



LearnMate Standalone Content



Getting Started

© 2004 Intelitek www.intelitek.com

User Manual

Catalog # 200018 Rev. C July 2005









Copyright ©2005 intelitek Inc. LEARNMATE V3 STANDALONE USER MANUAL

Catalog # 200018 Rev. C July 2005

Every effort has been made to make this book as complete and accurate as possible. However, no warranty of suitability, purpose, or fitness is made or implied. intelitek is not liable or responsible to any person or entity for loss or damage in connection with or stemming from the use of the application and/or the information contained in this publication.

intelitek bears no responsibility for errors that may appear in this publication and retains the right to make changes to the application and manual without prior notice.

INTELITEK INC. 444 East Industrial Park Drive Manchester NH 03109-5315 Tel: (603) 625-8600 Fax: (603) 625-2137 Website: www.intelitek.com









Table of Contents

Required Utilities	7
Internet Explorer 6.0 or Higher	8
LM Agent and Required Software	
Setting Active-X Settings	
Installing Required Software	
LearnMate Utility Checks	
Utility Check	
Ongoing System Check	
Standalone Installation	
Installing the LM Content Viewer	16
Running Standalone Content Modules	
Installing Standalone Content Modules	23
Standalone Software License	
LearnMate Content Quicktour	
Navigating a Module	30
Moving from Page to Page	
Moving from Page to Page Using Links Within the Text	
Moving from Page to Page Using Links Within the Text Exploring the LearnMate Toolbox	30 30 31 31
Moving from Page to Page Using Links Within the Text Exploring the LearnMate Toolbox Audio Narration	30 30 31 31 31 31
Moving from Page to Page Using Links Within the Text Exploring the LearnMate Toolbox Audio Narration Competencies	30 30 31 31 31 31 31 32
Moving from Page to Page Using Links Within the Text Exploring the LearnMate Toolbox Audio Narration Competencies Hardware Safety Instructions	30 30 31 31 31 31 32 32
Moving from Page to Page Using Links Within the Text Exploring the LearnMate Toolbox Audio Narration Competencies Hardware Safety Instructions Glossary	30 30 31 31 31 31 32 32 32 32
Moving from Page to Page Using Links Within the Text Exploring the LearnMate Toolbox Audio Narration Competencies Hardware Safety Instructions Glossary Notes	30 30 31 31 31 32 32 32 32 33
Moving from Page to Page Using Links Within the Text Exploring the LearnMate Toolbox Audio Narration Competencies Hardware Safety Instructions Glossary Notes Links Library	30 30 31 31 31 32 32 32 32 33 33 34
Moving from Page to Page Using Links Within the Text Exploring the LearnMate Toolbox Audio Narration Competencies Hardware Safety Instructions Glossary Notes Links Library Post-Test.	30 30 31 31 31 32 32 32 32 32 32 33 33 34 34
Moving from Page to Page Using Links Within the Text Exploring the LearnMate Toolbox Audio Narration Competencies Hardware Safety Instructions Glossary Notes Links Library Post-Test Instructing Students about the Post-Test	30 30 31 31 31 32 32 32 32 32 33 33 34 34 34
Moving from Page to Page Using Links Within the Text Exploring the LearnMate Toolbox Audio Narration Competencies Hardware Safety Instructions Glossary Notes Links Library Post-Test Instructing Students about the Post-Test Taking the Post-Test	30 30 31 31 31 32 32 32 32 32 32 32 32 33 34 34 34 34 35
Moving from Page to Page Using Links Within the Text Exploring the LearnMate Toolbox Audio Narration Competencies Hardware Safety Instructions Glossary Notes Links Library Post-Test Instructing Students about the Post-Test Taking the Post-Test Reviewing Post-test Results	30 30 31 31 31 32 32 32 32 32 32 32 32 32 32 32 32 32









Required System Configuration

LearnMate standalone content modules are displayed using the LM Content Viewer. The following system configuration is required to install and run the LM Content Viewer:

- Windows 98, 2000 or XP operating system is required to run the LM Content Viewer.
- 10MB or more free space must be available on your hard disk to install the LM Content Viewer.

Once the LM Content Viewer is installed on your computer, you can run standalone content directly from a LearnMate Standalone CD. Standalone content modules can also be installed on your hard disk, enabling you to study the content module without the original LearnMate Standalone CD. Approximately 400MB of free space must be available on your hard disk for each standalone content module you install.

Required Utilities

LearnMate content modules utilize a variety of multimedia tools to enhance the learning experience. To prepare your computer for LearnMate content modules, you need to ensure that the following applications are installed:

- Internet Explorer 6.0 or Higher, page 8.
- LM Agent and Required Software, page 10.
- Macromedia Flash Player 6.0 or Higher, page 12. LearnMate content modules are rich in interactive Flash animations that enrich the learning experience by giving you the opportunity to perform virtual hands-on experiments. Install instructions are found in
- ◆ Java Virtual Machine 1.5 or Higher, page 12. Test questions are provided throughout LearnMate content modules to help you measure knowledge of the materials taught. These questions incorporate Java technology.
- Acrobat Reader, page 12. Acrobat Reader is used to read all documentation provided with LearnMate products.





Internet Explorer 6.0 or Higher

LearnMate content modules are optimally viewed using Internet Explorer version 6.0 or higher. Complete the following steps to check the version of Internet Explorer currently installed on your computer, and to download and install the latest version if necessary.

To install or update Internet Explorer:

- 1. Open Internet Explorer.
- 2. From the *Help* menu, select **About Internet Explorer**. The *About Internet Explorer* window is displayed, as shown below.



- 3. In the top row of the information displayed, verify that you have version 6.0 or higher installed.
 - If you have Internet Explorer version 6.0 or higher installed, proceed to the next section.
 - If you have a previous version of Internet Explorer installed, complete the following steps to download and install the latest available version.





4. In your Internet Explorer address bar, link to the Microsoft website by entering <u>http://www.microsoft.com/downloads/search.aspx?displaylang=en</u>. The main Microsoft Download Center page is displayed, as shown below.



5. In the *Most Popular Downloads* area at the top of the page, click **Internet Explorer** and follow all installation instructions.

Note: If this link is not displayed in the Most Popular Downloads area, click **Internet** in the *Download Categories* area on the left of the page. A link to the latest version of Internet Explorer will be displayed.





LM Agent and Required Software

LearnMate content modules work in conjunction with intelitek's 3D simulation software to provide you with virtual hands-on learning experiences. When installed on your computer, the required simulation software can be launched and controlled directly from the LearnMate environment using the LM Agent.

The LM Agent is installed on your computer along with the standalone viewer. The LM Agent runs in the background until required by links in the modules. The LM Agent utilizes Active-X technology. To ensure that you are able to install and run the agent successfully, follow the procedure below to ensure that IE supports Active-X components.

Setting Active-X Settings

To set Internet Explorer Active-X settings:

- 1. Open Internet Explorer.
- 2. From the Tools menu, select Options. The Internet Options dialog box is displayed.
- 3. Select the **Security** tab.



4. In the "Security level for this zone" section of the tab, set the security setting to **Default** Level.





Installing Required Software

To install required software:

If you are installing a LearnMate content module from one of the fields of study listed below, the LM Agent will prompt you to install the required software the first time it is required in the module. Proper installation of these applications will ensure that they work seamlessly from within the content module.

Note that the LM Agent and other required software need only be installed once on each computer. If the LM Agent is already installed on your computer, you do not need to reinstall it for each new module.

1. The first time you click a link to launch software, a *LearnMate Software Check* window similar to the window shown below will be displayed. The example shown here is for CNC Router; the exact window displayed will be customized to the required software application.

Lear	nmate Check Wizard]	×
	Learnmate So	ftware Cł	neck	
	CNC Router (Virtual)			
	The following software is required for	this module:		
	Application Name	Required Version	Current Version	
	Benchtop Router: CNCMotion or CNCBase	3.3.3.3	Not Installed	
		Next> C	ancel Help	





2. Follow the instructions in the *LearnMate Software Check* window to install the required software.

Note: Printable copies of the installation instructions are available by clicking **Help** in the *LearnMate Software Check* window, as shown below.

Lear	nmate Check Wizard			×
	Learnmate So	ftware Cł	neck	
	CNC Router (Virtual)	this module.		
	The following software is required for	this module:		
	Application Name	Required Version	Current Version	
	Benchtop Router: CNCMotion or CNCBase	3.3.3.3	Not Installed	
		Click here for instructions	or installation	
		Next	ancel Help	

3. After the software has installed correctly, click the link to launch the software. The required software application will be displayed.

LearnMate Utility Checks

LearnMate offers several methods for both checking whether applications are installed, as well as for enabling you to easily install these applications.

- 1. **Utility Check Page.** The Utility Check hyperlink on the Standalone Menu enables you to quickly test whether the required applications are installed on your PC. From this page, you can install missing applications from either the Web or the Standalone CD.
- 2. Active System Check: Anytime LearnMate requires an external plug-in to display an object (e.g., Flash animation, Java applet, PDF file), LearnMate checks to ensure that the plug-in is installed on your PC. If the plug-in is not installed, you are prompted to do so.





Utility Check

To run the Utility Check:

The Utility Check allows you to test for applications required by LearnMate content. If the applications are not installed, the Utility Check page enables you to either download the application from the Internet or install the application from the Standalone Module CD.

- 1. Run the LM Content Viewer. The Available Modules page is displayed.
- 2. Click the **Utility Check** hyperlink in the upper right-hand corner of the page. The *Utility Check* window is displayed.

Modules se	election			X
Learn	Mate	Standalone M	odules	
LearnMate whether th column, ins click the Te the options	Content require e required utiliti tall the approprist icon. If a PDF below.	s several utilities in order to run ies are installed on your PC. If an riate application using the options file does not open in a separate	properly. This page enables you to qu object does not appear in the Java ar below. To test for the Acrobat Reade window, install the appropriate applic	Back ⊠ ickly test nd Flash Test r application, ation using
Application	Check	- / /		
Java	$\begin{bmatrix} 10 & 2 \\ 9 & 3 \\ 8 & 7 & 5 \end{bmatrix}$	Java™ Virtual Machine.	Java™ Virtual Machine.	
PDF		Acrobat Reader™.	Acrobat Reader™.	
Flash	1	Macromedia Flash™.	Macromedia Flash™.	

3. To test for Macromedia Flash Player:

- An animation should be playing in the Test column. If no animation is displayed, click the hyperlink in the Downloads column to install from the Internet.
- Alternately, click the hyperlink in the Install from CD column to install from the LearnMate Module CD.





4. To test for Java:

- A clock should be displayed in the Test column; its second hand should be moving. If the clock is not displayed, click the hyperlink in the Downloads column to install from the Internet.
- Alternately, click the hyperlink in the Install from CD column to install from the LearnMate Module CD.
- 5. To test for Acrobat Reader:
 - Click the icon in the Test column. A PDF file should open in a separate browser window.
 - If the file does not open, click the hyperlink in the Downloads column to install from the Internet.
 - Alternately, click the hyperlink in the Install from CD column to install from the LearnMate Module CD.

Ongoing System Check

1. Anytime that LearnMate requires an external plug-in to display an object (e.g., Flash animation, Java applet, PDF file), LearnMate checks to ensure that the plug-in is installed on your PC. If the plug-in is not installed, you are prompted to do so, as shown below.

Note: The screens displayed were captured on a PC running Windows XP Service Pack 2. The screens on your PC will vary, depending on the Operating System and Service Pack installed.







2. Click on the message shaded in yellow at the top of the screen. A submenu is displayed, as shown below.

Note: The example shown is specific to the installation of Java and will vary per missing application.

👏 This site might require the following ActiveX control: 'Java Plug-in 1.5' from 'Sun Microsystems, Inc.'. Click h	Install ActiveV Central	×
	What's the Risk?	
	Information Bar Help	

3. Select **Install ActiveX Control** from the submenu. Internet Explorer prompts you to install the application. The graphic shown below will vary depending on the application being installed.

Internet Explorer - Security Warning				
Do you	want to install this software?			
	Name: <u>Java Plug-in 1.5</u>			
	Publisher: Sun Microsystems, Inc.			
💙 Mo	re options Install Don't Install			
1	While files from the Internet can be useful, this file type can potentially harm your computer. Only install software from publishers you trust. <u>What's the risk?</u>			

- 4. Click Install. The Installer begins the installation process.
- 5. Select all defaults during the installation process. Once the installation process is complete, the object should display correctly.





Standalone Installation

LearnMate standalone content modules are displayed using the LearnMate standalone viewer. Once the viewer is installed on your computer, you can view content modules directly from a standalone CD. You can also install content modules on your hard disk, after which you will be able to view the modules without the standalone CD.

Note: These installation instructions are available from the LearnMate Standalone CD. Adobe Acrobat PDF reader must be installed to view these installation instructions. In the Standalone Menu that is displayed automatically each time you insert a LearnMate Standalone CD into your CD drive, click the Help Me! button to view instructions.

Installing the LM Content Viewer

The LearnMate standalone viewer is an Internet Explorer based application through which you can run LearnMate standalone content modules. The LM Content Viewer must be installed once on your computer. After installing the LM Content Viewer, you will be able to view modules from all LearnMate Standalone CDs or from your hard disk.

To install the LM Content Viewer:

1. Insert the LearnMate Standalone CD into your CD drive. The Standalone Menu, shown below, is displayed automatically.

Note: If the Standalone Menu is not displayed automatically, open My Computer and browse to your CD drive. Then double-click the CD drive to display the Standalone Menu.







2. Select **Standalone Setup: Install or update components required to run standalone modules** and click **Go**. The InstallShield Wizard starts, and after a few moments, the Welcome screen is displayed, as shown below.



3. Click Next. The License Agreement screen is displayed, as shown below.







4. In the *License Agreement* screen, carefully read the terms of the license agreement and then select the **I accept the terms of the license agreement** radio button before clicking **Next**.

LM Content Viewer - Instal	IShield Wizard	
License Agreement Please read the following licer	nse agreement carefully.	
	LICENSE AGREEMENT This document is an agreement between you, the LICENSEE, and Intelitek, Inc (hereinafter "Intelitek") BY INSTALLING, OPENING, OR USING THIS SOFTWARE YOU ARE AGREEING TO BECOME BOUND BY THE TERMS OF THIS SOFTWARE YOU ARE AGREEING TO BECOME BOUND BY THE TERMS OF THIS AGREEMENT, WHICH INCLUDES THIS SOFTWARE LICENSE If you do not agree to the terms of this agreement, promptly return the package to the place where you obtained them. DEFINITIONS Licensee: The current registered user of this product, either an individual or entity. Diginal Licensee: The registered user of this product prior to any license transfer Transferee: The registered user of this product after a license transfer. I gocept the terms of the license agreement I go not accept the terms of the license agreement	A line of the second se
InstallShield	< <u>B</u> ack <u>N</u> ext > Car	ncel

5. The Customer Information screen is displayed, as shown below. Enter your Name, Company and CD Key. The CD Key can be found on the CD jewel case. If you do not have a CD Key, enter the word *evaluation* in the CD Key field to generate a 30-day evaluation license. The installation procedure generates a PC-specific code, which can be found in the Registration dialog box. You must send Intelitek both the CD key and the PC-specific code to receive the unlock code required to fully license the product. For more information, see *Standalone Software License*, page 27.

LM Content Viewer - InstallS	hield Wizard		×
Customer Information			
	Please ente with the inst	r your name, the name of the company for whom you work and the CD key supplied allation CD, or enter "evaluation".	
	Name	John Doe	
	Company	Fairmont High School	
	CD Key	evaluation	
InstallShield		< <u>₿</u> ack <u>N</u> ext > Cancel	





6. In the *Choose Destination Location* screen, select the folder in which you want to install the module. It is recommended that you accept the default folder. Click **Next**.



7. The Ready to Install the Program screen is displayed. Click **Install** to begin the installation process. You can monitor the progress of the installation in the Setup Status screen.







8. Once the installation is complete, the *InstallShield Wizard Complete* screen is displayed. Click **Finish** to close the wizard and return to the Standalone Menu.

LM Content Viewer - InstallShield Wizard			
	InstallShield Wizard Complete The InstallShield Wizard has successfully installed LM Content Viewer. Click Finish to exit the wizard.		
InstallShield	Cancel		





Running Standalone Content Modules

Once the LM Content Viewer is installed on your computer, you can begin learning LearnMate content modules. Content can be run directly from a standalone CD, as described below. If content modules have been installed on your hard disk, as described in *Installing Standalone Content Modules*, page 23, they can also be run from the hard disk without the original CD.

To run a standalone content module from CD:

1. Insert the LearnMate Standalone CD into your CD drive. The Standalone Menu, shown below, is displayed automatically.

📀 Standalone Menu	
LearnMate	
Welcome to the standalone module setup. Select one of the options l experience. C Standalone Setup: Install or update components required to run :	below to begin your learning standalone modules.
Run Module: Launch a standalone module from your CD or harder	drive
C Install Module: Install the module on this CD onto your harddrive.	
	Go Help Mel

Note: If the Standalone Menu is not displayed automatically, open My Computer and browse to your CD drive, then double-click the CD drive to display the Standalone Menu.





2. The window shown below is displayed, enabling you to select the module you wish to run. Click the Launch icon 💟 to run the module.

arnMate			100	
	Standalone	Modules	1	C manage
		Utility	Check 🔳 Help 🗳	Register 🖬 Close
Launch Or Uninstall M	odules			
Module		Location	Version	
CAM Turning with spec	traCAM Turning	CD	1.0.0.1	
CAM Turning with spe	traCAM Turning	HardDrive	1.0.0.1	

The Viewer opens, displaying the selected module. Proceed to *LearnMate Content Quicktour*, page 29, for a guided tour through LearnMate's interactive features.

CAM Turning with spectraCAM Turning	
Activity 1: Getting Started	
In this module, you will learn how to use spectraCAD software to create a part design drawing and convert it into a computer file for automated machining of the part on a CNC lathe. In this first activity, you will be introduced to the basic concepts of CAD (Computer Aided Design), CAM (Computer Aided Manufacturing) and CNC (Computer Numerical Control). You will learn what a lathe is and its basic machining capabilities.	Rectared to see and the set of th
I he following topics are included in this activity:	Select writes to Capy HH RETURN to Acce 0 Selected SLTST PST 059.4M
 Overview of CAD, CAM and CNC 	
 How a Lathe Works 	
Lathe Operations Supported by spectraCAM () Prev. () Index () Next	
🕩 😵 🛦 🗫 🔮 💽	





Installing Standalone Content Modules

Standalone content modules can be installed on your hard disk, enabling you to study the content module without the original Standalone CD. Multiple modules can be installed on a single PC.

To install a standalone content module to your hard disk:

- 1. Insert the LearnMate Standalone CD into your CD drive. The *Standalone Menu*, shown below, is displayed automatically.
- 2. Select **Install Now: Install the module on this CD onto your hard disk** and click **Go**. The *Welcome* screen of the Standalone Module InstallShield Wizard is displayed, as shown.







3. In the *Welcome* screen, click **Next**. The *Choose Destination Location* screen is displayed, as shown below.



4. In the *Choose Destination Location* screen, select the folder in which you want to install the module. It is recommended that you accept the default folder. Click **Next**. The *Ready to Install the Program* screen is displayed, as shown below.

Module Installer - InstallShield Wizard		
CAM Turning with spectraCA	4 Turning	
	Click Install to begin the installation. If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.	
InstallShield	< Back Install Cancel	





5. In the *Ready to Install the Program* screen, click **Install**. You can monitor the progress of the installation in the Setup Status screen, as shown below. Note that depending on the size of the module and your PC speed, installing the module may take up to 15 minutes.



When the installation is complete, the InstallShield Wizard Complete screen is displayed.







6. In the InstallShield Wizard Complete screen, click Finish to close the wizard.

As the module is now installed on your computer, you can view the module at any time, without the need for the LearnMate Standalone CD. See *Running Standalone Content Modules*, page 21, for instructions on running standalone content modules directly from your CD.

To run a standalone content module from your hard disk:

1. Double-click the LM Content Viewer icon on your desktop



OR

Select Start > All Programs > LM Content Viewer > LM Content Viewer.

The window shown below is displayed, enabling you to select the module you wish to run. The Location column enables you to decide from which location you wish to run the module.

arnMate			12	2
	Standalone Mod	ules	1	
		Utility (Check 🗉 Help 🗳	Register 🖬 Close
Launch Or Uninstall Mo	odules			
Module		Location	Version	10-11
CAM Turning with spec	raCAM Turning	CD	1.0.0.1	D
CAM Turning with speci	raCAM Turning	HardDrive	1.0.0.1	
CAN running with spec				
CAN running with spec				
CAP running with spec				

2. Click the Launch icon next to the module you wish to study.

The viewer opens, displaying the selected module. Proceed to *LearnMate Content Quicktour*, page 29, for a guided tour through LearnMate's interactive features.





Standalone Software License

Standalone modules are license-protected. The web-based licensing procedure requires the following three steps:

- 1. Install the software from the CD.
- 2. Send the CD key and the PC-specific code to Intelitek.
- 3. Upon receipt of the unlock code, enter it in the Registration dialog box.

For more information about the software license provided with your Standalone CD, go to <u>http://www.intelitek.com/support/software-licenses/index.html</u>.

To register your software and receive an unlock code:

- During the software installation, you will be prompted to enter the CD key. This number is found on the CD case. (Make sure to keep the CD key in a safe place.)
- The installation procedure generates a PC-specific code. This code is found in the Registration dialog box.

To receive the unlock code for the software you installed, you must send Intelitek both the CD key and the PC-specific code in the Registration dialog box. Click the **Registration** hyperlink in the Standalone Menu to access the Registration dialog box.

The Registration dialog box provides several methods for obtaining the unlock code.

- Automatic from Intelitek Website. If Internet access is available on the PC, do the following: In the Registration dialog box, select Get Unlock Code and select From Intelitek.com. The software will automatically connect to Intelitek's website. The unlock code will automatically be installed on your PC and you will see a message that the software is now licensed.
- Email (uses Intelitek's software licensing service). In the Registration dialog box, select Get Unlock Code and select By Email.
 - If email is available on the PC, a new email message containing all required details will open. Fill in the requested user information (optional), and click Send. The licensing service will send back an unlock code. Enter the unlock code in the Registration dialog box and select Unlock.
 - If you have email service, but not on the same computer on which the software is installed, a Notepad window containing all required details will open. Fill in the requested user information (optional), and then transfer the text/file to your email program.

Send to: <u>info@intelitek.com</u> Subject line: Intelitek Software License





- To ensure successful processing, use this exact subject line and do not edit the automatically generated text in the message. You may add text and comments to the end of the message. Once you receive the unlock code, enter it in the Registration dialog box and select Unlock.
- Fax or Phone: If you do not have Internet or Email service, select Get Unlock Code and select By Fax or Phone. A Notepad window containing all required details will open. Fill in the requested user information (optional), and then print out the document. Contact your local dealer or Intelitek with the printed information.

Protect your License

Every unlock code is unique. It will become invalid (and cause the software to stop functioning) when you change a physical component in your PC (e.g., hard disk, network card, CPU), format your disk, or install a new operating system.

- If you want to upgrade your PC and keep your software operational, you must first transfer the license (unlock code) to another PC.
- Once you have upgraded your system, reinstall the software (if necessary) and transfer the license back.

If you do not have a PC available for the temporary transfer operation, return the license to Intelitek. You will be able to retrieve the license by following the standard procedure for obtaining the unlock code.

To transfer a license from one PC (source) to another PC (target):

- On the target PC install the software and get the PC-specific code from the Registration dialog box.
- On the source PC, open the Registration dialog box. Enter the PC-specific code of the target PC and Select Transfer. The software on the source PC will generate a new unlock code for the target PC and will remove the license from the source PC.
- On the target PC, enter the new unlock code in the Registration dialog box.

To return a license to intelitek, so you can retrieve it later:

Use this procedure when you need to remove a software license and do not have a target PC available.

- From the Registration dialog box, select Remove the License and click Remove. The software will generate a unique Remove code.
- Send the Remove code and your CD key to Intelitek using one of the methods described above (email, website, fax/phone). We will confirm the codes and update our licensing registration records.
- When you are ready to retrieve your license, install the software (if necessary) and follow the instructions for obtaining an unlock code.





LearnMate Content Quicktour

Each LearnMate standalone content module combines illustrative graphics, interactive animations and simulation software to create a unique learning experience. To facilitate learning, the same basic page structure, generic navigation tools and learning enrichment tools are used in each module.

A typical LearnMate content page is shown below.

	http://www.learnmate.com - CNC Milling Technology with proLit	GHT 1000 (Virtual)	- Microsoft Internet Explo	orer 🔲 🗖 🔀
		KOT		ا 💿 ا 📚
	Steps Required to Machine a Part			
	Required Steps	The subscription		
	The following steps are required in order to successfully machine a part with the proLIGHT 1000 machining center.		-ucht	
Graphic	1 Write the program, or load an existing program.		Telek	/
LINK ———	2 Define the workpiece in the control program and ensure that it is secured in the vise (mounted on the cross-slide).			[0]
Animation	3 Define the tool in the control program and ensure that the appropriate tool is mounted in the spindle.			
	4 Define the workpiece origin position.			
	5 Verify the program.			
Glossary Link	6 Perform a dry run of the program.		-	
	7 Run the program.			
Navigation Tools ———	@ Prev. @Index () Next			
Toolbox	- 📭 😵 🛦 🐲 🖺 🗈			
	ê		🌍 Inte	rnet .:

Each of the items specified will be discussed in one of the following sections:

- Navigating a Module, page 30, demonstrates various methods for moving from section to section in a module, and describes the functionality of different types of hyperlinks that your module may include.
- Exploring the LearnMate Toolbox, page 31, describes each of the six learning enrichment tools available in the LearnMate toolbox.
- **Post-Test**, page 34, provides instructions for instructing students on saving/printing post-tests, as well as reviewing finished test results.





Navigating a Module

Navigation links below the text on each page of LearnMate content enable you to easily move through the module. You can either move sequentially from page to page, or use the index to jump to a different section in the module. Additionally, links within the text enable you to change the media item that is displayed, or link directly to a term in the glossary.

Moving from Page to Page

🔇 Prev. 回 Index 🕟 Next

- Click **Prev** to display the previous page in the current module.
- Click Next to display the next page in the current module.
- Click **Index** to display an index of all the sections in the current module. An arrow marks the section that you are currently studying. Click the section to which you would like to jump to display it in the content viewer.

http://www.learnmate.com - Index of Advanced Robotic Prog	gramming with the 🔳 🗖 🔀
Advanced Robotic Programming with SCORBOT-E	R4u
Activity 1: Review	
OBJECTIVES	
The Use of Robots in Industry	
The Use of Simulation Software	
RoboCell Window Components	
RoboCell Working Modes	
Manipulating the Robot	
Basic Programming Tools	
Review	
Activity 2: Programming with Subroutines	
OBJECTIVES	
MATERIALS	
Subroutines	
Task: Running RoboCell and Recording Positions	
Subroutine Commands	
Task: Programming with Subroutines	×
Done	🔮 Internet





Using Links Within the Text

- Click a **red** link to change the graphic displayed.
- Click a **pink** link to change the animation displayed.
- Click a green link to show a term and definition in the glossary. For more details on the glossary, see *Glossary*, page 32.
- Click a **blue** link to open an external software application. Note that the required application and the LM Agent must be installed on your computer, as described in *LM Agent and Required Software*, page 10.

Exploring the LearnMate Toolbox

The six tools shown below are found in the LearnMate toolbox below the navigation links on each page of LearnMate content.



Audio Narration

All LearnMate content pages are narrated. Clicking Audio ¹ in the LearnMate toolbox opens an audio player on the bottom of the viewer. The narration of the current page begins playing automatically. You can stop, pause, fast forward, rewind, or restart the narration, or adjust the volume at which the narration is played, using the controls in the audio player.







Competencies

LearnMate modules accessed from a LearnMate server are associated with competencies (V) from state, national and industrial skills standards. Competency alignments are not available in LearnMate Standalone Content Modules.

Hardware Safety Instructions

LearnMate content modules often require the use of hardware. Clicking Safety A in the LearnMate toolbox displays a list of safety instructions for working with the hardware used with the current module. If the module is a virtual module that does not require hardware, no safety instructions will be displayed when you click Safety.

@	http://www.learnmate.com - Safety - Microsoft Internet Explorer	
	Safety for Electrical Systems (Lab)	
	Electrical and electronic systems require safe and responsible handling in the laboratory and work place. Careles handling can hurt someone or could cause serious damage to system components.	s
	Always follow the safety practices listed in the following section. Carelessness can lead to serious injury!	-
	Maintain a clean work area at all times.	-
	Excep food and drink away from the work area.	-
	Handle components with caution.	
	Make sure your hands are completely dry.	
	ALWAYS use a grounded electrical source of the proper rating. The MB-100 Trainer requires 115 VAC.	
	ALWAYS read directions completely before performing a task.	-
	If you are unsure about the operation of a circuit, talk to your instructor before turning on the main power swit to the trainer.	ch
	ALWAYS make sure the main power switch to the MB-100 Trainer is turned off before building or taking apart circuits.	
	ALWAYS take apart circuits and put away equipment properly before closing the case of the MB-100 Trainer.	
		-
	Close 🛛	
6	🕐 Internet	.:

Glossary

LearnMate modules are accompanied by glossaries. Clicking Glossary in the LearnMate toolbox displays the glossary for the currently active module. In the Glossary window that is displayed, you can search for a particular term for which you would like to see a definition using one of the following methods:

- Enter the term in field indicated and click Search to locate a particular term.
- Click the letter with which the term begins from the alphabet at the top of the window. Then scroll through all terms beginning with the selected letter until you find the term you require.





• When you click a glossary link (a green link) in a module, the glossary will open directly to a page displaying that term.

_

Notes

LearnMate provides you with a Virtual Notebook for your comments. Clicking Notes in the LearnMate toolbox displays your Virtual Notebook for the current module. Use the virtual notebook to enter any personal notes or comments on the material. You can then either save the notes to a text file on your PC or diskette, or print out your comments for review. Every user has one Virtual Notebook per each of his/her enrolled modules.

Attp://www.learnmate.com - My Notes - Microsoft Internet Explorer	
My Notes: Advanced Robotic Programming with the SCORBOT-ER4u	
	~
😂 Done 🔹 🔮	Internet 🤢





Links Library

LearnMate modules are accompanied by links to websites that provide additional information on

the topics covered in the modules. Clicking Links in the LearnMate toolbox displays the links library for the current module. Each link includes a short description. Clicking the link title (bold blue text) opens a new browser window displaying the linked website. Note that you must be connected to the Internet for these links to work.

🖄 http://www.learnmate.com/cgi-bin/bu.cgi?page=links&category_id=&template=eng - Microsoft Interne 🔳 🗖 🔀			
Robotics Links Library			
Flexible Manufacturing Systems: Moving Toward the Twenty First Century Introduction to flexible manufacturing systems and trends in this field.			
Larry's Robotic page Excellent resource for URLs of robotic sites.			
Manufacturing & Robotics Resources Technology Education Links to a large selection of robotic resources on the internet.			
Robotics FAQ This is the Frequently Asked Questions (FAQ) list for the internet robotics newsgroups comp.robotics.misc and comp.robotics.research. This list provides a resource of answers to commonly (and some uncommonly) asked questions regarding robotic systems, organizations, periodicals, and pointers to numerous other resources on the net.			
Webcorner: Robotics This site includes links to numerous robotic sites and serves as an excellent reference.			
Welding and Metals Joining Resources Resources related to welding, brazing, soldering and other metal joining technologies.			
Your Very Own Robotic Butler CNN article about potential daily uses of robots in the not-so-distant future.			
<<1>>>			
Close 🛙			
🗃 Done			

Post-Test

Instructing Students about the Post-Test

LearnMate Standalone content modules typically end with a post-test. Upon taking the post-test, students are prompted to print and/or save the post-test results. We recommend that you have students immediately print the results, as well as save the post-test results to a specific directory on either the local PC or server. Post-test results are automatically named using the student's first name, last name and the module ID (e.g., john_doe33.zip).

Note: If you do not instruct students to save the post-test results file to a specific folder, the file will automatically be saved to the directory in which you installed the LM Content Viewer. The default directory for this install is C:\Program Files\intelitek\LM Content Viewer.





Taking the Post-Test

Each LearnMate content module concludes with a post-test. The purpose of this post-test is to measure your knowledge of the concepts and technologies about which you learned in the module. The graded test, including all the questions and your answers is saved in an encrypted file for you to send to your instructor.

Before taking the post-test, you will be prompted to enter your details. Ensure that you enter your details accurately so that your instructor can easily retrieve them.

To take a post-test:

1. As instructed on the final page of the module, click the question mark icon to initiate the post-test. The popup window shown below is displayed.

User Details		
The following test will be graded and saved for you to send to your instructor. Allow 30 minutes for the test. Please enter your details below, and then click OK to take the test.		
Personal Information		
First Name:		
Last Name:		
Instructor:		
Class:		
ОК	Cancel	

- 2. Enter your details in the appropriate fields and click OK to take the post-test.
- 3. After completing the post-test, you will be prompted to either print or save the test.
 - Click **Print** to obtain a printout of the questions in the test and your answers. A copy of your test is automatically saved on your PC.
 - Click **Save** to save the test to a location of your choice on the PC.





Reviewing Post-test Results

The post-test is saved in zip file. To review the post-test results:

- 1. Unzip the file. The zip file contains an RTF file named with the same nomenclature.
- 2. Double-click on the RTF file from the folder in which you unzipped the results file. The Password dialog box is displayed, as shown below.



- 3. Enter the password: **LMPASSWORD**. Note that the password is case sensitive and must be entered using all capital letters. The post-test results file opens, displaying the following information:
 - Results specific to each question in the test, including the answer provided by the student, the correct answer and the student's score on the question.
 - A final post-test score, found at the end of the document.