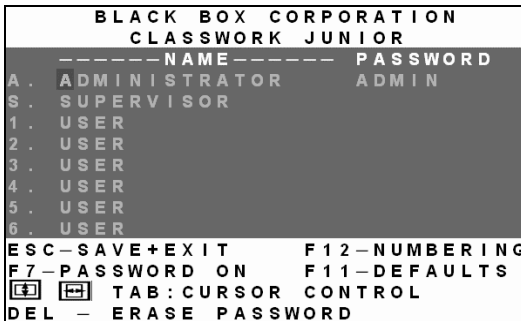


Figure 4-6 The Password window

4. Press **F12** to activate auto-numbering. A Confirmation label appears.

5. Press **Y** to confirm. The process activates. Wait until the process is complete.

6. Press **Esc** to save and return to the Select Computer window. The Remote computers now appear on the OSD.

4.3 Configuring the keyboard settings

Configure the system to function with the Supervisor and Remote computer keyboard types. The keyboard settings are configured in the Setup window.

To display the Setup window:

In the Select Computer window press **F3**. The Setup window appears see Figure 4-7.

BLACK BOX CORPORATION											
CLASSWORK JUNIOR											
	SCN	DSP	KB	MS	OUT	1	2	3	4	5	6
1	030	030	PS	MS	600	Y	N	V	Y	Y	Y
2	030	030	PS	MS	999	N	N	N	N	N	N
3	030	030	U1	MS	030	Y	Y	N	Y	N	Y
4	030	030	PS	MS	150	Y	V	V	V	N	Y
5	030	030	PS	MS	030	V	Y	Y	Y	N	N
6	030	030	PS	MS	030	N	N	V	V	Y	N
7	030	030	PS	MS	030	N	N	Y	Y	N	N
8	030	030	U2	MS	030	Y	Y	N	N	Y	Y
F6 - AUTOSKIP : ON					ESC : SAVE + EXIT						
F8 - KB MODE : US					999 : CONT. DISP						
F9 - HOTKEY : SHIFT SHIFT											
[F4] [F5] TAB : CURSOR CONTROL											

Figure 4-7 The Setup window

The **KB** column in the Setup window shows the keyboard settings. Set the **KB** mode for each computer according to its operating system.

The default **KB** mode is **PS**, which is the standard keyboard mode for Windows and Linux based operating systems.

For a UNIX operating system using a standard PS/2 keyboard, set the KB mode as follows:

- **U1** for HP UX and SGI UNIX
- **U2** for Alpha UNIX and Open VMS

To change the **KB** column from **PS** to **U1** or **U2**:

1. Navigate to the **KB** field by using the Tab or Arrow keys.
2. Press the **Spacebar**. The display interchanges between **PS**, **U1** and **U2**. Find the desired setting.
3. Press **Esc** to save and exit the Setup window.

5. The OSD functions

The ClassWork Junior system is controlled and monitored through an On-Screen-Display (OSD) on the Supervisor screen. The OSD contains a number of different windows that are accessed using Hot-keys. Each window has its own special function.

5.1 Displaying the OSD

To display the OSD:

Press **Shift, Shift**. The Select Computer window appears. See Figure 5-1.

Pressing keyboard hotkeys

Note! For all keyboard hotkey sequences mentioned in this guide – press the first key, release and then press the next key.

Note! When using a UPM not connected to a local computer the OSD appears automatically.

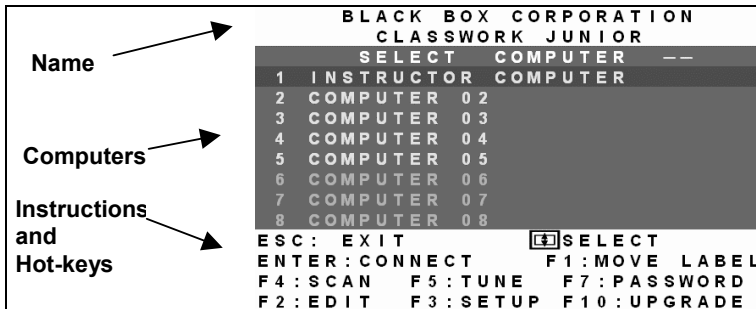


Figure 5-1 The Select Computer window

The OSD is divided into three sections. These are:

- Name
- Computers
- Instructions and Hot-key guide

5.1.1. The Computers section

The Computers section displays the computers in groups of eight.

Navigate between the groups with the **Page Up** and **Page Down** Arrow keys.

In this section you select computers - discussed below.

5.2 Line Color codes

Each computer line can be one of three colors as follows:

- | | |
|---------------|---|
| Yellow | Connected and switched on computer. |
| Black | Connected and switched on computer with a Local Workstation attached and presently being used locally. After remaining idle for 30 seconds, it changes to yellow . The ClassWork Junior Supervisor and the local user can both work on the remote computer with a one second Access-Timeout. This means that when one of them stops working for one second the other can take control. |
| Blue | Unconnected or switched off computer. |

5.3 Selecting a Computer

To select a computer:

1. **Navigate to the desired computer with the Up and Down Arrow keys.**

Or

Type the computer number. It will appear in the "SELECT COMPUTER" line. See Figure 5-1.

2. Press **Enter**. The selected computer's screen replaces the Supervisor's screen. A Confirmation label appears showing which computer is accessed. See Figure 5-2. Control and monitor the computer from the Supervisor KVM position.



Figure 5-2 The Confirmation label

To return to the OSD:

Press **Shift, Shift**.

To return to the Supervisor computer screen:

Press **Shift, Esc**.

To return to the previously accessed computer screen:

Press **Shift, Tab**.

5.4 The hotkey functions

The OSD hotkey functions are briefly outlined in the table below.

Hotkey	Function
F1	Move label identifying the current selected computer to anywhere on the screen
F2	Opens Edit window to edit text – change computer names etc.
F3	Opens Setup window to set parameters – scan times etc.
F4	Activate scan
F5	Image tuning
F6	Autoskip – during a scan skip inactive computers
F7	Opens Password window to activate password protection
F8	Keyboard language
F9	Change the display hotkey
F11	Load defaults
F12	Auto-numbering

5.5 Move Label - F1

Position the Confirmation label – Figure 5-2 above – anywhere on the screen.

To position the label:

1. Navigate to the desired computer using the Up and Down arrow keys.
2. Press **F1**. The selected screen image and Identification label will appear.
3. Use the arrow keys to move the label to the desired position.
4. Press **Esc** to save and exit.

5.6 Edit Mode window - F2

You can edit text in the Name and Computers sections. This is done in the **Edit Mode** window.

To display the **Edit Mode** window:

Press **F2**. The Edit Mode window with instructions appears, see Figure 5-3.

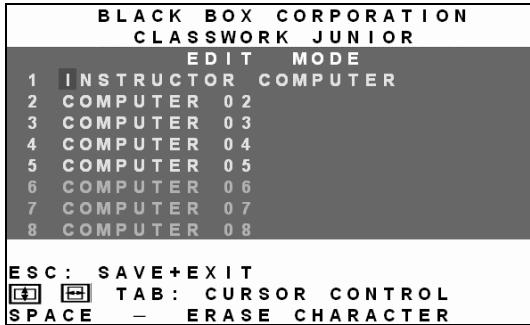


Figure 5-3 The Edit Mode window

5.6.1. Navigating between sections

To navigate between the Name and Station sections, use the **Up** and **Down** Arrow keys.

5.6.2. Editing options

The editing options below apply to all OSD windows in which you can edit characters.

You can either overwrite or erase a character.

To overwrite a character:

1. Navigate to it using the Arrow keys.
2. Type the new character.

To erase a character:

1. Navigate to it using the Arrow keys.
2. Press the Spacebar. The character disappears. A blank space replaces the erased character.

To erase a sequence of characters:

1. Navigate to the first character in the sequence.
2. Press and hold the Spacebar down until you erase the sequence.

5.6.3. Saving changes

To save all editing changes and return to the Select Computer window:

Press **Esc**.

5.6.4. Editing the Name section

You can substitute the text in the Name section with up to 30 characters in each of the two lines. A space constitutes a character.

5.6.5. Editing the Computers section

The numbering at the start of each line is unalterable.

You can substitute the text that appears after the number with up to 20 characters per line.

5.6.6. Editing a group of lines

You can edit a group of lines with the same data change.

To edit a group of lines:

1. Navigate to the first line you want to change.
2. Type the desired change.
3. Press **End, End**. The rest of the column downwards takes on the same change.

5.7 The Setup window - F3

You set parameters, and configure settings, in the Setup window.

To display the Setup window:

Press **F3**. The Setup window with the relevant instructions and hotkeys appears. See Figure 5-4.



BLACK BOX CORPORATION						
CLASSWORK JUNIOR						
	SCN	DSP	KB	MS	OUT	1 2 3 4 5 6
1	0 3 0	0 3 0	PS	MS	6 0 0	Y N V Y Y Y
2	0 3 0	0 3 0	PS	MS	9 9 9	N N N N N N
3	0 3 0	0 3 0	U 1	MS	0 3 0	Y Y N Y N Y
4	0 3 0	0 3 0	PS	MS	1 5 0	Y V V V N Y
5	0 3 0	0 3 0	PS	MS	0 3 0	V Y Y Y N N
6	0 3 0	0 3 0	PS	MS	0 3 0	N N V V Y N
7	0 3 0	0 3 0	PS	MS	0 3 0	N N Y Y N N
8	0 3 0	0 3 0	U 2	MS	0 3 0	Y Y N N Y Y
F 6 - AUTOSKIP : ON			MS		ESC : SAVE + EXIT	
F 8 - KB MODE : US			MS		9 9 9 : CONT . DISP	
F 9 - HOTKEY : SHIFT			SHIFT			
		TAB : CURSOR CONTROL				

Figure 5-4 The Setup window

The **Setup** window contains 7 columns, as follows:

Column	Function
Numbers	Computer numbers in groups of 8
SCN	Scanning time period
DSP	Confirmation label display time
KB	Keyboard setting, either PS or Unix
MS	Mouse type
OUT	Security Timeout period
1-6	Security profiles

5.7.1. The SCN (Scan) column

The SCN column shows the length of time in seconds that a remote computer's screen will appear on the Supervisor screen during scanning.

5.7.2. The DSP (Display) column

The DSP column shows the length of time in seconds that the remote computer's Confirmation label appears on the Supervisor screen.

5.7.3. Changing the SCN and DSP time spans

The **SCN** and **DSP** time spans are preset to 030 seconds. You can adjust these times to suit your needs.

To change the time span:

1. Navigate with the Tab or Right and Left Arrow keys to the time span you want to change.
2. Type the desired time span using the numbers above the keyboard letters.
3. Press Esc.

When typing over a group of three digits, the cursor automatically reverts to the first digit once you edit the third digit.

5.7.4. Changing the time span of a group of computers

You can change the time spans of the **SCN** and **DSP** columns from a particular computer downwards.

To change the time span:

1. Navigate to the time span of the first computer you wish to change.
2. Type the desired change.
3. Press **End, End**. The remainder of the column takes on the same change.
4. Press **Esc**.

5.7.5. Removing a computer from the scanning sequence

To remove a computer from the scanning sequence:

1. Type 000 in the **SCN** column.
2. Press **Esc**.

5.7.6. Constantly displaying the Confirmation label

To constantly display the computer Confirmation label:

1. Type 999 in the **DSP** column.
2. Press **Esc**.

5.7.7. The KB column

The **KB** column shows the keyboard mapping settings. Set the **KB** mapping for each computer according to its operating system.

The default **KB** mode is **PS**, which is the standard keyboard mapping for Windows and Linux based operating systems.

For a UNIX operating system using a standard PS/2 keyboard, set the KB mapping as follows:

- U1 for HP UNIX and SGI
- U2 for Alpha UNIX and Open VMS

To change the **KB** column from **PS** to **U1** or **U2**:

1. Navigate to the **KB** field by using the Tab or Arrow keys.
2. Press the Spacebar. The display interchanges between **PS**, **U1** and **U2**. Find the desired setting.
3. Press **Esc**.

5.7.8. The MS column

The ClassWork Junior system automatically detects the mouse types, and configures the system accordingly.

5.8 Scanning Computers – F4

You scan computers from the Select Computer window.

To start scanning:

Press **F4**. During scanning a Confirmation label appears, showing which **Remote** computer is presently displayed. See Figure 5-5.



```
1 . INSTRUCTOR COMPUTER
F4 - STOP SCAN
```

Figure 5-5 The Scan Confirmation label

Note

The scan will skip any active computer set to 000 in the SCN column.

To stop scanning press **F4**.

5.9 Image 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. See Figure 5-6.



Figure 5-6 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 Supervisor position, the lower the image quality, and the more tuning needed. So place the higher resolution computers closer to the Supervisor unit.

5.10 Skipping out unconnected or switched off computers- F6

When navigating through the list of computers, you can skip out the unconnected or switched off computers. You do this with Autoskip. By default, Autoskip is activated.

To activate or deactivate Autoskip:

In the Setup window (F3), press **F6**. The F6 Autoskip in the hotkey section of the OSD changes from ON to OFF

When Autoskip is inactive and the computer being scanned is switched off, then the **Supervisor** screen appears dark.

5.11 Changing the keyboard language - F8

You can change the keyboard language from US English (QWERTY) **US** to German (QWERTZ) **DE** or French (AZERTI) **FR**.

To change the Language:

1. In the Setup window (F3), press **F8** until you reach the desired language.
2. Press **Esc**.

5.12 Changing the OSD display hotkey – F9

The default hotkey to display the OSD, is **Shift, Shift**. You can replace this hotkey with any of the following:

- Ctrl, Ctrl
- Ctrl, F11
- Ctrl, F12

With a choice of 4 different hotkeys, you can operate up to 4 OSDs from 1 KVM position. Each OSD needs a different display hotkey. This is useful when cascading systems.

To change the hotkey:

1. In the Setup window (F3), press **F9**. The hotkey changes from **Shift, Shift** to **Ctrl, Ctrl**. Continue pressing until you reach the required hotkey.
2. Press **Esc**. The new hotkey is set. From now on, use the new hotkey to display the OSD.

5.13 Exiting the OSD

When the OSD is displayed press **Esc** to exit the OSD and remain switched to the current computer.

6. Password protecting the OSD

The Supervisor OSD comes with an advanced password security system that contains 3 different security levels. Each security level has different access rights to the system.

These levels are as follows:

6.1 Administrator (Status A) - Highest

The Administrator can:

- Set and modify all Passwords and security profiles
- Fully access any computer
- Use all OSD functions

6.2 Supervisor (Status S) - Middle

The Supervisor can:

- Fully access any computer
- Access the following OSD functions only – **F1** Moving the Confirmation label. **F4** Scan and **F5** Tune.

6.3 User (Status U) – Lowest

There are 6 different Users in the ClassWork Junior system. Each User has a Profile that defines the access level to different computers. There are 3 different access levels. These are:

- Y – Full access to a particular computer
- V – Viewing access only, to a particular computer (No keyboard/mouse functionality)
- N – No access to a particular computer – A TIMEOUT label appears if access is attempted

The Administrator defines the desired access levels of each User Profile. This is done in the OSD Setup window. By default the User Profile settings are full access.

NOTE: There can only be 1 Administrator password, 1 Supervisor password, and 6 User passwords.

6.4 Enabling password protection

By default, password protection is disabled.

To enable password protection:

1. From the Supervisor OSD Select Computer window press F7. The Password box appears. See Figure 6-1.



Figure 6-1 The Enter Password box

2. Type the default password “admin”. (You can change this password when customizing the security system).
3. Press Enter. The Password window appears. See Figure 6-2.

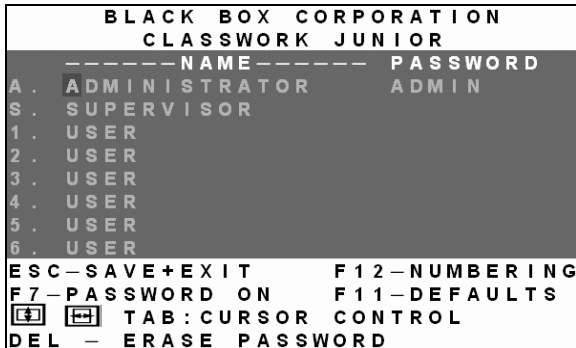


Figure 6-2 The Password window

4. Press **F7**. The Confirmation label appears. The password indication in the hotkey section of the OSD changes to **PASSWORD ON**.
5. Press ‘Y’ to confirm. Password protection is now enabled.
6. Press **Esc**.

6.5 Disabling password protection

To disable the password protection:

1. Enter the OSD Select Computer window with the Administrator's password.
2. Press **F7**. The Password window appears.
3. Press **F7** again to disable Password protection. The Confirmation label appears. The password indication in the hotkey section of the OSD changes to **PASSWORD OFF**.
4. Press 'Y' to confirm. Password protection is now disabled.
5. Press **Esc**.

6.6 Setting up a password

The Administrator sets up passwords for each User Profile in the Password window. See Figure 6-2. He can also edit the names to give each Profile a more identifiable name.

To set up a password:

1. From the OSD Select Computer window press **F7**. The Enter Password box appears.
2. Type the Administrator's password.
3. Press **Enter**. The Password window appears. See Figure 6-2. The first row marked **A** is for the Administrator name and password and the second row marked **S** is for the Supervisor name and password.

Note

Password characters are not case sensitive, and a space can be a password character. A space will appear as an asterisk.

To set up a password:

1. Navigate to the desired line number.
2. Type:
 - (i). A name in the **Name** column.
 - (ii). A password in the **Password** column – between 1 and 8 characters.
3. Press **Esc**.

6.7 Changing a password

The Administrator can change any name or password from the **Password** window.

To change a name or password:

1. Navigate to the desired line number.
2. Delete the text by pressing **Delete**.
3. Type the desired change.
4. Press **Esc**.

6.8 Setting the User profiles access level

Set the 6 User profiles access levels from the OSD Setup window (**F3**). See Figure 6-3. The 6 User Profiles correspond to the 6 Users in the Password window see Figure 6-2 above.

BLACK BOX CORPORATION											
CLASSWORK JUNIOR											
	SCN	DSP	KB	MS	OUT	1	2	3	4	5	6
1	030	030	PS	MS	600	Y	N	V	Y	Y	Y
2	030	030	PS	MS	999	N	N	N	N	N	N
3	030	030	U1	MS	030	Y	Y	N	Y	N	Y
4	030	030	PS	MS	150	Y	V	V	V	N	Y
5	030	030	PS	MS	030	V	Y	Y	Y	N	N
6	030	030	PS	MS	030	N	N	V	V	Y	N
7	030	030	PS	MS	030	N	N	Y	Y	N	N
8	030	030	U2	MS	030	Y	Y	N	N	Y	Y
F6 - AUTOSKIP : ON				ESC : SAVE + EXIT							
F8 - KB MODE : US				999 : CONT . DISP							
F9 - HOTKEY : SHIFT SHIFT											
[F4] [F5] TAB : CURSOR CONTROL											

The 6 User Profiles

Figure 6-3 The Setup window

To set the User Profiles access levels:

1. Navigate to the desired User Profile and computer.
2. Change the desired access level by pressing the Spacebar.
3. Repeat steps 1 and 2 for each User Profile and computer.
4. Press **Esc** to save the changes. When a User accesses the system with their password they see the access levels for each computer displayed on the OSD. See Figure 6-4.

BLACK BOX CORPORATION			
CLASSWORK JUNIOR			
SELECT		COMPUTER	--
1	INSTRUCTOR	COMPUTER	Y
2	COMPUTER	02	V
3	COMPUTER	03	N
4	COMPUTER	04	V
5	COMPUTER	05	Y
6	COMPUTER	06	N
7	COMPUTER	07	N
8	COMPUTER	08	V
ESC : EXIT		<input type="checkbox"/> SELECT	
ENTER : CONNECT		F1 : MOVE	LABEL
F4 : SCAN		F5 : TUNE	

Figure 6-4 User access levels

6.9 Accessing the OSD using a password

Once password protection is enabled, you can only access the OSD by entering the appropriate password.

The default Administrator’s password is “ADMIN”. The passwords of the other two security statuses are set by the Administrator.

To access the OSD:

1. Press **Shift, Shift**. The Enter Password box appears. See Figure 6-5.



Figure 6-5 The Enter Password box

2. Type in the appropriate password.
3. Press **Enter**.

6.10 Timeout

When password protection is activated you can automatically disable the Supervisor keyboard, mouse and screen after a preset time of non-use. You set the Timeout period in the OUT column of the Setup window (F3).

By default the OUT column is set to 999, which means that the Time Out function is disabled.

To set Timeout:

1. From the Select Computer window press **F3**. The Setup window appears.
2. Navigate with the Tab or Arrow keys to the OUT column of the desired computer.
3. Type the desired time span (minimum 030 seconds maximum 998 seconds).
(For the rest of the column downwards to take on the same change press **End, End**.)
4. Press **Esc**.

When Timeout is activated the keyboard and mouse are disabled and the monitor blacks out with a 'Timeout' label.



Figure 6-6 The TIMEOUT label

To re-enter the system:

Press **Shift, Shift**.

Type the password and press **Enter**. You re-enter the system.

7. Reverting to the default OSD + Auto numbering

7.1 Reverting to the default OSD settings - F11

The Administrator can reset all editing and configurations done in the different OSD windows, to the default factory settings.

Warning! This feature will erase all settings including computer names, passwords and security profiles.

To revert to the default OSD settings:

1. Enter the Password window (F7).
2. Press **F11**.
3. Press ‘Y’ to confirm. The OSD reverts to the default settings.

7.2 Auto numbering – F12

Perform Auto numbering when for example a new Remote card is added to the system. Auto numbering gives each ClassWork Junior Remote a sequential ID number. Auto numbering is done through the Supervisor OSD.

For Auto numbering to work properly **ALL** connected computers **MUST** be switched on

To perform Auto numbering:

1. From the OSD Select computer window Press **F7**. The Enter Password box appears. See Figure 7-1.



Figure 7-1 The Enter Password box

2. Type the Administrators password (default password is ADMIN) and press **Enter**. The Password window appears.
3. Press **F12** to activate Auto numbering. A Confirmation label appears.
4. Press **Y** to confirm. The process activates. Wait until the process is complete.
5. Press Esc to save and return to the Select Computer window. The Remote computers appear on the OSD. See Figure 7-2.

BLACK BOX CORPORATION	
CLASSWORK JUNIOR	
SELECT COMPUTER --	
1	INSTRUCTOR COMPUTER
2	COMPUTER 02
3	COMPUTER 03
4	COMPUTER 04
5	COMPUTER 05
6	COMPUTER 06
7	COMPUTER 07
8	COMPUTER 08
ESC:	EXIT
ENTER:	CONNECT
F4:	SCAN
F2:	EDIT
F5:	TUNE
F3:	SETUP
F1:	MOVE LABEL
F7:	PASSWORD
F10:	UPGRADE

Figure 7-2 The Select Computer window

Appendix A: Technical Specifications

ClassWork Junior system

Number of Remote units	63
System cable	Shielded CAT 5 FTP Cable
Maximum Distance	110m/360ft
Mouse Support	PS/2, IntelliMouse™, Logitech Wheelmouse
Operating Systems	DOS, Windows (3x, 9x, 2000, NT, ME, XP, Windows 2003 Server) Linux, UNIX, HP UNIX, QNX, SGI, FreeBSD, BeOS, Open VMS, NOVELL 3.12 – 6.0
Supervisor	On Screen Display (OSD)
Security	Password, multiple access Profiles
Scan	Automatically view all screens sequentially at adjustable time intervals of 5-995 seconds
Resolution	Up to 1600 x 1200 @ 75Hz
Operating Temp	0°C - 50° C
Maximum ambient air operating temperature	30°- 40° C
Storage Temp	-40° - 70° C

ClassWork Junior Supervisor

Cables / Connectors	VGA – HDD15 Key – MiniDin 6 Mouse – MiniDin 6 System Out – RJ45
Rack mountable	N/A
Dimensions	168 x 107mm
Weight	0.119 kg
Shipping weight	0.72 kg
Power consumption	5VDC 400mA100

ClassWork Junior Remotes

Cables / Connectors	VGA – HDD15 Keyboard – MiniDin6 Mouse – MiniDin6 System In/Out RJ45
Dimensions	131x102mm
Weight	150g
Shipping weight	520g
Power supply	From computer Keyboard port

RS232 Serial cable pin-out

RJ11 Service	Signal	DB9
1	N/C	-
2	TXD	2
3	RXD	3
4	N/C	-
5	GND	5
6	N/C	-

RS232 Terminal connector pin-out

Pin	Signal
1	N/C
2	RXD
3	TXD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	N/C



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