

How to get the most out of your Spiratone 400mm F/6.3

The SPIRATONE '400' is a lightweight, true telephoto lens yielding 8X image magnification as compared with the normal lens.

By understanding its features, by realizing its limitations as well as its potential, by taking advantage of the many accessories available for it, you will get the most out of the 400mm Spiratone, one of the finest "long" lenses available at any price.



Full Interchangeability of Fittings.

The Spiratone '400' uses the popular T adapter system of fittings. While Spiratone's low price for the lens includes one camera fitting of your choice, fittings for virtually all other 35mm focal plane SLR's (and 16mm C mount movie and T.V. cameras) are available at moderate cost. For a detailed listing and prices of available fittings, ask for listing 'FL'.

Mounting the Lens to your Camera.

Screw the "T" adapter onto the lens and mount the lens to the camera body in the usual manner. If the lens scale is not centered in the upright position, loosen the three setscrews in the "T" adapter, rotate the lens so that the scale is centered, and retighten the setscrews. To remove "T" adapter, do not loosen setscrews — simply unscrew entire adapter.

The Pre-set Diaphragm.

The pre-set diaphragm is calibrated from f/6.3 to f/32. Set the upper pre-set diaphragm ring to the desired f stop as determined by an exposure meter. Rotate the operating diaphragm ring just below the calibrated ring as far as it will go to open the diaphragm fully to f/6.3 for maximum brightness in focusing and composing.

After focusing, rotate the operating diaphragm ring in the opposite direction as far as it will go.

The diaphragm is now stopped down to the pre-set aperture and the shutter may now be tripped.

Using the Pre-set Diaphragm for

Behind-the-lens Metering.

The Spiratone '400' stops down all the way to f/32, giving you that extra depth of field sometimes so necessary in long telephoto work. The pre-set diaphragm is simple to operate and lets you use the behind-the-lens meter of your camera by means of the "stop-down method" of metering.

Your own camera instruction manual explains how this method is used in conjunction with your particular camera.

Focusing and Viewing with the '400'.

The microgrid and rangefinder prisms built into most SLR viewing screens are designed for normal and moderate telephoto lenses and generally do not work with as long a lens as the '400'. Some cameras per-

mit replacing of the focusing screen with a special screen to match the focal length of the lens. However, in most finders you simply focus on the fine focusing collar of the viewing screen and ignore the microgrid or rangefinder prism.

The very shallow depth of field of the '400' requires careful focusing on the most significant portion of the subject. The focusing mount on the Spiratone '400' is designed to focus slightly beyond the infinity mark on the focusing scale. This permits setting the focus beyond a very distant subject and "coming back" for optimum focus at the subject, whether at or near infinity.

On some cameras, long telephotos such as the '400' seem to produce an apparent cut-off, primarily in the upper corners or along the entire upper edge of the viewfinder. Actually, such viewing cut-off is caused by the size of the camera's mirror which is adequate for shorter focal length lenses only.

The slide or negative will be fully exposed and unaffected by this viewing deficiency.

For truly critical focusing, the Spiratone Critical Eyepiece Magnifier is available for most SLR's.



Depth of Field.

An engraved depth of field scale indicates the range of sharpness with the SPIRATONE '400' for any distance and f stop combination. Example: if the lens is focused to 100 feet and the diaphragm is stopped down to f/22, the depth of field scale indicates opposite 22 on the left and right a range of sharp focus from 80 feet to about 125 feet.

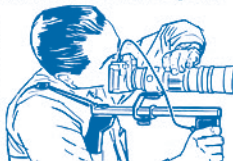
To Hand-hold or Not to Hand-hold.

The Spiratone '400' can be hand-held — but it takes a combination of several factors to avoid camera motion: steadiness of your stance, practice in holding a camera with a long lens, and a reasonably fast shutter speed (the latter being actually dependent on the first two factors). Clearly, there can be no fast rule — each individual user will have to experiment and find out whether he can hand-hold, and if so, at what shutter minimum speed.

But regardless of your skill in hand-holding your camera with a long telephoto, a tripod is a more reliable support than the steadiest grip you can muster. The '400' has its own tripod collar which is located near the center of gravity for balanced mounting and also allows quick rotation for vertical and horizontal mounting. All Spiratone tripods are more than adequately sturdy for use with the '400'. Ask for special brochure

'GT' on the Channel Brace, Versatile and Mini-Maxi tripods.

There is another alternative, too — the Spiratone Telegrip. It greatly improves the uncertainties of hand-holding by providing a combination of rifle stock support and vibration-free shutter tripping with its 24" metal cable release, right from the trigger position.



Penetrate Haze for More Distant Detail with Filters.

The SPIRATONE '400' uses custom 72mm size filters

directly or a Series IX 72mm adapter in conjunction with standard series IX accessories.

In long distance photography, haze filters of various capabilities are extremely important. There are several types to select from.

Haze #1 — for moderate haze correction on color or black and white. Haze #2A — for stronger correction, primarily with color film. UV-16 — for color, primarily when there is much ultra-violet present. Skylight 1A — reduces excess of blue in the shade and is recommended as "standard" filter for use with some color films. Also, there are yellow and red filters for black and white films, and polarizers for reflection control and certain types of haze penetration. For information on the use of filters, ask for brochure 'FC'.



Using a Lenshood.

A long straight metal screw-in custom lens hood which provides maximum protection is available for the Spiratone '400'. The use of the hood is recommended at all times — and is particularly important in outdoor work, since it protects the lens from stray light, assuring optimum contrast. The hood screws directly into the front of the lens or, into the screw-in accessories, such as filters, Opticap and FocusXtenders.

What about Close-ups?

The Spiratone '400' can be quite effective in taking telephoto close-ups. There are two ways. The slower way is by using extension tubes ("T" tubes) which fit between the adapter and lens and extend the focusing range down to 8'. Naturally, a tripod is a must when you use extension tubes. A moderate increase in exposure is required, depending on the amount of tube extension.

The faster way employs Spiratone's FocusXtenders which, unlike conventional close-up lenses, are specially designed to extend the focusing range of the 400mm telephoto. The .25 diopter FocusXtender covers a range from about 13' down to 8½', the .5 diopter FocusXtender from about 6½' down to 60" and both, in combination with each other, focus from about 54" down to 44". Unbelievably effective close-ups can be obtained with FocusXtenders, but in order to get satisfactory telephoto close-ups relatively small openings should be used and, of course, a tripod is essential. No exposure increase is required.



Protect your Spiratone '400'!

Your Spiratone '400' is sturdily constructed — but nevertheless requires the care and protection that is due any fine optical device. When not in use, protect both ends with front and rear caps. And for protection while shooting, particularly at the beach or in poor weather conditions, keep a Spiratone Opticap over the lens.



Spiratone offers a choice of two types of cases for the '400': an elegant hard tubular case with shoulder carrying strap and built in filter compartment. And the Teletoter, a hard "total outfit" case which cradles the camera and normal lens, stores the '400' in the bottom under

(Continued on opposite side)

the removable camera cradle platform and has lots of room for several other lenses, strobe and accessories. A convertible hand-carry or over the shoulder strap, and quick snap lock closure complete the features of this unusual outfit case.

So you see — there is so much more that you can do with the Spiratone '400' than "meets the eye". The Spiratone '400', despite its low cost, is not just simply a telephoto lens, but the heart of one of the finest and most versatile telephoto systems available.

PRICELIST OF ACCESSORIES

discussed in this brochure

		Shpg. Chge.
*Critical Eyepiece Focuser, for most SLR's	\$8.95	25c
Metal Rear Caps		
For Pentax (Mamiya, Yashica), Exakta, Topcon each	\$1.00	15c
For Nikon, Minolta, Canon each	\$2.00	15c
*72mm Metal Front Cap	\$3.50	20c
*72mm Opticap	\$5.00	20c
*Tubular 400mm Lens Case	\$9.95	\$1.00
*Teletoter Outfit Case	\$29.95	\$2.00
*72mm Custom Lenshood	\$8.95	50c
*Telegrip	\$10.99	\$1.25
"T" Extension Tube Set	\$3.98	20c
FocusXtenders		
*72mm .25 or .5 diopters, each	\$15.42	20c
*Set of both	\$27.84	30c
72mm Filters		
*Choice of most popular colors, ea.	\$12.95	20c
*Custom Polarizer	\$17.44	30c
Leather Pouch for 72mm Filter	\$1.79	

prices subject to change without notice

Spiratone INC.

SPIRATONE BUILDING

135-06 NORTHERN BLVD., FLUSHING, N.Y. 11354

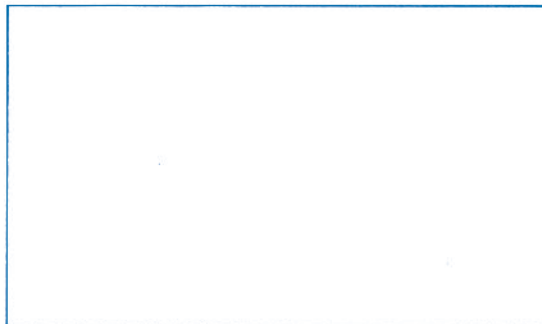
130 WEST 31st STREET, NEW YORK, N.Y. 10001

PRINTED IN JAPAN

30 DAY MONEY-SAVING OPTION

Within 30 days after purchase of your Spiratone 400mm lens, you have the option of purchasing any of the * starred items in pricelist at a 25% discount.

To qualify, use order form at right and attach proof of purchase† below.



† if purchase was by mail, packing slip; if purchase was made in one of our stores, register receipt

MINIMUM ORDER (after discount is deducted) \$12.00

HOW TO ORDER

Please PRINT your name and address legibly on your orderform or letterhead—signatures are often difficult to read and may result in incorrectly addressed shipments.

Give all PERTINENT FACTS—when ordering a lens, be sure to name camera it is to fit; most cameras are made in many models—give full model information. Even if you have supplied such information in the past, please include it with every order. If you are in doubt, give more, not less, information about the equipment you intend using accessories with.

If you are UNCERTAIN on what to order, please write us in advance—we will either tell you exactly what to order, how much it costs, or send you detailed literature for your study. If you indicate in your order that you are uncertain of your requirements, we will try to check your order, if given sufficient information. However, this may delay processing of the order.

If you have any QUESTIONS NOT CONNECTED WITH YOUR ORDER, please write these on a separate sheet of paper. We will gladly discuss your problems with you, but any correspondence not directly connected with your order (even if pertaining to a previous order) has to be handled by separate departments.

Please make your order short and to the point—if possible, use our orderform and state exactly what you want, what each item costs, how much you are remitting, and your name and address. If you are entitled to any free booklets or bonuses, please ask for these ON your order—we cannot honor such requests afterwards. 'Same time purchase' offers must be taken advantage of at the time you place the order that entitles you to these—do not apply to separate orders.

SHIPPING SCHEDULE

Over 99% of all articles listed and advertised by us are in stock at all times. While camera accessories—thousands of different ones—can never be shipped on a mass production basis, we endeavor to ship every order within two to five working days after receipt of order and payment. If an item you order is out of stock, we will so notify you. Unless otherwise specified, all shipments are made by parcel post or United Parcel Service which may take anywhere from a few days to a few weeks, depending on variations in the services.

For faster mail service, we recommend First Class, Air Mail, Special Handling and Special Delivery service—please consult your postmaster regarding the extra cost for these services.

If you are in a genuine HURRY for your order (not just the type of hurry we all are for everything in) we will endeavor to give your order preferential treatment—please request such rush service only if absolutely necessary.

If you have occasion to check up on an order you sent us, please give complete details in your inquiry, stating when order was placed, what you ordered, how much you remitted.

We do at all times endeavor to give you the best possible service compatible with careful, individual handling of your orders—and appreciate your cooperation in making this possible.

ORDER FORM FOR 400MM LENS ACCESSORIES

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C.O.D. orders must be accompanied by a 25% deposit. When ordering accessories be sure to give necessary information regarding size, equipment to be fitted, etc. Please see opposite for ordering instructions.

*Adequate prepayment must be made for Airmail, Special Delivery or other faster means of transportation.

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- CHARGEX
- DINERS CLUB

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*Minimum charge order \$20.00 net (exclusive of shipping costs)

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USING THE SPIRATONE

400MM f/6.3 PRE-SET TELEPHOTO

The SPIRATONE 400 is a lightweight, true telephoto lens yielding 8X image magnification as compared with the normal lens.

MOUNTING THE LENS TO YOUR CAMERA.

The SPIRATONE 400 is a "T" mount lens. It is supplied with the appropriate "T" adapter for your SLR camera. Screw the "T" adapter onto the lens and mount the lens to the camera body in the usual manner. If the lens scale is not centered in the upright position, loosen the three setscrews in the "T" adapter, rotate the lens so that the scale is centered, and retighten the setscrews.

THE PRE-SET DIAPHRAGM.

The pre-set diaphragm is calibrated from $f/6.3$ to $f/32$. Set the upper pre-set diaphragm ring to the desired f stop as determined by an exposure meter. Rotate the operating diaphragm ring just below the calibrated ring counter clockwise as far as it will go. This opens the diaphragm fully to $f/6.3$ for maximum brightness in focusing and composing.

After focusing, rotate the operating diaphragm ring clockwise as far as it will go.

The diaphragm is now stopped down to the pre-set aperture and the shutter may now be tripped

DEPTH OF FIELD.

An engraved depth of field scale indicates the range of sharpness with the SPIRATONE 400 for any distance and f stop combination. Example: if the lens is focused to 100 feet and the diaphragm is stopped down to f/22, the depth of field scale indicates opposite 22 on the left and right a range of sharp focus from 80 feet to about 125 feet.

TRIPOD COLLAR.

The SPIRATONE 400 may be hand held at fast shutter speeds, but for maximum definition the use of a tripod is recommended. Mount the tripod to the tripod collar. The collar may be rotated to permit vertical or horizontal composition.

FILTERS.

The SPIRATONE 400 uses custom 72 mm size filters or series IX 72 mm adapter for standard series IX accessories.

The use of a haze filter is generally recommended in telephotography.

SLR CAMERAS AND TELEPHOTO LENSES.

The effectiveness of the various types of focusing screens varies with the focal length and the speed of the lens. The rangefinder or microgrid prisms built into the groundglass do not work as well with longer focal length lenses as with the normal lens and may black out. When such conditions exist, focusing is best done on the groundglass portion of the viewing screen. On some SLR cameras, long lenses seem to produce an apparent cutoff, primarily in the upper corners or along the entire upper edge of the viewfinder. Actually, such viewing cutoff is caused by the size of the camera's mirror which is adequate for the shorter focal length lenses only. The slide or negative will be full and unaffected by this viewing deficiency.