



Nordisk Synsupport AB

Informationsteknik för synskadade

User manual
&
Assembly instructions

IDEA-SCX

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1. Included part (standard system)

2. Assembly and connections

3. Functions

4. Technical data



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<u>Name</u>	<u>Included parts.</u> <u>Picture</u>
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XY-table



Cimb-unit



Control panel



Camera stand



Keypad



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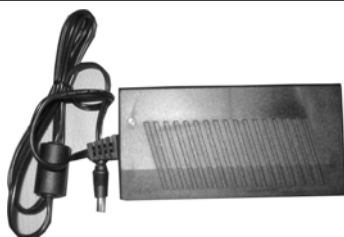
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Camera unit



Power supply



Power supply
cable



VGA cable



Allen keys





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Distance
camera



Joystick



Cable to
distance
camera





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Video Card

IDEA-SCX is not dependent on graphic card, resolution or frequency, but in split screen mode, a setting on 60 Hz is recommended.

Following resolutions / frequencies can be set:

640x480	-	60, 72, 75, 85, 90 Hz
800x600	-	56, 60, 72, 75, 85, 90 Hz
1024x768	-	60, 70, 75, 85 Hz
1152x864	-	60, 75 Hz
1280x960	-	60, 75, 85 Hz
1280x1024	-	60 Hz

Divergences from settings above can occur, depending on which video card the computer is provided with.

Camera Stand Assembly

This next section describes how to assemble the stand camera.

Place the x/y-table and camera base on a table (fig.1) and place the camera stand (fig.2) over the two pins in the x/y-base (fig.3).



Fig1



Fig2

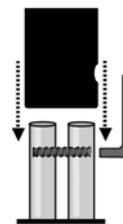


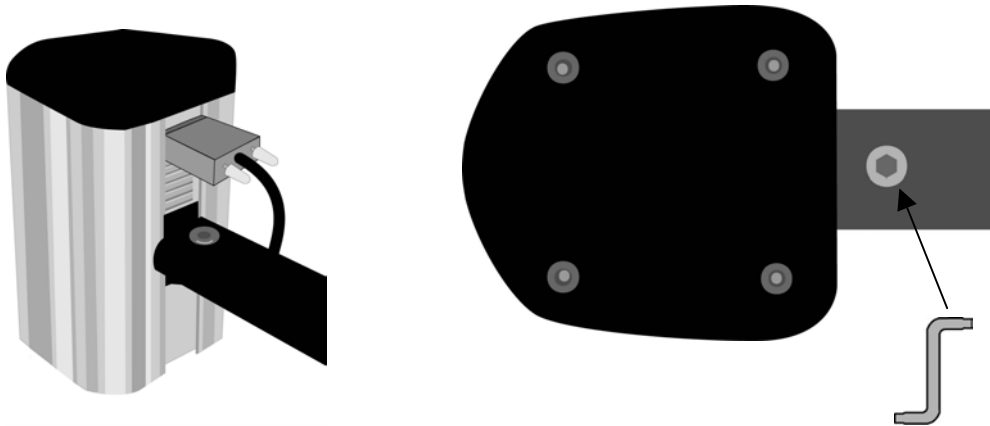
Fig3

The stand will be able to support itself, however a fixing screw is used to give the stand complete stability. Tighten the small grub screw, which is now inside the stand, using one of three 'Allen' keys provided (fig.3). The aim is to tighten the screw so that it forces the two pins apart in the stand. This will provide the stability needed for the camera.



Fixing the Camera

The camera can now be safely fixed to the stand. A special bracket has been designed to allow the easy fixing of the camera. A groove on the camera will easily slide over the aluminium extrusion on the stand. Before securing this with the Allen screw, you must ensure that the connector from the camera stand can easily be connected to the camera. The securing screw can now be tightened with the other provided Allen key (S-key), The 9 pin 'D' connector can also be connected



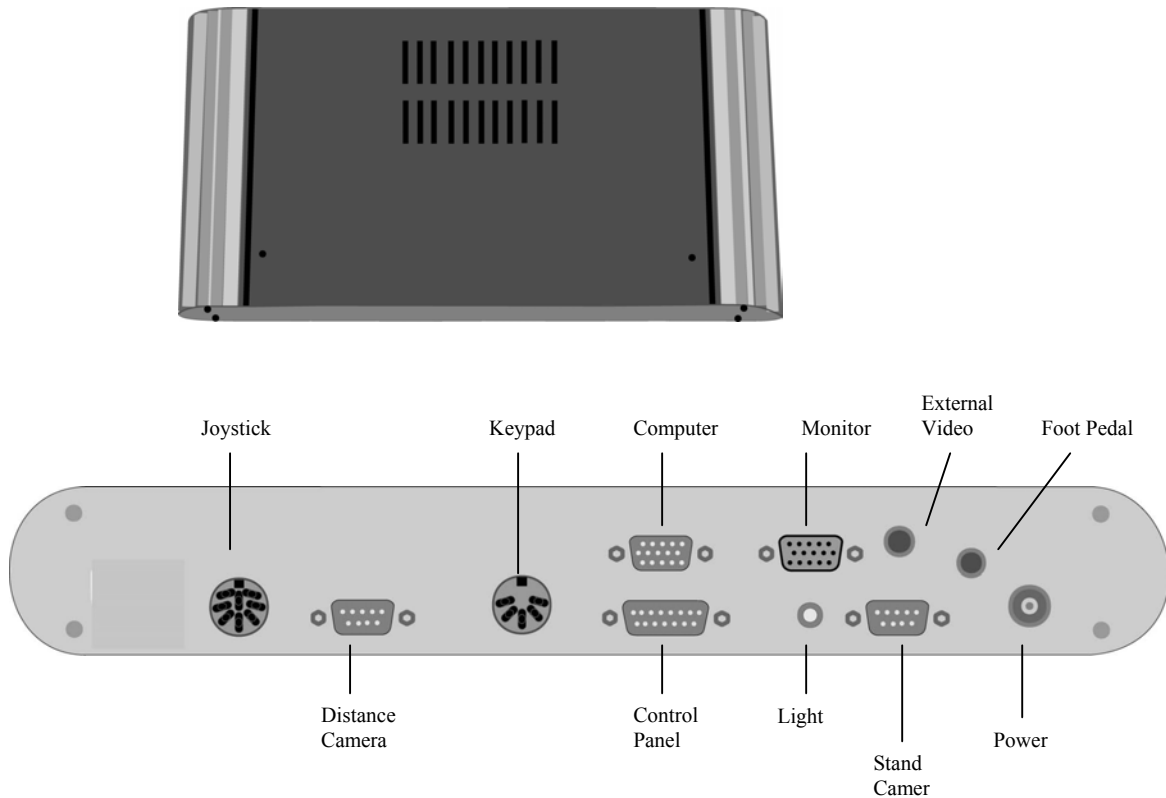


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The CIMB Box

The CIMB box can be positioned almost anywhere but it is important not to cover the "air holes". For convenience there is, stated below, a diagram of the connectors



Connecting the Camera to the CIMB

The two cables coming from the camera stand can now be connected to the CIMB. The thinner of the two cables has a jack plug which is responsible for providing low voltage for the lamp on the stand. This must be connected to the socket marked 'Light'. The other carries the camera image to the CIMB box ready for splitting and converting. This must be connected to the socket marked 'Stand camera'.

Connecting the Control panel to the CIMB

There is only one cable coming from the control panel and this shall be plugged into the socket marked 'Control panel'



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Connecting the Key Pad

The keypad has a standard 5 pin keyboard that fits into the socket marked 'keypad' on the CIMB-box

Connecting External Video Source

A VCR, TV or camera can be connected to the 'External Video' connector . The CIMB automatically detects the video and adds the fourth option to the 'PC' key on the keypad, The external source must be on, before the camera system is powered on , otherwise the system will not recognize a external source.

Connecting the Monitor

The VGA monitor can now be placed at a suitable location, for example on a monitor stand or a terminal arm, and the cable plugged into the socket 'Monitor' on the CIMB-box.

Connecting the PC

The VGA cable provided with your IDEA system is used to connect the VGA card in your PC to the CIMB-box. (Connector marked 'Computer' on the CIMB-box.)

Connecting Distance camera .

First place the distance camera to a table and attach it, connect the cable from the pole and to the cimb box , marked distance camera.

Connect the joystick cable to the cimb box marked joystick.



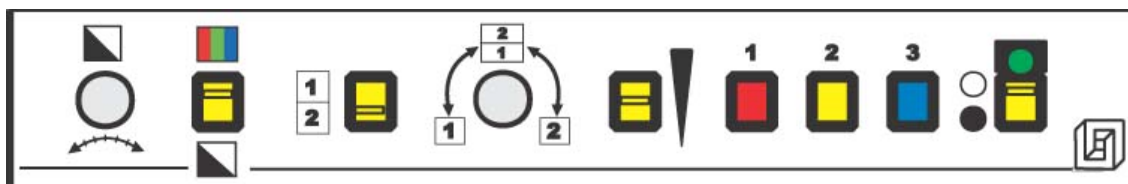
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Your IDEA Stand System offers the very best in screen magnification and in order to take advantage of its extensive features we recommend that you take a few minutes to read through this manual. You will then be able to confidently use all of the available features.

Control Panel

The control panel consists of a number of buttons, switches and knobs, which all, except for one, are positioned on the front side. Below is a diagram of the control panel with all the features appearing as they do on the panel itself..



As the label suggests this button simply switches the whole system on and off except for the monitor and the computer. These are done independently.



These buttons allow the selection of 3 user defined magnification levels. The factory defaults can be as follows:

Preset 1: 1,5x (on a 17" monitor). A low magnification for an overview of the material under the stand camera. This is very useful for orientating yourself with a new document or for viewing diagrams and photographs.



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Preset 2: 7x. This is for many people the ideal magnification level for writing. Very often detail is not necessary when writing as the spelling and content do not need to be read. With 7x magnification you can easily see if the text is in the correct position on the page.

Preset 3: 18x. This is the average magnification for reading. Now that you are more familiar with the control panel we can try changing the 3 preset magnifications, assuming that the factory defaults are not suitable. If you have already tried the preset buttons, you will have seen how easily they work. Programming new magnifications is just as easy.



Using the zoom button on the control panel, you must first select the magnification level you wish to set. When you have the correct magnification, decide which of the 3 buttons you wish to define.

Press the button until a 'beep' sounds, the value is now stored.

This programming works on each of the 3 preset buttons and can be changed as often as you like.



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The IDEA cameras are equipped with a 216x zoom lens which is electronically controlled with the 'Zoom' switch. For example you can select any magnification level between 1.5x and 324x on a 17" monitor. This range will reduce on a smaller monitor and increase on a larger one. Simply push the switch upwards to increase the magnification and as you would expect downwards to reduce it.



Colour/Black/White.) This switches the selected camera from full colour to black/white and vice versa.

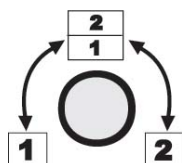


(Negative/Positive.) This rotary switch works only when in the B/W mode and allows you to select a black on white or a white on black picture. Between these two options are grey scale positions. These are ideal when viewing black and white photos.

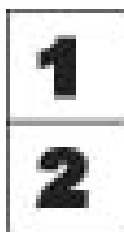


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This rotary knob controls the position of the horizontal dividing line when mixing the two camera images.



This selects which of the two cameras will be controlled by the panel. If camera 1 is selected the preset buttons, zoom and other switches will only have an effect on the stand camera. If the switch is then set to camera 2 the cameras switches and buttons will now control the distance camera.



Controls the zoom on the distance camera.

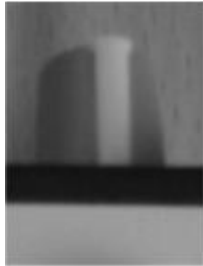


3 preset button to be used as save zoom and position on the distance camera or recall the zoom and position. To store a value, place the camera in the position you want and zoom to desired magnification, then press one of the button and hold down until a 'Beep' Sounds. To restore a value just press down and release one of the buttons

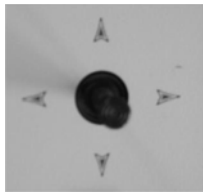


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Controls the speed up/Down and Left/right of the distance camera.



Controls the Up / Down , Left / right moments of the distance camera.

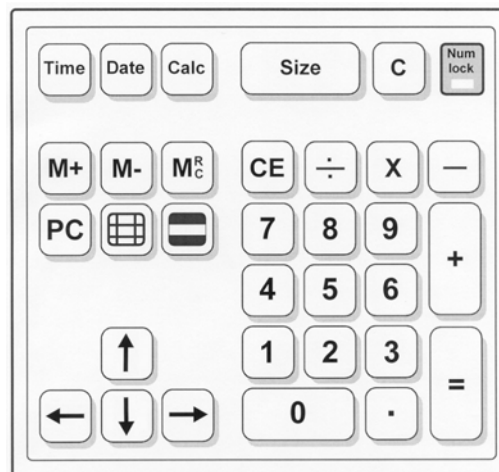


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The Keypad

Whilst the panel controls the camera, the keypad is responsible for the mixing of images, artificial colours and other features. The keypad looks a little like the numeric section of a normal computer keyboard. There are arrow keys and a set of number keys. The other keys are specially programmed for the IDEA systems. It is therefore important to look at this keypad and examine the different keys.



Description of the keypad and its features:

Time: Displays the time on the screen as a digital clock. Simply press this key again to turn it off.

Date: Displays the date on the screen with day month and year. Like the Time key, pressing the key again switches the display off.

Calc: Activates the calculator and displays it on the screen. This feature offers basic features such as multiplication, division, addition and subtraction. These features will help when working with bills and bank statements without having to switch on the computer. Simply press this key again to turn it off.

The position of the Time, Date and Calc on the screen can be altered. You must first select full-screen camera and switch the feature on. The arrow keys will then allow you to move the display to a more convenient position.




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Size: The size of the letters and numbers can be changed. The ‘Size’ key cycles through four different character sizes.

PC: Cycles through all the available screen modes. These are:

- Full screen computer
- Full screen camera
- Split screen computer and camera. (The camera image shown on the screen is the camera which is chosen on the control panel. (camera 1 or camera 2.)

It is possible to switch from a horizontal to a vertical split with the  key. The position of the dividing line can be changed with the \updownarrow keys in the horizontal split and the \leftrightarrow keys in the vertical split. This can easily be reset to the middle position by pressing the ‘C’ key. You must make sure the calculator is not switched on or otherwise the ‘C’ key does not work.

There is yet another feature in the split screen mode. By pressing the  key you can swap the position of the camera and PC image.

Reference lines : This key activates the reference lines. Two horizontal lines appear on the screen over the camera picture. These can be used to highlight a line of text or can be used as a writing aid. Press the key again to switch to vertical lines. This setting is ideal for column text and for figures. Press the key again to switch the lines off.



Curtaings: This key activates the curtains, which blank out the top and bottom of the screen. This helps orientation by covering other lines of text on the screen which can be distracting. Pressing the key again blanks the left and right of the screen.



The reference lines and curtains are limited unless you are able to alter the separation and position of these features. The arrow keys can do this. In the horizontal mode the \updownarrow keys move the curtains or lines up and down the screen while the \leftrightarrow keys change the width of the gaps.

The vertical Lines or Curtains can be moved sideways with the \leftrightarrow keys. The \updownarrow keys change the width of the gaps.

To restore the settings (reference lines and curtains) to one third and two thirds, press the ‘C’ key. You must make sure the calculator is not switched on or otherwise the ‘C’ key does not work.



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The Menu

There are several functions which can be adjusted with the IDEA on-screen menu. This is activated by holding down the '=' key for 2-3 seconds whilst in full screen camera mode or until the menu appears.

You will see a menu with 8 options, the first of which will be flashing. To select an option use the ↑ and ↓ until the required option flashes. Now it is possible to change the setting by using the ← and → keys. When the desired setting is shown move to the next option that needs to be changed or press '=' to save the new settings and to leave the menu.

Below is a list of the options that can be changed in the menu.

Language You can select the language for the on-screen calendar display.

12/24 Hour Clock This option allows you select whether the clock is displayed in a 12 or 24 hour format. 6:00 pm or 18:00.

Decimal/Point Some countries use a comma rather than a period for the decimal point. Here you can select the one that your country uses.

Display You can choose whether or not the symbols +, -, x, and / are displayed on the calculator.

False You can choose to display text in artificial colours. There are various popular colour combinations, including black and white. As you toggle through the different combinations the menu will reflect the selected option. This should help you choose your ideal combination. The NP (Negative/Positive image.) knob on the control panel allows you to reverse this colour combination.

Lights Adjusts the brightness of the image. When you do the adjustment, the camera image is displayed on the screen. By using the ç and è keys you can reduce or increase the brightness of the camera picture.

Colour You are able to adjust the level of colour saturation on the screen. The camera picture is displayed on the screen whilst you make the adjustments. By using the ← and → keys you can increase or decrease the colour intensity in the camera picture.

VGA-Bright You are able to get extra high luminance by choosing the alternative 'VGA-Bright'. Back to standard luminance: choose 'VGA Standard'. You can find these alternatives under 'Display'. Change the setting by using the ← and → key



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Technical data IDEA-SCX

Wight :	gross : 16 kg	Net : 15 kg
Dimensions in transport :	box 1: 480x230x470 mm	
Magnification area reading camera	1.5 – 324 x med 17.7" effective viewing area	
Zoom Reading camera:	216x	
Distance camera:	40x	
Max Contrast:	Depending of monitor	
Max Luminance:	Depending of monitor	
Radioation:	TCO 95 / 99, depending of monitor 300 mm, can be adjusted	
Working distance:	at max magnification 70mm	
Focus area :	3000 lux	
Light on object:	Philips, 12v, 20w halogen, 60	
Bulb:	100-240v	
Power:	Max 50w	
Power :	640x480 60,72,75,85,90 Hz	
Resolution / frequency when splitting with pc	800x600	56,60,72,75,85,90 Hz
	1024x768	60,70,75,85 Hz
	1152x864	60,75 Hz
	1280x960	60,75,85 Hz
	1280x1024	60 Hz