

1.4 SIROTEM Transmitter On/Off Times

The SIROTEM transmitter current waveform is square and bipolar, with the off-time equal to the on-time. The off-time is a multiple of 10ms for 50Hz interference rejection, and a multiple of 8.333ms for 60 Hz rejection. Refer to Table 1.3 for Mk II on/off times for both 50/60Hz rejection. The SATX-1 will automatically display the on/off time in use.

NUMBER OF CHANNELS	50 Hz	60 Hz
10	10.000	8.333
12	10.000	16.666
14	20.000	16.666
16	20.000	25.000
18	30.000	25.000
20	40.000	33.333
22	50.000	50.000
24	60.000	58.333
26	80.000	75.000
28	100.000	100.000
30	130.000	125.000
32	180.000	175.000

Table 1.3 : SIROTEM On/Off Times (ms)

The off-time is set internally for optimum cultural noise rejection according to the power line frequency of the region where the instrument is to be used.

- (1) For non-sync units XL1 on the transmitter card (EB181) is selected as follows.

50Hz 1.6384 MHz
60Hz 1.96608 MHz

- (2) For sync units SW3 on the sync converter card (EB162) is set as follows.

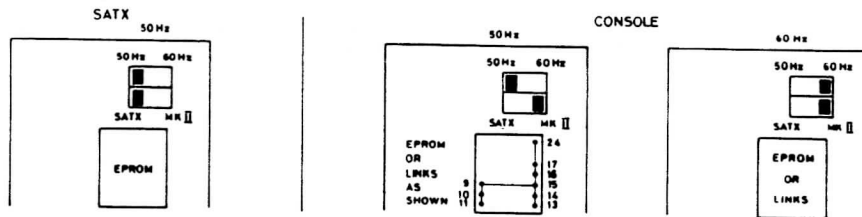


Figure 1.4 : Power Line Frequency Rejection Settings

1.5 SIROTEM ST and ET Nominal Data Windows

SIROTEM nominal data windows				EARLY TIME nominal data windows				
ms	CHANNEL	START	MIDDLE	END	CHANNEL	START	MIDDLE	END
	1	0.315	0.487	0.659	1	0.025	0.049	0.074
	2	0.707	0.879	1.051	2	0.074	0.098	0.123
	3	1.099	1.271	1.443	3	0.123	0.147	0.172
	4	1.491	1.663	1.835	4	0.172	0.196	0.221
	5	1.883	2.055	2.227	5	0.221	0.245	0.270
10	6	2.275	2.643	3.011	6	0.270	0.319	0.368
	7	3.059	3.427	3.795	7	0.368	0.417	0.466
	8	3.843	4.211	4.579	8	0.466	0.515	0.564
	9	4.627	4.995	5.363	9	0.564	0.613	0.662
	10	5.411	5.779	6.147	10	0.662	0.711	0.760
	11	6.195	6.955	7.715	11	0.760	0.858	0.956
	12	7.763	8.523	9.283	12	0.956	1.054	1.152
	13	9.331	10.091	10.851	13	1.152	1.250	1.348
	14	10.899	11.659	12.419	14	1.348	1.446	1.544
20	15	12.467	13.227	13.987	15	1.544	1.642	1.740
	16	14.035	15.579	17.123	16	1.740	1.936	2.132
	17	17.171	18.715	20.259	17	2.132	2.328	2.524
30	18	20.307	21.851	23.395	18	2.524	2.720	2.916
	19	23.443	24.987	26.531	19	2.916	3.112	3.308
	20	26.579	28.123	29.667	20	3.308	3.504	3.700
40	21	29.715	32.827	35.939	21	3.700	4.092	4.484
	22	35.907	39.099	42.211	22	4.484	4.876	5.268
50	23	42.259	45.371	48.483	23	5.268	5.660	6.052
	24	48.531	51.643	54.755	24	6.052	6.444	6.836
70	25	54.803	57.915	61.027	25	6.836	7.228	7.620
	26	61.075	67.323	73.571	26	7.620	8.404	9.188
90	27	73.619	79.867	86.115	27	9.188	9.972	10.756
	28	86.163	92.411	98.659	28	10.756	11.540	12.324
120	29	98.707	104.955	111.203	29	12.324	13.108	13.892
130	30	111.251	117.499	123.747	30	13.892	14.676	15.460
150	31	123.795	136.315	148.835	31	15.460	17.028	18.596
180	32	148.883	161.403	173.923	32	18.596	20.164	21.732

Table 1.4 : ET and ST Nominal Data Window Details