USA's primary source for projector lamps

myprojectorlamps

PROJECTOR OWNER'S MANUAL

3M

MPRO110

Need a replacement lamp for this projector?

www.myprojectorlamps.com

Original manufacturer manual, provided unmodified as a courtesy of MyProjectorLamps.com.
All trademarks belong to their respective owners.

3M™ Micro Professional Projector

MPro110

Operator's Guide
Guide de l'utilisateur
Bedienungsanleitung
Guía para el operador
Guida utente
Gebruiksaanwijzing
Användarmanual
用户指南
使用手冊

Contents

Intended Use Statement 3
Trademarks and Copyrights 3
Safety Information 3
Safety Labels 5
Package Contents 7
Parts 7
Getting Started 8
Operating Instructions 10
Troubleshooting 13
Specifications 14
Limited Warranty 16

© 2008 3M. All Rights Reserved.

Intended Use Statement

The 3M™ Micro Professional Projector MPro110 is designed to operate with the 3M-specified battery and 3M battery charger and in a normal office and home environment.

- 10˚–30˚C (50˚–86˚F)
- 10–80% RH (without condensation)
- 0–1,829 m (0–6000') above sea level

The ambient operating environment should be free of airborne smoke, grease, oil and other contaminants that can affect the operation or performance of the projector.

Use of this product in adverse conditions will void the product warranty.

Trademarks and Copyrights

3M is a trademark of 3M Company.

VGA and XGA are trademarks of International Business Machines Corporation.

S-VGA is a registered trademark of the Video Electronics Standards Association.

No publication or commercial use may be made of this material without the express written permission of 3M.

Safety Information

Please read, understand, and follow all safety information contained in these instructions prior to the use of this projector. Retain these instructions for future reference.

Explanation of Signal Word Consequences	
⚠ **Warning:**	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury and/or property damage.
⚠ **Caution:**	Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury and/or property damage.

© 2008 3M. All Rights Reserved.

⚠ Warning

To reduce the risk associated with hazardous voltage:

- Do not modify this product in any way. Use only 3M approved replacement components.
- Do not attempt to service this projector other than battery replacement. There are no user serviceable parts other than the battery. Service to be performed only by a 3M-authorized service provider using 3M-approved system components.
- Do not use the wall power supply in a wet environment.
- Do not use with a damaged wall power supply. Replace damaged part prior to use.

To reduce the risk associated with fire and explosion:

- * Do not immerse the projector or battery in any liquid or allow either to get wet.
- Use only wall power supply and Li-Ion battery provided.
- Do not disassemble, short or expose the battery to high temperature.
- Do not overcharge or rapidly discharge the battery.
- Do not dispose of the battery by incineration or fire.
- Do not operate this projector in any environment above 100°F (38°C).
- Do not expose the projector or battery to direct sunlight in a closed space such as a vehicle.

To reduce the risks associated with driver distraction in a moving motor vehicle:

- Do not use this projector in a moving motor vehicle.

⚠ Caution

To reduce the risk associated with environmental contamination:

- Dispose of all system components in accordance with applicable government regulations.

To reduce the risks associated with LED visible bright light:

- Do not stare directly into the LED light beam.

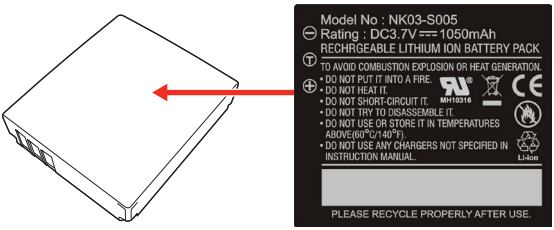
To reduce the risks associated with tripping and falling:

- Position the charging cord and data cables so that they can not be tripped over.

SAVE THESE INSTRUCTIONS

© 2008 3M. All Rights Reserved.

Safety Labels



CLASS 1 LED PRODUCT

FCC STATEMENT - CLASS B

This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual may cause interference to radio communications. It has been tested and found to comply with the limits for a Class "B" computing device pursuant to Subpart B of Part 15 of the FCC Rules, which are designed to provide reasonable protection against such interference when operated in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

NOTICE: This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

© 2008 3M. All Rights Reserved.

INSTRUCTIONS TO USERS: This equipment complies with the requirements of FCC equipment provided that the following conditions are met. The cables may have to be used with the core set to the projector side. Use the cables which are included with the projector or specified.

Note: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CE Statement

ElectroMagnectic Compatibility Statement: Meets 2004/108/EC Directive

Low Voltage Directive: Meets 2006-95-EC Directive.

WEEE Statement

The following information is only for EU-members States:

The mark shown to the right is in compliance with Waste Electrical and Electronic Equipment Directive 2002/96/EC (WEEE). The mark indicates the requirement NOT to dispose the equipment as unsorted municipal waste, but use the return and collection systems according to local law.

RoHS Statement

3M Projection Systems can provide RoHS certification for products meeting the RoHS directive.[1]

European (EU) Restriction of Hazardous Substances (RoHS) Directive, 2002/95/EC,

[1] RoHS compliant means that the product or part does not contain any of the substances in excess of the following maximum concentration values in any homogeneous material, unless the substance is in an application that is exempt under RoHS, as amended:(a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers; or (b) 0.01% (by weight) for cadmium. This information represents 3M's knowledge and belief, which may be based on information provided by third party suppliers to 3M.

© 2008 3M. All Rights Reserved.

Package Contents

1 Projector

2 Battery Charger/AC Adapter

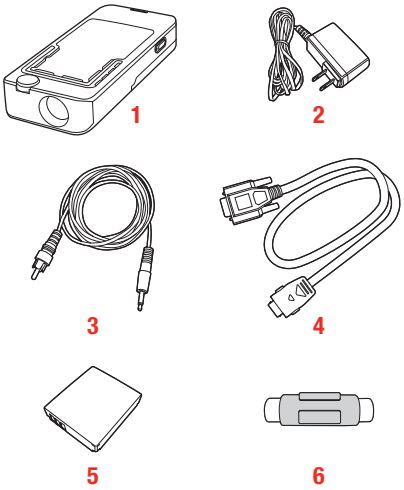
3 Video Cable

4 VGA Cable

5 Battery

6 RCA Adapter

Note: In some regions, the battery charger/AC adapter will come with an outlet adapter.



Parts

1 Focus Wheel

2 Lens

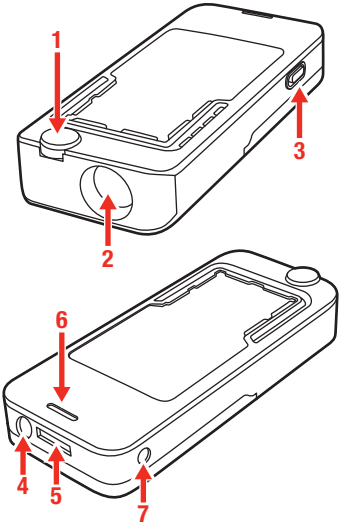
3 Power On/Off

4 Video IN

5 VGA IN

6 Power and Charge LEDs

7 DC Power IN



© 2008 3M. All Rights Reserved.

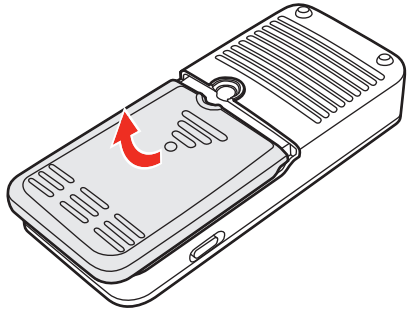
Getting Started

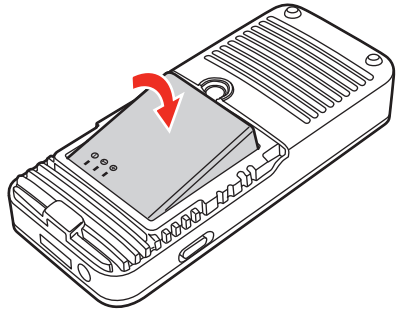
Install Battery

The 3M MPro110 comes with a rechargeable Lithium-Ion (Li-Ion) battery. The battery should be charged before using the projector with the battery.

Important Note: Switch projector OFF and disconnect all cables before installing the battery. Use only the 3M-specified battery: 78-6969-9974-3.

To install the battery: slide the back cover off, insert the battery, and reinstall the cover.



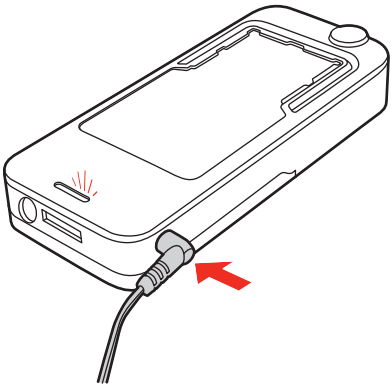


© 2008 3M. All Rights Reserved.

Charge the Battery

The 3M MPro110 comes with a battery charger/AC adapter. Use the battery charger/AC adapter to power the projector when the battery is not charged or installed and to charge the battery. When the battery needs charging, the image will turn black and the Power LED will flash red.

To charge the battery: (1) Turn the power switch OFF. (2) Connect the battery charger/AC adapter to the projector's DC in. (3) Plug the battery charger/AC adapter into an electrical outlet. (4) The charge LED lights orange while the battery is charging. The battery will be fully charged in about 2 hours. (5) Once charging is complete, the charge LED will turn off.



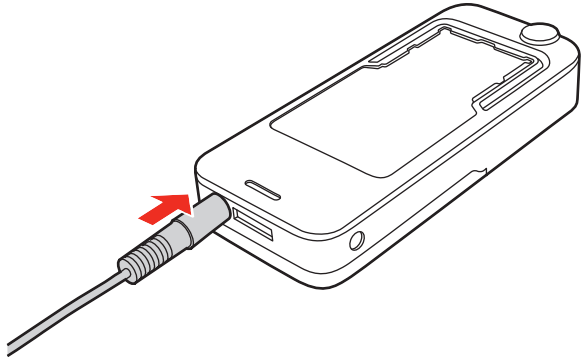
Note: The battery will not charge when the power switch is in the ON position. Turn the power switch OFF to charge battery.

© 2008 3M. All Rights Reserved.

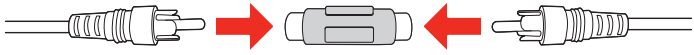
Operating Instructions

Connecting to a Video Source

There are many devices that output video signals: digital cameras, video phones, and portable video players. The 3M MPro110 can project the video from these devices using its video port. (1) Connect the included video cable to the projector (2) Connect the video cable to the video source's cable or the video output port.



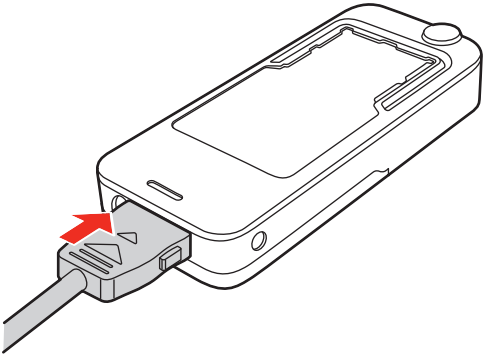
NOTE: If the two cables have the same connector on the end, use the RCA adapter to connect the two cables.



© 2008 3M. All Rights Reserved.

Connecting to a Computer Video Source

There are several types of computers that output a video signal: desktop computers, laptop computers, ultra-portable computers and some personal digital assistants (PDAs). The 3M MPro110 can project the video from these devices using its VGA port. (1) Connect the included VGA Cable to the projector. (2) Connect the VGA Cable to the device's video output.



Powering On

Slide the power switch to the ON position. The power LED will turn green and the projector will energize. The projector will automatically detect the connected cable and switch to the appropriate port. Then the projector will detect and display the video source. If the video source is not detected, the projector will display a blue image and the name of the selected port: CVBS (video) or VGA.

NOTE: The projector will switch to power save mode in 30 seconds if no video or computer source is detected. The projector will switch to sleep mode in 60 seconds if there is no source. When a source is detected, the projector returns to full operating mode.

Tip: The video output on some devices is turned off by default. Please refer to the device's documentation for details on enabling the video.

Powering Off

Slide the power switch to the OFF position.

Disconnect video, VGA and AC adapter cables.

© 2008 3M. All Rights Reserved.

Image Size

Increase or decrease the projector-to-wall distance 305 mm (12 in) to 1800 mm (71 in.) to project an image ranging from 163 mm to 975 mm (6.4 in. to 38.4 in.) wide.

Projector-To-Wall Distance	Image Width
305 mm (12 in)	163 mm (6.4 in)
610 mm (24 in)	235 mm (9.3 in)
914 mm (36 in)	355 mm (14 in)
1219 mm (48 in)	523 mm (20.6 in)
1524 mm (60 in)	739 mm (29.1 in)
1800 mm (71 in)	975 mm (38.4 in)

Focus Adjustment

Rotate the focus wheel until the image is clear.

Cleaning Projector

1 Turn off the projector and disconnect power and other cables.

2 Use soft cloth to wipe off dust. If the dust is difficult to remove, dampen the cloth with clean water and then wipe the projector clean. Then use a clean cloth to dry the projector.

Important Notes

- Do not use cleaning chemicals or solvents to clean the projector. Cleaning chemicals and solvents may cause the plastic parts to discolor.

© 2008 3M. All Rights Reserved.

Troubleshooting

Problem	Cause	Solution
Image is fuzzy	Projector-to-screen distance outside of limits. Image not focused.	Place projector 200–1800 mm from wall. Turn focus to sharpen image.
Does not run on battery power	Battery not charged. Battery needs replacement.	Plug in AC adapter and turn power switch Off to charge battery. Replace battery if it will not hold a charge.
Blank image	Power is off. Projector in Power Saver Mode.	Turn projector ON. Input source must be powered ON and sending an input signal.
LED flashing red	Battery is low.	Plug in AC adapter and turn power switch Off to charge battery.
LED is green	Projector in Power Saver Mode.	Projected images returns when input signal resumes.
LED is orange	Battery is charging.	LED is orange during charging and goes off when battery is fully charged.
Video or VGA icon is flashing	No input signal is detected by projector.	Turn on power for input source.
Video/VGA icons alternate flashing	No input cable is detected.	Connect input cable and power on input source.

© 2008 3M. All Rights Reserved.

Specifications

Projector

Description		Specification
Imager	Technology	LCOS
	Size	11.9 mm (0.47")
	Image Resolution	640 x 480 Pixels
	Image Aspect Ratio	4:3
Projection Distance		305–1800 mm (12"–70")
Image Size		163–975 mm (6.4"–38.4")
Throw Ratio (Width/Distance)		0.53
Lens Offset		1:1 (none)
Inputs		VGA, Composite Video, DC Power
Compatible Resolution		VGA, SVGA, XGA
Refresh Rates		60 Hz
Video Compatibility		NTSC, PAL, NTSC (M), PAL (BGHI)
Dimensions		115 mm (L) x 50 mm (W) x 22 mm (H) (4 1/2" x 1 31/32" x 7/8")
Weight		160 g (5.6 oz.)
Tripod Socket		¼"-20
Operating Temperature		10˚–30˚C (50˚–86˚F)
Altitude		Sea Level to 1,829 m (6000')

© 2008 3M. All Rights Reserved.

NK03-S005 Rechargeable Lithium-Ion Battery

Description	Specification
Type	Rechargeable Lithium-ion Battery
Rated Capacity	3.7 V/ 1050mAh
Dimensions	40.4 x 34.4 x 9.4 mm (1.6" x 1.4" x 0.4")

Do not throw battery into trash. Please dispose of according to federal, state, or local laws

Supported Computer Signals

Description	Resolution (width x height)	Refresh Rate
VGA	640 x 480	60 Hz
SVGA	800 x 600	60 Hz
XGA	1024 x 768	60 Hz

Replacement Parts / Accessories

Description	3M Part Number
US AC Power Adapter	78-6969-9972-7
EU/UK AC Power Adapter	78-6969-9977-6
Rechargeable Battery	78-6969-9974-3
AV Cable Kit (Video Cable and RCA Adapter)	78-6969-9979-2
VGA Cable	78-6969-9978-4

© 2008 3M. All Rights Reserved.

Limited Warranty

- The 3M™ Micro Professional Projector MPro110 (the "3M product") is warranted to be free from defects in material or manufacture for a period of 90 days from the date of purchase.
- All other accessories included with the 3M product are warranted to be free from defects in material or manufacture for a period of 90 days from the date of purchase.
- Optional product accessories that are not sold as part of the 3M product are subject to individual warranties.

THE WARRANTIES STATED ABOVE ARE EXCLUSIVE AND ARE MADE IN PLACE OF ANY AND ALL WARRANTIES, EXPRESS OR IMPLIED WARRANTIES OR CONDITIONS, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ANY INDUSTRY PRACTICE OR CUSTOM OR TRADE USAGE.

In the event the 3M product fails to conform to the above stated warranties within the applicable warranty period, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or to refund the purchase price of the 3M product. All replaced parts or products become property of 3M. If the product is repaired, 3M will repair the defective part(s) with a new or used part(s). If the 3M product is replaced, 3M will replace the 3M product with the same or equivalent model and with a new or refurbished 3M product. In the case of an approved warranty claim, the replacement 3M product will carry only the remaining term of the original 3M product's warranty period as stated above. For warranty service, you must provide proof of the date of the original purchase else the manufacturing code date will be used to establish the start date of the warranty. The following are exclusions to the above listed warranty:

a. This warranty does not cover 3M product that is modified or damaged through improper storage, misuse, abuse, accident, vandalism, improper installation, neglect, improper shipping, damage caused by acts of war, disasters such as fire, flood, and lightning, improper electrical current, software problems, interaction with non-3M products, or service other than by an 3M Authorized Service Provider, neglect or mishandling by any person. Normal wear and tear is not covered under warranty.

© 2008 3M. All Rights Reserved.

b. 3M product is designed to operate in the typical indoor environment. This warranty does not cover 3M product used outside of the following circumstances:

- 100V–240V AC, 50/60 Hz
- 10° to 30° C (50° to 86° F)
- 10–80% RH (without condensation)
- 0–1828m (0–6000 feet) above sea level
- Environments with high levels of smoke or air born particulates

c. The air intake and exhaust vent must be clear of obstructions. Inadequate air ventilation will cause the 3M product to malfunction or will cause damage to the 3M product which will void the warranty.

d. This warranty does not cover any additional costs including, but not limited to, those associated with removal, cleaning or installation of the 3M product, adjustments, (mechanical or electronic) made to the 3M product.

e. This warranty covers only normal use of the product. 24-hour-per-day or other excessive continual use causes strain and is not considered normal use.

f. This warranty does not cover consumables (e.g., fuses), other than lamps and only as set forth below.

g. This warranty is not transferable.

h. 3M is not responsible for warranty service should the 3M label or logo or the rating label or serial number be removed unless otherwise stated in writing for the purposed of private labeling for partnership requirements.

i. This warranty does not cover postage, insurance, or shipping costs incurred in presenting your 3M product for warranty service. Said costs are the customer's responsibility. If a claimed defect cannot be identified or reproduced in service, the customer may be held responsible for cost incurred. Should your warranty upgrade include a "change out" service and the claimed defect cannot be identified or reproduced by the technician, the customer will be responsible for call out costs.

FAILURE TO FOLLOW THE INSTRUCTIONS CONTAINED IN THE APPROPRIATE 3M product MANUAL OR TO USE THE 3M PRODUCT IN ACCORDANCE WITH 3M'S INTENDED USE STATEMENT, WILL VOID ALL WARRANTIES AND LIMITED REMEDIES.

© 2008 3M. All Rights Reserved.

EXCEPT AS SPECIFICALLY STATED IN THE APPLICABLE 3M PRODUCT MANUAL, 3M SHALL NOT BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS, REVENUE OR BUSINESS) RESULTING FROM, OR IN ANY WAY RELATED TO PERFORMANCE, USE OR INABILITY TO USE ANY OF THE 3M PRODUCT. This limitation applies regardless of the legal theory upon which damages are sought.

For warranty support, please call or write your local 3M office or a 3M Authorized Service Provider to obtain an RMA # (Return Material Authorization number) before returning the product. If you are inside the Continental United States of America, please contact 3M Customer Service at 1-866-631-1656 or email *meetings@mmm.com*.

What 3M Will Do To Correct Problems:

- If your 3M product requires service, 3M will ask you to bring or send the 3M product, securely packaged in its original container or equivalent, along with proof of the date of original purchase, to your 3M Service Dealer or 3M Service Center.
- 3M will, at its option, repair or replace the defective unit without charge for parts or labor. Return of the 3M product will be at 3M's expense.
- When warranty service involves the exchange of the 3M product or of a part, the item replaced becomes 3M property.
- The exchanged 3M product or part may be new or previously refurbished to the 3M standard of quality, and at 3M's option, the replacement may be another model of like kind and quality.
- 3M's liability for replacement of the warranted 3M product or part will not exceed the original retail selling price of the 3M product. Exchange or replacement products or parts assume the remaining warranty period of the product covered by this limited warranty. However, each replacement lamp carries the limited 90-day warranty stated above.

© 2008 3M. All Rights Reserved.

3M is a trademark of 3M Company.
3M est une marque commerciale de 3M Company.
3M es una marca registrada de la Compañía 3M.
3M è un marchio commerciale 3M Company.
3M ist ein Warenzeichen der Firma 3M.
3M is een handelsmerk van 3M Company.
3M är ett varumärke tillhörande 3M Company.

Projection Systems
3M Austin Center
6801 River Place Blvd.
Austin, TX 78726-9000
866-631-1656
www.3M.com/meetings
e-mail: meetings@mmm.com

Please recycle. Printed in Taiwan.
© 3M 2008. All rights reserved.
August 2008 78-6971-1437-5-B