

3M Small Animal Radiographic Techniques
3M Asymetrix™ Rare Earth Screens/Cassettes
3M Ultra Detail Plus #1420G Veterinary X-Ray film
Portable HF Units

30" FFD

<u>MinXray HF80</u>				<u>MinXray HF80+</u>					
<u>3M Asymetrix™ Fast</u>			<u>3M Asymetrix™ Detail</u>	<u>3M Asymetrix™ Fast</u>			<u>3M Asymetrix™ Detail</u>		
<u>Detail cassette</u>			<u>cassette</u>	<u>Detail cassette</u>			<u>cassette</u>		
<u>cm</u>	<u>kVDC</u>	<u>Time (sec)</u>	<u>Time (sec)</u>	<u>cm</u>	<u>kVDC</u>	<u>Time (sec)</u>	<u>Time (sec)</u>		
Extremities, Pelvis, Skull	2-3	50	.02	.06	Extremities, Pelvis, Skull	2-3	50	.02	.03
	4-5	50	.04	.08		4-5	50	.02	.03
	6-7	50	.06	.10		6-7	50	.04	.06
	8-9	55	.06	.10		8-9	54	.04	.06
	10-11	60	.08 (.16)*			10-11	58	.06 (.12)*	
	12-13	65	.08 (.16)*			12-13	62	.06 (.12)*	
	14-15	65	.10 (.20)*			14-15	64	.06 (.12)*	
	16-17	70	.10 (.20)*			16-17	64	.08 (.16)*	
	18-19	70	.12 (.24)*			18-19	68	.08 (.16)*	
	20-21	75	.12 (.24)*			20-21	72	.08 (.16)*	
Thorax	6-7	60	.04	.08	Thorax	6-7	60	.02	.04
	8-9	60	.04	.08		8-9	60	.04	.08
	10-11	65	.04	.08		10-11	62	.04	.08
	12-13	65	.04 (.08)*			12-13	64	.04 (.08)*	
	14-15	65	.05 (.10)*			14-15	70	.04 (.08)*	
	16-17	65	.06 (.12)*			16-17	72	.04 (.08)*	
	18-19	70	.06 (.12)*			18-19	72	.06 (.12)*	
	20-21	75	.06 (.12)*			20-21	72	.08 (.16)*	
	22-23	80	.06 (.12)*			22-23	72	.10 (.20)*	
	Abdomen	6-7	55	.06		.10	Abdomen	6-7	54
8-9		60	.08	.12	8-9	52		.06	.10
10-11		60	.08	.14	10-11	56		.06	.12
12-13		65	.08 (.16)*		12-13	60		.06 (.12)*	
14-15		65	.08 (.16)*		14-15	64		.06 (.12)*	
16-17		65	.12 (.24)*		16-17	62		.08 (.16)*	
18-19		65	.14 (.28)*		18-19	64		.10 (.20)*	
20-21		70	.14 (.28)*		20-21	68		.10 (.20)*	
22-23		75	.14 (.28)*		22-23	70		.12 (.24)*	

(*) Denotes Grid Technique
Grid: 6:1; 103 Ipi; Short Focal Length

These are recommended starting techniques. Final results depend upon many factors. Therefore, if films are too dark (overexposed), decrease time; if films are too light (underexposed), increase time.

3M Small Animal Radiographic Techniques
3M Asymetrix™ Rare Earth Screens/Cassettes
3M Ultimate 2000 film
Portable HF Units

30" FFD

MinXray HF100

3M Asymetrix™ Fast
Detail cassette

3M Asymetrix™ Detail
cassette

MinXray HF100/30

3M Asymetrix™ Fast
Detail cassette

3M Asymetrix™ Detail
cassette

	cm	kVDC	Time (sec)	Time (sec)		cm	kVDC	mAs	mAs
Extremities, Pelvis, Skull	2-3	44	.02	.05	Extremities, Pelvis, Skull	2-3	50	.3	.7
	4-5	48	.02	.05		4-5	50	.4	.7
	6-7	50	.03	.05		6-7	50	.6	1.0
	8-9	54	.03	.05		8-9	56	.6	1.0
	10-11	58	.04 (.08)*	.06		10-11	60	.8 (1.6)*	1.2
	12-13	62	.04 (.08)*	.06		12-13	64	.8 (1.6)*	1.2
	14-15	64	.05 (.08)*			14-15	68	1.0 (2.0)*	
	16-17	64	.06 (.12)*			16-17	70	1.0 (2.0)*	
	18-19	68	.06 (.12)*			18-19	70	1.2 (2.4)*	
	20-21	72	.06 (.12)*			20-21	76	1.2 (2.4)*	
Thorax	6-7	56	.02	.05	Thorax	6-7	56	.3	.7
	8-9	60	.02	.05		8-9	58	.3	.7
	10-11	58	.03	.05		10-11	60	.3	.7
	12-13	60	.03 (.06)*			12-13	64	.4 (.8)*	
	14-15	62	.03 (.06)*			14-15	64	.5 (1.0)*	
	16-17	64	.03 (.06)*			16-17	68	.5 (1.0)*	
	18-19	68	.03 (.06)*			18-19	70	.6 (1.2)*	
	20-21	72	.03 (.06)*			20-21	74	.6 (1.2)*	
	22-23	76	.03 (.06)*			22-23	80	.6 (1.2)*	
	Abdomen	6-7	56	.03		.05	Abdomen	6-7	54
8-9		56	.04	.06	8-9	54		.6	.10
10-11		58	.04	.06	10-11	54		.8	.14
12-13		58	.05 (.10)*		12-13	54		1.0 (2.0)*	
14-15		58	.06 (.12)*		14-15	58		1.0 (2.0)*	
16-17		62	.06 (.12)*		16-17	62		1.0 (2.0)*	
18-19		64	.06 (.14)*		18-19	66		1.2 (2.4)*	
20-21		68	.06 (.14)*		20-21	70		1.4 (2.8)*	
22-23		72	.06 (.12)*		22-23	76		1.4 (2.8)*	

(*) Denotes Grid Technique
Grid: 6:1; 103 lpi; Short Focal Length

These are recommended starting techniques. Final results depend upon many factors. Therefore, if films are too dark (overexposed), decrease time; if films are too light (underexposed), increase time.