

Television Sound Levels

<u>Signal</u>	<u>Audio Level</u> (dBu)	<u>TPM</u> <u>Reading</u>	<u>Peak Deviation</u> (kHz)	<u>R.F. Level Relative</u> <u>to Unmod. Carrier</u> (dB)
Programme Line-up (400 Hz)	0	4	+17.0	-2
Tone (400 Hz)	+8	6	+42.7	-2
Noise Line-up (1 kHz)	0	4	+17.7	-2
19 kHz Monitoring	-34.5 (Approx)	-	+ 1.9	-26
23 kHz DPSK Data	-34.5 (Approx)	-	+ 2.3	-26
27.1 kHz DPSK Data	-34.5 (Approx)	-	+ 2.7	-26

Network and Local Radio VHF/FM Radio Levels : Stereo

<u>Signal</u>	<u>Coder Input</u> <u>Audio Level</u> (dBu)	<u>TPM</u> <u>Reading</u>	<u>Coder Output</u> (mV p-p)	<u>Peak Deviation</u> (kHz)	<u>to Unmod. Carrier</u> (dB)
Full System Deviation	-	-	1000	+75.00	-
Left and Right Channel (400 Hz)	-3	3 $\frac{1}{2}$	228*	+17.120	-2
Left and Right Channel (400 Hz)	+8	6	810*	+60.750	-2
Noise Line-up (1 kHz)	-3	-	237	+17.81	-2
19 kHz Pilot Tone	-	-	81	+ 6.075	-16
23 kHz Monitoring Tone	-28 (Approx)	-	60	+ 4.50	-20
38 kHz Carrier Leak	-	-	9	+ 0.675	-40
57 kHz Radio Data	-	-	40	+ 3.0	-32
76 kHz PSK Data	-	-	32	+ 2.4	-36
5.3 kHz Bessel Zero	+2.6	-	839*	+62.89	-2

Network VHF/FM Radio Levels : Mono

<u>Signal</u>	<u>Audio Level</u> (dBu)	<u>TPM</u> <u>Reading</u>	<u>Peak Deviation</u> (kHz)	<u>R.F. Level Relative</u> <u>to Unmod. Carrier</u> (dB)
Programme Line-up (400 Hz)	0	4	+17.12	-2
Tone (400 Hz)	+8	6	+43.01	-2
Tone (400 Hz)	+11 ³	6 $\frac{1}{2}$ ³	+60.75	-2
Noise Line-up (1 kHz)	0	4	+17.81	-2
23 kHz Monitoring or Data	-28 (Approx)	-	+ 4.5	-20

Local Radio VHF/FM Levels : Mono

<u>Signal</u>	<u>Audio Level</u> (dBu)	<u>TPM</u> <u>Reading</u>	<u>Peak Deviation</u> (kHz)	<u>R.F. Level Relative</u> <u>to Unmod. Carrier</u> (dB)
Programme Line-up (400 Hz)	0	4	+24.19	-2
Tone (400 Hz)	+8	6	+60.75	-2
Noise Line-up (1 kHz)	0	4	+25.15	-2
23 kHz Monitoring or Data	-28 (Approx)	-	+ 4.5	-20

Notes

1. This is the r.f. level of the first sideband relative to the unmodulated carrier and is ideally measured in the absence of other modulating signals.
 2. The first sideband is too close to carrier to be measured on a typical spectrum analyser.
 3. The limiters will act +11 dBu, TPM '6 $\frac{1}{2}$ ' (+60.75 kHz deviation). The mono network is derived from a stereo source and its level is 3 dB less than the sum of the left and right signals. Maximum mono level therefore occurs when A=B=+6dB, i.e. -3 dB relative to the voltage addition of +8 dBu and +8 dBu, that is +11 dBu.
 4. On Local Radio stations the coder input is preceded by limiters having a gain of 3 dB before
- * This may be measured out of the coder with either L and/or +R signals but must be ONLY L and R co-phased when measuring deviation with no pilot.