

## Program Background Noise and Loud Commercials

### Background

Whether or not something is “too loud” is a judgment that varies with each listener. The decision is influenced by many factors like content, tone, and style, the speaker’s voice and tone, background sounds, and music.

The Federal Communications Commission (FCC) does not regulate the volume of programs or commercials. FCC rules limit the amount of power that a station can transmit and the peak level of the program material. Within the limitations imposed by FCC rules, however, there is considerable latitude for broadcasters and program producers to vary the “loudness” of the program material through the use of available audio processing techniques, including compression and peak limiting.

### Equipment That Helps

Equipment is available that can be used to minimize the effects of “loud” commercials. Some television receivers are equipped with level control devices, as well as mute switches, to give the viewers more control over “loud” commercials. Manually controlling audio levels remains the best approach to reducing volume. Some automatic devices can also help. They include:

- Automatic Gain Control (AGC) Circuits – are available in professional and some “top-of-the-line” consumer audio equipment. If the audio level is low, an AGC circuit will raise it; if the level is too high, the AGC circuit will bring it down.
- Audio Compressors – are used to pull down loud sounds. Compressors can be adjusted so that many of the negative effects of automatic control go unnoticed.
- Limiters and Peak Limiters – can be used to keep the audio level from exceeding a set level. Peak limiters are the simplest, least intrusive of all the automatic level control devices, but can introduce considerable distortion.
- Audio Expanders – are used to increase the range of sound. An expander can restore sound to its normal range and also reduce noticeable background noise.
- Audio Filters – can be used to “screen out” specific audio frequencies.



## If You Have A Complaint

Under most circumstances, it is in the interest of broadcasters to use equipment and procedures to avoid “loud” commercials and background noise. If you have a complaint about “loud” commercials and background noise, contact the station(s) involved. You should identify each message of concern by the sponsor or product’s name and by the date and time of the broadcast.

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