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HONEYWELL STROBONAR ELECTRONIC FLASH GUIDE

What it is...How it works
...And the unit that's best for you.



Honeywell Strobolar

Table of Contents

Electronic Flash	
What It Is	2
How It Works	3
Measurement of Light Output	3
How Long a Unit Will Last	4
Automatic Electronic Flash	
What It Is	4
How It Works	4
What It Can Do	5
Creative Uses of Electronic Flash	5
Honeywell Strobe-Eye	6
Features to Consider Before Buying	7
Honeywell Shoe Mount Strobonars	8
Strobonar 100	11
Strobonar 105	11
Slave Strobonar 109	11
Auto/Strobonar 110	11
Auto/Strobonar 115	11
Auto/Strobonar 360	13
Auto/Strobonar 460	13
Auto/Strobonar 462	13
Auto/Strobonar 470	13
Shoe Mount Selection Chart	9
Honeywell Handle Mount Strobonars	14
Strobonar 710	17
Auto/Strobonar 780	17
Auto/Strobonar 782	17
Strobonar 810	17
Auto/Strobonar 890	17
Auto/Strobonar 892	19
Handle Mount Selection Chart	15
Strobe-Eye Remote Sensor	19
Slave Units	19
Prox-O-Lites	23
Accessories	21

3/74

Cover: Ballerina moved in a straight line between two automatic Honeywell Strobonars facing each other in front of a black velvet background. Both electronic flashes were activated by reflected light from another Honeywell Strobonar placed behind the camera. Color filter was changed with each exposure.

A brief but interesting history of electronic flash...

1

In 1932, Dr. Harold Edgerton of M.I.T., father of electronic flash, developed the basic circuitry to convert stored electrical energy into a short burst of light. With more electricity, you could repeat the flash over again. Electronic flash was born!

Working with Edgerton, Heiland Research Corporation refined and developed the basic circuitry concepts and began manufacturing useable, portable electronic flash units.

In 1939, Heiland developed a method of firing an external flash attachment by tripping the camera shutter.

By the late 1940's, Heiland was the recognized leader in electronic flash.

In 1954, the Heiland Research Corporation merged with Honeywell. Work began immediately on more compact, powerful forms of electronic flash.

We've come a long way from the Strobonar IV which weighed 13½ pounds and had a separate battery pack. Today, you can buy a Honeywell Strobonar that's about the size of a pack of cigarettes and weighs less than 5 ounces!

As pioneers in electronic flash, we've made a number of breakthroughs which have advanced the entire flash industry.

We introduced the first units with self-contained batteries—units that are used today by more than 85% of the professional photographers.

We developed an energy-saving device which cuts down on the power output when the unit's fully charged. This makes the batteries last lots longer!

In 1971, Honeywell introduced the first true rapid charge units . . . units that are ready to fire after a few minutes' charging.

But our biggest breakthrough was automatic electronic flash. This made electronic flash the simplest—as well as the best—way of taking flash pictures.

Today, electronic flash is highly sophisticated, yet simple and inexpensive. This brochure is designed to answer any questions you may have about electronic flash. And we hope it will open a whole new world of flash photography to you.

If you have any further questions about Strobonar or any other Honeywell photographic products, please write us. Or talk with your nearest dealer.

Honeywell Photographic Products
P.O. Box 22083 Denver, Colorado 80222

Electronic Flash: A new and better way to take flash pictures.

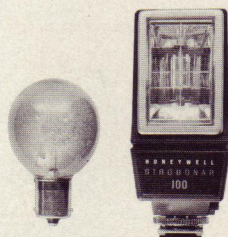
Yesterday, you used flashbulbs to take flash pictures. Sometimes they flashed and sometimes they didn't. But, you had no choice. So you used them, threw them away and bought more. It was a very expensive way to take pictures.

Today, however, you do have a choice: electronic flash. Think of it as a flashbulb that you can use over and over again. A new, improved flash that actually costs less than bulbs and, yet, is more convenient, more reliable and gives better results.

Electronic flash is more convenient.

You needed a fresh flashbulb for every flash picture you took. You also needed something to carry the bulbs around in and a place to throw them away (once they cooled off enough to touch). And you always seemed to run out just when you needed them most. With electronic flash, however, you're always ready for your next shot!

Electronic flash is much less expensive than flashbulbs.



15¢ PER FLASH 1¢ PER FLASH

Flashbulbs cost approximately 15¢ each. But, an electronic flash unit with a set of alkaline batteries can deliver about 150 flashes at less than 1¢ a flash. And units with rechargeable batteries offer an even lower cost per flash! The initial cost of an electronic flash unit is more than a package of bulbs. But, the money you'll save will more than pay for the unit.

Electronic flash is more reliable than flashbulbs.

With bulbs, you crossed your fingers and hoped they would flash. But with electronic flash, you don't have to. These units contain highly developed electronic circuitry which is not subject to the corrosion of bulb-type flash. (How many times have you had to scrape the corrosion off or spit on the contact point of a flashbulb?) Something to consider: the pros must have reliable equipment and they rely on electronic flash!

You will take better pictures with electronic flash.

The flash from bulbs is so slow that the shutter always has time to open and close before the flash ends. So if your camera or subject is moving while the shutter's open, this movement is illuminated and photographed. The result is a blurred picture.

With electronic flash, when the shutter opens, the unit flashes simultaneously. The flash is so fast that any movement is frozen in a perfectly exposed, blur-free picture.

Electronic flash: Here's how it works.

All electronic flash units are powered by either batteries, AC household current or both. The power is stored in a capacitor. When you release the camera's shutter, this stored power is discharged between two electrodes in the flashtube and the light dispersed by a built-in reflector.

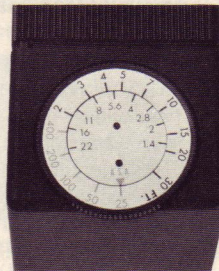
1. How to connect the unit to your camera.

Electronic flash will work with almost any good camera. Simply plug the cord into the socket on your camera marked "X", or move the switch to the position marked "X". This connection causes the unit to flash only when the shutter is fully opened.

2. How to set your unit for the correct exposure.

Honeywell Stroboblars have a built-in dial. First, turn the arrow to the correct ASA (or film speed number). You'll find this number on the film box or the roll.

Then read the distance between you and your subject on the focusing ring of your camera and find that distance on the dial. The f/stop opposite this mark is the f/stop you set on your camera. That's it... fast and foolproof.



3. A "Ready Light" tells you when to shoot.

All Honeywell units offer built-in neon tubes called "Ready Lights." This tiny tube lights up to tell you when there's enough power in the capacitor for another flash picture. That could be in as little as 1/2 second!

How much time between shots? Recycle time is the time it takes for power build-up between flashes. Each unit has a stated recycle time. You can expect the length of the recycle time to increase slightly as the batteries get weaker but it's never more than a few seconds.

Guide Numbers and Light Output. Every electronic flash unit has a guide number which indicates the light output capability for that unit. The higher the guide number, the greater the distance at which you can take properly exposed flash pictures.

You may hear other measures of light output such as "watt seconds", ECPS (Effective Candle Power

Seconds) or BCPS (Beam Candle Power Seconds), but guide numbers are the most often used measure because they relate to light output in terms of the speed (light sensitivity) of the film you're using.

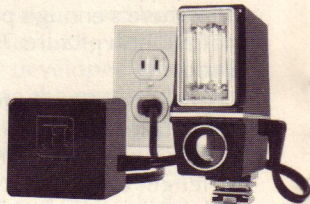
Guide numbers are usually stated for ASA 25 film, but the instruction manual for each flash unit usually lists them for other common film speeds. Dividing the guide number by the flash-to-subject distance yields the proper lens aperture for good exposure. Honeywell Strobonar electronic flash units have a built-in calculator dial to eliminate guide number calculations. (See preceding page.) With a Honeywell Auto/Strobonar, however, you make just one setting and the unit automatically computes proper exposure for you.

How many flashes can you expect to get out of a unit?

Most moderate to expensive units will flash as long as the flashtube holds out. You should get approximately 10,000 flashes. Even the most economical Honeywell Strobonars are good for thousands of flashes.

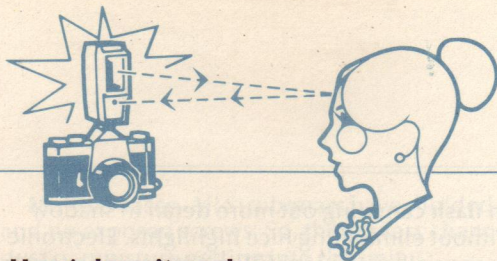
Units using non-rechargeable batteries will deliver about 150 flashes per set of batteries. There are two basic types of replaceable batteries: standard dry cells and alkaline batteries. Dry cells cost less but don't deliver as many flashes or recycle as fast as alkaline batteries. The number of flashes, however, also depends on the condition of the battery and on the flash unit itself.

Units with rechargeable batteries offer the cheapest source of battery power and approximately 50 to 80 flashes per charge. These batteries, of course, may be charged hundreds of times. Some units are available which may be recharged very quickly. A Honeywell Strobonar with Rapid Charge will deliver enough flashes for a full roll of film (20 exposures) in only 15 minutes.



What is automatic electronic flash?

The automatic electronic flash, which Honeywell invented in 1965, was a significant breakthrough for the flash industry. Automatic Strobonars determine the exact amount of light your subject needs for a perfect exposure and deliver just that amount. This eliminates the need for your calculating the correct exposure.



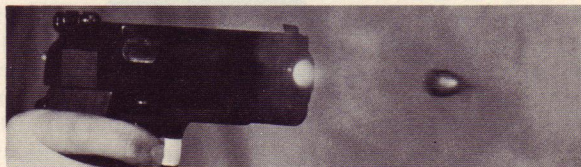
Here's how it works:

The shutter release triggers the flash. The light is directed to the subject and reflected back into the flash unit's light sensor. When proper illumination is reached, the remaining light energy is shunted into a quench tube where it dissipates without affecting the picture you've just taken.

Some of the more recent Honeywell Strobonars are made with Energy Saver circuitry. In these units, light energy remaining after the flash has been fired is saved for the next flash. Consequently, depending on subject distance, Energy Saver circuitry allows the unit to recycle to its original flash power in as little as one-half second! And you get more flashes per battery charge.

It can stop a speeding bullet!

Normal electronic flash is faster than flashbulbs but it's still not fast enough to freeze extremely high-speed action. Automatic electronic flash is.



With simple sound or electrical contact devices to trigger flash operation, an Auto/Strobonar will capture a speeding bullet, a golf ball temporarily flattened by a club, or a light bulb being shattered. (For additional information on high-speed action photography, write our Consumer Affairs Department.)

Most automatic units can also be used manually.

If you select an automatic unit that can also be used manually, you'll be able to achieve special lighting effects such as bounce flash and outdoor fill-in. This is definitely something to consider before you select a unit.

Electronic flash can help bring out the artist in you.

Bounce flash can soften shadows and tone down bright spots. You can bounce the light off the ceiling, walls, sheets of paper or even bedsheets. Bounce lighting also seems to add depth, dimension and tone to almost any shot. It's fun to try but be sure to switch your unit to manual operation unless you use one of the new remote sensor units.

Fill-in flash can bring out more detail in shadow areas without eliminating nice highlights. Electronic flash is especially useful for fill-in with outdoor shots. Harsh sunlight can cause deep shadows. Electronic flash can soften them. Be sure your unit is in its manual mode.

Close-up flash can help you create many interesting shots. With an automatic Strobonar, you can get a perfect flash exposure from as close as two feet. If your subject's closer than that, you can move your camera in closer, leaving your flash unit at least two feet away from the subject.

Strobo-Eye Remote Sensor. The Strobo-Eye is a light sensor that you can mount on your camera. It's the same kind of light sensor that's built into other Auto/Strobonars. You can aim your camera and the light sensor at your subject while using the flash for bounce, off camera, indirect or direct lighting. And still get automatic exposure control!



The Honeywell Auto/Strobonars 462, 772, 782, 882 and 892 were designed specifically for use with Strobo-Eye. All five have a Green Light. After you've taken your picture, this light comes on if your subject received enough light for a good exposure and stays on until your next shot. You can also flash the unit before you take a picture and the Green Light will tell you if there will be adequate light for proper exposure.

Removable shutter cords. Some units offer shutter cords which are permanently attached to the unit because these are cheaper to make. But if the cord has to be replaced or repaired, you have to send the entire unit back to the manufacturer.

Molded cases. All Strobonars have molded cases and no exposed screws. So, there's less chance of dust or moisture getting into the unit.

Recycle circuitry. Stated recycle time for some units is the shortest you can expect. With Honeywell Strobonars, recycle time is stated as an average. You will sometimes encounter faster recycle times with fresh batteries.

Rapid Charging: Many Honeywell Strobonar units with Rapid Charge have batteries which can be recharged to deliver enough flashes for a full roll of film (20 exposures) in only 15 minutes. Some other units take as long as 24 hours to bring the batteries to full power.

Ability to withstand humidity and temperature extremes. Every Strobonar can withstand extreme humidity and temperatures. We store sample units in 95% humidity for 10 days and subject them to temperatures reaching 158°F.

Ability to withstand vibration. A Honeywell Strobonar can take a beating. We strap sample units to a vibration table for 45 minutes where they pull from one to five G's of force in three positions. We also package these same units and put them back on the vibration table for 45 more minutes to test the strength of the packaging. But that's not all. We also drop these packaged sample units on the floor on all corners and all sides. This way, we know that a Strobonar can withstand the hazards of use and shipping.

Ability to withstand pressure. If you fly much, your unit should be able to withstand the changing pressures of high altitudes. Honeywell units undergo pressure variations up to 50,000 feet and testing at different simulated altitudes to assure perfect operation.

Name brands. As with almost all technical products, you're better off buying a unit made by a well-known manufacturer. He has a reputation to protect and will offer you a sound guarantee on the best product he can make at the best price.

Honeywell Shoe Mount Strobonars

100 Series

For convenience, economy and dependability, look to the 100 Series shoe mounts. These five pocket-size units mount to the hot shoe of your camera adding less than 8 ounces of weight. You can flash at least 80 times before recharging or adding new batteries. And there's a 100 Series Strobonar to fit any budget.

Take a look at the variety of units this series offers. Three manuals and two automatics that do the calculating for you with one simple aperture setting. You also have a choice of two power sources — "AA" alkaline batteries or rapid-charging Ni-Cads. And there's a unit for both auxiliary lighting and regular use — the Slave Strobonar 109. It's the lowest priced pocket slave unit in the world. The versatile A/S 110 and A/S 115 are designed for shoe mount, automatic operation. Switch them to manual to highlight their full potential for bounce and fill-in lighting. Honeywell's 100 Series Strobonars are as diverse as your photographing needs.

Auto/Strobonar 360

Move up the Honeywell shoe mount line and you move to more power. The A/S 360 gives you full automatic exposure control from two to 22 feet! And it's built to last. NASA tested this unit for overall quality and durability of construction. Results? The Auto/Strobonar 360 is the first and only NASA approved automatic electronic flash used for space exploration.

400 Series

Honeywell's most sophisticated shoe mounts are the 400 Series. They're the closest thing to a professional unit in a convenient shoe mount design. They're Honeywell's most powerful shoe mounts and can be used as either automatic or manual, on-camera or off-camera. All three units in this series are powered with rapid-charging Ni-Cad batteries and cannot be overcharged.

The 400 Series Strobonars also offer variety. Choose the A/S 460 for a powerful shoe mount with a choice of three full f/stops. Or, if you need an automatic shoe mount that works with Honeywell's revolutionary Strobe-Eye system, get the A/S 462. The newest Honeywell shoe mount is the A/S 470 with Energy Saver circuitry. (See page 5.) It's built for the action photographer who can't afford to miss a shot because his electronic flash wasn't fast enough. Recycles in as little as 1/2 second and weighs only 11 1/2 ounces. That's engineering you expect from the inventors of electronic flash.

Selection Guide

SHOEMOUNTS	100	105	109	110	115	360	460	462	470
Automatic Operation	NO	NO	NO	2-11 Feet	2-11 Feet	2-22 Feet	2-28 Feet	2-28 Feet	2-28 Feet
Guide Number ASA 25 ASA 100	28 56	28 56	28 56	28 56	28 56	42 80	56 110	56 110	56 110
Average Recycle Time (Seconds)	10	6	10	10	6	9	9	9	4-9
Power Source	2-AA	Ni-Cad	2-AA	2-AA	Ni-Cad	Ni-Cad	Ni-Cad	Ni-Cad	Ni-Cad
Flashes Per Charge or Set of Fresh Batteries	160	80	160	160	80	32	50+	50+	40-500
Angle of Coverage	50°	50°	50°	50°	50°	52°-65°	50°	50°	50°
Rapid Charge		20 Flashes in 15 Min.			20 Flashes in 15 Min.	20 Flashes in 20 Min.	25 Flashes in 20 Min.	25 Flashes in 20 Min.	Up to 500 Flashes in 3 hr.
Special Features		Multi-Voltage	Slave Operation		Multi-Voltage	Multi-Voltage Variable Range Control		For Use with Strobe-Eye System	Energy Saver Voltage Variable Range Control

Strobonar 100

Guide number (Kodachrome II): 28; Power source: 2 "AA" alkaline or Ni-Cad batteries; Flashes per set of batteries: about 160*; Recycle time: about 10 sec.; Light angle: 50°; PC cord: Yes, removable; Hot shoe: Yes; Dimensions: 2.5" x 1.4" x 3.5"; Weight: 5 oz. without batteries

Cat. No. 165 **\$34.95**
*With fresh batteries

Strobonar 105

Guide Number (Kodachrome II): 28; Power source: Ni-Cad; Flashes per charge: about 80; Recycle time: about 6 sec.; Light angle: 50°; PC cord: Yes, removable; Hot Shoe: Yes; Dimensions: 2.5" x 1.4" x 2.8"; Weight: 6.5 oz.

Cat. No. 4540 **\$49.95**

Slave Strobonar 109

Same output, guide number and other features as the Strobonar 100, **plus** converts from regular flash to auxiliary slave for multiple lighting. Solid state slave-triggering circuitry is built-in.

Cat. No. 4541 **\$44.95**

Auto/Strobonar 110

Guide number (Kodachrome II): 28; Automatic range: 2-11'; Power source: 2 "AA" alkaline or Ni-Cad batteries; Flashes per set of batteries: about 160*; Recycle time: about 10 sec.; Light angle: 50°; PC cord: Yes, removable; Hot Shoe: Yes; Dimensions: 2.5" x 1.4" x 3.5"; Weight: 6 oz. without batteries

Cat. No. 4506 **\$54.95**
*With fresh batteries

Auto/Strobonar 115

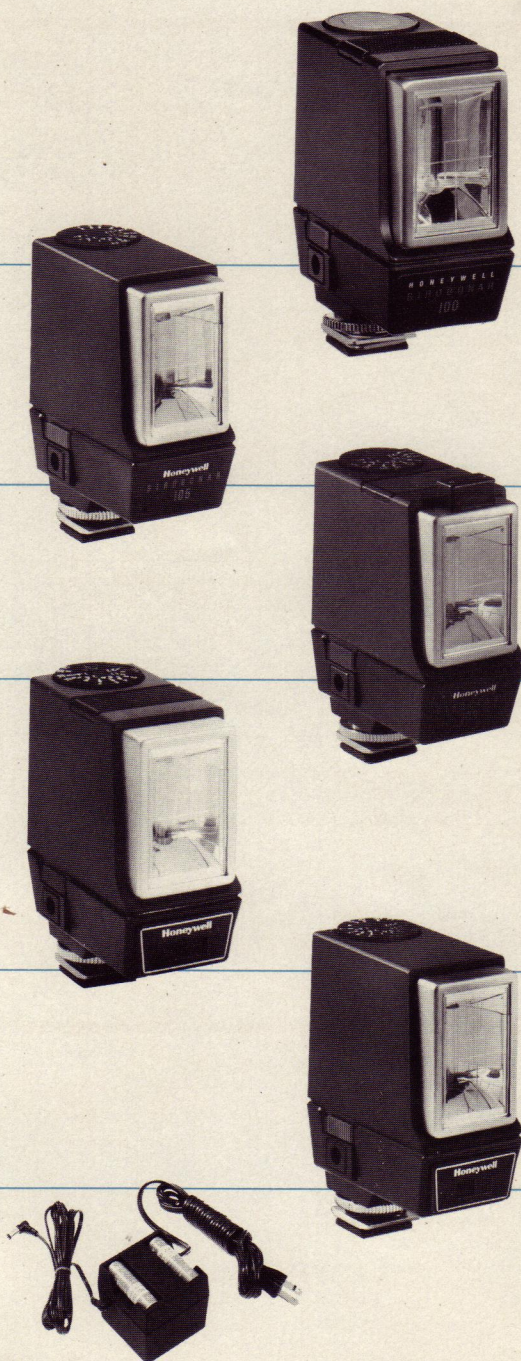
Guide number (Kodachrome II): 28; Automatic range: 2-11'; Power Source: NiCad; Flashes per charge: about 80; Recycle time: about 6 sec.; Light angle: 50°; PC cord: Yes, removable; Hot Shoe: Yes; Dimensions: 2.5" x 1.4" x 2.8"; Weight: 6.5 oz.

Cat. No. 4542 **\$69.95**

Model 100 AC Charger

Comes with two rechargeable Ni-Cad batteries that can be used to replace "AA" alkaline batteries in the 100 series Strobonars.

Cat. No. 538 **\$11.95**



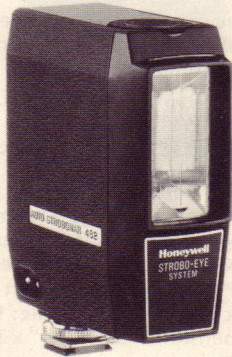
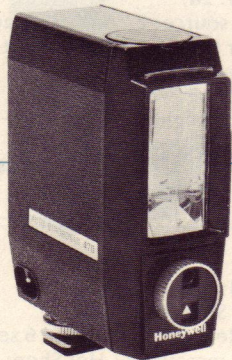


Auto/Strobonar 360

Guide number (Kodachrome II): 42; Automatic range: 2-22' (3 range variable); Power source: Ni-Cad; Flashes per charge: about 40; Recycle time: about 9 sec.*; Light angle: 50°; Depth-of-field choice: Yes; PC cord: Yes, removable; Hot shoe: Yes; Rapid Charge: Yes; Dimensions: 3.2" x 1.3" x 3.8"; Weight: 9 oz.
Cat. No. 4503 **\$99.95**

Auto/Strobonar 460

Guide number (Kodachrome II): 56; Automatic range: 2-28' (3 range variable); Power Source: Ni-Cad; Flashes per charge: about 60; Recycle time: about 9 sec.*; Light angle: 50°; PC cord: Yes, removable; Hot shoe: Yes; Rapid Charge: Yes; Dimensions: 3.4" x 1.6" x 4.6"; Weight: 13 oz.
Cat. No. 191 **\$129.95**



Auto/Strobonar 462

For use with Honeywell Strobe-Eye Remote Sensor. Guide number (Kodachrome II): 56; Automatic range: 2-28' variable; Power source: Ni-Cad; Flashes per charge: about 60; Recycle time: about 9 sec.*; Light angle: 50°; Depth-of-field choice: Yes; PC cord: Yes, removable; Hot shoe: Yes; Rapid Charge: Yes (120V or 230V); Includes Green Light exposure indicator; Dimensions: 3.4" x 1.6" x 4.6"; Weight: 13 oz.
Cat. No. 192 **\$129.95**

Auto/Strobonar 470

Guide No.: 56; Automatic range: 2-28' Variable; Power source: Ni-Cad; Flashes per charge: 40 to 500 flashes depending on distance; Recycle time: .4 to 9 seconds*; Light angle: 50 x 50; Depth-of-field choice: Yes; PC cord: Yes, 12" removable; Hot Shoe: Yes; Rapid Charge: Yes; Dimensions: 3.4" deep x 1.6" wide x 3.9" high excluding foot—4.6" including foot; Weight: 11½ ozs.
Cat. No. 4513 **\$149.95**

*with fully-charged battery

High Performance Handle Mounts

As a professional photographer, you need electronic flash with plenty of power, quick response and wide coverage. You have it with the new Honeywell 700 and 800 series handle mount Strobos. They're fast, very dependable high-powered electronic flash units. Here's why.

We've computer-designed the handle mount flash head so that the reflector, lens and flash tube work as an integrated optical system. The entire area of the lens is true lens. That means better light distribution than ever before and wider angles of coverage. And Honeywell's handle mounts have more power than ever before. All six units in these series have a Guide Number of 90 with ASA 25 film. Even with all this light output, these new units recycle as fast as you can wind the film and focus. From 2 to 6 seconds, depending on the power source.

Within the handle mount line, there are two families of flash units — the 700 Series and the 800 Series. The 700 Series Strobos are powered by self-contained rapid-charging Ni-Cad batteries. For the 800 Series, choose from two battery sources of power — the standard 510 volt battery or the new rechargeable Permacad Power Pak. With several battery cartridges one can eliminate down-time so you never have to be without freshly charged batteries.

Both the 700 and 800 Series Strobos offer a variety of units. Each features manual and automatic Strobos. Automatic units have variable range control. The A/S 782 and A/S 892 are both designed to work with Honeywell's Stobo-Eye remote sensor.

Use our Strobos Shopper's Guide to choose the handle mount that fits your electronic flash needs. Each unit delivers high performance and the power to spare that a professional demands.

Selection Guide

15

HANDLEMOUNTS	MANUAL STROBOS		AUTOMATIC STROBOS		AUTO/STROBOS FOR USE WITH STROBO-EYE	
	710	810	780	890	782	892
Automatic Operation						
Guide Number ASA 25 ASA 100	90 180	90 180	90 180	90 180	90 180	90 180
Average Recycle Time (Seconds)	6	3	6	3	6	3
Power Source	Ni-Cad	510 Volt Dry Cell Battery or Rechargeable Permacad Power Pak	Ni-Cad	510 Volt Dry Cell Battery or Rechargeable Permacad Power Pak	Ni-Cad	510 Volt Dry Cell Battery or Rechargeable Permacad Power Pak
Flashes Per Charge or Set of Fresh Batteries	72	600 with 510 Volt Battery 120 per Charge with Permacad Power Pak	72	600 with 510 Volt Battery 120 per Charge with Permacad Power Pak	72	600 with 510 Volt Battery 120 per Charge with Permacad Power Pak
Angle of Coverage	46°x64°	46°x64°	46°x64°	46°x64°	46°x64°	46°x64°
Special Features	Multi-Voltage	Multi-Voltage	Multi-Voltage Variable Range Control	Multi-Voltage Variable Range Control	Multi-Voltage	Multi-Voltage

Strobonar 710

Guide Number (Kodachrome II): 90; Power source: Ni-Cad and AC; Flashes per charge: about 72; Recycle time: about 6 sec.; Light angle 46° x 64° (78° diagonal); Dimensions: 4.0" deep x 3.6" wide x 9.3" high; Weight: 24.5 ounces (with batteries)
 Cat. No. 4514 **\$119.95**
 Cat. No. 547 Spare battery and tray assembly . . . **\$ 17.95**

Auto/Strobonar 780

Guide Number (Kodachrome II): 90; Automatic range: 2-32'; Power source: Ni-Cad and AC; Flashes per charge: about 72; Recycle time: about 6 sec.; Light angle: 46° x 64° (78° diagonal); Dimensions: 4.0" deep x 3.6" wide x 9.3" high; Weight: 24.5 ounces (with batteries).
 Cat. No. 4515 **\$169.95**
 Cat. No. 547 Spare battery and tray assembly . . . **\$ 17.95**

Auto/Strobonar 782

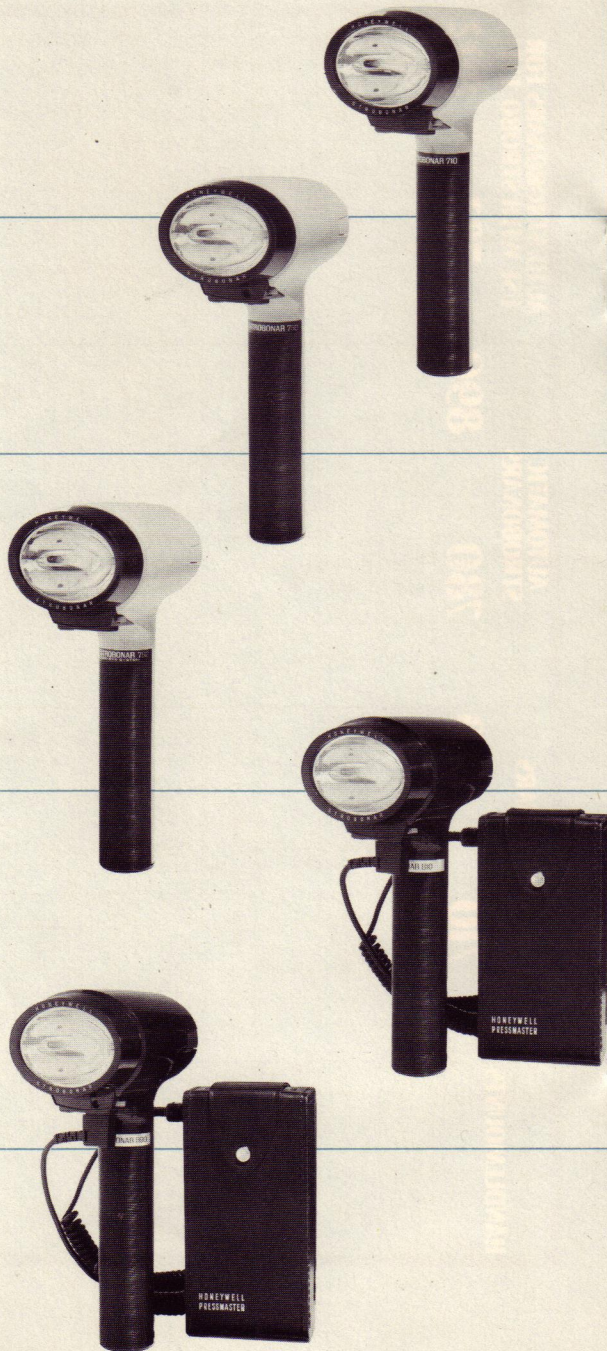
For use with Honeywell Strobo-Eye Remote Sensor.
 Guide number (Kodachrome II): 90; Automatic range: 2-45'; Power source: Ni-Cad and AC; Flashes per charge: about 72; Recycle time: about 6 sec.; Light angle: 46° x 64° (78° diagonal); Depth-of-field choice: Yes; Includes Green Light exposure indicator; Dimensions: 4.0" deep x 3.6" wide x 9.3" high; Weight: 24.5 ounces (with batteries).
 Cat. No. 4516 Auto/Strobonar 782 **\$169.95**
 Cat. No. 4311 Strobo-Eye Remote Sensor **\$ 30.00**
 Cat. No. 547 Spare battery and tray assembly . . . **\$ 17.95**

Strobonar 810

Guide number (Kodachrome II): 90; Power source: 510V supply or rechargeable Permacad Power Pak and AC; Number of flashes per battery: about 600; Number of flashes per charge: about 120; Recycle time: about 2-4 sec.; Light angle: 46° x 64° (78° Diagonal); Dimensions: 4.0" deep x 3.6" wide x 9.3" high; Weight: 18 ounces (Permacad Power Pak and Battery, 31 ounces)
 Cat. No. 4517 Strobonar 810 with Pro Pak II (less battery) **\$139.95**
 Cat. No. 506 Eveready 510V Battery **\$18.95**
 Cat. No. 4527 Strobonar 810 Permacad Power Pak Outfit **\$219.95**

Auto/Strobonar 890

Guide number (Kodachrome II): 90; Automatic range: 2-32'; Power source: 510V Supply or rechargeable Permacad Power Pak and AC; Number of flashes per battery: about 600; Number of flashes per charge: about 120; Recycle time: about 2-4 sec.; Light angle: 46° x 64° (78° diagonal); Dimensions: 4.0" deep, 3.6" wide x 9.3" high;
 (continued on page 19)





Weight: 18 ounces (Permacast Power Pak and battery, 31 ounces)

Cat. No. 4518 Auto/Strobonar 890 with Pro Pak II (less battery)	\$199.95
Cat. No. 506 Eveready 510V Battery	\$ 18.95
Cat. No. 4528 Auto/Strobonar 890 Permacast Power Pak Outfit	\$279.95

Auto/Strobonar 892

For use with Honeywell Strobe-Eye Remote Sensor. Guide Number (Kodachrome II): 90; Automatic range: 2-45'; Power source: 510V Supply or rechargeable Permacast Power Pak and AC; Number of flashes per battery: about 600; Number of flashes per charge: about 120; Recycle time: about 2-4 sec.; Light angle: 46° x 64° (78° diagonal); Depth-of-field choice: yes; Includes Green Light exposure indicator. Dimensions: 4.0" deep, 3.6" wide, 9.3" high; Weight: 18 ounces (Permacast Power Pak and battery, 31 ounces)

Cat. No. 4519 Auto/Strobonar 892 with Pro Pak II (less battery)	\$199.95
Cat. No. 4529 Auto Strobonar 892 Permacast Power Pak Outfit	\$279.95
Cat. No. 4311 Strobe-Eye Remote Sensor	\$ 30.00

Strobe-Eye Remote Sensor.

This remote sensor slips into accessory shoe and connects via PC cord. Designed for use with Auto/Strobonars 772, 882, 782, 892 and 462.

Cat. No. 4311	\$30.00
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Strobonar 804 Flash Head

This unit resembles familiar Honeywell Strobonars but it has no battery supply or storage capacitor. Power provided from any Prox-O-Lite power supply. It can be used as either a key light or primary light source for macro multi-light setups and lends itself to conventional assignments. Four power levels and four basic lighting ratios are available when used simultaneously with a Prox-O-Lite and the High Performance Power Pak.

Cat. No. 164	\$49.50
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Slave Strobonar 200

Guide number (Kodachrome II): 32; Power source: AC only; Modeling light: Yes; Recycle time: about 5 sec.; Light angle: 60°; Dimensions: 7.9" x 5.3" x 4.2"; Weight: 41 ozs.

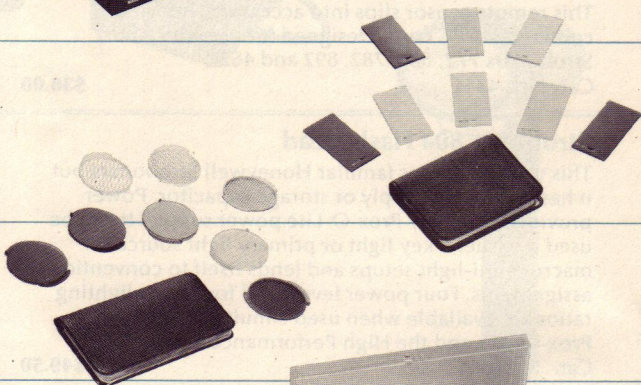
Cat. No. 173	\$69.50
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Slave Strobonar 202

Guide number (Kodachrome II): 46 high, 32 low; Power source: AC only; Modeling light: Yes; Recycle time: about 7 sec.; Light angle: 60°; Dimensions: 7.9" x 5.3" x 4.2"; Weight: 48 ozs.

Cat. No. 174	\$89.50
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Auto/Strobonar 892 and Permacad Power Pak Outfit

Honeywell's most powerful automatic electronic flash team. For complete specifications, see separate listings.

Permacad Power Pak

For use with all Honeywell 800 Series Strobonars. Charger Input: Multi-Voltage; Pak Power Source: Rechargeable Ni-Cad batteries in sealed cartridge; Recycle Time: 2-3 seconds to 100% power; Weight (Pak with Battery): 31 ozs.; Dimensions (Pak with Battery): 1.95" deep x 4.2" wide x 5.6" high

- Cat. No. 537 Permacad Power Pak Set, includes battery cartridge, charger and power pak . . . \$129.95
 Cat. No. 542 Permacad Battery Cartridge . . . \$ 39.95
 Cat. No. 543 Permacad Power Pak (less battery cartridge) . . . \$ 69.95
 Cat. No. 544 Permacad Battery Charger . . . \$ 29.95

Lens Kit for Strobonar Models 312, 330, 332, 460, 462 and 470

Contains No. 2 neutral density filter, No. 4 neutral density filter, a regular wide angle lens, a UV filter, a No. 85 conversion filter and others.

- Cat. No. 4301 . . . \$5.95

Lens Kit for 700 and 800 Series Strobonars

Includes Bayonet-mounting, neutral density, UV and wide-angle filters and lenses.

- Cat. No. 167 . . . \$7.95

Variable Range Lens Kit for Auto/Strobonar 770 and 880.

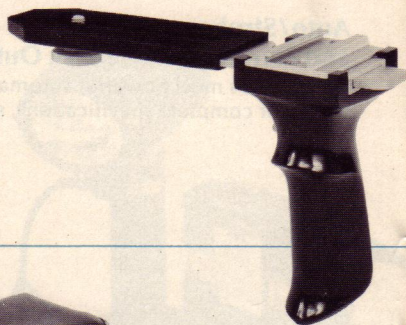
Set of five color-coded filters for the sensor unit of the 770 and 880. Designed for close-up work with depth-of-field choice. These filters allow automatic operation at distances as close as 6 inches.

- Cat. No. 4302 . . . \$8.95

Slave Accessory Kit

Contains one set of barn doors, one snoot, a diffusing lens and five filters; fits 200, 202, 51A and 52 Slaves.

- Cat. No. 175 . . . \$29.50



Pistol Grip Quick Release Bracket

Pistol Grip has large comfortable handle and detaches instantly from bracket by pressing release lever. Rubber cushioned to give firm support to most popular cameras.

Cat. No. 329 **\$11.95**



Strobonar Carrying Cases

These roomy soft cases are handsomely made of soft vinyl with rugged aluminum zippers.

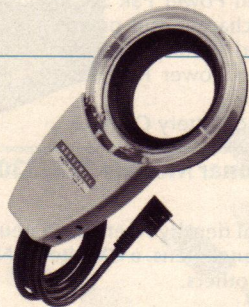
Cat. No. 4305 Case for Strobonar Models 220, 225, 227, 312, 330, 332, 360 and 460 **\$4.95**



Ikoblitz Flash Cube Holder

Uses standard flash cubes and connects to camera hot shoe. Powered by Eveready 504 battery.

Cat. No. 226 **\$7.95**



Honeywell Prox-O-Lite

The Prox-O-Lite is designed for close-up photography or fill-in lighting. Electronic flash tube encircles camera lens and is powered by either of the Prox-O-Lite Paks or the P700, 800 or 880 Strobonars. Prox-O-Lite 7—Series 7 thread.

Cat. No. 160 **\$59.50**



WP-10RF Cronoscope

AC repeating electronic flash for multiple exposure stroboscopic photography. Solid state electronics; trips by cord, slave or sound trigger. Fully adjustable from 3 to 25 fps; duration 1/10,000. Kodachrome II guide number 20 per flash. 110 volt AC operation only. Open flash release.

Cat. No. 2315 **\$79.95**

Prox-O-Lite High Performance Pak

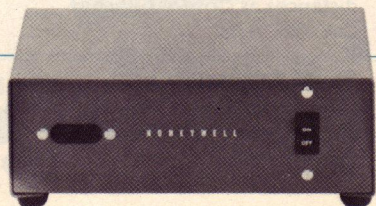
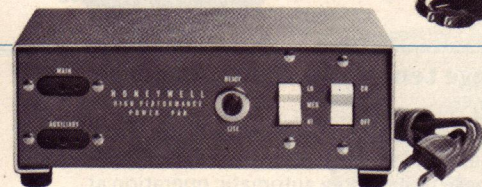
High Performance Power Pak features a regulating circuit and recycles in 6 seconds. It is solid state and has a 3-way power switch for controlling light output, with a peak power of 40 watt-seconds, medium power of 10 watt-seconds and 4.5 watt seconds on low. Weight: 34 ounces.

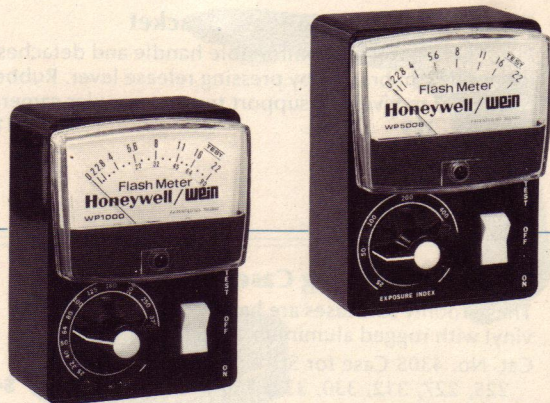
Cat. No. 180 **\$79.50**

Custom AC Pak

Lightweight, 26-ounce power supply with a typical recycle time of 15 seconds and an output of 52 watt-seconds.

Cat. No. 179 **\$49.50**



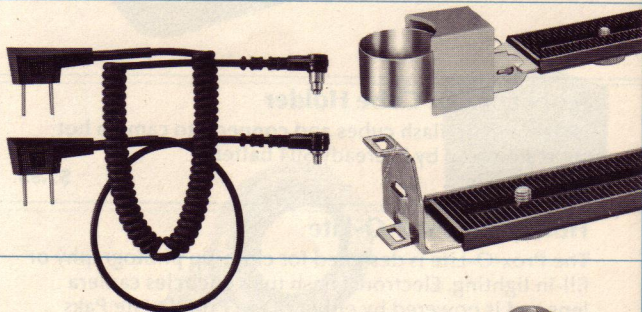


WP-500B Flash Meter

Patented space-age electronic circuitry interprets electronic flash bursts in direct f /stops in an $f/2$ to $f/22$ range. This meter balances exposure with flash and daylight, lets photographer determine accurate readings from bounce flash ratios of key lighting to backlighting. Cordless automatic operation, ASA range 25-400. Cat. No. 2301 **\$79.95**

WP-1000 Flash Meter

Has all the features of the WP-500 and covers a range of 11 f /stops at ASA 25. Cordless automatic flash sync operation; F /stop range $f/2$ to $f/90$, with accuracy and repeatability to $1/6$ f /stop. Cat. No. 2302 **\$129.95**



Strobonar Shutter Cords and Adapters

Honeywell shutter cords and adapters link Strobonar electronic flash units to most cameras. Ask your Honeywell dealer which is best for your camera.

Strobonar Brackets and Accessories

Your Honeywell dealer carries a complete assortment of brackets, clamps and attachment accessories for mounting a Strobonar to your camera.



Micro Slave

Small, low-cost electronic flash slaves. Fires Strobonar instantaneously in response to any other Strobonar when inserted in sync outlet. Solid state circuit. Encapsulated in indestructible epoxy resin; not affected by shock, temperature or humidity. Not affected by ambient light or sun. Will trigger at distances of more than 100 feet, including bounce light. Cat. No. 2320 **\$14.95**

WP/ST Sound Trigger

Enables photographer to control electronic flash with exceptional degree of flexibility. Consists of three electronic control systems in one unit, can be used as a remote control, a sensitive sound trigger and as a shutter arc eliminator. Cat. No. 2325 **\$41.95**

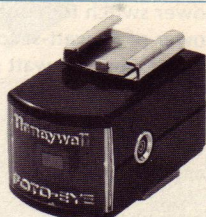


Foto-Eye II

Solid-state, light-sensitive, slave-triggering unit for firing a slave electronic unit remotely and in sync with a master electronic flash. Choice of mountings to accommodate all Strobonars, shoe mount and handle models. Operating distance up to 200', depending on light output of master unit. Cat. No. 4317 **\$14.95**

All prices subject to change without notice.