

Astrum IR-200

Instructions for use and handling

Film Characteristics

Astrum IR-200 is a 200 ISO, superpanchromatic, IR sensitive aerial film. It has sensitivity to 775nm according to Astrum. Coated on an ultra-clear, 0.06mm base, this film dries ultra-flat and is extremely well suited for black-and-white reversal processing. When shot as normal B&W film, the film negative has moderate contrast and average grain. When shot with an IR filter, the film offers an image with darker skies and bright white foliage typical of superpanchromatic films.

Exposure

Visible light exposure: This film is an ISO 200 film, and as such is suitable for most environments. When shooting outside, especially in sunny weather, the extra red sensitivity makes red objects look brighter, skies look slightly darker, and foliage slightly lighter even without any filter. A red filter, such as an R25, will enhance these effects.

IR Exposure: While experimenting, I have found that with a 720nm filter, an EI rating of 12-50 can be used on a sunny day, giving a nice Wood effect. This allows for easy handheld shooting on suitable cameras, such as rangefinders and TLRs. Depending on the EI used, different effects can be seen. The following notes are from my own experience with this film:

- EI 12: The normal speed for superpanchromatic films, exposing at this speed will give very dark skies and a more subtle Wood effect. Due to the red light allowed through 720nm filters, the Wood effect will be slightly reduced compared to the faster speeds.
- EI 25: This speed is already beyond what superpanchromatic films available today are capable of when shooting IR. With dark skies and Wood effect, this is a perfect speed for those who are looking for a typical IR image, and those that wish to use the negative for darkroom printing.
- EI 50: Faster than any other IR-sensitive film that is readily available, this is perfect for using with higher shutter speeds to capture scenes with motion, when shooting handheld, and when looking for dramatic effects on foliage. The sky will be slightly lighter than lower speeds, but this can be fixed with a CPL filter. The wood effect is extremely strong. The negative will be slightly thinner than normal, but will scan very well, and should be able to be printed in the darkroom with some care.



Examples from right to left at EI 12, 25, and 50. Developed in D-76.

Handling

This film must be handled with extreme care prior to, and after, exposure! As with other aerial film stocks (such as Rollei and other films from Astrum), the film base is extremely transparent and will lead to light piping if not carefully handled. Please read the below instructions carefully before using the film.

- **Motion picture film:** Load and unload all motion picture film in complete darkness. If the film is provided on a camera spool, loading and unloading in subdued light is possible, but it is not recommended.
- **Bulk film rolls:** ALWAYS handle bulk film rolls in the dark. When loading 35mm or 70mm cassettes in daylight loaders, do this in total darkness. Subdued light may be used with daylight loaders, but it is not recommended. Ensure the final packaging of any bulk loaded film is light-proof.
- **Finished 35mm and 120/220:** Finished film is provided in light-tight packaging. 35mm film should be stored in the plastic cassettes at all times. 120/220 should be kept in its aluminum wrapping until it is shot, then stored in complete darkness after exposure.
- **Loading/unloading:** 35mm and 70mm cassettes should be loaded in complete darkness. Subdued light may be used, but it is not recommended. Paper-backed rollfilm (120, 220, 127) should be loaded in subdued light.
- **Storage:** Store any undeveloped film in light-tight packaging. After exposure, develop promptly.

Developing

This film is on an extremely thin base, so creases and stress marks are much more likely to occur, especially while developing. It is highly recommended to use metal reels, and not plastic JOBO or Patterson reels when processing, as they will likely bend and crease the film when loading.

When having a lab develop this film, ensure that they are aware that IR lighting cannot be used when handling this film. While most labs use IR lights that shouldn't fog this film, it is still possible and IR lighting is best avoided altogether.

The development times to the right are based on Astrum Foto-200, but should only be considered a starting point. I do not know the original film stock this is made from. **Note that this film is not Aviphot 200**, so times for development of that film should not be exclusively relied on.

Times in **bold** have been tested by me. All times are at 68°F/20°C.

Developer:	Time:
D-76 (Stock)	8.5
Eco Pro (Stock)	10
Eco Pro (1+1)	12
HC-110 (B)	7
HC-110 (J)	60
Ilfosol 3 (1+14)	12
DD-X (1+4)	8
Rodinol (1+25)	7
Rodinol (1+50)	14
T-Max (1+4)	7.5
XT-3/Xtol (stock)	10
XT-3/Xtol (1+1)	12

