

(d) Except as provided in (e) and (f) of this section, the technical characteristics of the retransmitted signals shall not be deliberately altered so as to hinder reception on consumer DTV broadcast receiving equipment.

(e) A digital TV translator station shall not retransmit the programs and signals of any TV broadcast or DTV broadcast station(s) without the prior written consent of such station(s). A digital TV translator may multiplex on its output channel the video program services of two or more TV broadcast and/or DTV broadcast stations, pursuant to arrangements with all affected stations, and for this limited purpose, is permitted to alter a TV broadcast and/or DTV broadcast signal.

(f) A digital TV translator station may transmit locally originated visual and/or aural messages limited to emergency warnings of imminent danger, to local public service announcements (PSAs) and to seeking or acknowledging financial support deemed necessary to the continued operation of the station. Acknowledgments of financial support may include identification of the contributors, the size and nature of the contribution and the advertising messages of the contributors. The originations concerning financial support and PSAs are limited to 30 seconds each, no more than once per hour. Emergency transmissions shall be no longer or more frequent than necessary to protect life and property. Such originations may be accomplished by any technical means agreed upon between the TV translator and DTV station whose signal is being retransmitted, but must be capable of being received on consumer DTV broadcast reception equipment. A digital TV translator shall modify, as necessary to avoid DTV reception tuning conflicts, the Program System and Information Protocol (PSIP) information in the DTV broadcast signal being retransmitted.

(g) A digital LPTV station may operate under the following modes of service:

(1) For the retransmission of programming of a TV broadcast or DTV broadcast station, subject to the prior written consent of the station whose signal is being retransmitted;

(2) For the origination of programming and commercial matter as defined in § 74.701(1).

(3) Whenever operating, a digital LPTV station must transmit an over-the-air video program signal at no direct charge to viewers at least comparable in resolution to that of its associated analog (NTSC) LPTV station or, in the case of an on-channel digital conversion, that of its former analog LPTV station.

(4) A digital LPTV station may dynamically alter the bit stream of its signal to transmit one or more video program services in any established DTV video format.

(h) A digital LPTV station is not subject to minimum required hours of operation and may operate in either of the two modes described in paragraph (g) of this section for any number of hours.

(i) Upon transmitting a signal that meets the requirements of paragraph (g)(3) of this section, a digital LPTV station may offer services of any nature, consistent with the public interest, convenience, and necessity, on an ancillary or supplementary basis in accordance with the provisions of § 73.624(c) and (g) of this chapter.

(j) A digital LPTV station may not be operated solely for the purpose of relaying signals to one or more fixed receiving points for retransmission, distribution or relaying.

(k) A digital LPTV station may receive input signals for transmission or retransmission by any technical means, including those specified in paragraph (b) of this section.

[69 FR 69334, Nov. 29, 2004]

§ 74.791 Digital call signs.

(a) *Digital low power stations.* Call signs for digital low power stations will be made up of a prefix consisting of the initial letter K or W followed by the channel number assigned to the station and two additional letters and a suffix consisting of the letters –D.

(b) *Digital television translator stations.* Call signs for digital television translator stations will be made up of a prefix consisting of the initial letter K or

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W followed by the channel number assigned to the station and two additional letters and a suffix consisting of the letter –D.

(c) *Digital low power television stations and Class A television stations.* Digital low power television and Class A television stations may be assigned a call sign with a four-letter prefix pursuant to §73.3550 of the Commission’s rules. Digital low power stations with four-letter prefixes will be assigned the suffix –LD and digital Class A stations with four-letter prefixes will be assigned the suffix –CD.

[69 FR 69335, Nov. 29, 2004]

§ 74.792 Digital low power TV and TV translator station protected contour.

(a) A digital low power TV or TV translator will be protected from interference from other low power TV, TV translator, Class A TV or TV booster stations or digital low power TV, TV translator or Class A TV stations within the following predicted contours:

- (1) 43 dBu for stations on Channels 2 through 6;
- (2) 48 dBu for stations on Channels 7 through 13; and
- (3) 51 dBu for stations on Channels 14 through 69.

(b) The digital low power TV or TV translator protected contour is calculated from the authorized effective radiated power and antenna height above average terrain, using the F(50,90) signal propagation method specified in §73.625(b)(1) of this chapter.

[69 FR 69335, Nov. 29, 2004]

§ 74.793 Digital low power TV and TV translator station protection of broadcast stations.

(a) An application to construct a new digital low power TV or TV translator

station or change the facilities of an existing station will not be accepted if it fails to meet the interference protection requirements in this section.

(b) Except as provided in this section, interference prediction analysis is based on the interference thresholds (D/U signal strength ratios) and other criteria and methods specified in §73.623(c)(2) through (c)(4) of this chapter. Predictions of interference to co-channel DTV broadcast, digital Class A TV, digital LPTV and digital TV translator stations will be based on the interference thresholds specified therein for “DTV-into-DTV.” Predictions of interference to co-channel TV broadcast, Class A TV, LPTV and TV translator stations will be based on the interference threshold specified for “DTV-into-analog TV.” Predictions of interference to TV broadcast, Class A TV, LPTV and TV translator stations with the following channel relationships to a digital channel will be based on the threshold values specified for “Other Adjacent Channels (Channels 14–69 only),” where N is the analog channel: N–2, N + 2, N–3, N + 3, N–4, N + 4, N–7, N + 7, N–8, N + 8, N + 14, and N + 15.

(c) The following D/U signal strength ratio (db) shall apply to the protection of stations on the first adjacent channel. The D/U ratios for “Digital TV-into-analog TV” shall apply to the protection of Class A TV, LPTV and TV translator stations. The D/U ratios for “Digital TV-into-digital TV” shall apply to the protection of DTV, digital Class A TV, digital LPTV and digital TV translator stations. The D/U ratios correspond to the digital LPTV or TV translator station’s specified out-of-channel emission mask.

	Simple mask	Stringent mask	Full service mask
Digital TV-into-analog TV	10	0	Lower (–14)/Upper (–17)
Digital TV-into-digital TV	–7	–12	Lower (–28)/Upper (–26)

(d) For analysis of predicted interference from digital low power TV and TV translator stations, the relative field strength values of the antenna vertical radiation pattern if provided

by the applicant will be used instead of the doubled values in Table 8 in OET Bulletin 69 up to a value of 1.0.

(e) Protection to the authorized facilities of DTV broadcast stations shall