Operating Instructions

Professional
Overhead
Projector

MODELS
28A641, 28A647,
28A653, 28A663

BIBLIOGRAPHIC INSTRUCTION/CD-ROM
IMPORTANT SAFETY INSTRUCTIONS

When using your overhead projector, basic safety precautions should always be followed, including the following:

1. Read and understand all instructions before using.
2. Close supervision is necessary when any projector is used by or near children. Do not leave projector unattended while in use.
3. Care must be taken as burns can occur from touching hot parts.
4. Do not operate projector with a damaged cord or if the projector has been dropped or damaged — until it has been examined by a qualified serviceman.
5. Position the cord so that it will not be tripped over, be pulled, or contact hot surfaces.
6. If an extension cord is necessary, a cord with a current rating at least equal to that of the projector should be used. Cords rated for less amperage than the projector may overheat.
7. Always unplug projector from electrical outlet before cleaning and servicing and when not in use. Never yank cord to pull plug from outlet. Grasp plug and pull to disconnect.
8. Let projector cool completely before putting away.
9. To protect against the risk of electric shock, do not immerse this projector in water or other liquids.
10. To avoid the risk of electric shock, do not disassemble this projector, but take it to a qualified serviceman when some service or repair work is required. Incorrect reassembly can cause electric shock when the projector is used subsequently.
11. The use of accessory attachment not recommended by the manufacturer may cause a risk of fire, electric shock or injury to persons.
12. Connect this projector to a grounded outlet.
13. Disconnect this unit from its source of supply before replacing the projection lamp.

Additional lamp safeguards: never handle lamps with bare fingers; periodically inspect lamps, when they’re turned off, for signs of blistering or blackening; insure proper action of the cooling system; turn off the projector immediately if the image becomes abnormally dim; never operate a projector with the lamp housing open; and make sure that the lamp itself is properly seated.

SAVE THESE INSTRUCTIONS
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Important Safety Instructions</td>
<td>1</td>
</tr>
<tr>
<td>Index of Functional Parts</td>
<td>3, 4</td>
</tr>
<tr>
<td>Specifications</td>
<td>5</td>
</tr>
<tr>
<td>General Description</td>
<td>5</td>
</tr>
<tr>
<td>Setup</td>
<td>6</td>
</tr>
<tr>
<td>Operation</td>
<td>6</td>
</tr>
<tr>
<td>Maintenance</td>
<td>7</td>
</tr>
<tr>
<td>Lamp Replacement</td>
<td>7</td>
</tr>
<tr>
<td>Lamp Warranty</td>
<td>8</td>
</tr>
<tr>
<td>Shipping Information</td>
<td>8</td>
</tr>
<tr>
<td>Service</td>
<td>8</td>
</tr>
<tr>
<td>No Charge Warranty Repair</td>
<td>8</td>
</tr>
<tr>
<td>Electrical Safety Grounding Instructions</td>
<td>9</td>
</tr>
<tr>
<td>Unit Warranty</td>
<td>Back Cover</td>
</tr>
</tbody>
</table>
Index of Functional Parts

A number of terms are used frequently in this instruction booklet. The OVERHEAD PROJECTOR will be easier to operate if you become familiar with the terms for the functional parts listed below:

1. Mirror  
2. Lens Head  
3. Mast  
4. Focus Knob  
5. Stage  
6. Stage Latch  
7. Base  
8. Lamp Cover  
9. Locking Knob  
10. Power Switch*

* IEC 320 Power Inlet Module and Switch on 220V model.
11. Lamp Ejection Lever
12. Lamp Change Lever (not on all models)
13. Door Latch (one each side)
14. Door/Leg Assembly
15. Power Cord*

* Cord Set cannot be stored on 220V model.
Specifications

Dimensions ..................... 5"H x 13"W x 17.5"D (Folded)
 ..................................... 32"H x 13"W x 17.5"D (Opened)

Aperture ......................... 10" x 10" (254mm x 254mm)

Lens .............................. One Element – 293mm (11.5"")
 ..................................... Three Element – 327mm (13.0"")
 ..................................... Four Element – 280mm (11.0"")

Lamp ............................... 360W, ENX (120V)
 ..................................... 250W, EVW (220V)

Elevation ......................... Up to 30 Degrees

Focus .............................. Rack and Pinion

Power .............................. 120V, 60Hz, 4.4 A
 ..................................... 220 or 240V, 50Hz, 1.5 A

Power Cord ......................... 3-Wire Grounded, 10 Ft.
 ..................................... (Cord Set Not Included with 220V)

Safety Interlock .................. Cuts Off Power When Unit Is Open

Weight .............................. 17 Lbs. – 120V Models
 ..................................... 22 Lbs. – 220V Models

General Description

This Overhead Projector is a transmissive (lamp under stage) projector designed to project material on transparencies and LCD panels for audience viewing.

Your projector is designed to incorporate rugged simplicity with easy-to-use efficient operation. With a minimum of routine care and maintenance, it will provide you with many years of dependable service.
Setup
1. Set unit on projection table in the vertical position.
2. Slide bottom door latches out and swing both doors around to magnet latches (see page 4).
3. Remove all of the power cord, then tip unit over to rest on its legs. (Does not apply to 220V model.)
4. Turn focus knob clockwise until it stops at the end of the mast (Fig. A).
5. Rotate the mast up until it stops (Figs. B and C).
6. Push in the mast locking knob and tighten (Fig. C).
7. Rotate the lens assembly counterclockwise to the working position. Open the mirror and focus image (Fig. C).

TO FOLD AWAY – Do the actions in reverse order.

Operation
Place the projector on a stable surface that is desk or table height. Be sure the side vents are not blocked. Plug the power cord into a properly rated power source. Press the power switch to the ON position. Place a transparency on the stage and focus the image. Keystone can be minimized by adjusting the mirror up or down on the lens. Some models have a lamp changer that can be used to switch to a reserve lamp should the primary lamp fail during a presentation.
Maintenance

To clean fresnel, cover glass and mirror:

1. Remove lamp cover.
2. Press stage catch.
3. Lift and swing stage over.
4. Remove fresnel by pressing release latch as shown below. (Shipping brackets may be removed and discarded.)
5. Clean with dry, lint free cloth.

LAMP REPLACEMENT:

CAUTION: Glass components may shatter. Cover glass parts with cloth. Protect eyes. Handle carefully.

Allow the lamp to cool before removing it.

Your projector uses:
- ENX – 360W on 120V model.
- EVV – 250W on 220V model.

TO REMOVE:

1. Remove the defective lamp by pulling up and pushing back the lamp ejection lever.
2. Before inserting a new lamp, move the ejection lever back to its original position.
3. Avoid touching the new lamp — oily skin can cause discoloration of the lamp capsule or reflector.

4. Push lamp down into socket until firmly seated with the reflector lined up with the aperture.

Information On Lamp Warranty

Projection lamps are warranted by the lamp manufacturer and not by the equipment manufacturer. If you have a lamp which you believe to be defective, contact the manufacturer of that particular lamp for the appropriate warranty replacement.

General Electric Co.
1501 South 19th Street
Mattoon, IL 61938

GTE – Sylvania
Irvin Road
Winchester, Kentucky 40391

North American Philips
Bank Street
Heightstown, New Jersey 08520

Thorn Lighting
23 Leslie Court
 Whippany, New Jersey 07981

Shipping Information

If it becomes necessary to return a unit, please use the original packing material or pack securely to insure safe shipment.

Service

Service and parts are available from the manufacturer or an approved service station. Contact the manufacturer for the nearest service station. Service manuals are also available at nominal cost by contacting the manufacturer.

No Charge Warranty Repair

1. Unit must be taken or sent to manufacturer or approved service station with warranty card and sales receipt.
2. If warranty card is lost:

Send model and serial number to manufacturer with a request to issue a replacement card.

The manufacturer will not be liable for any expense incurred because of failure to present warranty card, pick-up and delivery charges, service calls, or if service is supplied by other than the manufacturer's approved service stations.

**Electrical Safety Grounding Instructions**

The power cords used on this product are equipped with a three-prong, ground-type plug for your safety. Whenever a two-prong receptacle is encountered, we strongly recommend that it be replaced with a properly grounded three-prong receptacle by a qualified electrician in accordance with the National Electrical Code and local codes and ordinances. See Figure A.

---

**FIGURE A**
120 Volt Grounded Plug and Adaptor
For your safety and for the safety of others, if there is any question as to whether or not the receptacle is properly grounded, have it checked by a qualified electrician.

Do not cut off the power cord grounding prong or alter the plug in any way.

Do not use a two-wire extension cord with this product. When it is necessary to use an extension cord, be sure that it is a three-wire cord, that it is in good condition, and that it is large enough to do the job safely and efficiently. It, too, must be plugged into a grounded receptacle.

If changing the wall receptacle to an approved grounding type is not possible, and where local codes permit, an adaptor may be used to connect the three-prong grounding plug to a two-prong receptacle.

However, the green pigtail must be connected to ground. If the receptacle is grounded, the pigtail may be connected to the receptacle. If the receptacle is not grounded, connect a separate #18 gauge round wire from the receptacle nearest available effectively grounded metal pipe or equivalent grounding electrode. See Figure B.

---

**Figure B**

120 Volt Grounded Adaptor
One-Year Limited Warranty

This Dukane audio visual product is warranted to the original purchaser for a period of one (1) year from the original purchase date — in normal use and service — against defects in material and workmanship. DUKANE CORPORATION EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

During the warranty period, Dukane Corporation will repair or replace (at the Manufacturer's option) any such defective parts (except for lamps, which are subject to whatever warranties the manufacturer may provide) without charge to the purchaser for parts or labor when the product is returned, prepaid and insured, with proof-of-purchase date. This remedy of repair or replacement is exclusive of all other remedies that the purchaser may have. This exclusive remedy is void if the product has been damaged by accident or unreasonable use, neglect, or improper service or other causes not arising out of defects in material or workmanship.

Dukane Corporation disclaims all liability for incidental or consequential damages of any kind, including all damages arising out of any interruptions in operation of the product and all damages to software.

No person, firm or representative is authorized to assume any obligation or make any warranty on behalf of the Dukane Corporation other than as stated above.
ONE-YEAR LIMITED WARRANTY

This Dukane audio visual product is warranted to the original purchaser for a period of one (1) year from the original date—in normal use and service—against defects in material and workmanship. DUKANE CORPORATION EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

During the warranty period, Dukane Corporation will repair or replace (at the Manufacturer’s option) any such defective parts (except for lamps, which are subject to whatever warranties the manufacturer may provide) without charge to the purchaser for parts or labor when the product is returned, prepaid and insured, with proof-of-purchase date. This remedy of repair or replacement is exclusive of all other remedies that the purchaser may have. This exclusive remedy is void if the product has been damaged by accident or unreasonable use, neglect, or improper service or other causes not arising out of defects in material or workmanship.

Dukane Corporation disclaim all liability for incidental or consequential damages of any kind, including all damages arising out of any interruptions in operation of the product and all damages to software.

No person, firm, or representative is authorized to assume any obligation or make any warranty on behalf of the Dukane Corporation other than as stated above.

Part No. 697-107

Form No. 10495-E-90
CUSTOMER REGISTRATION FORM

Please complete this information so that we may better serve you and others who purchase Dukane Products.

MODEL PURCHASED ___________________________ DATE PURCHASED ___________________________

PURCHASED FROM ___________________________ SERIAL NUMBER ___________________________

CITY, STATE ________________________________

PURCHASED BY ______________________________ TITLE __________________ PHONE (___) ______

ORGANIZATION ______________________________ # OF EMPLOYEES ___________________________

DEPARTMENT ________________________________

STREET ADDRESS ______________________________

CITY ___________________________ STATE __________ ZIP CODE __________

1. TYPE OF ORGANIZATION?

☐ Library or Information Center
☐ Child Day Care Service
☐ Elementary School
☐ Secondary School
☐ College, University or
☐ Professional School
☐ Retail Business (please describe) ______________________________________________________________________

☐ Wholesale Business (please describe) ______________________________________________________________________

☐ Manufacturing (please describe) ______________________________________________________________________

☐ Other (please describe) ______________________________________________________________________

2. PRINCIPAL USE OF AUDIO VISUAL EQUIPMENT?

☐ Sales Presentations
☐ Point-of-Sale Display
☐ Trade Shows
☐ Training
☐ Meetings
☐ Education
☐ Reference/Research
☐ Other ___________________________

3. HOW DID YOU LEARN OF THIS EQUIPMENT?

☐ Catalog
☐ Trade Show
☐ Word of Mouth
☐ Direct Mail
☐ Local Ad, Newsletter
☐ or Salesperson
☐ Magazine Ad (Name)
☐ Other ___________________________

4. WHAT MOST INFLUENCED YOUR PURCHASE OF DUKANE EQUIPMENT?

__________________________________________________________________________________________

__________________________________________________________________________________________

__________________________________________________________________________________________

__________________________________________________________________________________________

THANK YOU FOR YOUR TIME AND FOR PURCHASING DUKANE PRODUCTS.
DUKANE WARRANTY CARD

DATE PURCHASED

SERIAL NO.

PURCHASED FROM

This card and a sales receipt must be presented to your service station when requesting warranty service.

DUKANE CORPORATION / AUDIO-VISUAL DIVISION
2900 DUKANE DRIVE / ST. CHARLES, ILLINOIS 60174
708-584-2300    FAX# 708-584-5156