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YASHICA

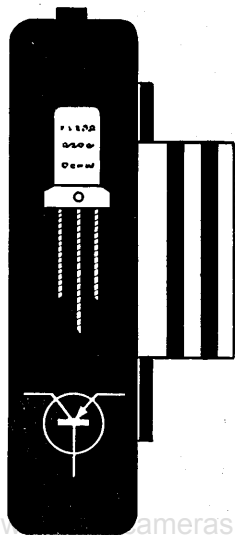
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Electro 35

INSTRUCTION BOOKLET GEBRAUCHSANWEISUNG
MODE D'EMPLOI FOLLETO DE INSTRUCCIONES

35

Electronic Exposure Control



Perfect exposure is instantly determined under any light condition by means of the electric circuit consisting of transistors, condenser and CdS cell.

Even candlelight dimness or night photography is possible without flash.



Your Electro 35 is the world's first 35mm camera with accurate Magic Lamps; over-exposure warning lamp, warning lamp for hand held exposure, and battery check lamp.

Illuminating Magic Lamps



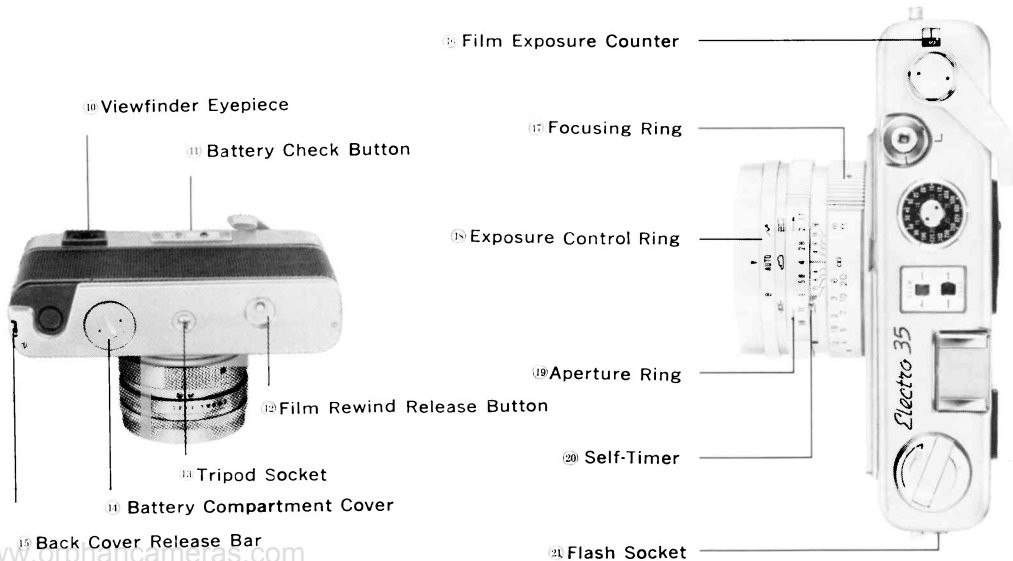
The Electronic Brain and transistorized electronic shutter extends the scope of picture-taking. Picture in dim light is easily made and even the slightest change in light conditions will be automatically adjusted for the precise exposure.



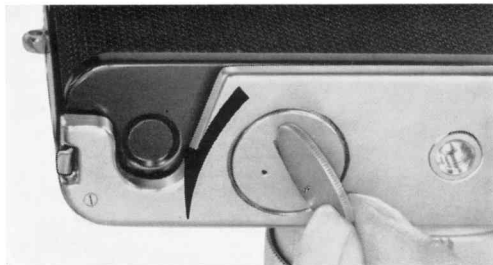
Fabulously fast Yashinon-DX f/1.7 lens

The f/1.7 lens on your Electro 35 captures the subject as you see in the luminous viewfinder. It also assures edge-to-edge sharpness at all times.

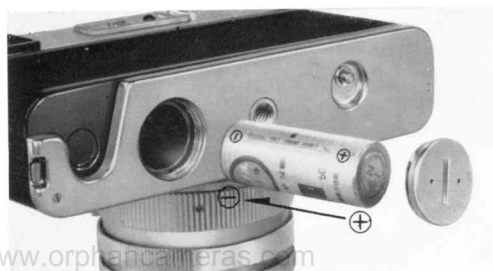




LOADING BATTERY

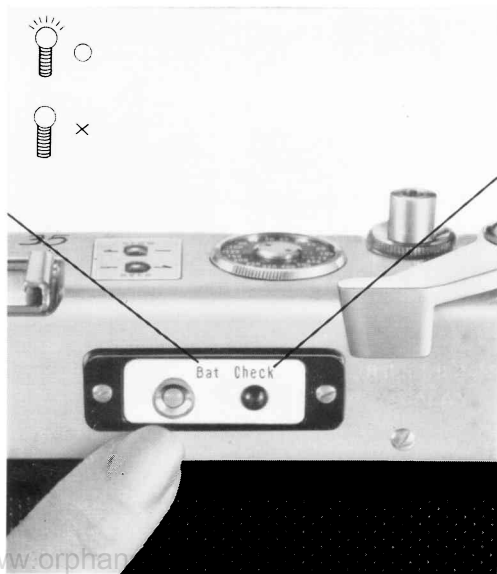


- 1 Unscrew the coin-slotted Battery Compartment Cover as illustrated.



- 2 Drop in the mercury battery (Mallory TR164, Eveready E164 or equivalent) as illustrated. Please check carefully the polarity markings. Replace the Cover.

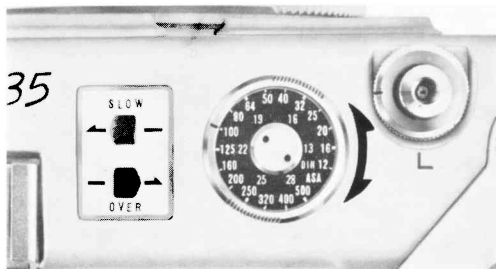
CHECKING BATTERY



It is necessary to check the battery power before picture-taking, because sufficient battery power is required to obtain the correct exposure.

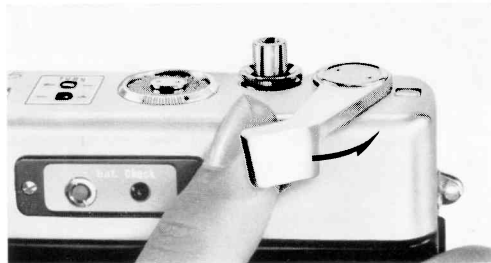
Press the small, red Battery Check Button on the back of the camera body. When the green lamp lights, the battery power is sufficient. If not, the battery should be replaced.

FOR CORRECT EXPOSURE (1)



1 Set the desired ASA/DIN rating by turning the ASA/DIN Film Speed Dial. Otherwise, the correct exposure can not be obtained.

2 Set the Exposure Control Ring to AUTO position.



- 3 Choose the desired Exposure Symbol by turning the Aperture Ring.

Symbols	Conditions	Apertures
☉	Bright Sun	16/11/8
☁	Heavy Overcast or Open Shade	5.6/4/2.8
☑	Indoors	2/1.7

- 4 When the Film Advance Lever is wound, the meter switch is set to ON position automatically. The CdS cell activates to measure the light.
CAUTION: The Shutter Release Lock Ring must be released.

FOR CORRECT EXPOSURE (2)



- * Depress the Shutter Release Button gently.
- * When neither the yellow lamp nor the red lamp lights in the finder, the exposure is correct.
- * Press the button all the way down to make the exposure.
- * You can also use the Exposure Check Lamps on the top of the camera body.



In usual outdoor shooting, you can take perfectly exposed pictures at all times without worrying about the lamps in the finder, if you've set the Exposure Symbol correctly.

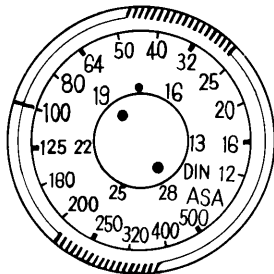
- * However, in the dimmest light or in extremely brilliant light snow or beach scenes it is advisable to check the exposure.
- * Depress the Shutter Release Button half-way. If the red lamp lights, it indicates over-exposure. If the yellow lamp does, it warns that a hand-held picture-taking is not recommended. See the following pages how to use the Magic Lamps.

INTERMEDIATE ASA/DIN FILM SPEED SETTINGS

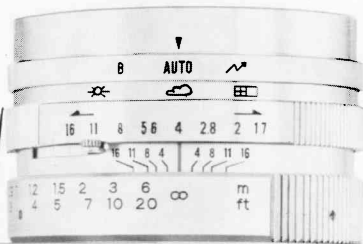
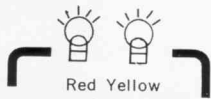
ESCALA ASA/DIN

Contrôl de la Sensibilité du film ASA/DIN

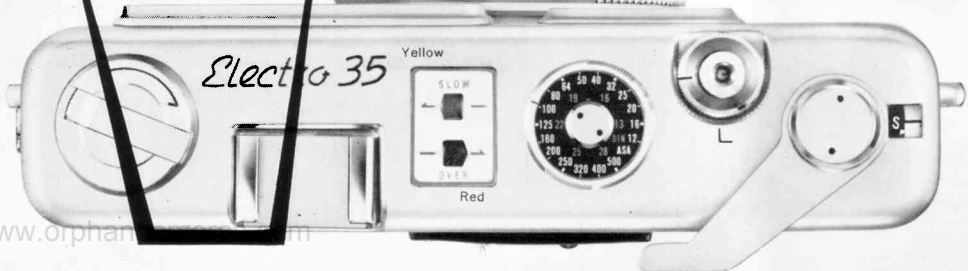
Filmempfindlichkeit ASA/DIN-Zwischenwerte



EXPOSURE CHECK LAMPS



← Aperture Ring

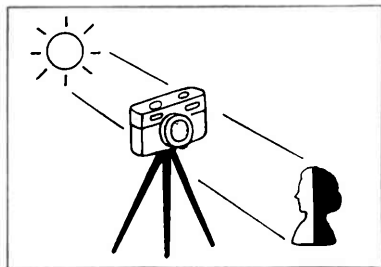


The lamps in the viewfinder are cross-coupled to the ones on the top of the camera. The correct exposure is given when the red lamp does not illuminate by pressing slightly the Shutter Release Button.

Instructions for various lamp indications are given in the following:

HAND-HELD PICTURE-TAKING LIMIT	<ul style="list-style-type: none">* If the yellow lamp lights, it warns that a hand-held exposure is not recommended.* When the yellow lamp extinguishes by turning the Aperture Ring in the direction of the yellow arrow, it is possible to make exposures hand-held.* When the yellow lamp lights, it is advisable to use a tripod and a cable release. If necessary, switch to flash photography.
OVER-EXPOSURE	<ul style="list-style-type: none">* When the red lamp extinguishes by turning the Aperture Ring in the direction of the red arrow, the correct exposure is obtained.* When the red lamp does not extinguish even by turning the Aperture Ring in the direction of the red arrow as far as it will go. use a Neutral Density (4X) filter and reset the Film Speed Setting Ring to 1/4 of the original ASA setting. For example, if the film with ASA 100 is used, set the Dial to ASA 25.

FOR BETTER PICTURES



For color pictures: Color films have little exposure latitude. Careful exposure setting is required. Your Electro 35 guarantees the correct exposure at all times. However, it is recommended to shoot color photos in soft, diffused sunlight.



For open views: Open views, such as distant landscape, usually have very light shadows. The use of a lens hood is recommended to cut off the harmful reflected light for more crisp pictures.

USE OF FILTERS



The use of a filter is advisable for clear, crisp pictures in blazing sunlight, snow or beach scenes, etc.



When using a filter, an increase in exposure time is necessary. This is indicated on most filters in the form of a filter factor indicating by how much (e.g., 2 times, 3 times) the exposure must be increased with the filter.

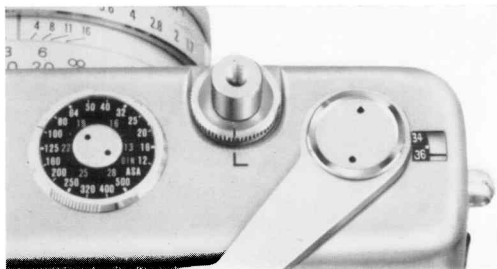
B SETTING



When the light is very weak, especially when you have to use a small stop, even the slowest shutter speed may be too short. In that case, you need time exposure. Set the Ring to 'B' and press the release button. The shutter now remains open over the duration the shutter release button is depressed. For such time exposures, the camera must be mounted on a firm support such as a tripod. When using the slower shutter speeds than 1/30 sec. or Bulb setting, the camera must be mounted on a firm base such as a tripod. Also, it is safest to release the shutter with the help of a cable release to avoid shaking the camera. This release screws into the socket provided in the release button.



SHUTTER RELEASE LOCK RING



Lock the shutter release button by turning the Shutter Release Lock Ring counter-clockwise when your camera is not in use.



The shutter release button is locked.

The battery drain and an accidental shutter release are prevented.



The shutter release button is released.



In order to take sharp pictures, you must hold the camera still. Hold the camera as shown making sure that your fingers do not obscure the CdS cell window or the lens. Place the camera close to your eye with the eye centered on the rear eyepiece so the complete luminous viewfinder is visible. For vertical pictures, hold the camera in a position you find comfortable and most steady.

FOCUSING



The image seen within the luminous view-frame will be reproduced on the film. The subject at short camera-to-distances (2.6 feet or 0.8 meter) should be composed in this frame providing automatic parallax correction.



Sight your subject through the yellow rhomb in the viewfinder. Then, focus the camera on your subject by turning the Focusing Ring.



In focus :

To focus, set the yellow rhomb in the centre of the viewfinder on the subject and turn the Focusing Ring until the two images overlap and form one clear image.



Out of focus :

The left photo shows the two images are not overlapped. The camera is not in focus.

SELF-TIMER



- 1 Advance the film to set the shutter. Move the Self-Timer on the lens barrel in the direction of the arrow.
- 2 Press the Shutter Release Button which will actuate the Self-Timer and in 7-8 seconds, the shutter will click.

DEPTH-OF-FIELD



F 1.7



F 16

When you focus the camera on a subject, there is a certain distance in front and back of the subjects within which other objects will also appear sharp. This is known as the "Depth-of-Field" and it varies with the aperture. The smaller the aperture, the greater the Depth-of-Field.



The Depth-of-Field Scale will be found on the lens barrel. With the camera focused on 2 meters, the Depth-of-Field indicated by the scale for an aperture of f/16 is from 1.4 meters to 3.8 meters.


FLASH PICTURES



The electronic shutter is provided with ' B ' setting long exposure. However, when you want to take pictures of moving subjects in dim light, the use of a flash gun is recommended.

A Yashica flash gun can be attached to your camera by means of the accessory shoe on the top of the camera or a bracket affixed to the tripod socket in the camera base.



Set the flash mark  to the index line by turning the Exposure Control Ring. The shutter speed is set automatically at 1/30 sec. Electronic flash or flashbulbs can be used as the shutter speed is set at the X setting.

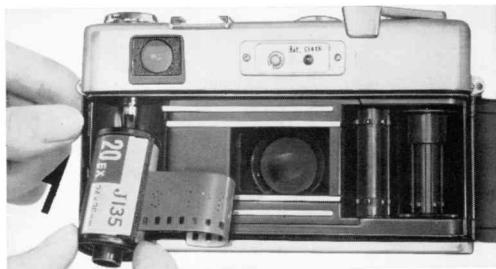


Obtain the camera-to-subject distance by turning the Focusing Ring and divide the guide number of the electronic flash or flashbulbs by the distance. The figure thus obtained is the correct aperture, which should be set on the camera by turning the Aperture Ring. Remember that the guide number is different for each film speed.

LOADING FILM (1)

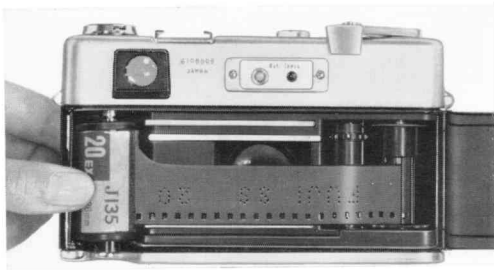


- 1 Pull out the Back Cover Release Bar and the hinged back cover will pop open.

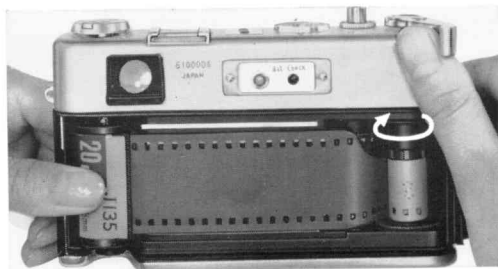


- 2 Insert a new roll of 35mm film into the Film Chamber.

You should load a film in subdued light, never in direct sunlight.

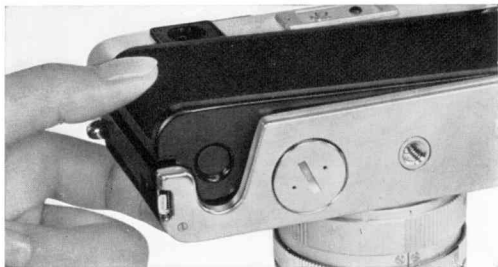


- 3 Carefully pull out the film leader from the cassette and thread the end into any slot of the Take-up Spool.

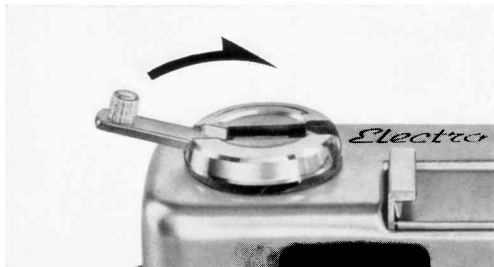


- 4 Make certain that the perforations in the film are threaded securely on the sprocket teeth.

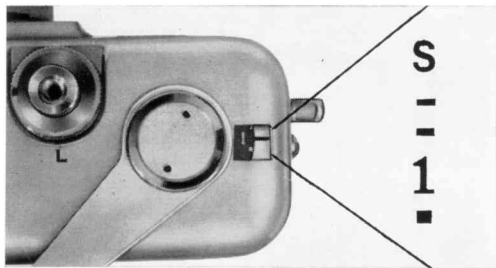
LOADING (2)



- 5 Close the back cover securely by pressing the back against the body.



- 6 Flip up the Folding Film Rewind Crank and gently wind in the direction of the arrow until you feel a slight resistance. Then, replace the crank.

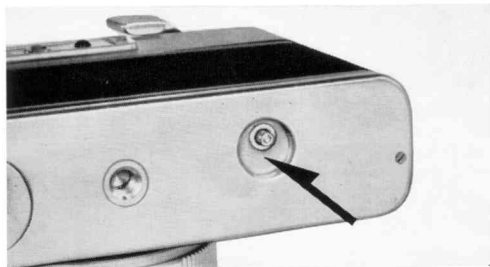
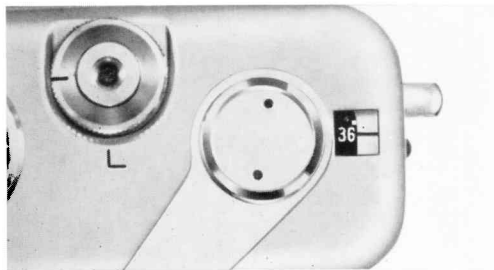


- 7 The Film Exposure Counter is automatically set to "S" (start) when the back cover is closed. Advance the film, press the Shutter Release Button and repeat until the figure "1" appears in the Exposure Counter Window. You are ready for your first exposure.



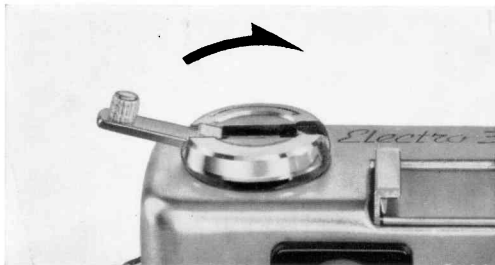
- 8 Check the Folding Film Rewind Crank as you advance the film. If it moves as illustrated, the film is properly loaded. If it fails to move, open the back cover and thread the film into the spool again.

UNLOADING

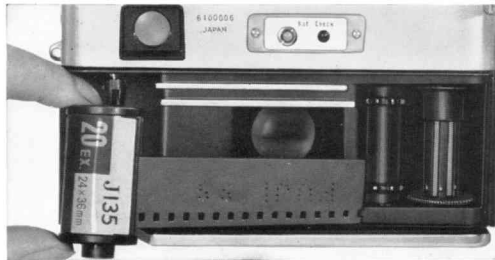


1 After the last exposure (36 or 20), the film must be rewound into its cassette before removing it from the camera.

2 Press the Film Rewind Release Button on the base of the camera.



- 3 Flip up the Folding Film Rewind Crank and turn it in the direction of the arrow. When you reach the end of the film, you will feel a slight resistance. Continue turning the Crank until you feel the film pulling away from the slot of the Take-up Spool.

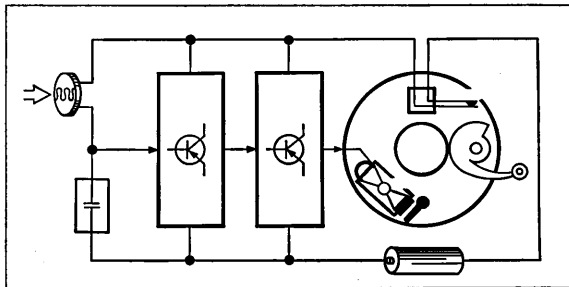


- 4 Open the Back Cover and remove the film.

What is an Electronic Shutter?

In the conventional cameras, the amount of light accepted by the CdS photoresistor cell is converted into the electric current. The CdS meter needle is interconnected with the shutter speeds and the apertures to obtain the correct exposure.

In this Electro 35 with the electronic shutter, the amount of light accepted by the CdS photoresistor cell is controlled for perfect exposure by means of a completely transistorized electric circuit, condenser and an electric magnet to actuate the shutter.



Principle of Electronic Shutter

When the shutter release button is depressed, the shutter blades are fully opened and at the same time, the power supply switch is automatically turned to "ON". The amount of light entering the CdS photoresistor cell actuates charging in the condenser when it is fully charged to the prescribed voltage, the transistorized circuit activates the electric magnet to trip the shutter blades to close.

CARE OF YOUR CAMERA

- Do not keep the camera in the glove compartment or trunk of the car or leave it under direct sunlight. Because heat may affect the film in use, battery and electric circuit in the camera.
- It is advisable to carry a spare battery.
- If the front surface of the lens needs cleaning, first blow away any dust or dirt from the surface. Then, clean with a lens brush or clean, soft, lintless cloth.
- When the camera is not in use for a long period of time, remove the battery and store them in a cool, dry and safe place.
- When the camera is not in use, do not leave the shutter cocked.

DEPTH-OF-FIELD TABLE

PROFUNDIDAD DEL CAMPO

TABLE DE PROFONDEUR DE CHAMP

TIEFENSCHÄRFENTABELLE

DEPTH-OF-FIELD TABLE

Meter

Distance	F.No.	1.7	2	2.8	4	5.6	8	11	16
∞	from	37.7	32.1	22.9	16.1	11.5	8.07	5.89	4.08
	to	∞	∞	∞	∞	∞	∞	∞	∞
7	from	5.93	5.77	5.39	4.91	4.39	3.79	3.24	2.61
	to	8.56	8.91	10.0	12.3	17.6	51.6	∞	∞
2	from	1.91	1.89	1.85	1.79	1.72	1.63	1.52	1.38
	to	2.10	2.12	2.18	2.26	2.39	2.61	2.94	3.77
1	from	0.98	0.97	0.96	0.95	0.93	0.91	0.88	0.83
	to	1.02	1.03	1.04	1.06	1.08	1.12	1.17	1.27
0.8	from	0.79	0.78	0.77	0.76	0.75	0.74	0.72	0.70
	to	0.81	0.82	0.82	0.83	0.85	0.87	0.90	0.96

Feet

Distance	F.No.	1.7	2	2.8	4	5.6	8	11	16
∞	from	124'	105'	75'	53'	38'	27'	19'	13'
	to	∞	∞	∞	∞	∞	∞	∞	∞
20	from	17' 3"	16' 11"	15' 11"	14' 7"	13' 2"	11' 6"	9' 11"	8' 1.7"
	to	23' 9.1"	24' 6.9"	27' 0.7"	31' 10.9"	41' 11.6"	80' 0.2"	∞	∞
7	from	6' 7.8"	6' 7.1"	6' 5.3"	6' 2.8"	5' 11.7"	5' 7.5"	5' 2.9"	4' 8.6"
	to	7' 4.7"	7' 5.5"	7' 8.0"	7' 11"	8' 5.7"	9' 3.9"	10' 8.1"	14' 1.2"
3.5	from	3' 5.0"	3' 4.8"	3' 4.4"	3' 3.8"	3' 2.9"	3' 1.8"	3' 0.4"	2' 10.3"
	to	3' 7.0"	3' 7.2"	3' 7.7"	3' 8.5"	3' 9.7"	3' 11.4"	4' 1.9"	4' 6.6"
2.6	from	2' 6.7"	2' 6.6"	2' 6.4"	2' 6.0"	2' 5.6"	2' 4.9"	2' 4.2"	2' 3.0"
	to	2' 7.7"	2' 7.8"	2' 8.1"	2' 8.5"	2' 9.0"	2' 9.9"	2' 11.1"	3' 1.2"