

SANGAMO

WESTON

# WESTON RATINGS

## WESTON RATINGS

Correct exposure depends upon two variables: (1) the available light and (2) its effect on the film in use.

WESTON have always considered these two to be of equal importance and therefore introduced their own system of film ratings. Subsequently this system was found to be so successful that it was widely accepted in photographic circles and formed the basis for internationally agreed standards.

Although primarily written for owners of the latest WESTON MASTER III exposure meter, this booklet can be used with all types of WESTON meter.

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Our laboratories are continually engaged on rating new and existing emulsions using a conventional M.Q. developer for roll and sheet film and plates, and M.Q.-Borax for 35mm stock. However, there will obviously be changes and additions occurring after publication of this booklet and when in doubt the B.S. or A.S.A. arithmetical index will serve as a convenient starting point if used with developers as indicated above.

For photoflood lamps use tungsten values.

## **FOR WESTON MASTER III UNIVERSAL AND ALL CINE MODELS**

use the ratings as given on the following pages.

If the film you are using is not shown, use the B.S. or A.S.A. arithmetical index recommended by the manufacturer. Or—ciné models only—if the required value does not appear on the calculator dial, the nearest available rating should be used. For colour ciné work, the nearest lower rating is recommended.

## **FOR WESTON MASTER II UNIVERSAL AND FOR EARLIER UNIVERSAL MODELS**

use the next lower rating on your meter in preference to the one shown in this booklet.

If the film you are using is not shown, use the next lower rating to the B.S. or A.S.A. arithmetical index recommended by the manufacturer.

For example if this booklet shows a WESTON RATING of 200 you should set your meter to 160. Alternatively, if the film is not shown but the B.S. or A.S.A. arithmetical index is given as 64 your meter should be set to 50.

When using a particular type of film for the first time, it is advisable to confirm that the correct Weston Rating has been used before exposing a large quantity. Equipment errors can lead to under or over exposure and the listed Weston Rating should be lowered if results are under exposed or raised if over exposed.

**DIE NACH WESTON  
GEMESSENE FILMEMPFINDLICHKEIT  
FÜR DEN WESTON MASTER III  
UNIVERSAL-BELICHTUNGSMESSER UND ALLE  
KINO-MODELLE**

Man benütze die auf den folgenden Seiten angeführten Werte.

Ist der verwendete Film hingegen nicht angeführt, dann benütze man die B.S. oder A.S.A. Tabelle, die vom Hersteller empfohlen wird.

Wenn bei Kino-Modellen die B.S. oder A.S.A. Werte auf der Einstell-Skala nicht angeführt sind, dann verwende man den nächstliegenden Wert. Bei Verwendung von Farbfilmen wird der nächstkleinere Wert empfohlen.

**FÜR DEN WESTON MASTER II UND  
FRÜHERE UNIVERSAL-MODELLE**

Man benütze eher den nächstkleineren Wert auf seinem Belichtungsmesser als den in diesem Büchlein angegebenen.

Ist der verwendete Film hingegen nicht angeführt, dann benütze man in Bezug auf den vom Hersteller empfohlenen B.S. oder A.S.A. Wert den nächstkleineren.

Bei der erstmaligen Verwendung eines bestimmten Filmtyps ist es ratsam, sich zu vergewissern, dass der richtige Wert verwendet wurde, bevor der grössere Teil des Filmes belichtet worden ist. Fehlerquellen, die vom verwendeten Filmapparat herrühren, können zu Unter- oder Ueberbelichtung führen. Die hier angegebenen Weston - Werte sollten im Falle von Unterbelichtung herabgesetzt, im Falle von Ueberbelichtung heraufgesetzt werden.

## **RAPIDITÉ D'ÉMULSION WESTON**

### **POUR MODÈLE WESTON MASTER III UNIVERSEL ET TOUS MODÈLES POUR FILM CINÉ**

Employer les chiffres de rapidité d'émulsion donnés aux pages suivantes.

Si la pellicule que vous employez n'y figure pas, appliquer l'indice B.S. ou A.S.A. recommandé par le fabricant.

Sur les modèles pour film Ciné, lorsque les valeurs d'indice B.S. ou A.S.A. ne sont pas portées sur le cadran du calculateur, on devra appliquer le chiffre de rapidité d'émulsion disponible le plus voisin. Pour la photographie en couleurs, il est recommandé de prendre le chiffre inférieur le plus rapproché.

### **POUR LE MODÈLE WESTON MASTER II ET LES MODÈLES TYPE UNIVERSEL ANTÉRIEURS**

Employer le chiffre de rapidité d'émulsion inférieur suivant indiqué sur votre posemètre, de préférence à celui qui figure dans cette brochure.

Si la pellicule que vous employez n'y figure pas, appliquer le chiffre de rapidité suivant inférieur à l'indice B.S. ou A.S.A. recommandé par le fabricant.

Lorsqu'on emploie un type de pellicule particulier pour la première fois, il est plus prudent de vérifier si l'on a bien appliqué le chiffre de rapidité d'émulsion Weston qui convient, avant d'exposer beaucoup de pellicule. Les erreurs dues au matériel sont souvent la cause d'un manque ou d'un excès de pose, il faudra donc prendre un chiffre de rapidité Weston, dans la liste, plus petit si les résultats révèlent une insuffisance de pose, ou plus grand en cas de surexposition.

# VELOCIDADES WESTON

## **PARA EL WESTON MASTER III UNIVERSAL Y TODOS LOS MODELOS DE CINE**

Adopte las velocidades que se indican en las páginas siguientes.

Si no ha sido incluida la película que Vd. emplea, adopte el índice B.S. o A.S.A. recomendado por el fabricante.

En los modelos cinematográficos, cuando no aparecen sobre el cuadrante del calculador los valores de índice B.S. o A.S.A. deberá adoptarse la velocidad próxima disponible. Para los trabajos en colores se recomienda la velocidad más baja inmediata.

## **PARA EL WESTON MASTER II Y LOS MODELOS UNIVERSALES PRECEDENTES**

Adopte la velocidad inmediatamente más baja sobre su medidor con preferencia a la indicada en el presente librito.

Si no ha sido incluida la película que Vd. emplea, adopte la velocidad inmediatamente más baja del índice B.S. o A.S.A. recomendado por el fabricante.

Cuando se emplea un tipo determinado de película por la primera vez, se recomienda confirmar que ha sido adoptada la Velocidad correcta antes de efectuar una gran cantidad de exposiciones. Los errores en el equipo pueden dar lugar a una exposición insuficiente o excesiva y se deberá reducir la Velocidad Weston catalogada si los resultados acusan una exposición insuficiente o aumentar si ésta es excesiva.

# WESTON RATINGS FOR STILL CAMERA FILMS AND PLATES

<b>ADOX</b>				Daylight	Tungsten
<b>Roll Film</b>					
Panchromatic R23P	...	...	125	100	
Panchromatic R21P	...	...	80	64	
Panchromatic R17P	...	...	32	24	
Panchromatic R14P	...	...	16	12	
Orthochromatic R.180	..	..	40	20	
<b>Miniature 35mm Film</b>					
Panchromatic KB.21	...	...	80	64	
Panchromatic KB.17	...	...	32	24	
Panchromatic KB.14	...	...	16	12	
<b>Sheet Film</b>					
Panchromatic PL.21.PM	...	...	80	64	
Panchromatic PL.21.PT	...	...	80	64	
<b>Filmpack</b>					
Panchromatic FP.21	...	...	80	64	
<b>AGFA</b>					
<b>Roll Film</b>					
Isopan Ultra	...	...	200	320	
Isopan ISS	...	...	80	40	
Isopan F	...	...	32	20	
Isopan FF	...	...	16	12	
Isochrom	...	...	50	32	
<b>Miniature 35mm Film</b>					
Isopan Ultra	...	...	200	320	
Isopan ISS	...	...	80	40	
Isopan F	...	...	32	20	
Isopan FF	...	...	16	12	

# WESTON RATINGS FOR STILL

## AGFA (Continued)

			Daylight	Tungsten
<b>Sheet Film</b>				
Isopan ISS	...	...	80	40
Isopan Portrait	...	...	80	40
Isopan F	...	...	32	20

## ANSCO

### Roll Film

Supreme	...	...	50	32
All Weather Pan	...	...	64	50

### Miniature 35mm Film

Supreme	..	...	50	32
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### Sheet Film

Triple S. Pan	...	...	200	160
Superpan Press	...	...	125	80
Isopan	...	...	50	32
Superpan Portrait	...	...	50	32
Triple S. Ortho	...	...	125	64
Commercial Ortho	...	...	25	12
Commercial	...	...	25	6

## CRUMIERE

### Roll and Sheet Film

Aviapan	...	...	125	100
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### Miniature 35mm Film

Aviapan	...	...	64	50
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# CAMERA FILMS AND PLATES

## FERRANIA

Daylight      Tungsten

### Roll and Sheet Film

Pancro 54	...	...	...	250	160
Pancro 32	...	...	...	100	80
Pancro 28	...	...	...	40	32
Ultracromatica	...	...	...	64	32

### Miniature 35mm Film

Pancro S2/32	...	...	...	100	80
Pancro P3/28	...	...	...	40	32

### Plates

Super Rapida	Pancro	Antialo		125	100
Superex	..	...	...	80	64
Ultra Pancro	30	...	...	64	50
Fine Pancro	...	...	...	24	20
Super Orto	...	...	...	100	100
Extra Rapida	...	...	...	12	12

## GEVAERT

### Roll Film

Gevapan 36	...	...	...	250	160
Gevapan 33	...	...	...	125	80
Gevapan 30	...	...	...	64	40
Gevapan 27 (Microgran)	...	...	...	32	20
Gevachrome 30	...	...	...	64	32
Infra-R...	...	...	...	40*	50*

\*With Gevaert No. 719 Filter

# WESTON RATINGS FOR STILL

## GEVAERT (Continued)

### Miniature 35mm Film

				Daylight	Tungsten
Gevapan 36	...	...	...	250	160
Gevapan 33	...	...	...	125	100
Gevapan 30	...	...	...	64	40
Gevapan 27 (Microgran)	...	...	...	32	20
Dia Direct 26 Pan (Reversal)				24	16

### Sheet Film

Gevapan 36	...	...	...	250	160
Gevapan 33	...	...	...	125	100
Gevapan 30	...	...	...	64	40
Gevachrome 32	...	...	...	100	50

### Plates

Gevapan 36	...	...	...	250	160
Gevapan 33	...	...	...	125	80
Gevapan 30	...	...	...	64	40
Gevapan 27	...	...	...	32	20
Gevachrome 32	...	...	...	100	50

## ILFORD

### Roll Film

H.P.S.	...	...	...	400	320
H.P.3	...	...	...	200	160
Selochrome (Panchromatic)				80	64
F.P.3	...	...	...	64	50

# CAMERA FILMS AND PLATES

## ILFORD (Continued)

### Miniature 35mm Film

				Daylight	Tungsten
H.P.S.	...	...	...	400	320
H.P.3	...	...	...	200	160
F.P.3	...	...	...	64	50
Pan. F.	...	...	...	24	16

### Sheet Film

H.P.S.	...	...	...	400	320
H.P.3	...	...	...	200	160
F.P.3	...	...	...	64	50
Hyperchromatic	...	...	...	200	100
G8.30 Commercial Ortho	...	...	...	40	20

### Plates

H.P.S.	...	...	...	400	320
H.P.3	...	...	...	200	160
F.P.4	...	...	...	80	50
R.10 Soft Gradation Pan.	...	...	...	50	32
R.25 F.P. Special	...	...	...	40	32
R.20 Special Rapid Pan.	...	...	...	24	16
Selochrome	...	...	...	80	40
G.30 Chromatic	...	...	...	5	2.5
Special Rapid	...	...	...	10	2.5

# WESTON RATINGS FOR STILL

<b>KODAK</b>					Daylight	Tungsten
<b>Roll Film</b>						
Tri-X	...	...	...	200	160	
Verichrome Pan.	...	...	...	80	64	
Panatomic X	...	..	...	24	20	
<b>Miniature 35mm Film</b>						
Tri-X	...	...	...	200	160	
Plus-X	...	...	...	80	64	
Quick-finish Panchromatic	...		...	40	32	
Panatomic-X	...	...	...	24	20	
<b>Sheet Film</b>						
Panchro-Royal	...	...	...	200	160	
Super-XX	...	...	...	100	80	
Plus-X	...	..	...	80	64	
Ortho-Royal	...	...	...	200	125	
Commercial Ortho	...	...	...	24	8	
Commercial Fine-Grain	...		...	20	4	
<b>Plates</b>						
P.2000	...	...	...	500	400	
P.1600	...	...	...	200	160	
P.1200	...	...	..	200	160	
P.300	...	...	...	24	20	
0.800	...	...	...	64	32	
0.250	...	...	...	8	3	
<b>PERUTZ</b>						
<b>Roll Film</b>						
Peromnia 25	...	...	...	250	160	
Peromnia 21	...	...	...	100	64	

# CAMERA FILMS AND PLATES

<b>PERUTZ</b>				Daylight	Tungsten
<b>Roll Film (Continued)</b>					
Perpantic 18	...	...	...	50	32
Persenso	...	...	...	50	24
<b>Miniature 35mm Film</b>					
Peromnia	..	...	...	100	64
Perpantic	...	..	...	40	24
Pergrano 14	..	...	...	16	10
35mm Reversal	...	...	...	24	16
<b>Sheet Film</b>					
Peromnia 25	..	...	...	250	160
Superomnia	...	...	..	100	64
Portrait	...	...	...	100	64
Perpantic	...	...	...	40	24
<b>Plates</b>					
Superomnia	...	...	...	125	80
Portrait	...	...	...	100	64
Peromnia	..	...	...	64	40
Perchromo	...	...	...	40	24
Persenso	..	...	...	80	40
Silver Eosin	..	...	...	12	6

**Note:** Where high contrast material and developments are employed, exposure is very critical and for the best results a practical trial is advisable.

# WESTON RATINGS

## ANSCO

		Daylight	Tungsten
Supreme Negative	... ..	64	50
Triple S. Pan (Reversal)	... ..	125	100
Hypan (Reversal)	... ..	50	32

## FERRANIA

Pancro 37 (Reversal)	... ..	320	320
Pancro 32 (Reversal)	... ..	100	80
Pancro 28 (Reversal)	... ..	40	32

## GEVAERT

Gevapan 33 (Negative)	... ..	125	100
Gevapan 27 (Negative)	... ..	32	24
Gevapan 32 Ultra (Reversal)	... ..	100	64
Gevapan 26 Super (Reversal)	... ..	24	16
Gevapan 23 Micro (Reversal)	... ..	12	8

# FOR CINÉ FILM

## ILFORD

			Daylight	Tungsten
H.P.S. Negative	...	...	400	320
H.P.3 Negative	...	...	200	160
F.P.3 Negative	...	...	64	50
Pan. F. Negative	...	...	24	16

## KODAK

Tri-X (Negative)	...	...	320	250
Plus-X (Negative)	...	...	80	64
Tri-X (Reversal)	...	...	200	160
Plus-X (Reversal)	...	...	50	40
Super-X (Reversal)	...	...	40	32

## PATHE

Super Pan V.F.	...	...	100	80
S.X. Panchromatic	...	...	24	20
S.S. Panchromatic	...	...	12	10

# COLOUR PHOTOGRAPHY

When using a particular type of film for the first time it is advisable to confirm that the correct Weston Rating has been used before exposing a large quantity. Equipment errors can lead to under or over exposure and the listed Weston Rating should be lowered if results are under exposed or raised if over exposed.

## STILL FILMS

### ADOX

	Daylight	Tungsten
Negative Daylight Type R-CNT	24	—
Negative Daylight Type KB-CNT	24	—

### AGFA

Agfacolor CN17 (Negative) .	32	32
Agfacolor CT18 (Reversal) ...	40	—
Agfacolor CK (Reversal) ...	—	32

### ANSCO

Super Anscochrome (Daylight type) ... ..	100	40*
Anscochrome (Daylight type)	32	12*
Anscochrome (Flash type) ...	25†	20‡
Anscochrome (Tungsten type)	20††	25

\* With Wratten No. 80B or Ansco No. 10 Filter

† With Wratten No. 85C Filter

‡ With Wratten No. 82A Filter

†† With Wratten No. 85B or Ansco No. 11 Filter



# AND COLOUR FILM RATINGS

## STILL FILMS (Continued)

### EKTACHROME

(see under Kodak)

Daylight      Tungsten

### FERRANIA

Reversal Daylight	...	...	10	—
Reversal Artificial Light	...	...	—	10
Negative	...	...	10	10

### GEVAERT

Reversal Daylight	Type R.5	24	—
Negative Daylight	Type N.5	24	—

### ILFORD

Reversal Type D	...	...	10	2.5*
Reversal Type F	...	...	{ — 10§	{ 16‡ 10‡‡

\* Photoflood with Ilford No. 351 Filter

‡ Photoflood without Filter

§ Daylight with Ilford No. 172 Filter

‡‡ Photoflood with Ilford No. 362 Filter

# COLOUR PHOTOGRAPHY

## STILL FILMS (Continued)

### KODAK

Daylight      Tungsten

#### EKTACHROME

Daylight Type (E2) ... ..	32	12*
Type F (E2) ... ..	16†	16‡
Daylight Type (E1) ... ..	12	6*
Type B (E1) ... ..	6††	10

#### KODACHROME

Reversal Daylight Type ... ..	10	5*
Reversal Type A ... ..	10††	16

#### KODACOLOR

Negative ... ..	32	20§
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\* Photoflood with Wratten No. 80B Filter

† With Wratten No. 85C Filter

‡ Photoflood with Wratten No. 82A Filter

†† With Wratten No. 85B Filter

††† With Wratten No. 85 Filter

§ Photoflood and Wratten No. 82A Filter for shutter speeds faster than half a second.

#### RAYCOLOR

Negative Universal ... ..	40	40
Reversal Type R32 ... ..	32	—

#### PAKOLOR

Daylight ... ..	40	12*
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\* With Ilford No. 830 Filter or Wratten No. 80A

# AND COLOUR FILM RATINGS

## CINÉ FILMS

<b>AGFA</b>	Daylight	Tungsten
Agfacolor Type T (Reversal)	20	—
Agfacolor Type K (Reversal)	—	20

## **ANSCO**

Super Anscochrome (Daylight)	100	40*
Anscochrome (Daylight Type)	32	12*
Anscochrome (Tungsten Type)	25‡‡	32

\* With Wratten No. 80B or Ansco No. 10 Filter

‡‡ With Wratten No. 85 or Ansco No. 11 Filter

## **EASTMAN**

Negative Type 5248	...	16††	24
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†† With Wratten No. 85B Filter

## **FERRANIA**

Reversal Daylight 16mm	...	10	—
Reversal Artificial Light 16mm	...	—	10
Reversal Daylight 8mm	...	8	—

## **KODACHROME**

Reversal Daylight Type	...	10	5*
Reversal Type A	... ..	10‡‡	16

\* Photoflood and Wratten No. 80B Filter

‡‡ With Wratten No. 85 Filter

## **PATHESCOPE**

Reversal Daylight Type	...	12	—
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ADDITIONAL COPIES OF THIS  
LIST ONE SHILLING EACH

*To the best of our knowledge, the  
information contained in this booklet  
is correct. However, we cannot be held  
responsible for any changes, errors or  
omissions.*

**SANGAMO WESTON LIMITED**  
**Enfield, Middlesex, England**

Telephone Enfield 3434 (6 lines)

Enfield 1242 (6 lines)

Telegraphic Address SANWEST ENFIELD

**Scottish Factory**  
**Port Glasgow, Renfrewshire**

Telephone Port Glasgow 41151

*Branches at*

London · Glasgow · Manchester · Newcastle-on-  
Tyne · Leeds · Liverpool · Wolverhampton  
Nottingham · Bristol · Southampton · Brighton