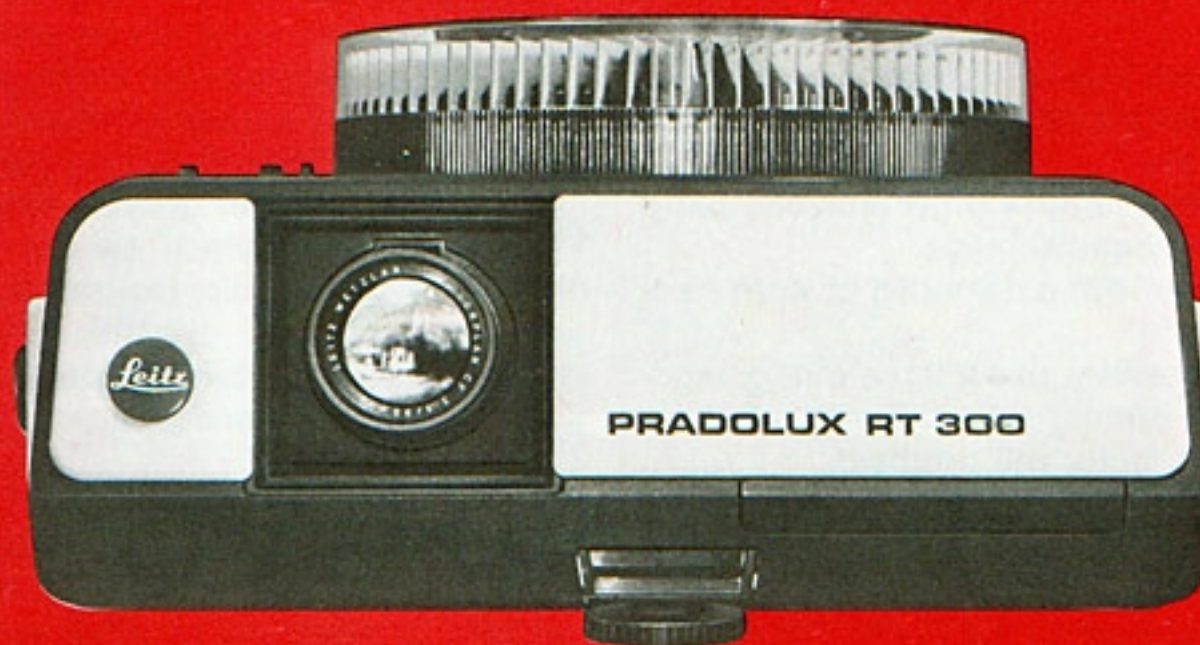


# LEITZ® PRADOLUX RT-300

Instructions





# Please read all of these instructions before operating.

## Important safeguards.

When using your Leitz Pradolux RT-300, basic safety precautions should always be followed including the following:

1. Read and understand all instructional material provided with this projector.
2. Stay with the projector when it is being used. Do not leave unattended for use by persons not fully acquainted with correct operating procedure.
3. Avoid touching the projection lamp or other projector parts which could be hot and may cause burns.
4. Do not operate the projector with a damaged or worn electrical power cord.
5. If an extension cord is necessary, use a three-wire grounding type cord for suitable current rating. Cords rated for less amperage than the projector will overheat.
6. Place and protect the power cord so that you and others will not trip over it. Avoid letting the cord touch sharp edges or hot surfaces.
7. Carefully unplug the projector when not in use. Never yank cord to pull from the outlet. Grasp plug and pull.

8. Keep the air vent on the back of the projector clear to assure adequate cooling.
9. Let the projector cool before storing or moving it.
10. The projector must not be operated in wet conditions that could cause electrical shock hazards.
11. The operator should not disassemble this projector beyond the instructions of routine maintenance described in this manual. If further disassembly is necessary, it should be done by a qualified service technician, since incorrect disassembly and/or reassembly can cause electrical shock hazard.
12. If projector has been dropped or damaged, have it checked by a qualified service technician.

### Save these instructions.

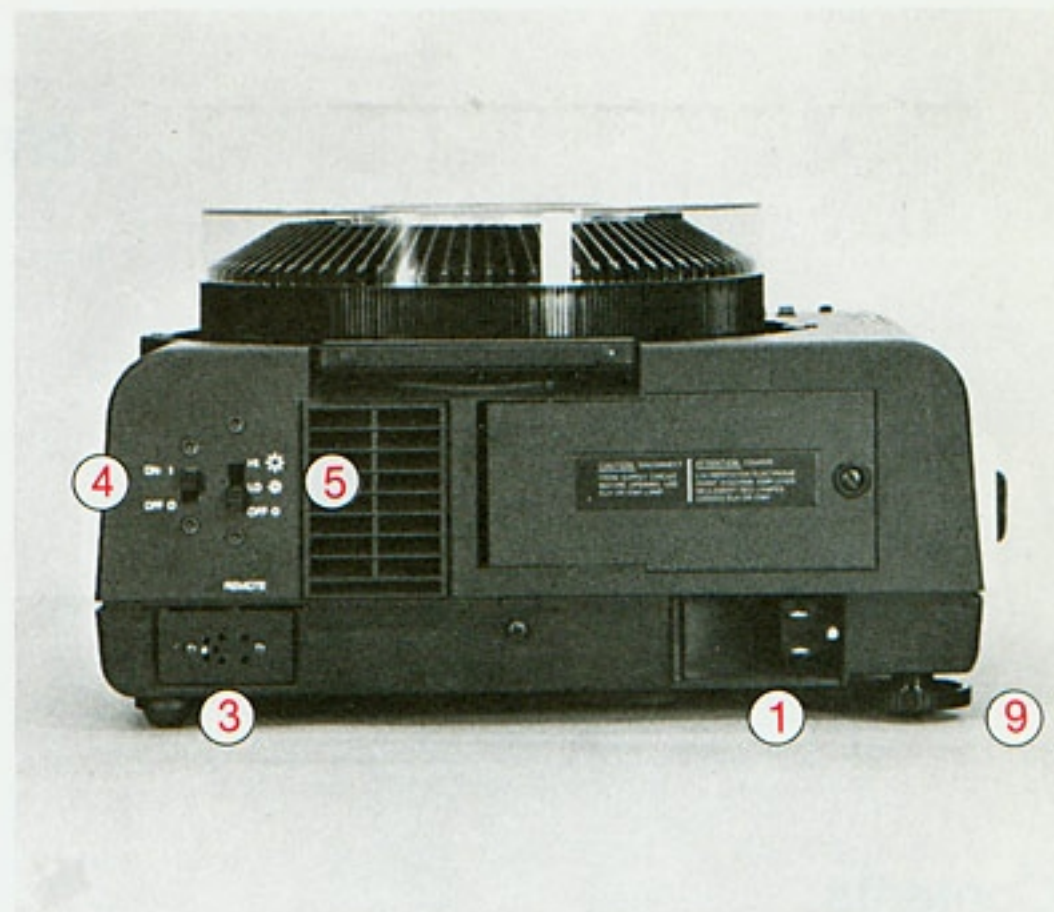
**Important:** If you modify this projector in any way, UL and CSA labels should be obliterated. All modified equipment should conform to electrical or other codes and to safety requirements.



## Contents.

	Page
General procedure .....	4
Other operating features .....	6
Manual control .....	8
If a slide jams .....	8
Remote control and dissolve .....	9
Lens changing .....	10
Projection table .....	11
Lamp replacement .....	12
Projection lamp table .....	13
Auto focus .....	14
Interval timer .....	14
Warranty .....	15
Service .....	15
Specifications .....	16





## General procedure.

Remove the projector and the remote control unit from the carton. Place the projector on a level, steady surface facing the screen as close to an electrical outlet as you can get. Then follow the steps described below.

Pull the power cord (1) out from the back of the projector. Pull steadily until you have about one foot more than needed, then release gently and the cord will latch in place. To return the cord to its reel, pull it away from the projector and release it quickly. Plug into a 120 volt 60 Hz grounded outlet. The power cord extends a maximum of 8 feet.

Place the slide tray on top of the projector so that "0" on the tray is directly opposite the arrow on the slide gate index (2). The tray can normally be put in place or removed *only* at the "0" position. (There's an exception to this. See page 8.) The tray should be seated firmly. (Note: Slides should be put in tray upside down and with the printed material on the slide mount facing the screen. Make sure the tray locking ring or cover is in locked position.)

Plug the remote control unit into the socket on the back of the

projector. The remote control socket (3) is the left hand group (as you face the rear of the projector) of five holes with a white dot. The white dot on the remote control plug should be to your left. The extreme left hole is not part of the socket.

Push the power switch (4) up. This is the switch nearer the outside edge of the projector. You'll hear the fan start.

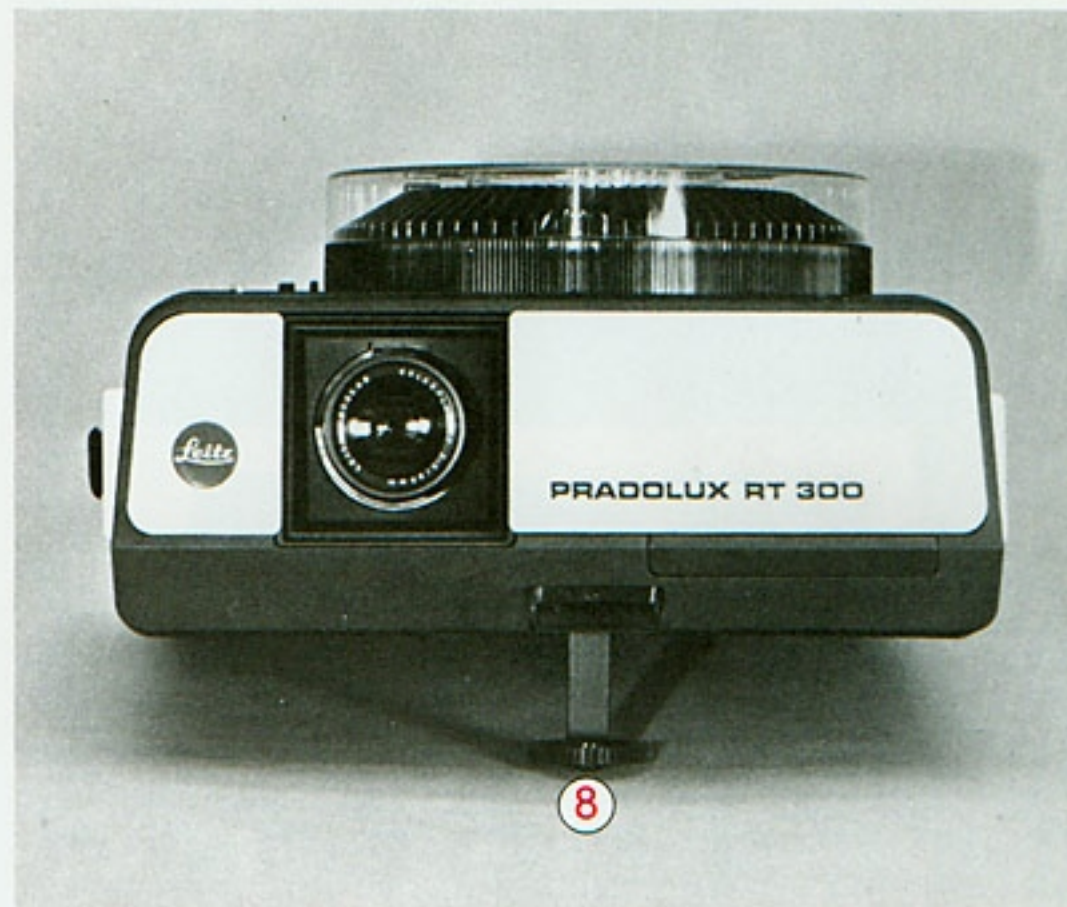
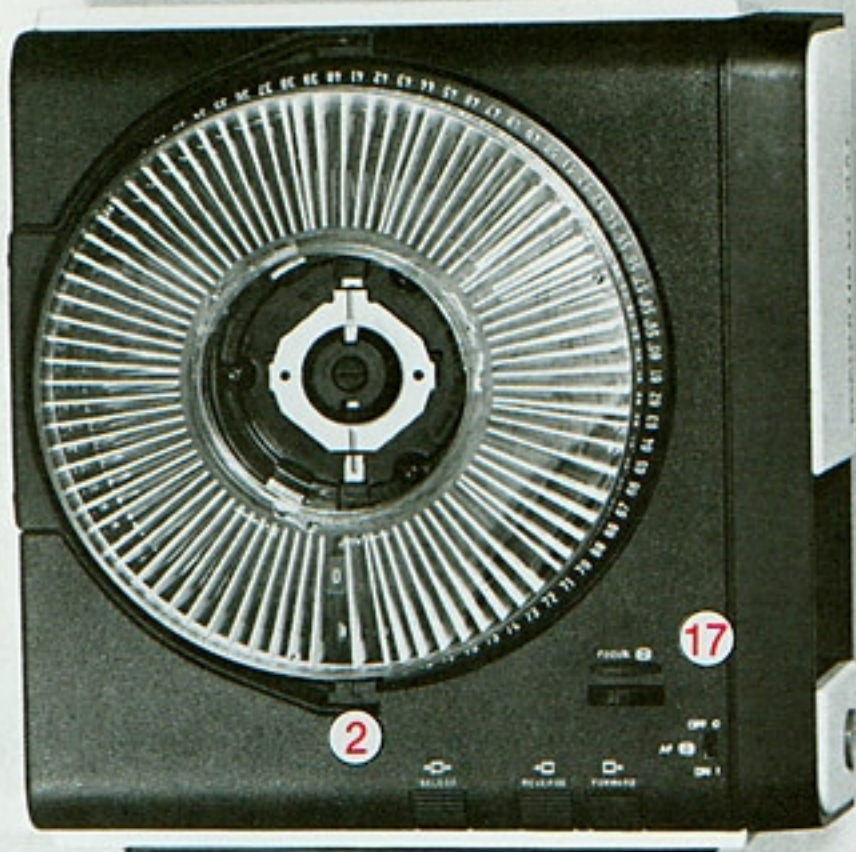
Push the other switch (5) up to turn on the projection lamp. There are three positions for this switch. The lowest one is for fan only. The middle, for lower brightness. The top position is for maximum brightness. For most purposes you should use the low level, as it prolongs lamp life. (See page 13.)

Even though the light goes on, no light will appear on the screen until a slide is shown.

Press the left hand switch (6) on the remote control to the forward position. A slide will drop into place and an image will appear on the screen.

Aim the projector by moving it to the left or right. Then focus the image by rotating the manual focus wheel (17). You can



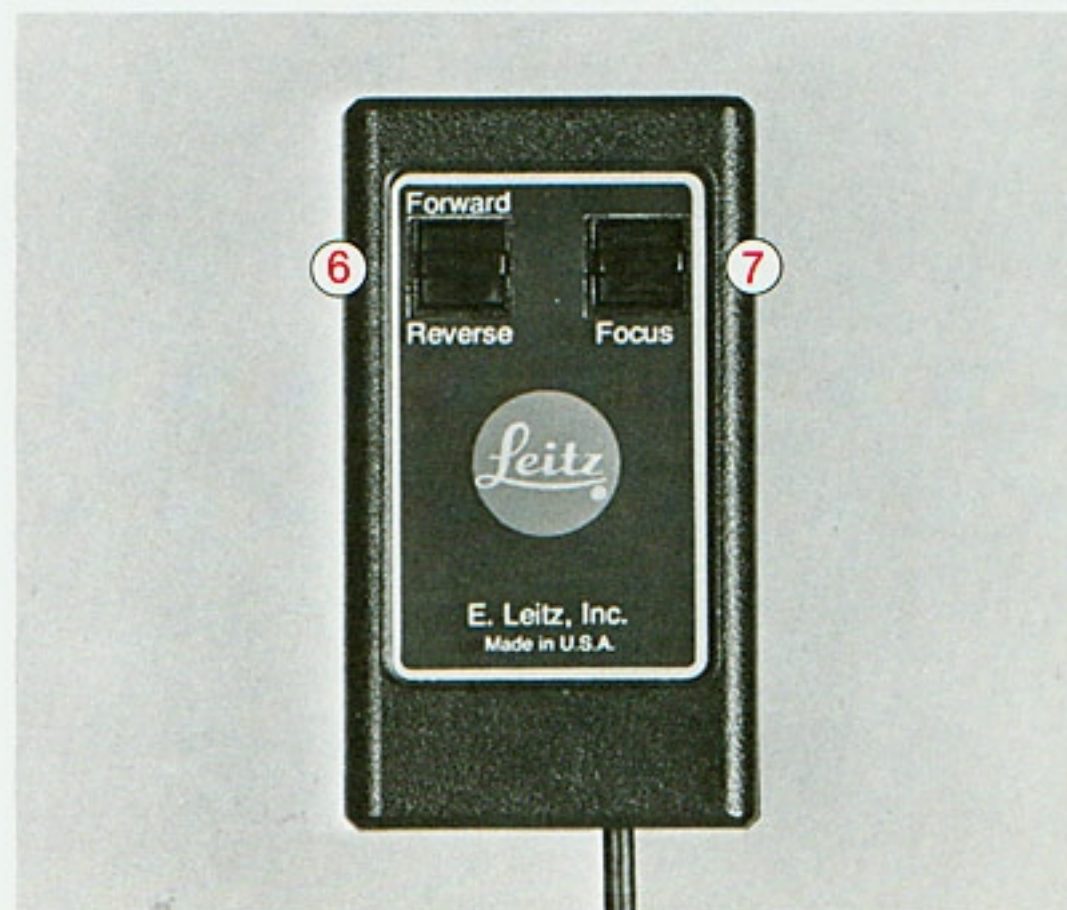


also focus by pressing the right hand switch (7) on the remote control. The manual focus is faster. The remote control focus is for fine adjustment once you start showing slides.

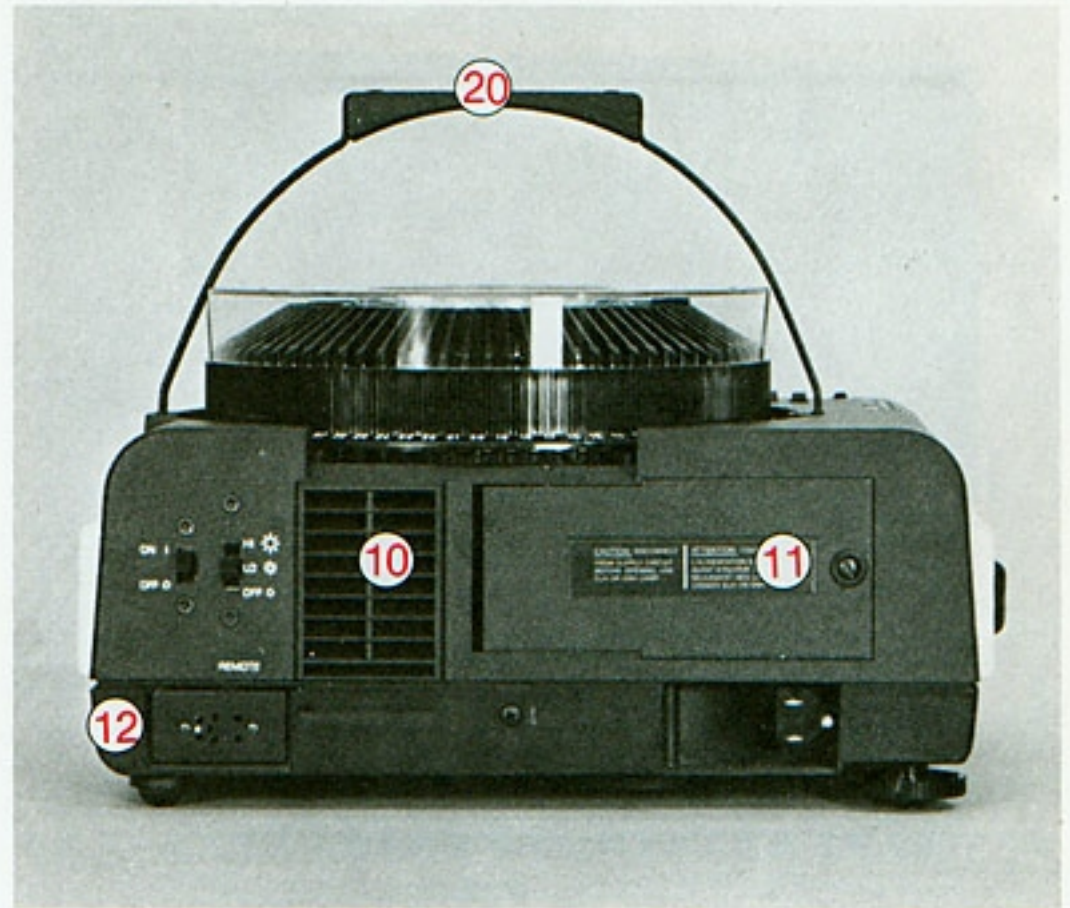
To raise the image on the screen, lift the front of the projector and press the bar (8) that is under the "Prad" in "Pradolux." The elevating leg will drop down. Rest the leg on the table while you hold the bar down until the image is at the right height. Then release the bar to lock the leg in place. The wheel on the end of the leg can be rotated to raise the front of the projector higher, or for fine adjustment.

If the image is crooked, you can level the projector by turning the wheel (9) under the right hand back corner. Rotating the wheel clockwise (as seen from above), raises the right hand side of the projector.

That's it. Continue to push the forward switch (6) on the remote control and enjoy the show. You may have noticed some other switches and controls on the projector. They are explained on the following pages. Please read on.



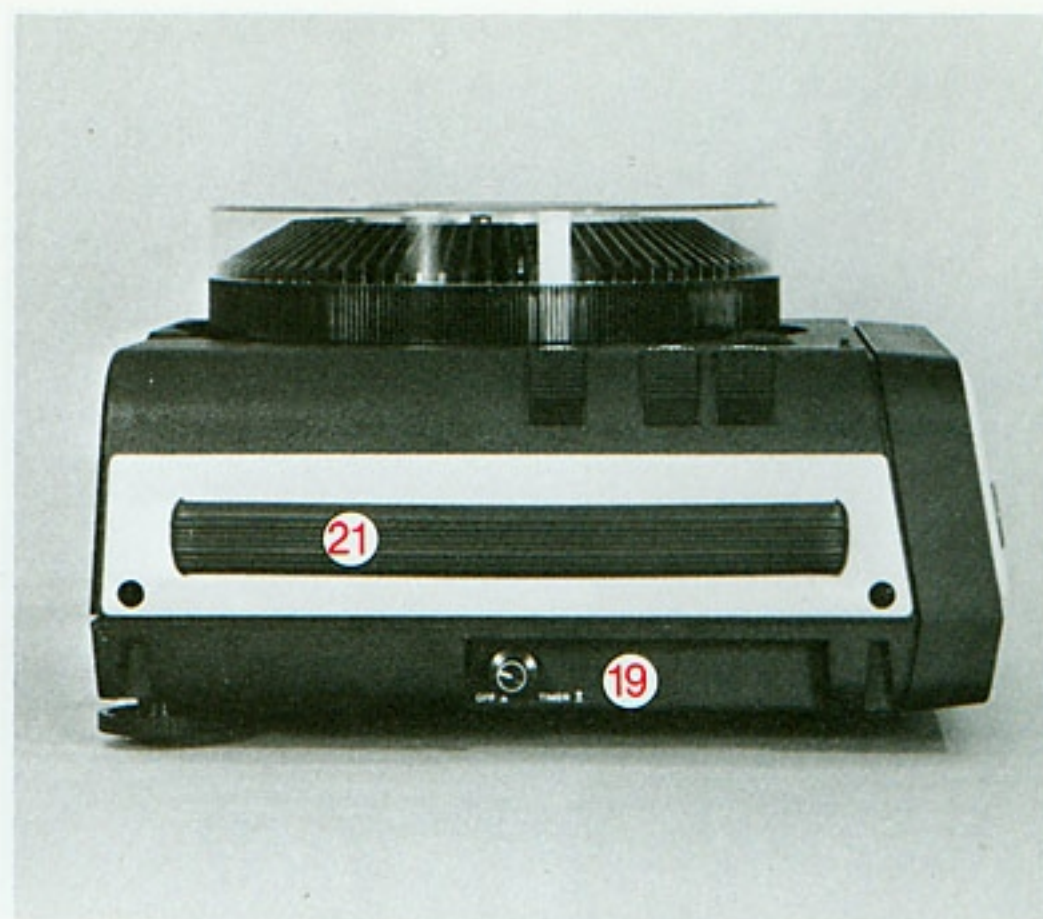
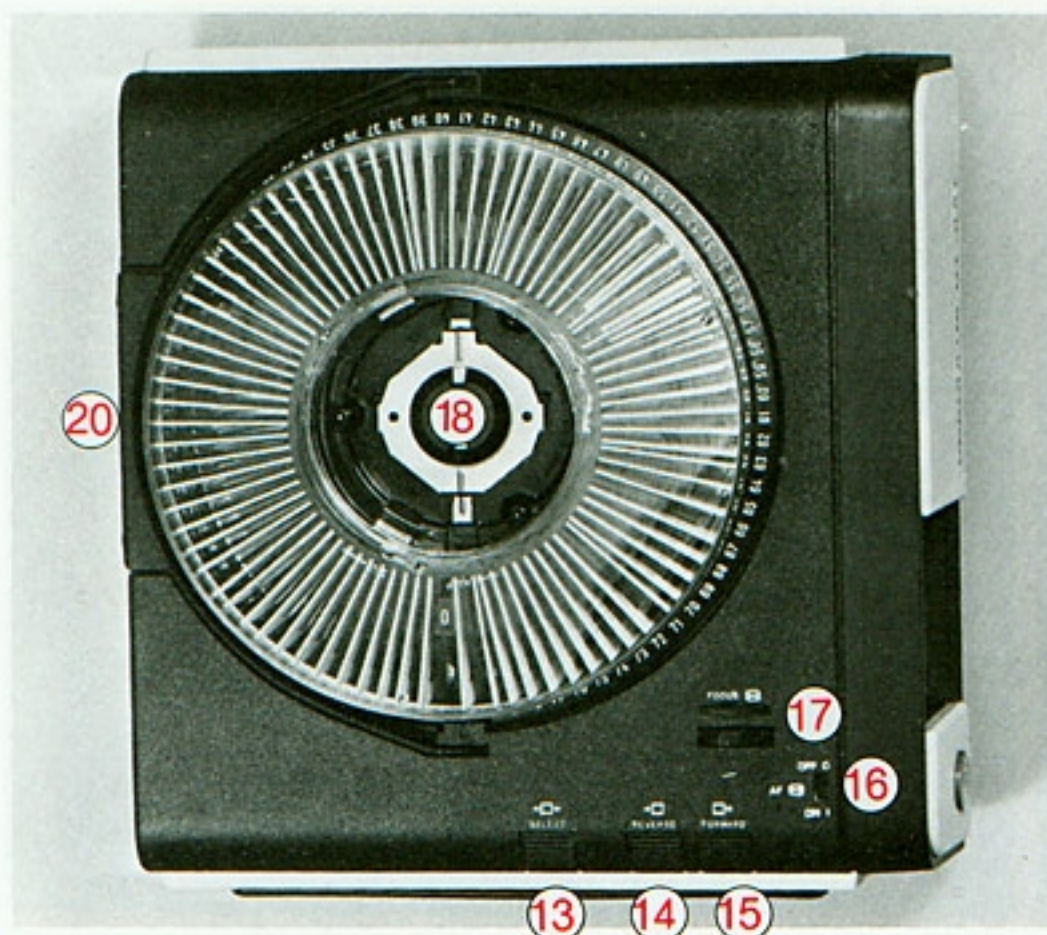




## Other operating features.

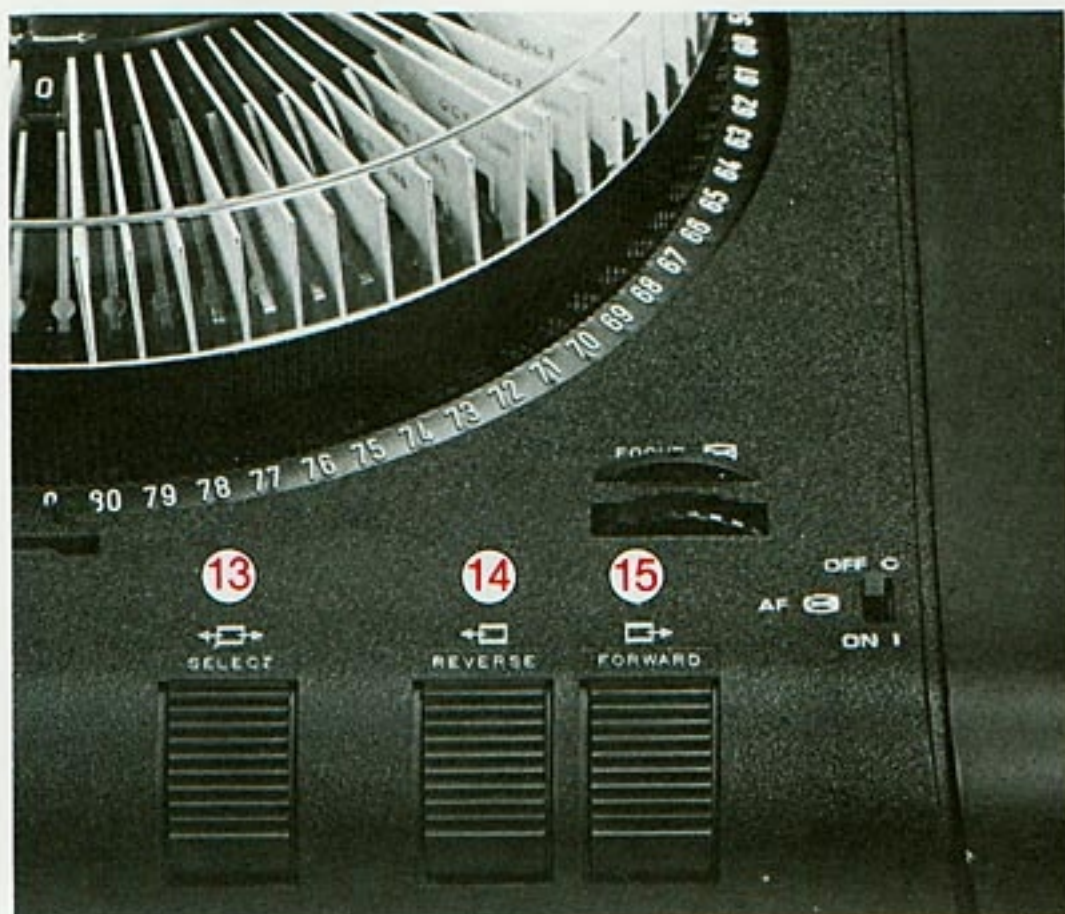
- 10. Air vent. See page 2.
- 11. Lamp housing door. See page 12.
- 12. Remote control and dissolve unit socket. See page 9.
- 13. Select control. See page 8.
- 14. Reverse control. See page 8.
- 15. Forward control. See page 8.





- 16. Auto-focus on-off switch. See page 14.
- 17. Manual focus control. See page 4.
- 18. Tray release screw. See page 8.
- 19. Interval timer. See page 14.
- 20. Folding handle.
- 21. Carrying handle.

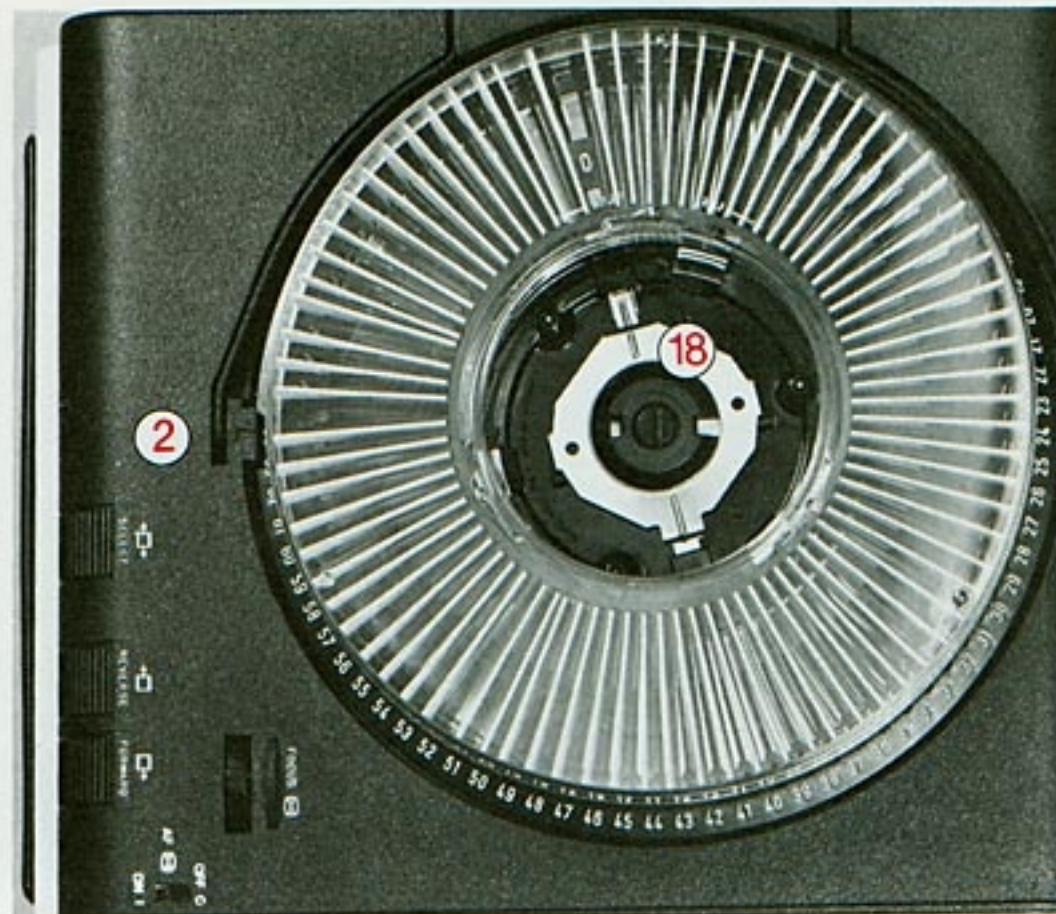




## Manual control.

Most of the time you'll use the remote control. But there may be occasions when you want to operate without it. Then you use the manual forward switch (15) and manual reverse switch (14) to advance or reverse slides. Just touch either switch momentarily to actuate it. If you hold the switch depressed, the slides will continue to advance (or reverse) as long as you keep the switch down.

The select switch (13) does two things. When you press it down, a slide that is down in the projector will be raised. Then when you release the switch, the slide drops back down again. This is handy when you edit slides. You can remove the slide that is in the gate. (The gate is the slot the slides drop into.) The other function of the select switch is to let you rotate the slide tray by hand. Just press the switch down and rotate the tray by hand to any desired position, including the "0" position so that you can remove the tray.



## If a slide jams.

If a slide gets stuck in the gate, the tray will not rotate. So you can't remove the tray by turning it to the "0" position. But you can remove it by turning the large coin-slotted screw (18) in the center of the tray as far as it will go in either direction—about 1/8 turn. Hold the screw in this position, lift up the side of the tray opposite the gate index (2) and pull the tray out from under the gate index. Push the select button (13) to remove the slide. Now you have to get the tray back to normal. On an 80 slide tray turn it over (make sure locking ring is tight!) and rotate the bottom plate until it locks. On the bottom of a 140 slide tray, you'll see a release lever and little hole. Push the release lever toward the center of the tray and rotate the plate until the hole is lined up with a little notch in the rim of the tray which is across the tray from the "0" position. Put the tray back on the projector, press the select switch (13) and on with the show!

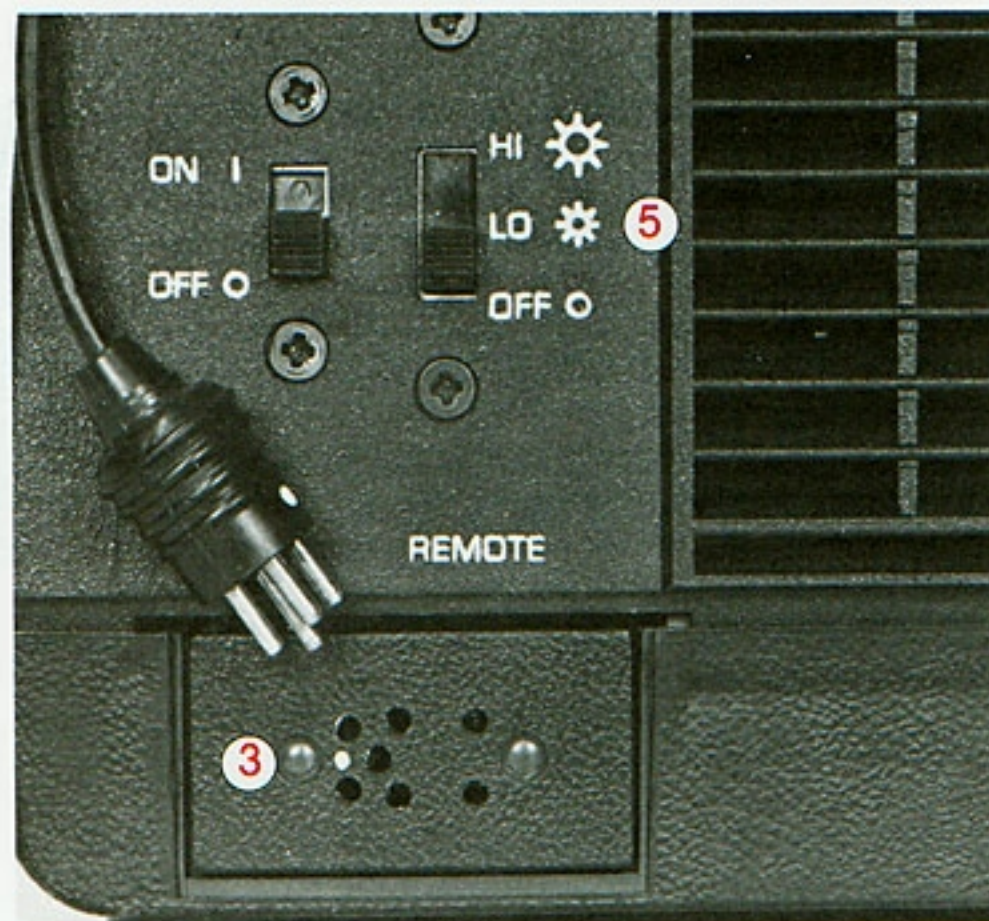
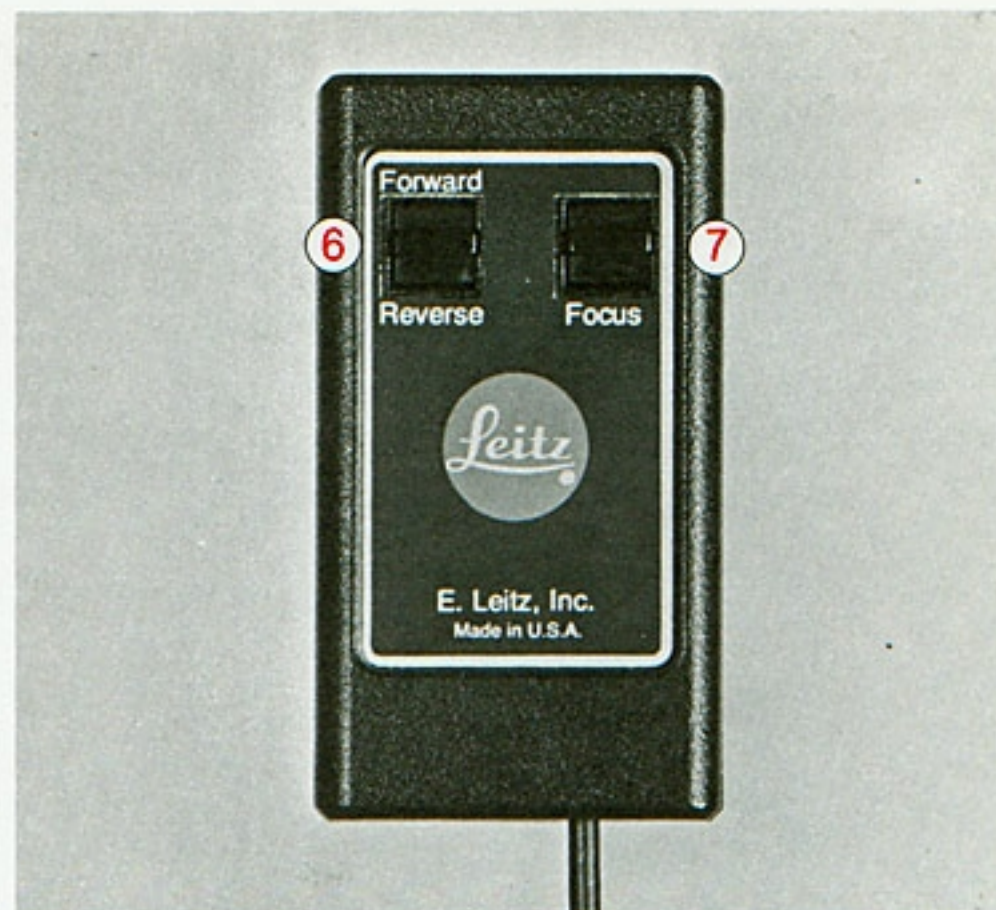


## Remote control and dissolve.

The remote control has two switches. The left hand one (6) is for forward and reverse as indicated on the unit. If you hold the switch in either position, the tray will continue to rotate as long as you hold it.

The focus switch (7) moves the lens back and forth to focus the image on the screen. It takes about 30 seconds for the lens to travel from one extreme position to the other. The lens moves as long as you hold the focus switch in a given position up to the maximum limit of its travel.

The socket (3) accepts both the five-pin remote control plug and seven-pin plugs used with dissolve units. The three-position switch (5) must be in the lowest position when you use a dissolve unit. The RT-300 will work with most American dissolve units.







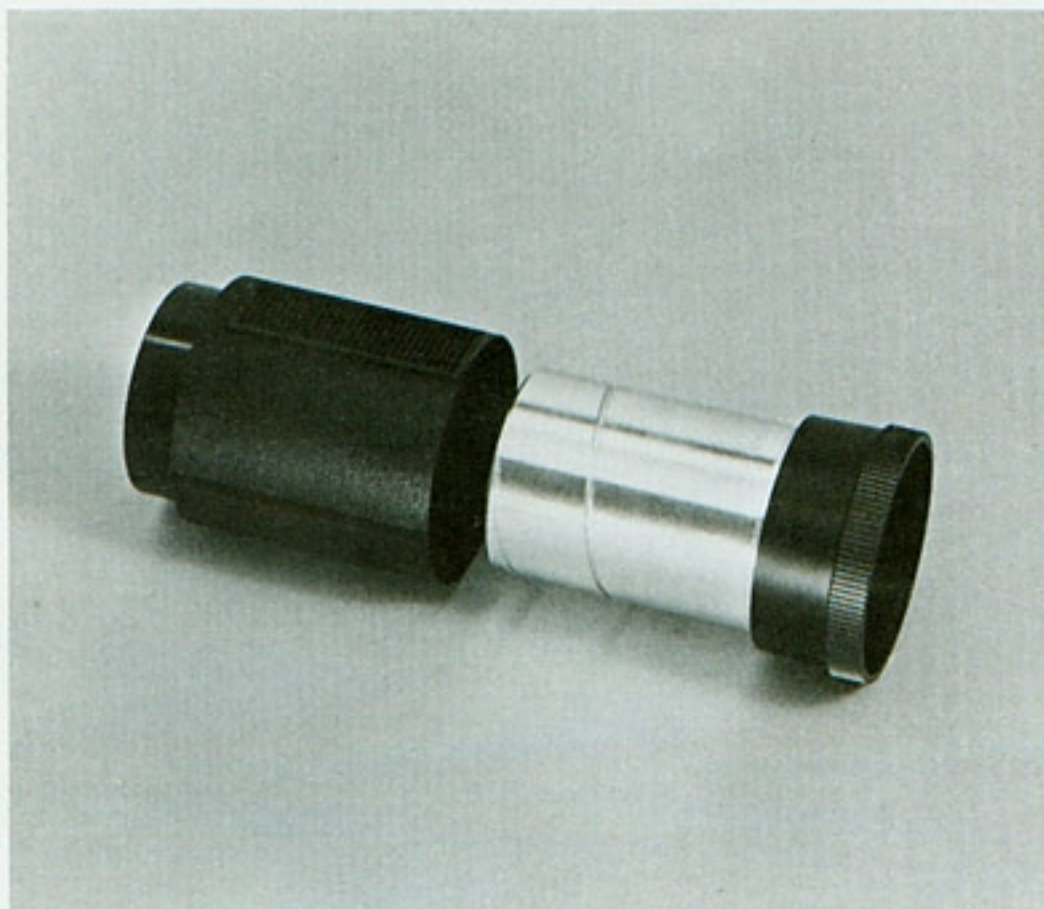
## Lens changing.

Rotate the manual focus (17) toward the back of the projector. Then grasp the lens and pull it out.

Hold the sleeve in one hand and the knurled rim of the lens in the other. Then rotate the lens counter clockwise (as seen from the front) until it comes out. Reverse the procedure to install a lens in the sleeve. Make sure the lens is screwed in as far as it will go.

To put the lens and sleeve back into the projector, insert it so the ribbed track is on top and fits into the corresponding notch in the projector lens housing. Gently push the lens in until the manual focus engages.





To gain maximum image quality, we do not recommend the use of non-Leitz lenses. If you do use a non-Leitz lens (Kodak, Singer, Buehl) the lens and sleeve are integral and all you do is simply insert the unit into the projector housing as described above.

The projection distance table shows you the size of the image you get at a given distance from the screen with lenses of various focal lengths. The longer the focal length the farther you can be from the screen while maintaining a large image.

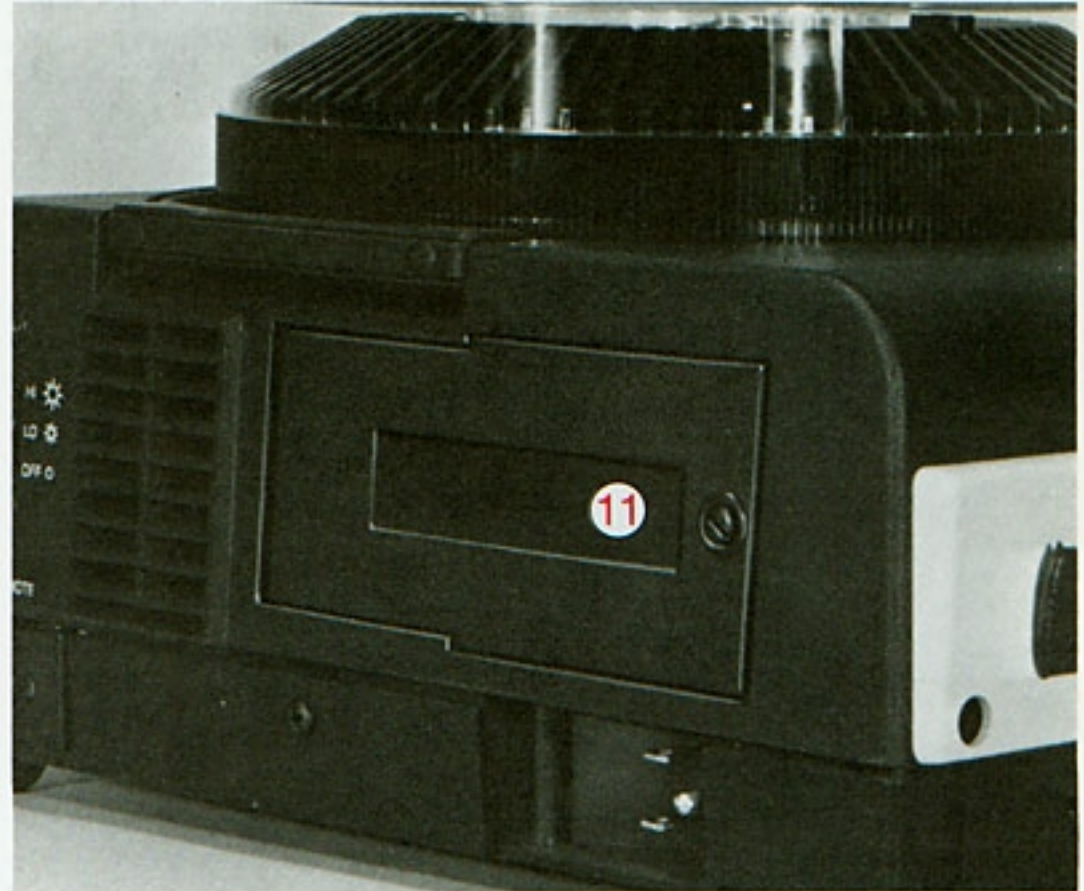
Note: Some Leitz projection lenses made prior to 1980 will not fit the RT-300.

Distance from screen (feet).

	Focal length of projection lens (mm)						
	50	60	85	90	120	150	200
10	7	6	4				
20	14	11	8	8	6	5	
30			12	11	9	7	5
40					12	9	7
50						12	9
60							11

Above figures show approximate size (in feet) of the longer side of the image projected from a 24 x 36 mm transparency.





## Lamp replacement.

**Caution: Allow the lamp to cool before replacement.**

If you leave the fan on, the lamp will cool faster.

Once the lamp has cooled, unplug the projector.

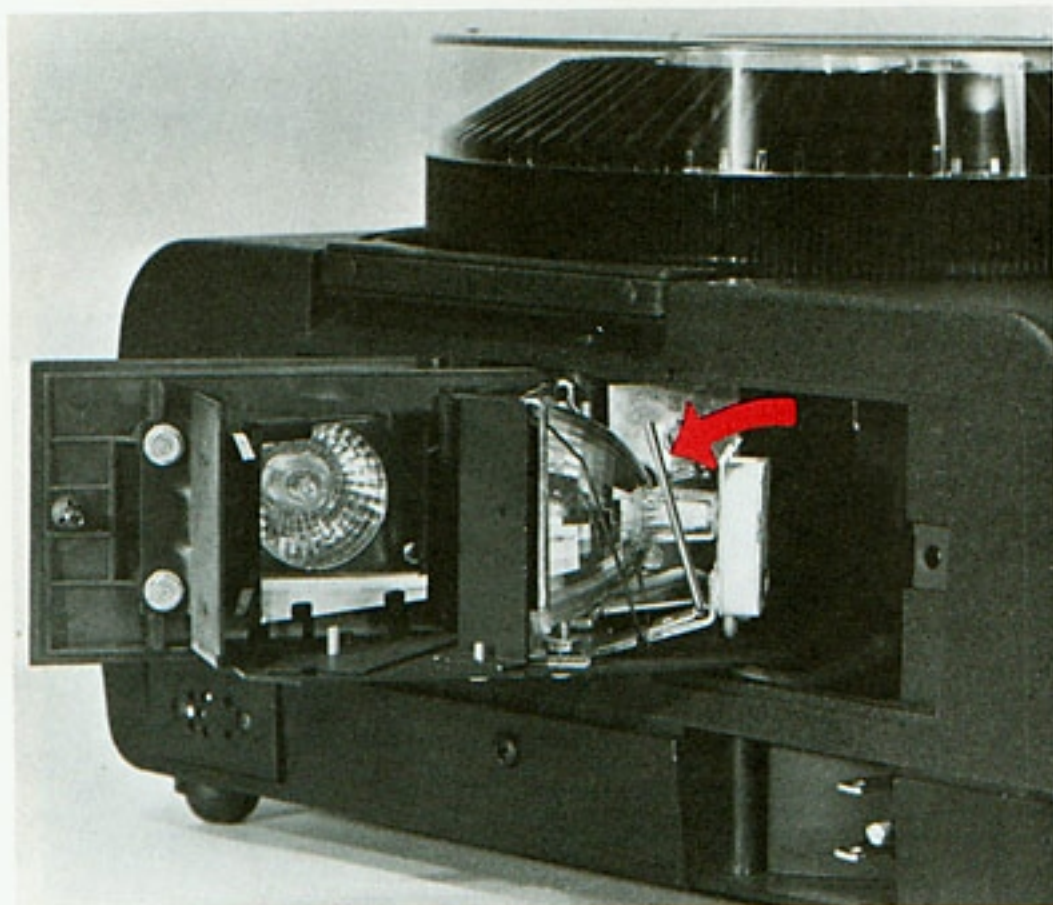
Turn the captive screw on the lamp housing door (11) counter-clockwise until the screw releases. Then open the lamp housing door.

To remove the lamp, push the release lever toward the bulb socket. This pushes the lamp up. Pull the lamp up and out.

Return the release lever to its original position (to your left). Avoid getting fingerprints on the interior of the lamp reflector or on the bulb. Push the lamp down into the socket as far as it will go. Make sure it is seated firmly. Close the lamp housing door and tighten the screw.

**Important: Do not touch the mirror.**





## Replacement lamps.

Type	ANSI Code	Lamp-switch Position	Relative Brightness	Average Life in Hours
Standard	"ELH" 300 watt 120 volt	"Lo"	70%	125
		"Hi"	100%	35
Maximum Life	"EHN" 250 watt 120 volt	"Lo"	50%	500
		"Hi"	65%	175





## Auto-focus.

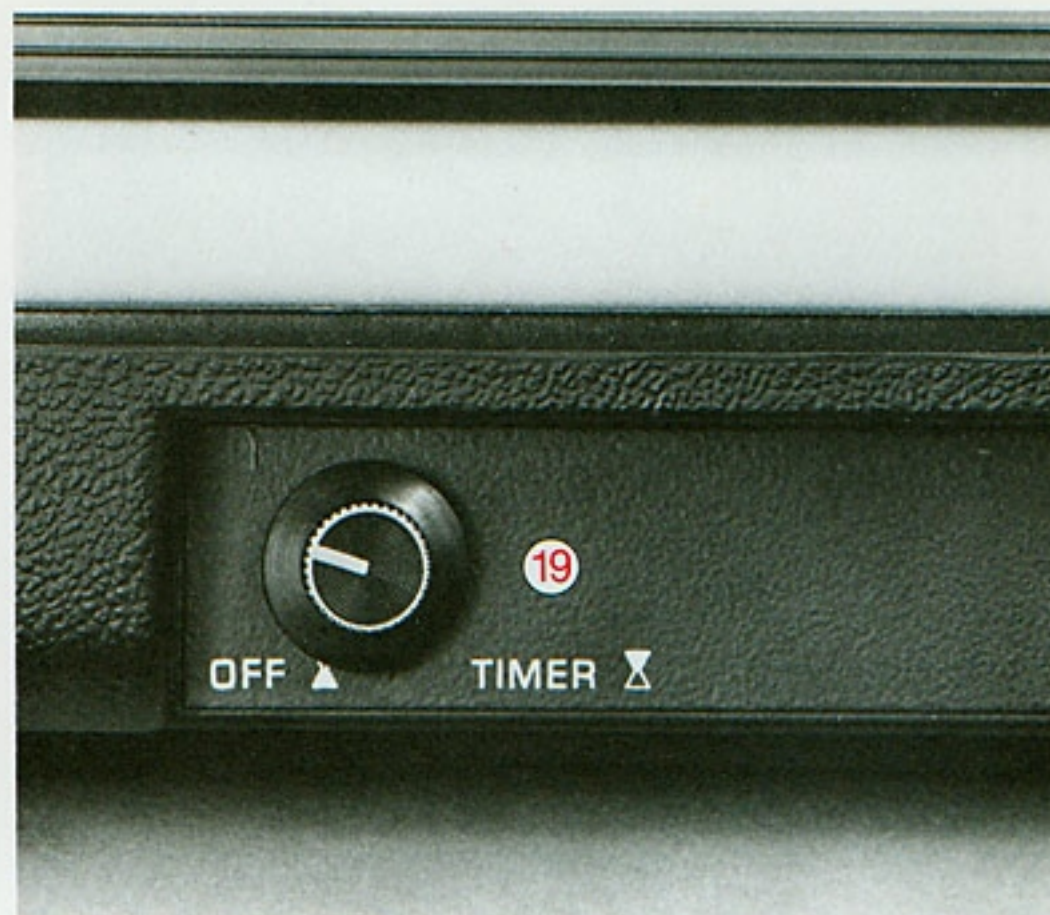
With the auto-focus switch (16) in the "on" position (pushed to the left as you face the front of the projector), focusing of slides will be automatically controlled after you have focused the first slide. The first slide can be focused either with the manual focus control (17) or with the remote control focus switch (7). All subsequent slides that are the same type as the first one (i.e. paper or plastic mounted) will be automatically focused.

Push the auto-focus switch to the "Off" position (to your right) if you have intermixed slides in the tray, such as paper and glass. With the switch in the "On" position, this mixing will cause inconsistent focusing which might be annoying.

Warped film or damaged slide mounts may also cause inconsistent focusing.

If you show write-on slides, turn the switch "Off."

With the auto-focus switch off, focus either with the remote control or the manual focus control.



## Interval timer.

The interval timer (19) is used when you want to run slides "hands off", completely automatically. Rotate the knob clockwise (as you face the right side of the projector) to turn on the interval timer. You'll feel it click on. The timer varies the interval from 2 to 30 seconds. The farther clockwise you turn the knob control, the longer the interval. The interval timer works both with the remote control plugged in, or disconnected.

If, when you turn on the interval timer, the tray does not advance, press the forward control (15) and the cycle will get started.

The timer will rotate the tray indefinitely, until you turn the timer or the projector off. To turn the timer off, rotate the knob to the left (counter-clockwise) until it clicks off.



## Service.

If service is required pack the projector in its original cartons or otherwise pack carefully and ship the unit, insured, to:

E. Leitz, Inc.  
Rockleigh, NJ 07647  
Att: Service Operations

Enclose a note with the package stating the repairs you think are necessary or describing the reason for returning the item.

If your projector is still in warranty, please include your Warranty Certificate or a copy. There will be no charge and service will be completed as soon as possible.

If your projector is out of warranty, we will send you an estimate of repair costs and delivery date. Delivery is from date of your firm go-ahead. Your check, money order or Master Charge number is required in advance.

You may ship by Parcel Post; however, time will be saved if you use Air Parcel Post, Air Express, Special Delivery, or UPS. Postal regulations require you to mark the outside of Parcel Post packages with the words "Letter Enclosed" if a letter is enclosed with the package. First Class postage for this letter has to be affixed separately to the outside of the package in addition to the fourth class (parcel post) postage. DO NOT attach your letter to the outside of the parcel since the letter might be lost or discarded with the wrapping.

We will make return delivery with the same carrier or a faster one unless a specific one is requested by you.

Repairs performed in accordance with our estimate are guaranteed for a period of one year for mechanical/optical parts and for six months for electronic parts.



## Specifications.

Width:	13.65"	34.67cm
Height:	5.625"	14.29cm
Depth:	12.96"	33.00cm
Weight:	14.5 lbs.	6.35kg
Projection lamp:	Standard lamp—ANSI code "ELH" Long-life lamp—ANSI code "ENH"	
Power required:	120 volts, 60 Hz	
Slide acceptance:	Will accept all transparencies mounted in 2 x 2 slides these meeting specifications	

### ANSI Standard PH 3.43 (1977)

	"Thick" Slide	"Thin Slide"
Size:	2.000" to 1.969"	1.988" to 1.957"
Thickness:	0.126" to 0.055"	0.055" to 0.040"
Flat within:	0.126"	0.083"



E. Leitz, Inc. Rockleigh, NJ 07647  
Telephone: 201-767-1100