

**Owner's Manual
Auto/Strobonar 682S
Thyristor Energy Saver**

Congratulations and welcome to the Strobonar family of fine photography

Thank you for your purchase of this fine electronic flash unit.

The Auto/Strobonar 682S provides the added light control, balance and reliability associated with handle-mount flash units. In addition, the 682S can be the basis of a full lighting system using some of the many matched Strobonar accessories.

For best results and to enjoy the many features of your 682S, read this owner's manual thoroughly before attempting to use your Strobonar. Then use the brief operating steps on page 6 as a key for day-by-day operation of your Strobonar.

Contents

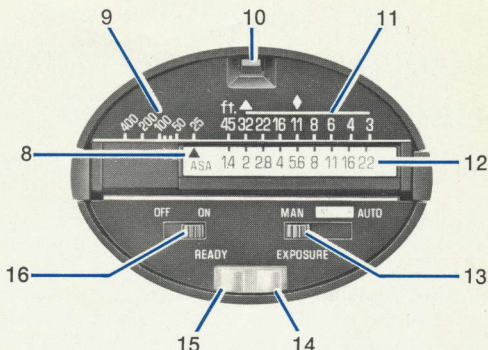
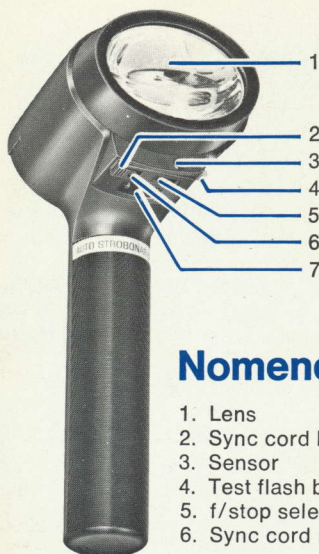
Know your Auto/Strobonar	3
Specifications	4-5
Brief operating steps	6
Operating with AA-size batteries	7
Installing batteries	7
When to replace the batteries	7
Forming the capacitor	7
Attaching the camera — internal or manual mode	8
Removing flash sync cord	8
Setting shutter speed	8
Automatic operation — internal mode	9
Depth-of-field control	9
Thyristor-energy savings	9
Green exposure light	10
Taking pictures automatically	10-11
Manual operation	12
Using calculator	12
Using guide numbers	13
Determining your own guide number	13
Optional power sources	14
Permacad Power Pak Set	14
Pro Pak II	15-16
AC Adapter	17
Automatic operation — with optional Strobo-Eye 3R	18
Attaching to camera with hot shoe	18
Attaching to camera without hot shoe	18
Setting Strobo-Eye 3R dials	19
Depth-of-field control with Strobo-Eye 3R	19
Taking pictures automatically with Strobo-Eye 3R	20-21
Strobodome optional accessory set	21
Tips for using your Auto/Strobonar	22-23
Trouble-shooting tips	23-25

Open this flap.

Leave this flap open for easy reference while reading through the instruction book.

Know your Auto/Strobonar

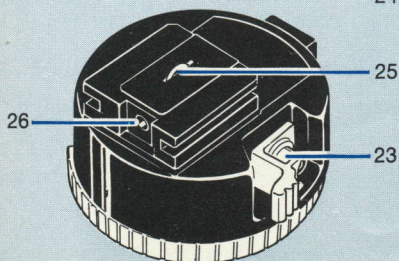
www.butkus.us



Nomenclature

1. Lens
2. Sync cord lock
3. Sensor
4. Test flash button
5. f/stop selector
6. Sync cord receptacle
7. AC adapter receptacle
8. ASA film speed index
9. Film speed scale
10. Battery compartment door latch
11. Distance scale
12. f/stop scale (sliding)
13. Mode switch
14. EXPOSURE green light
15. READY light
16. OFF-ON
(Internal batteries switch)

Optional Strobe-Eye (Not Supplied)



Optional Strobe-Eye 3R

17. Outer dial (f/stop selector)
18. f/stop index
19. f/stop dial (white)
20. ASA (Film speed indicator window)
21. FEET MAX.
(Distance indicator window)
22. Flash sync cord lock
23. Flash sync receptacle
24. Sensor
25. Center contact for hot shoe cameras
26. Sync receptacle for non hot shoe cameras

Notice: Equipment subject to appearance and specification changes without notice.

For your convenience the numbers listed on this page are referenced in the text.

Specifications

Power Sources (Not Supplied)	AA Alkaline (6 batteries)
	AA Nicad (6 batteries)
	Permacad Power Pak
	Pro Pak II with 510 volt battery
	AC adapter 120 or 240 AC

Flashes Per Set of Batteries or Per Charge		
AA Alkaline	Auto	up to 1200
	Man	125
AA Nicad	Auto	up to 900
	Man	90
Permacad Power Pak	Auto	up to 1000
	Man	150
Pro Pak II	Auto	up to 7000
	Man	400
AA Alkaline & Permacad Power Pak	Auto	up to 2200
	Man	275
AA Alkaline & Pro Pak II	Auto	up to 8200
	Man	525
AA Nicad & Permacad Power Pak	Auto	up to 1900
	Man	240
AA Nicad & Pro Pak II	Auto	up to 7900
	Man	490

Recycle Time		
AA Alkaline	Auto	0.9 to 10 sec.
	Man	10 sec.
AA Nicad	Auto	0.9 to 6 sec.
	Man	6 sec.
Permacad Power Pak	Auto	0.9 to 2.5 sec.
	Man	2.5 sec.
Pro Pak II	Auto	0.9 to 3.8 sec.
	Man	3.8 sec.

Flash Speed Automatic

Approx. 1/50,000 to 1/500 sec.

Flash Speed Manual

Approx. 1/500 sec.

Guide Number		
	Feet	63 for ASA 25 (DIN 15)
	Meters	19 for ASA 25 (DIN 15)

.....	Feet	126 for ASA 100 (DIN 21)
.....	Meters	38 for ASA 100 (DIN 21)
Automatic operation f/stops available		
With Internal Sensor		
.....	Choice of 2 f/stops for each film speed	
.....	Example: ASA 25 ▲f/2.0 or ♦f/5.6	
.....	ASA 100▲f/4.0 or ♦f/11	
With Remote Sensor (Optional Strobe-Eye 3R)		
.....	Choice of 3 f/stops for each film speed	
.....	Example: ASA 25 f/1.4, f/2.8 or f/5.6	
.....	ASA 100 f/2.8, f/5.6 or f/11	
Automatic Shooting Range All Film Speeds		
Internal		
.....	▲4 to 32 ft. (1.2 to 10m)	
.....	♦2 to 11 ft. (.6 to 3m)	
Remote (with optional Strobe-Eye 3R)		
.....	5 to 45 ft. (1.5 to 13.7m)	
.....	3 to 22 ft. (.9 to 6.7m)	
.....	2 to 11 ft. (.6 to 3m)	
Angle of Coverage		
.....	35° Vertical 60° Horizontal	
Color Temperature		
.....	Approximately noon daylight	
Weight		
.....	15 ounces (425 grams)	
Size		
.....	4.0" deep x 3.6" wide x 9.3" high	
.....	101mm deep x 91.4mm wide x 237mm high	

The condition of the storage capacitor, power source, and in-use operation substantially affect performance of all electronic flash units.

How often you flash, how rapidly you flash, and idle time between flashes are some of the conditions that affect performance. Listed below are the test conditions which established these specifications:

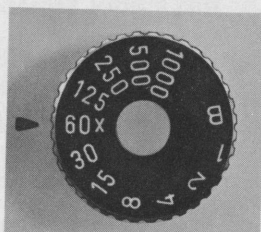
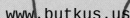
All data specified with fresh batteries, fully formed storage capacitor and/or nominal (120V or 240V) AC line voltage.

All automatic data specified with unit flashed at 10-second intervals with no rest at a distance of 6 ft. (2m) from subject until ready light takes longer than 10 seconds to glow without Strobodome.

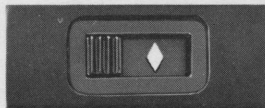
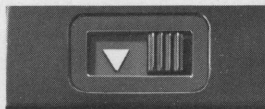
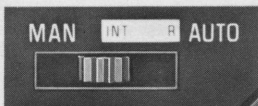
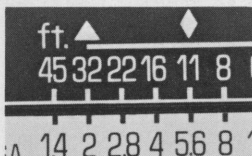
All manual data specified with unit flashed at 30-second intervals until ready light takes longer than 30 seconds to glow.

CAUTION: Your unit is designed for rapid flash sequence. However, damage may occur to the unit under extremes of rapid flashing. Do not flash more than 25 times successively with a 5-second or less interval between flashes in manual mode or automatic mode when using optional Strobodome.

Familiarize yourself with your Auto/Strobonar—then follow these simple steps for automatic operation with internal batteries. For other modes of operation, see appropriate sections of this manual.



- 400 200 100 50 25
ASA



- [illegible]



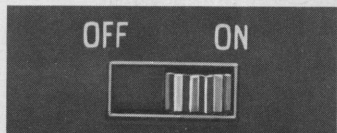
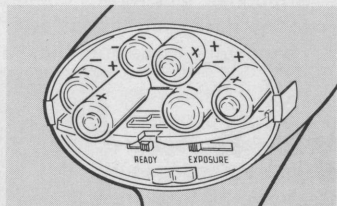
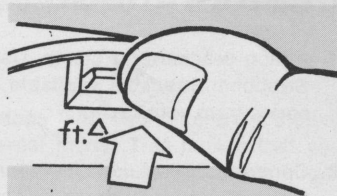
- 6

Operating with AA-size batteries

The 682S uses 6 AA-size batteries. Alkaline or rechargeable Nicad batteries may be used.

Installing batteries

1. To unlock battery door, push in on door while pressing up on latch (10)*. Then release pressure on door while pushing up on latch.
2. Install batteries as shown in the picture. Be sure to match the polarity (+) or (−) marks on flash and battery.
3. When batteries are installed, close battery compartment door.
4. Set OFF-ON switch to ON. You'll hear a faint whine and the READY light will glow, indicating that you have inserted the batteries correctly. Always set the OFF-ON switch to OFF when you're not using your flash unit.



When to replace the batteries

Replace the batteries when the READY light takes longer than 30 seconds to glow.

Forming the capacitor

Like all electronic flash units, your flash has an energy storage capacitor that stores the electrical energy required by the flashtube. When your flash is new or has not been used for 30 days or more, it's normal for the capacitor to lose some of its ability to store electrical energy, or deform. A deformed capacitor causes longer recycle time for the first few flashes and less flashes per set of batteries.

The capacitor is reformed by flashing the unit 5 or 10 times, waiting about 30 seconds between flashes. Use the test flash switch (4) to test flash your unit.

NOTE: If you are in a hurry, reform the storage capacitor by using your 682S in your photographic situation. Just remember, you may get fewer flashes from the battery and the recycle time will be longer for the first few flashes.

*Numbers in parentheses used in this manual refer to the nomenclature numbers on page 3.

Attaching to camera — internal or manual mode

1. Attach bracket and clamp. Use one of the many Strobonar brackets available as optional accessories from your dealer.
2. Connect shutter cord between flash and X-sync terminal of your camera. Use a cord with a Strobonar locking tip connector for connection to the flash unit. If your cord has removable tip connectors, make sure they're tight. Check often.

NOTE: Faulty shutter sync cords are a major source of electronic flash failure. Strobonar has designed cords assure good connection with Strobonar flash units. You may get unreliable results if you do not use a Strobonar cord.

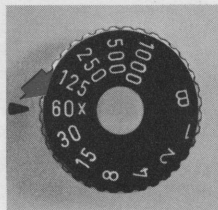


Removing flash sync cord

When removing flash sync cord from flash or Strobo-Eye 3R receptacle, release lock as shown in the picture.

Setting Shutter Speed

Use X-synchronization (zero delay). If your camera has a between-the-lens shutter it will synchronize at all speeds. If it has a focal plane shutter, it will synchronize only at slower speeds, generally up to 1/60 second. Check your camera instruction manual or see your dealer.



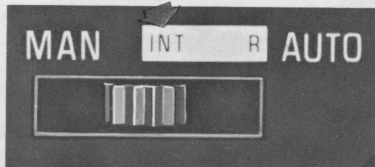
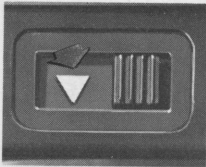
Automatic operation — internal mode

Your flash unit will operate automatically in two modes: Internal (using the built-in sensor) and Remote (using the optional remote sensor, Strobo-Eye 3R). The remote sensor is available from your dealer, see page 18.

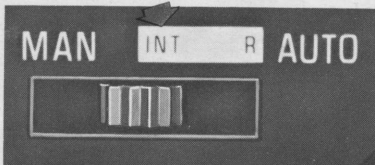
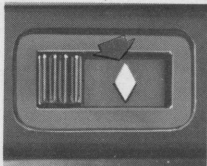
Depth-of-Field Control

Your Strobonar gives you a choice of two f/stops with two different shooting ranges when shooting automatically in the internal mode. This means that you can decide on more or less depth of field (area of sharp focus) by using a larger or smaller f/stop while shooting automatically.

Set mode selector to INT (internal) and f/stop selector to the desired position.



This position lets you select a large lens opening to decrease depth of field with a shooting range of 4 to 32 feet (1.2 to 10m).



This position lets you select a smaller lens opening to increase depth of field with shorter flash to subject range of 2 to 11 feet (.6 to 3m).

Thyristor-energy savings

Your Strobonar has an energy-saving, thyristor-controlled automatic circuit. When you're operating in automatic mode, the amount of energy consumed from the batteries and the recycle time varies with shooting distance.

It's relative. See table below:

Flash-to-subject distance	Recycle time	Flash per set of Batteries
6 feet (2m)	0.9 sec.	1200
13 feet (4m)	1.5 sec.	400
22 feet (6.7m)	less than 10 seconds	125

All data used in chart is specified with fully formed storage capacitor, fresh set of alkaline batteries, unit flashed at 10-second intervals with no rest.

Green exposure light

The green EXPOSURE light indicates if enough light has reached your subject for proper exposure. It lights for about 5 seconds when the flash computer determines if the light is correct.

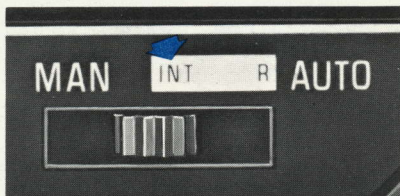
You can use the green EXPOSURE light as a good exposure verification or you can use it to pre-test your lighting situation.

To use for pre-test, position your flash and subject as you want them for the final picture and make a trial test using the test flash button (4). If the green light glows, take your picture with confidence of good exposure. If it doesn't light, reduce flash-to-subject distance or select another range.

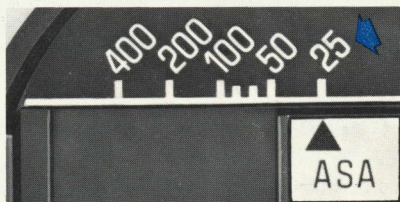
The green EXPOSURE light is particularly important when you're shooting in a very large room with high ceiling, shooting with optional Strobodomes, or if you're on the outer limits of your shooting range.

Taking pictures automatically – Internal mode

1. Set mode selector to internal (INT).



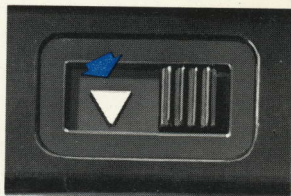
2. Slide f/stop scale until the ASA number of the film you're using is opposite the ASA ▲ triangle.



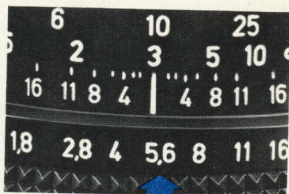
3. Choose the f/stop that gives you the depth of field and/or range you want opposite one of the two symbols ♦ or ▲, see page 9.



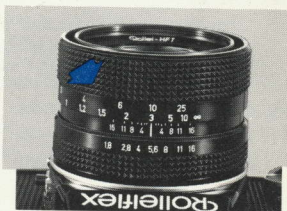
-
- A close-up photograph of a black plastic component, likely a part of a vehicle's interior trim. The component has a rectangular recessed area. Inside this area, on the left, are several vertical, parallel ridges. To the right of these ridges is a white, diamond-shaped feature. A blue arrow points to this white diamond feature.



-



-



-

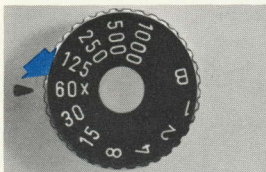
- 
- EXPOSURE

11

Manual operation

Using calculator

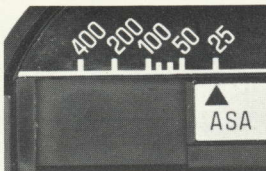
1. On your camera, set shutter speed for x-sync.



2. Set mode selector to MAN.



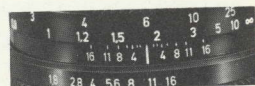
3. Slide f/stop scale until the ASA number of the film you're using is opposite the ASA ▲ triangle.



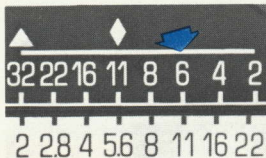
4. Focus camera.



5. Check the distance from your subject to your flash unit using your camera lens or some other convenient method.



6. On your camera lens, set the f/stop that appears opposite the flash-to-subject distance on your calculator.



7. Set OFF-ON switch to ON or to desired position if you're using optional power sources, see page 14.



8. Take your picture after the READY light comes on.



www.butkus.us

EXAMPLE: If you're using a film speed of ASA 25 (DIN 15) with flash-to-subject distance of 6 feet (1.8m), the proper f/stop to set on your camera is f/11.

NOTE: The green exposure light is for use in automatic mode and will not light in manual mode.

Using guide numbers

1. Set shutter speed for X-sync.
2. Find the guide number of the film you're using in the table below.
3. Determine the flash-to-subject distance.
4. Divide the guide number by the flash-to-subject distance to find your f/stop setting and set this f/stop on your camera lens.
5. Set mode switch to MAN.
6. Set OFF-ON switch to ON or desired position if using optional power sources, see page 14.
7. Take your pictures after the READY light comes on.

EXAMPLE: If you are using a film rated at ASA 25 (DIN 15) at a flash-to-subject distance of 8 feet (2.4 meters), the proper f/stop to set on your camera is f/8 (63 divided by 8 or 19 divided by 2.4). The nearest click stop on your camera is close enough for practical work.

ASA	25	32	40	50	64	80	100	125	160	200	250	320	400	800	1600
DIN	15	16	17	18	19	20	21	22	23	24	25	26	27	30	33
GUIDE NO. FEET	63	71	79	89	100	112	126	142	159	178	201	225	252	356	504
GUIDE NO. METERS	19	21	24	27	30	34	38	43	48	54	61	68	76	108	154

NOTE: The calculator scale and the guide number table are based on averages calculated for average size rooms with light walls. If you are taking pictures in a very large room or out of doors at night, you may need to increase the exposure by one f/stop or more.

Determining your own guide number

A guide number is simply what the word implies. It's a guide for determining manual flash exposure.

There are many factors that affect flash exposure. These include variations in flash units, cameras, processing technique, film tolerances, subject reflectivity, size of room, etc.

Experience and your personal taste may suggest more or less exposure than our guide numbers call for. So, to get the results that suit you best, here's how to determine your own guide number:

1. Use transparency slide film.
2. Determine exposure as explained for manual operation either with the calculator or using guide number listed in the chart, and make a trial exposure.
3. Now make additional exposures in $\frac{1}{2}$ f/stop increments to one f/stop larger and one f/stop smaller than your first trial exposure. Be sure to make all your exposures at the same flash-to-subject distance.
4. Process the film and select the f/stop adjustment that suits you best. Once you've determined how much adjustment is needed, make this same adjustment for all films.

Optional power sources

In addition to AA-size Alkaline or AA-size Nicad batteries, the 682S operates with three other Auto Strobolar power sources.

The following power sources are available from your dealer:

- Permacad Power Pak
- Pro Pak II
- AC Adapter (120 or 240 volts)

*orders from
Cooper*

Permacad Power Pak Set

The Permacad Power Pak Set includes pak, rechargeable Nicad battery cartridge, and charger. The Pak is convenient to carry. It clips to your belt or attaches easily to shoulder strap.

To use the Pak as a power source for your 682S, follow instructions provided with the Pak. In addition to the Pak, you'll need the Strobolar Power Cord, Cat. No. 100 478.



The Pak can be used instead of AA batteries or in combination with AA batteries for improved performance.

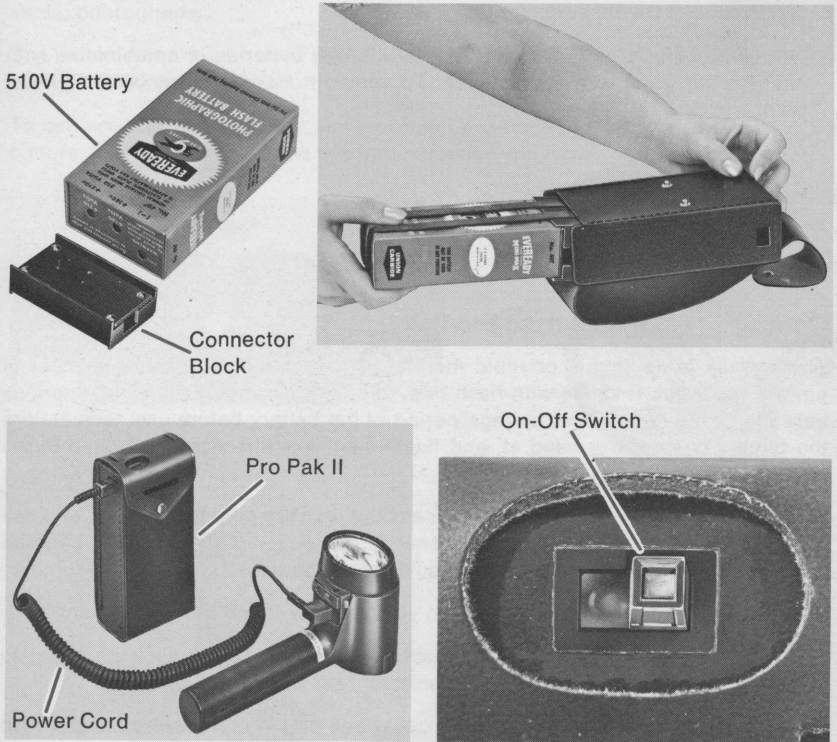
To use Pak:

1. Connect power cord as shown in the picture.
2. Set Pak switch to A.
3. On 682S, set OFF-ON switch to ON for use in combination with AA batteries. To use the Pak only, set OFF-ON switch to OFF.
4. Be sure to set the Pak and 682S switch to OFF when finished to avoid draining the batteries.

Be sure to read the manual that comes with Permacad Power Pak Set for additional suggestions about getting the best performance from the Pak.

Pro Pak II

The Pro Pak II includes connector block, leather case and shoulder strap. To use, you'll need a 510 volt dry battery.



Battery Installation

Follow the simple steps to install a new battery in the Pro Pak II:

1. Place the connector block on top of the battery so the pins puncture the seals and make contact with the minus (—) and plus (+) 510 volt terminals.
2. Stretch the rubber bands around the battery and connector block.
3. Insert the battery into the case, connector block toward the top and snap the case closed. Be sure the On-Off switch is operable through the hole in the top of the case and the receptacle in the connector block is aligned with the hole near the top of the case.

Using Pro Pak II

1. Connect power cord as shown in the picture on page 15 above. Be sure to use the Strobonar power cord, Cat. No. 100 478.
2. Set Pro Pak II On-Off switch to On.
3. Set 682S OFF-ON switch to ON to use with AA batteries in combination with the Pak for improved performance. To use with Pak only, set 682S OFF-ON switch to OFF.

Getting good service from Pro Pak II

There really is no simple or rapid method of determining the actual number of flashes you'll get. It varies with flash rate, idle time between flashes, rest periods between shooting sessions, storage period of the battery before use, temperature the battery is stored or used at, and flash-to-subject distance when used in the automatic mode.

The 510-volt batteries are extremely sensitive to rest periods. Even a one-half hour rest between uses is good. In general, the longer the rest period between uses up to 24 hours, the more flashes you'll get per battery.

Here's how to get the most flashes from your Pro Pak II and 510-volt battery:

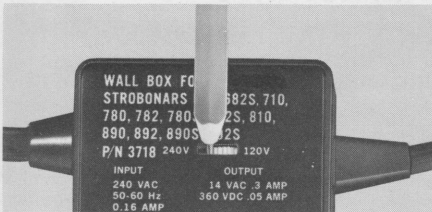
1. Purchase fresh batteries from a reliable photo dealer. Make sure the batteries have not been stored at high temperatures.
2. Try not to flash over 20 flashes during any one period at a flash rate faster than one flash every 10 seconds. If you know you're going to be firing at fast rates, it's best to take along an extra Pro Pak II and battery. Then you can rest one while using the other.
3. If there is to be more than five minutes between flashes, switch off the Pro Pak until just before you're ready to shoot.
4. Try to rest the battery for at least 4 hours between shooting sessions.

AC Adapter

An AC Adapter can be used as a power source for your 682S. It's ideal for forming the storage capacitor and particularly good for constant use needs such as studio photography.

The AC Adapter must be set to the proper line voltage (120V or 240V) to prevent damage or improper operation.

To set, use a ballpoint pen or similar object positioned in the slot as shown in the picture. Slide the switch to the voltage indication you want.

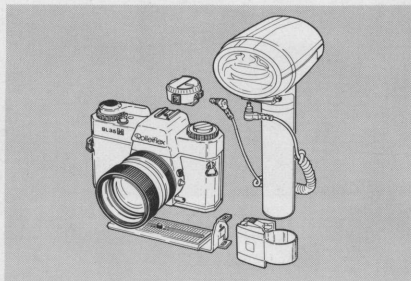


Automatic operation — with optional Strobe-Eye 3R

The Strobe-Eye 3R Remote Sensor is an optional accessory for off-or on-camera lighting with automatic exposure control. The remote sensor measures the light reflected from your subject and turns your 682S off when your subject has received enough light for good exposure. It gives you the advantage of shooting automatically for bounce and off-camera flash operations. The remote sensor gives you a choice of 3 f/stops for each film speed so you can select the depth-of-field you want.

Attaching to cameras with hot shoe

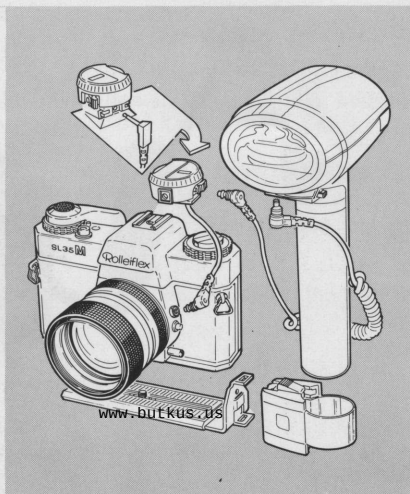
1. Attach bracket and clamp as shown in the picture.
2. Insert Strobe-Eye 3R into mounting shoe of your camera.
3. Connect flash sync cord between Strobe-Eye 3R and flash unit. Use a cord with Strobonar locking tip connector on each end. Make sure cord tip connectors are screwed in tightly. Check often. (Locking tip supplied with Strobe-Eye 3R).



Attaching to cameras without hot shoe

1. Attach bracket and clamp as shown in the picture.
2. Insert Strobe-Eye 3R into accessory clip of your camera.
3. Connect flash sync cord between Strobe-Eye 3R and flash unit. Use a cord with a Strobonar locking tip on each end. Make sure cord tip connectors are screwed in tightly.
4. Connect shutter sync cord (furnished with Strobe-Eye 3R) between receptacle at back of Strobe-Eye 3R (see picture) and X-sync terminal of your camera.

NOTE: If your camera does not use the standard PC connector (as supplied), you'll need a special sync cord and removable camera tip connectors. Strobonar sync cord (Cat. No. 100 476) and a variety of tip connectors for different cameras are available from your Rollei dealer.



Setting Strobe-Eye 3R Dials

To set film speed, rotate white f/stop dial (19) until the film speed number of the film you're using is visible in the ASA film speed window (20), see page 3.

To select f/stop, rotate outer dial (17) until the desired f/stop on the f/stop dial (19) is opposite the f/stop index (18). You have a selection of 3 f/stops for each different film speed. There is an indent for each f/stop. Make sure the f/stop outer dial stops in the proper indent. The maximum shooting distance for your selected f/stop appears in the FEET MAX window (21).

Depth-of-Field Control with Strobe-Eye 3R

With Strobe-Eye 3R, you have a choice of 3 f/stops with three different shooting ranges. This means you can decide on more or less depth-of-field by using a larger or smaller f/stop while shooting automatically.

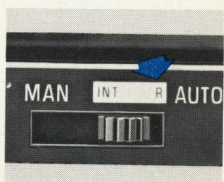
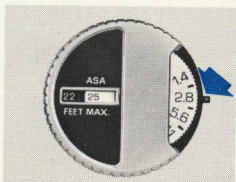
When using Strobe-Eye 3R remote sensor the mode switch must be set to R (remote position).

The sequence below shows f/stop and range selection when using ASA 25 film.

This position lets you use a large lens opening to decrease depth-of-field with a shooting range of 5 to 45 feet (1.5 to 13.7m).



This position lets you use a medium f/stop for medium depth-of-field at a shooting range of 3 to 22 feet (.9 to 6.7m).



This position lets you use a smaller lens opening to increase depth-of-field with shorter shooting range of 2 to 11 feet (.6 to 3m).

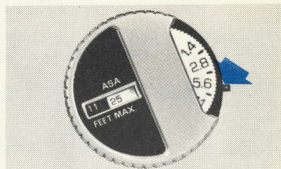


Taking Pictures Automatically with Strobo-Eye 3R

1. On Strobo-Eye 3R, rotate f/stop dial (19) until the ASA number of the film you're using is in the ASA window.



2. On Strobo-Eye 3R, select and set f/stop by turning the outer dial (17). You have a choice of 3 f/stops.



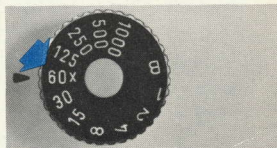
3. On flash, set mode switch to R (remote).



4. On flash, set OFF-ON switch to ON, or to desired position if using optional power sources, see page 14.



5. On camera, set shutter speed to x-sync.



6. On camera, set your camera lens to the f/stop you selected in step 2.



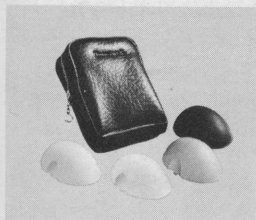
7. Focus camera.



8. Take your picture after the READY light comes on.



9. The green EXPOSURE light will glow for about 5 seconds, indicating good exposure.



Strobodome optional accessory set



Increase your creative options with a set of Strobodome diffusers. You'll get an effect similar to direct lighting combined with bounce flash. The domes extend the wide angle coverage (equal to 20mm wide angle lens on 35mm cameras). They come in a set of four, packed in a handsome vinyl case. A Strobodome color set for special effects is also available. See your dealer.

The Strobodome set will greatly increase the versatility of your Auto/Strobonar 682S. You should note, however, that the extra diffusion of the domes will reduce the automatic range and may reduce the flashes per set of batteries.

Tips for using your Auto/Strobonar

Try to line up a group so that everyone is about the same distance from your Auto/Strobonar.

Try to keep your subject a few feet from the wall. This will keep the harsh shadows out of your pictures.

Avoid shooting through doorways or against windows where objects close to your field of view may reflect light into the sensor, causing incorrect exposure.

Strobodome — Discover the many advantages of Strobodome photography with a set of Strobonar accessory domes.

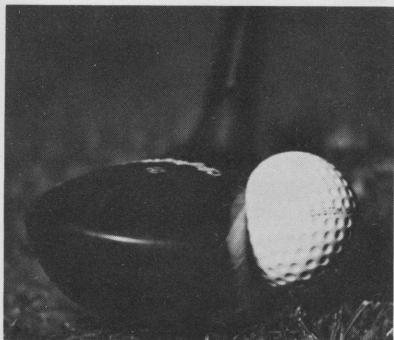
Bounce flash — Use manual (MAN) mode or remote (R) mode with optional Strobe-Eye 3R for bounce flash. Remove flash from camera. Allow 2 f/stops more exposure to compensate for the light absorbed by the ceiling or wall under average conditions for manual flash. **In remote (R) mode**, the Strobe-Eye 3R will automatically cut the flash off at the right time for good exposure. The green EXPOSURE light will glow if there is enough light for proper exposure.

Stop action — The fantastic speed of your computer flash (1/50,000 to 1/500 second) is excellent for such stop-action pictures as breaking a light bulb, hitting a golf ball, and bursting a balloon. Creative pictures of this type require special techniques. Usually the camera shutter is set to "B" and a sample switch (made of aluminum foil, paper clip or pieces of wire) is used to fire the flash at the moment you desire to make the exposure. Be sure to photograph your subject in a dark area and fire the flash when the shutter is open.

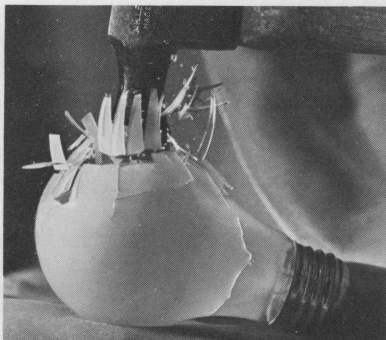
Outdoor use for fill-in light — Your Strobonar can be used quite simply in manual (MAN) mode as fill-in light when sunlight causes heavy side or front shadows.

Spare sync cord — Since sync cords are a major reason for electronic flash failure, carry spare (tested) sync cord with you on all assignments.

Sync cord tip connectors — Make sure removable sync cord tip connectors are tight, check often.



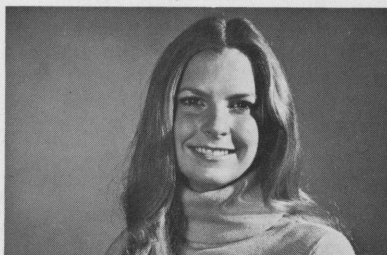
Stop action



Stop action



Subject in bright sunlight without fill-in flash.



Strobonar fill-in softens shadows and gives crisp detail.

The techniques of bounce, stop-action and fill flash, although not complicated, are beyond the scope of this owner's manual. If you would like to explore these techniques, write to Consumer Affairs. The address is on page 25.

Trouble-shooting tips

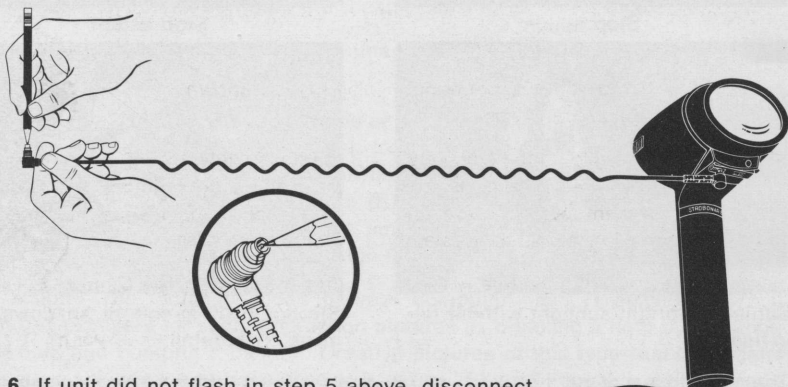
We hope your Auto Strobonar never causes problems. But if something should go wrong, check according to the information listed below. It may save you a trip to your dealer or to one of our service centers. The problem may be only a simple cord connection or maybe you just need fresh batteries.

A. UNIT WILL NOT FLASH OR FLASHES INTERMITTENTLY.

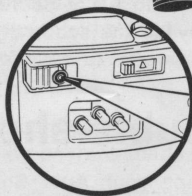
Press test flash button. If unit flashes, perform the following:

1. Check removable tip connectors. Tighten if loose. Make sure tip connectors are tight at the beginning of each shooting session.
2. Check camera and PC connectors for firm connection.
3. Look for worn or frayed areas on your sync cord.

4. Look for worn socket holes on PC receptacles. Look for loose or worn pins in male PC connector.
5. Test sync cord as follows:
Disconnect from camera and stretch cord as shown in the picture. With ordinary pencil or paper clip, short tip contacts (center pin to outside wall) while stretching, bending and holding cord in various positions. Each time you position the cord to a new position, remove pencil or paper clip. Then, with ready light lit, short tip contacts. If unit flashes in all positions, sync cord and Strobonar are probably good, and the problem may be with your camera. Have it checked for bad or dirty shutter contacts.



6. If unit did not flash in step 5 above, disconnect sync cord from flash unit. Short receptacle as shown in the picture. If unit flashes replace sync cord.



B. READY LIGHT WILL NOT GLOW

1. If operating in internal (INT) mode, make sure mode switch is set to INT.
2. Make sure batteries are installed properly, see page 7.
3. Batteries may be discharged, try a fresh set.

C. GREEN LIGHT WILL NOT GLOW

1. Make sure mode switch is in desired automatic position.
2. Check shooting range.

D. FLASH DOES NOT FLASH WITH STROBO-EYE 3R CONNECTED TO HOT SHOE CAMERA

1. Make sure mode switch is set to remote (R).
2. Make sure Strobo-Eye is inserted in hot shoe properly.
3. Make sure flash cord is connected between flash and Strobo-Eye properly as shown on page 18.
4. Check flash cord as described in step A.

E. READY LIGHT WILL NOT GLOW WHEN CONNECTED TO CAMERA WITHOUT HOT SHOE

Make sure Strobo-Eye is connected properly as shown on page 18. Check flash and camera sync cords.

If you can't find the problem, let us help. Our national network of Rollei owned and operated service centers is staffed by trained technicians who know Strobolar equipment best. They're listed on the back page of this manual. You can get in touch with the center nearest you through your Rollei photo dealer.

When taking or sending your equipment to the Rollei Service Center, be sure to send all components: Strobolar, sync cord, etc. Be sure to pack all components carefully if mailing. Please include the name and model number of your camera.

Please write to us directly if you have comments or suggestions on how we can serve you better. We'd really like to hear from you.

Write to: **Consumer Affairs Dept.**
Rollei Service Center
5501 S. Broadway
Littleton, Co 80121

ROLLEI OF AMERICA INC. SERVICE CENTERS

ROLLEI
Service Center
5501 S. Broadway
Littleton, CO 80121

ROLLEI
Service Center
141 The Old Arcade Bldg.
Cleveland, OH 44114

ROLLEI
Service Center
3201 Old Glenview Road
Wilmette, IL 60091

ROLLEI
Service Center
1140 East Franklin Ave.
El Segundo, CA 90245

ROLLEI
Service Center
100 Lehigh Drive
Fairfield, N. J. 07006

ROLLEI
Service Center
7850 Edgewater Drive
Oakland, CA 94621

ROLLEI
Service Center
2675 Cumberland Parkway
Suite 160
Atlanta, GA 30339