

Sunpak Auto 622 Pro System



SUNPAK®

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THE system for professionals

Sunpak Auto 622 Pro System.
A component flash
that's as versatile as you are.

Cameras with interchangeable lenses, finders, screens, backs, winders, etc. were originally conceived for the professional photographer who rarely gets the same assignment twice. Now there's a professional flash system designed on the same principle. The Sunpak Auto 622 Pro System has "interchangeable everything," right down to the ingenious modules that plug it into the dedicated systems of electronic cameras. This is a true system flash—a system that always has the right head, the right power source for the job, ready and waiting!

1. Interchangeable heads. The Auto 622 Pro System lets you choose from 7 different interchangeable heads—standard, zoom, wide angle, diffused, bare bulb, infrared and ring flash—to adapt the flash to any assignment. And an instant release lets you change heads in just seconds to put the capabilities of 7 different flashes at your command.

2. Tilting/rotating head. Adjustable bounce flash head mount tilts 90°; rotates 330°, so it's easy to bounce the flash in any direction. The silicon photo cell light sensor remains constantly aimed at your subject to give you accurate, fully automatic flash operation at all times.

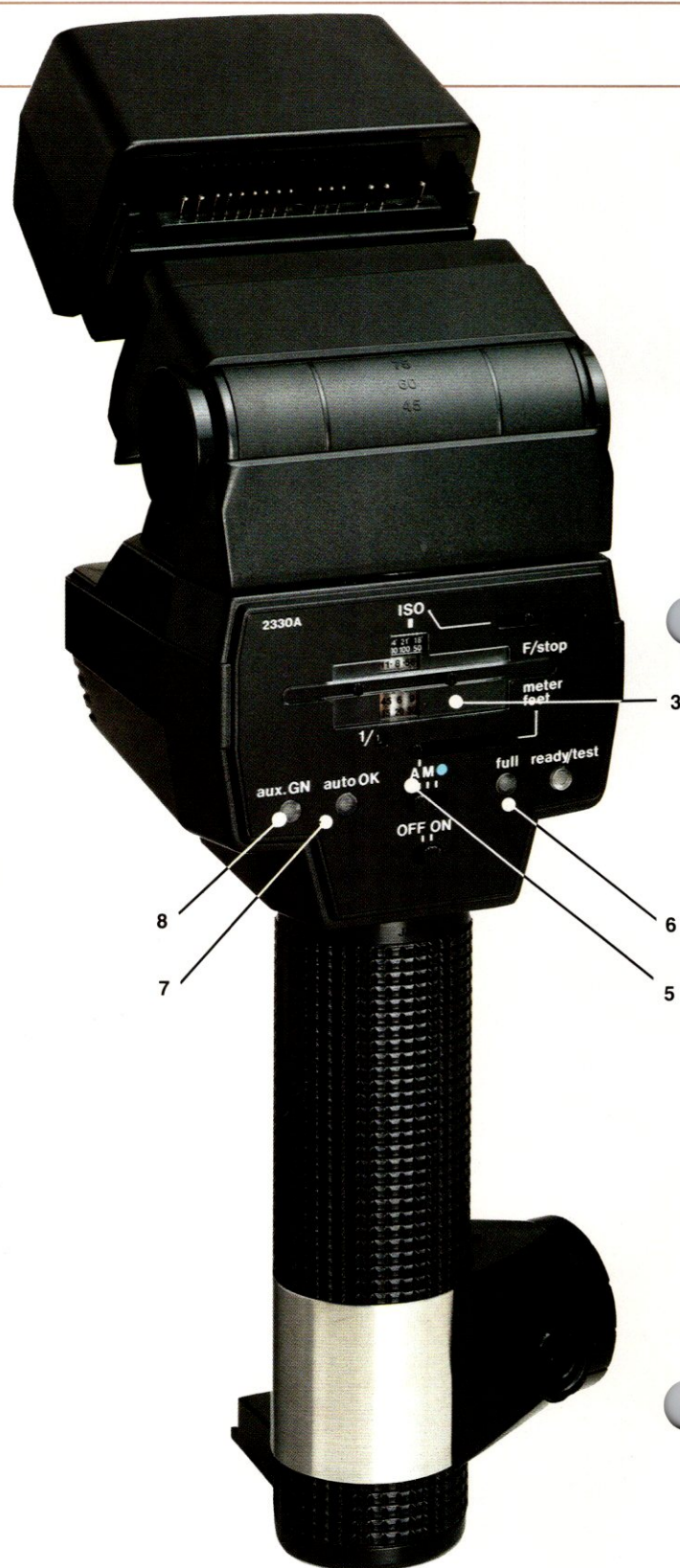
3. Automatic operation. Choice of 7 auto apertures (f/2 to f/16 with ASA 100). An auto range of 2' all the way up to 120' (with the zoom head). Widest choice of depth of field control.

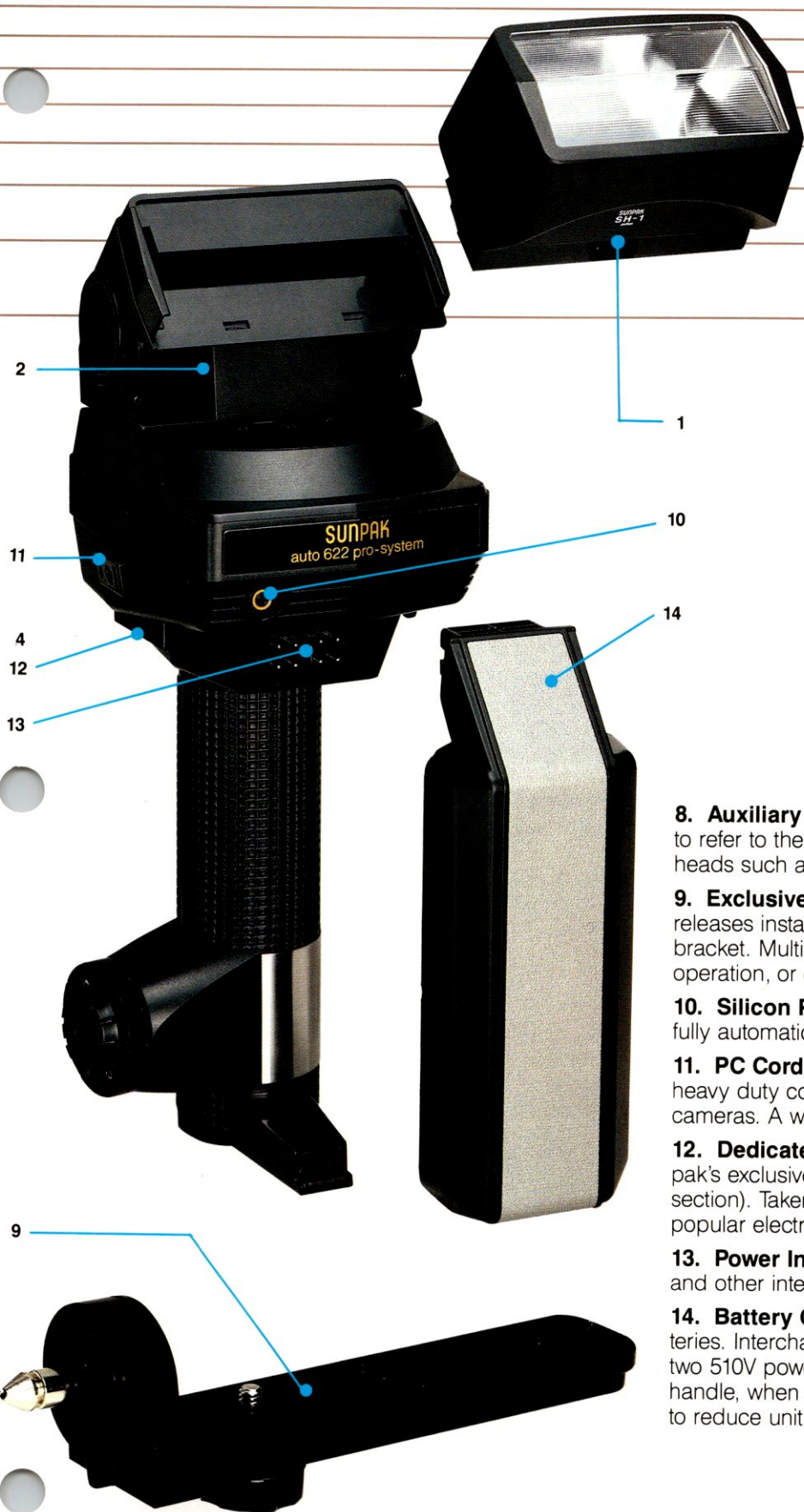
4. Full dedication. Takes full advantage of all dedicated features on all popular 35mm cameras, including those with TTL off-the-film plane metering systems. A professional flash that makes perfect exposures easier than ever, even when using accessories such as bellows and extension rings.

5. Total Manual Control. Manual thyristor control over an 8-stop range gives you full control of depth-of-field, daylight fill-in flash, shorter flash durations for freezing action, rapid-sequence photography with motor drive, and the flexible exposure control required in macro and micro photography.

6. Full Charge Indicator. Indicates unit is ready to deliver 100% of the power level chosen. Assures you that light output is constant.

7. Auto OK lamp. Confirms correct automatic exposure before actually shooting—no wasted film.





8. Auxiliary Guide Number Lamp. Blinks to alert you not to refer to the guide number dial when using special purpose heads such as the bare bulb, infrared, or ring light heads.

9. Exclusive Quick Release Camera Bracket. Installs and releases instantly, and locks firmly. Interchangeable with 6 x 6 bracket. Multi-position operation lets you switch to left-handed operation, or change clamp angle to fit any shooting situation.

10. Silicon Photo Cell. Reads light bouncing off subject for fully automatic exposure control.

11. PC Cord Socket. Accepts standard PC coil cord (2' heavy duty cord included) for use with non-dedicated cameras. A wide selection of longer cords is also available.

12. Dedicated Connector. For dedicated cord and Sunpak's exclusive Dedicated Interchangeable Modules (see next section). Taken advantage of *all* dedicated functions of *all* popular electronic cameras.

13. Power Input Socket. Accepts plug-in battery cartridge and other interchangeable power sources.

14. Battery Cartridge. For four C-size alkaline or NC batteries. Interchanges instantly with similar rechargeable cluster, two 510V power sources, or an AC adapter. Removes from handle, when using AC or 510V Power Pack battery cartridge, to reduce unit weight.

Full dedication to today's electronic cameras.

Working closely with all of the major camera manufacturers, Sunpak engineers have developed the proven technology to achieve full dedication for the Auto 622 Pro System with all of today's leading 35mm cameras. The sophisticated electronics of the Auto 622 fully interface with the microprocessor controls of the camera, to create a single, integrated camera/light source unit. The technology for the Auto 622 is actually "licensed" by the leading camera manufacturers to Sunpak to guarantee the reliability of the flash/camera integration.

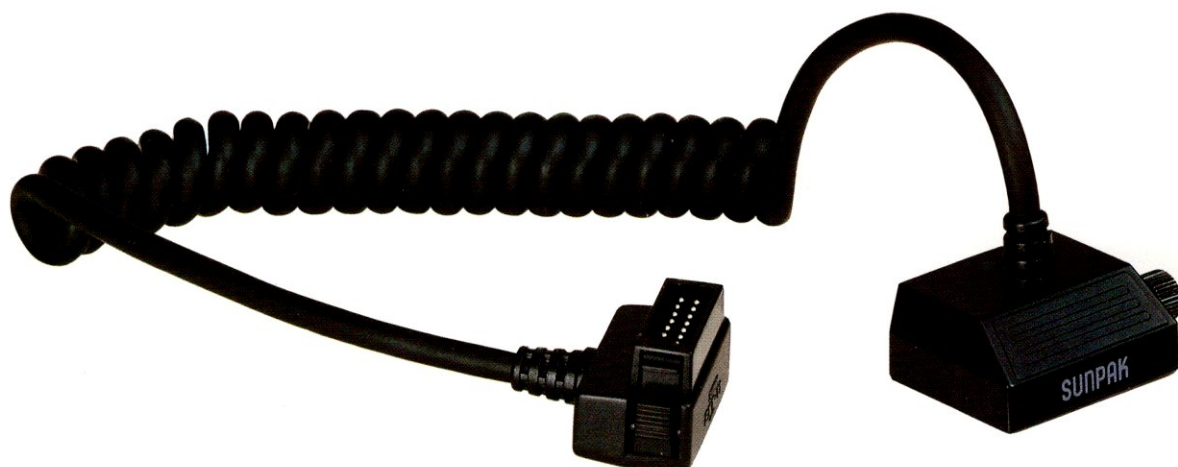
Sunpak's unique Interchangeable Dedicated Module System means you can use the Auto 622 with all of today's electronic 35mm camera, and make use of *all* the camera's dedicated capabilities. These may include TTL (through-the-lens) metering, automatic shutter speed control, automatic aperture control, ready light and/or auto exposure check in the viewfinder. With the Interchangeable Module System you can utilize your Auto 622 with more than one camera by simply adding a module. The Auto 622 is also compatible with standard SLR and rangefinder cameras with or without electronic facing.

And as larger format cameras are produced with the electronic dedication of today's 35mm SLR's, Sunpak will of course have the modules to provide them with the same advantages of full dedication.

With the Sunpak Auto 622 Pro System, you get all the capabilities of a powerful, professional modular flash, plus the efficiency and convenience of the electronic camera. . . and obsolescence-proof technology, too.

Auto exposure, even with closeups.

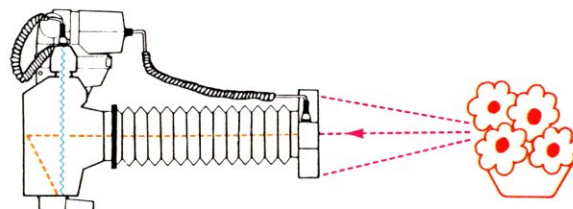
The Auto 622's dedicated capabilities work with all seven of the dedicated heads, and are especially useful if your camera's features include through-the-lens metering control. You still get fully automatic flash exposure, even with special heads, such as the ring light head where the flash's auto system isn't functional. Even with the ringlight on a bellows, for extreme closeups, exposure is automatically correct!





Off-camera flash operation.

Ordinary amateur flash units sit in the camera's hot shoe, with all the limitation of that arrangement. But with the dedicated module system, you can move the flash away from the camera for better lighting. Add the Dedicated Remote Cord accessory, and you can increase the distance even further. No matter how far away the flash is, the in-the-finder ready light, another dedicated feature, lets you know when the flash is ready—with no need to look away from the subject!



Flash exposure with ringlight and bellows would normally require complex calculations, including bellows factors and the like. But with the Auto 622 and cameras which have dedicated through-the-lens exposure metering, it's all automatic. The camera reads the flash, just as it does "continuous" light.

Interchangeable Dedicated Modules

Cat. No.	Shoe Module	Interface with
651-040	CA-1D	Canon A-1, AE-1 PROGRAM, AE-1, AL-1, AV-1, NEWF-1, T-50, T-70
651-046	NE-1D	Nikon FE, EM, FM2, NEWFM2
651-049	OT-1D	Olympus OM-2N, OM-2, OM-1N, OM-20, OM-30, OM-2S
651-043	MX-1D	Minolta XD series, XG series, LEICA R4 MOT
651-044	YC-1D	CONTAX 137MD/MA, 139 Quartz, RTS11
651-047	RX-1D	Ricoh XR-1000S, XR-2S, XR-6, XR-S, XR-7
651-041	KX-1D	Konica FC-1, FP-1, FS-1, FT-1, FT-1 MOT
651-048	PT-1D	Pentax ME, ME super, Program Plus
651-146	NE-2D	Nikon FA, FE-2, FG
651-143	MX-2D	Minolta X-500, X-600, X-700, X-370
651-246	NE-3D	Nikon F3
651-042	STD-1D	For all Non-Dedicated cameras.

7 interchangeable flash heads put on any scene.

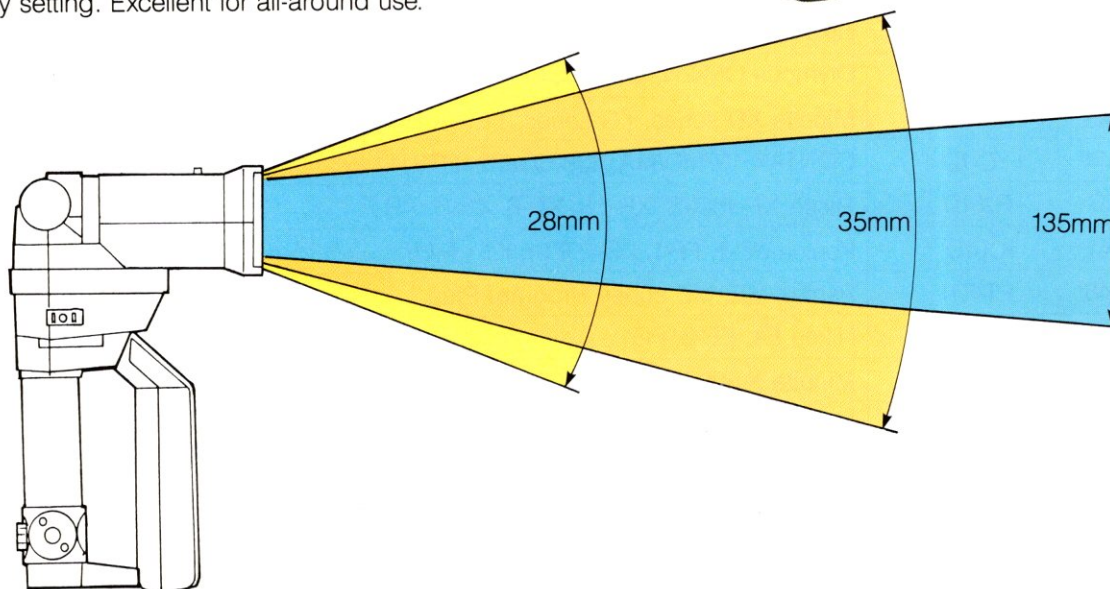


Standard Head.

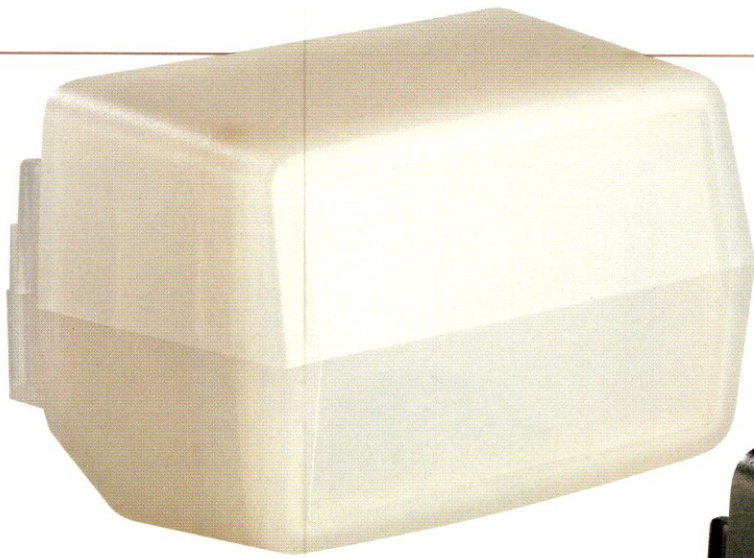
Excellent for most indoor/outdoor shooting, weddings, and general flash photography. An all-around performer that can cover a 35mm lens on a 35mm camera.

Zoom Head.

Three-position zoom control lets you cover any lens from 28mm through 135mm. Provides optimum light coverage by zooming the flash as you zoom or change lenses. Features convenient click stops for easy setting. Excellent for all-around use.



the right light



Diffused Head.

Lets you reflect and disperse light off surrounding surfaces for soft, wonderfully even, diffused 360° illumination. Even when shooting conditions aren't right for bounce lighting.

Bare Bulb Head.

360° illumination for creating soft, natural lighting effects similar to Diffused Head, but with slightly more contrast and some shadowing. Ideal for broad coverage with fisheye and other ultrawide angle lenses.



Interchangeable flash heads



Infrared Head.

Offers the correct filtration for infrared photography.

Ideal for use with Kodak high speed infrared film, to capture night action or for unusual effects. Emits invisible infrared light with a peak spectrum of 840NM, and eliminates the need for special or separate infrared flash units. Widely used by law enforcement agencies and the military for criminal investigation and surveillance.



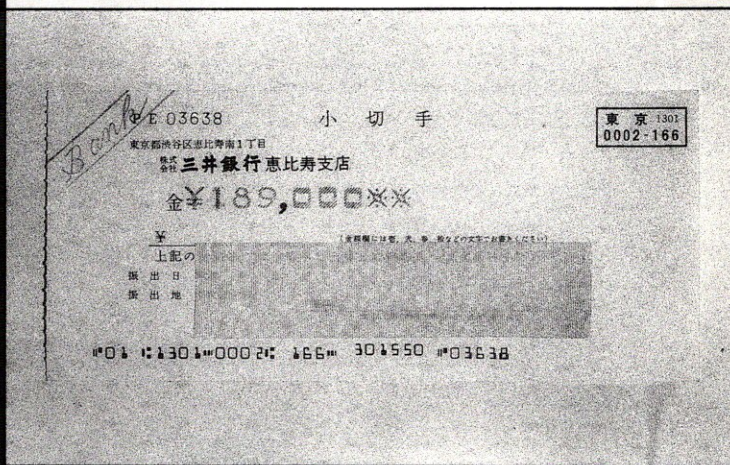
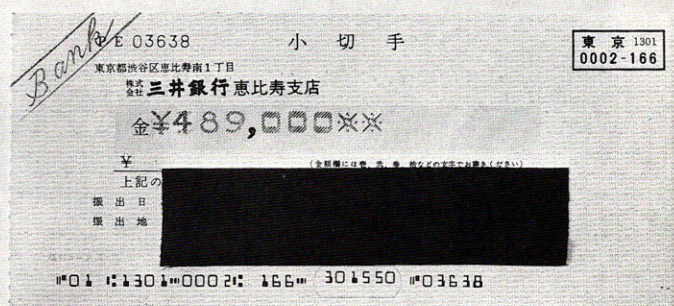
The Infrared Head allows you to take photos at night or in complete darkness without the subject's knowledge. Because infrared light is invisible to the human eye, zoologists often use infrared flash for night life photography of nocturnal animal behavior.



Infrared photography is often used to examine antiques and artwork to determine whether they are real or counterfeit.

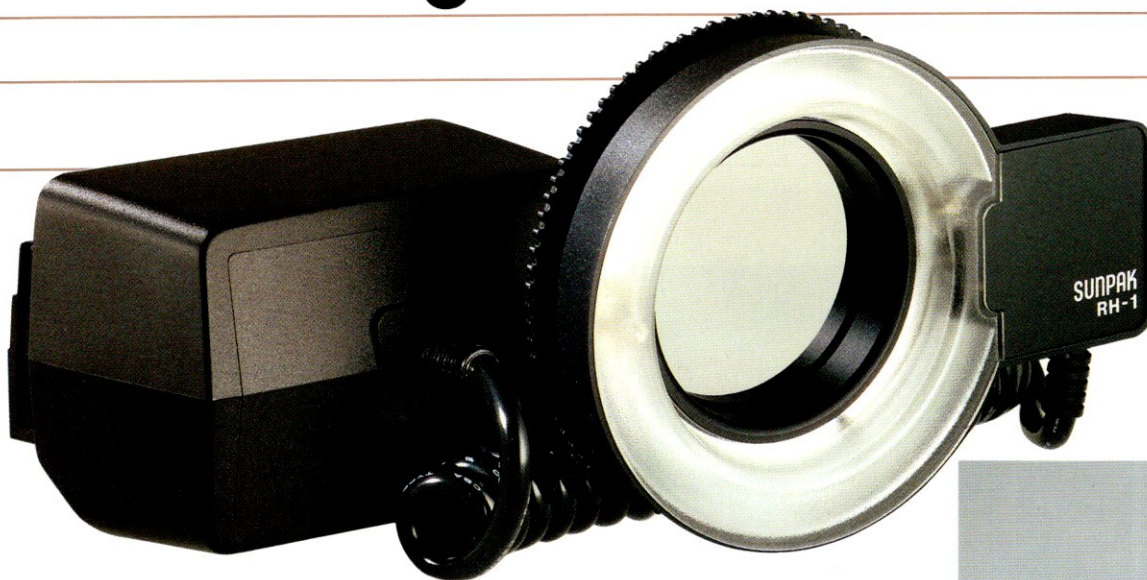
In this example, the original paint is visible in the infrared photo even though it is not visible to the human eye.

The Infrared Head emits infrared light, which is virtually invisible to the human eye. When used with infrared films, it enables you to: take pictures at night or in complete darkness, without the subject's awareness; take photographs of objects that are normally invisible to the eye, such as contents of certain types of containers, altered or stained photographs and documents — even veins within a subject's body; take special-effects photographs in which day appears as night, foliage and trees become magically luminous, and where almost any subject assumes a new and fascinating appearance.



If a document has been altered, by adding, erasing or covering something, and the change is not visible to the eye . . . you can use the Infrared Head to reveal the portion of the document as it appeared prior to the change.

Interchangeable flash heads



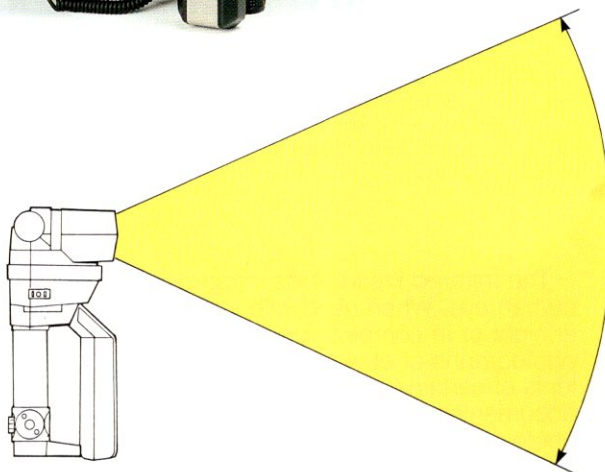
Ring Flash Head.

Provides 80° diagonal illumination for perfectly even shadowless illumination. In close-up and macro photography, the ring flash on the front of the lens is the ultimate tool. And is especially effective for medical and dental photographic applications.



Wide Angle Head.

When you want to cover a 24mm lens on a 35mm camera, or a 50mm lens on a 2 1/4-square camera with direct flash, this is the head to choose. With its 24mm wide angle coverage and a guide number of 113 (ASA 100) this is the most powerful portable flash commercially available today.



Interchangeable components mean the Auto 622 System is many flashes in one.

The Auto 622 Pro System is a true professional system flash. You can interchange not only the flash head but the power source, in seconds, to fit the flash to the job at hand. (If you have more than one brand of electronic camera, you can even interchange Dedicated Modules!) So the 622 is always the ideal flash for what you have to do. That's the mark of a true professional.

When it comes to power sources, you can choose according to how many flashes you'll need, and how fast you

want recycling to be. The snap-on battery cartridge holds four C-size batteries, alkaline or NiCad. Or there's an optional NiCad Battery Cluster (CL-3) that attaches the same way. Many photographers will want two of these, so one can be recharging while the other is in use. There are also two 510V power sources, regular and rechargeable, for when you need the maximum in capacity and speed, plus an AC adapter. The Auto 622 System also includes other accessories (see the full listing on the back page).

1. 622 Body
2. Standard Head
3. Wide Angle Head
4. Infra-Red Head
5. Diffused Head
6. Ring Head
7. Zoom Head
8. Bare Bulb Head
9. 35mm Bracket
10. 6 x 6 Bracket
11. Battery Cartridge CG-10
12. Rechargeable NiCad Battery Cluster CL-3
13. Plug Adapter
14. 510V Powerpak
15. Rechargeable NiCad Battery Pack NC510
16. AC Adapter AD-26
17. 1-HR Charger QBC-6
18. Filter Kit FK-6
19. PC Cord
20. Slave Unit
21. Dedicated Remote Cord EXT-11
22. Dedicated Modules
23. Bounce Adapter
24. Charger QBC-5
25. Bracket Extender



TECHNICAL SPECIFICATIONS

Power Source:	Recycle Time	No. of Flashes	Recycle (full) / No. of Flashes (full)
Battery Pak C × 4	0.25-13 sec.	80-700	25 sec./3 flashes
CL-3 Nicad Cluster	0.25-3 sec.	90-500	6 sec./80 flashes
Powerpak w/510V Battery	0.25-1 sec.	200-2500	3 sec./120 flashes
NC510 Rechargeable Battery	0.25-3 sec.	80-400	6 sec./80 flashes
AD-26 AC Adapter	0.25-19 sec.	Unlimited	
Auto Distance Range:	with Standard Head 2-80' with Zoom Head 2-120'		
Auto Apertures ASA 100	f/2, 2.8, 4, 5.6, 8, 11, 16		
Flash Duration	1/500 - 1/30,000 sec.		
Sensor Acceptance Angle	15°		
Variable Power Ratio	Full, 1/2, 1/4, 1/8, 1/16, 1/32, 1/64, 1/128		
Color Temperature	5500° K		
Dimensions (Standard Head)	10.8"H × 3.8"W × 4.8"D		
Weight:			
Body	31 oz.		
Standard Head	3.7 oz.		
Battery Cartridge	3.5 oz.		

Angle of Illumination:

Standard Head

60° Horizontal × 45° Vertical
35mm Wide Angle coverage on 35mm cameras.

Wide Angle Head

74° Horizontal × 65° Vertical.
Permits use of 55mm lenses on 6 × 6 camera, 24mm lenses on 35mm cameras

Zoom Head

W-Position 70° Horizontal × 53° Vertical.
Permits use of 28mm lenses on 35mm camera.

S-Position 60° Horizontal × 45° Vertical.
Permits use of 35mm lenses on 35mm camera.

T-position 24° Horizontal × 17° Vertical.
Permits use of 135mm lenses on 35mm camera.

Ring Head

80° Diagonal.
Permits use of 35mm lenses on 35mm camera.

Infrared Head

60° Horizontal × 45° Vertical.
Permits use of 35mm lenses on 35mm camera.

Diffused Head

Horizontally, approximately 360°

Bare Bulb Head

Horizontally, approximately 360°

OPTIONAL ACCESSORIES

	Catalog Number		Catalog Number
Auto Slave	651-715	1-Hour Quick Charger—QBC-6	651-165
Bounce Kit	651-795	Dedicated Remote Cord EXT-11	651-166
510V Power Pak	651-723	Plug Adapter	651-168
NC-510 Battery	651-727	35mm Standard Flash Head	651-060
QBC-5 Charger	651-809	Zoom Flash Head	651-061
AC Adapter AD-26	651-741	Infrared Head	651-064
6 × 6 Bracket	651-752	Bare Bulb Head	651-066
Filter Kit FK-6	651-167	Ring Light Flash Head	651-063
PC Cord	651-753	50mm Wide Flash Head for 6 × 6 Camera	651-065
Battery Cartridge CG-10	651-160	Diffused Head	651-062
Nicad Battery Cluster CL-3	651-163	Dedicated Modules	

Guide Number Chart

Film Speed	ISO 25	ISO 100	ISO 1000
STD Head	80	160	506
Zoom Head	W 56	113	358
	S 80	160	506
	T 113	226	715
Ring Head	20	38.4	121
IR Head	36	72	228
Wide Head	56	113	358

B.C.P.S. (Beam Candle Power Second) Chart

Power Ratio	Full	1/2	1/4	1/8	1/16	1/32	1/64	1/128
STD Head	4530	2300	1130	555	280	140	70	35
Zoom Head	W 2300	1130	555	280	140	70	35	18
	S 4530	2300	1130	555	280	140	70	35
	T 9030	4530	2300	1130	555	280	140	70
Wide Head	2300	1130	555	280	140	70	35	18
Ring Head	260	80	30	15	6	1.8	—	—
Bare Bulb Head	125 ws	63 ws	31 ws	16 ws	8 ws	4 ws	2 ws	1 ws
Diffused Head								