

## Technical comments for including of the advertising spots intended for broadcasting in TV Barrandov

1. Media Master is receiving the advertising spots in following format:
  - a. PAL SD 16:9 anamorphic
2. All advertising spots must be recorded and delivered on SONY Digital Betacam media
3. An audiosignal must be recorded in Dolby NR. A modulation A1 and A2 can't be in a mutual phase opposition.
4. In MONO version audiosignal must be the identical in the both channels A1 and A2.
5. A dual sound won't be transmitted.
6. STEREO version must comply with this sequence:  
A1 = L (left channel)  
A2 = R (right channel)
7. A reference tone with a frequency 1 kHz corresponds to signal – 18 dBfs (headroom VTR and a editing suites etc. are adjusted for – 18 dB). The values of a modulatory signal of the program that is measuring by a peak meter can overreach a referential level about +6 dB. Uniquely the modulatory peaks that are measuring by the peaking indicator can overreach the referential level about +9 dB. If can be the channel A1 and A2 change during the transmission of the signal, the referential tone must be air (taped) in the left channel intermittently for an easy identification of the channel.
8. The programs that contain the music and the spoken words must respect an aligned physiologic sensation of the sound, it means the music and also the speaking must be apperceives in the same level of a volume. A rapport of the referential tone and the sound modulation for a UV meter, PPM and a digital meter are show in picture 1.
9. A temporal directive code must be recorded in the track LTC during contemporary using of VITC, if it is possible. The codes must be identical.
10. The signals on a recording medium must be range subsequently:
  - a) A setting part: TC 00:00:00:00 to 00:01:30:00
    - period: 90s
    - picture: the colored stripes PAL 100-0-75-0 according to the table 2 and the picture 2
    - sound: the referential tone according to the point 7
  - b) A guidance part: TC 00:01:30:00 to 00:02:00:00
    - 30 sec with the signal of the black burst in the picture without the sound
  - c) A program part: starting TC 00:02:00:00
  - d) A lead out part:
    - 30 sec after a finish of the program with the signal of the black burst in the picture and without the sound
  - e) If in a carrier are more different reports, the reports starting with TC at each next minute (if a length makes it possible. At these clips is not record the test except the starting (TC 00:00:00:00 – TC 00:02:00:00)
11. If the sound is embedded into SDI, must be A1 (let us say A2,A3,A4) embedded into group 1 CH 1 (let us say CH2,CH3,CH4).
12. A time shift (offset) between the picture and the sound can't be subjectively perceivable and according to recommendation of CCIR can't overreach 60ms in case of an advancing of the sound let us say 100ms when the sound is behind the picture.
13. All the synchronizing impulses must stay in a mutual fixed temporal and also a phase relation. A pull out of the lines or even their absence and the visible disturbing failures in the modulation are not acceptable. A displacement of the picture in a face of the synchronizing impulses is in a vertical direct possible about 2 TV lines and in a horizontal direct about max. 400ns in face of a blanking pulse.

14. The sound and the vision signal must be homogeneous without a perspicuous loss and the disturbing effects. In case of the dubbing can't be hearable the original sound under the Czech version.
15. The level of aluminance signal (Y signal) can't overreach a value 103%  $\check{c}$ -b in any case, it means 721 mV and value - 1%  $\check{c}$ -b, it means - 7 mV compared to the level of the black (black = 0 mV).
16. The range of the colored version must be situated with regard to a digitalization in an area of a valid gamut RGB. It means that after decoding of the colored signal to RGB, the components of RGB must be situated in range -5% (-0,035V) to 105% (0,735V).

**Picture 1: A deflection of the VU meter, the peaking meter PPM and the digital meter for the reference tone and for the sound modulation**



