

Technovision RFDM Description

The Technovision RFDM is a RS232 controlled RF demodulator capable of decoding both TV and FM stereo signals. The unit comes with separate 75 Ω terminated 'F' connectors for TV and FM broadcast reception. The TV band covers the frequency range from 55.25 MHz to 801.25 MHz, with the FM band covering the standard 87.50 MHz to 108.00 MHz and also the Japanese FM band (76.00 MHz to 90.00 MHz). The unit has separate RCA outputs for video and left and right audio channels. The RFDM uses a Philips FM1236 demodulator as its core device.

Technovision RFDM Command Syntax

The RS232 command syntax for a setting the decoding frequency is as follows:

T<T#>=FFF.FF <CR>

where: **T** is an ASCII 'T' character in the CAPITAL form
 <T> is the tuner # - an ASCII character within the range of '1' to '9' (default '1')
 FFF.FF is the frequency you wish to decode (must be 5 digits with decimal place)
 <CR> is an ASCII Carriage Return

An example of a proper command to the RFDM is:

"T1=061.25<CR>" which would set tuner #1 to channel #3 or

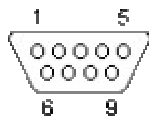
"T1=067.25<CR>" which would set tuner #1 to channel #4.



RFDM Back panel

A/V RADIO TV RS232 9VDC
 OUT IN IN CONTROL

RS232 Connector on the RFDF is a DB9 male (pins)



Pin Number	Signal Name	Pin Number	Signal Name
1	N.C.	2	TX (output)
3	RX (input)	4	N.C.
5	GND	6	N.C.
7	N.C.	8	N.C.
9	N.C.		

RS232 Settings: 9600 Baud, 8 Data bits, 1 Stop Bit, No Parity

Appendix

Appendix A : NTSC Off Air Channel Frequencies

The following table lists the frequencies in the range of “Off-Air” channels from 2 to 69.

Channel No.	Frequency	Channel No.	Frequency	Channel No.	Frequency
2	55.25	25	537.25	48	675.25
3	61.25	26	543.25	49	681.25
4	67.25	27	549.25	50	687.25
5	77.25	28	555.25	51	693.25
6	83.25	29	561.25	52	699.25
7	175.25	30	567.25	53	705.25
8	181.25	31	573.25	54	711.25
9	187.25	32	579.25	55	717.25
10	193.25	33	585.25	56	723.25
11	199.25	34	591.25	57	729.25
12	205.25	35	597.25	58	735.25
13	211.25	36	603.25	59	741.25
14	471.25	37	609.25	60	747.25
15	477.25	38	615.25	61	753.25
16	483.25	39	621.25	62	759.25
17	489.25	40	627.25	63	765.25
18	495.25	41	633.25	64	771.25
19	501.25	42	639.25	65	777.25
20	507.25	43	645.25	66	783.25
21	513.25	44	651.25	67	789.25
22	519.25	45	657.25	68	795.25
23	525.25	46	663.25	69	801.25
24	531.25	47	669.25		

Appendix B : NTSC Cable Channel Frequencies

The following table lists the frequencies in the range of cable channels from 1 to 100.

Channel No.	Frequency	Channel No.	Frequency	Channel No.	Frequency
1	73.25	35	289.25	69	493.25
2	55.25	36	295.25	70	499.25
3	61.25	37	301.25	71	505.25
4	67.25	38	307.25	72	511.25
5	77.25	39	313.25	73	517.25
6	83.25	40	319.25	74	523.25
7	175.25	41	325.25	75	529.25
8	181.25	42	331.25	76	535.25
9	187.25	43	337.25	77	541.25
10	193.25	44	343.25	78	547.25
11	199.25	45	349.25	79	553.25
12	205.25	46	355.25	80	559.25
13	211.25	47	361.25	81	565.25
14	121.25	48	367.25	82	571.25
15	127.25	49	373.25	83	577.25
16	133.25	50	379.25	84	583.25
17	139.25	51	385.25	85	589.25
18	145.25	52	391.25	86	595.25
19	151.25	53	397.25	87	601.25
20	157.25	54	403.25	88	607.25
21	163.25	55	409.25	89	613.25
22	169.25	56	415.25	90	619.25
23	217.25	57	421.25	91	625.25
24	223.25	58	427.25	92	631.25
25	229.25	59	433.25	93	637.25
26	235.25	60	439.25	94	643.25
27	241.25	61	445.25	95	91.25
28	247.25	62	451.25	96	97.25
29	253.25	63	457.25	97	103.25
30	259.25	64	463.25	98	109.25
31	265.25	65	469.25	99	115.25
32	271.25	66	475.25	100	649.25
33	277.25	67	481.25		
34	283.25	68	487.25		