

PREFACE

This amendment has been prepared by IEC Technical Committee No. 84: Equipment and systems in the field of audio, video and audiovisual engineering.

The text of this amendment is based on the following documents:

Six Months' Rule	Report on Voting
84(C0)61	84(C0)76

Full information on the voting for the approval of this amendment can be found in the Voting Report indicated in the above table.

Page 33

Add the following new clause:

19. Analogue matching of digital audio sources and amplifiers for household and similar use

Note. - The digital audio source may be a compact disc (CD) player or a digital audio tape (DAT) recorder or player.

Digital audio source		Amplifier	
Output	Preferred values	Input for digital audio source	Preferred values
Output source impedance	$\leq 1 \text{ k}\Omega$	Rated source impedance	$1 \text{ k}\Omega$
Rated load impedance	$10 \text{ k}\Omega$	Input impedance	$\geq 10 \text{ k}\Omega$
Rated output voltage (note 1)	0,5 V	Rated source e.m.f.	0,5 V
Minimum output voltage	(note 2)	Minimum source e.m.f. for rated output voltage	0,2 V
Maximum output voltage	2 V (note 3)	Overload source e.m.f.	$\geq 2,8 \text{ V}$

Notes 1.- The rated output voltage is the r.m.s. value of the output voltage when reproducing a sinewave signal recorded at a level 12 dB below a so-called "full scale" (note 3) recorded digital signal.

2.- It is not necessary to define a minimum output voltage since it is directly related to the rated output voltage.

3.- The positive and negative peak values of the sinewave signal recorded "full scale" in a 16 bit system are represented by the digital values (7FFF)H and (8001)H. In the compact disc system specification, these values correspond to a maximum (r.m.s.) output voltage of $2 \text{ V} \pm 3 \text{ dB}$.

14.3 *Voltage-fed input* (for current-fed input, see Sub-clause 14.2)

Amplifier		Magnetic tape recorder	
Output for magnetic tape recorder	Preferred values	Input	Preferred values
Output source impedance	$\leq 10 \text{ k}\Omega$	Rated source impedance	$10 \text{ k}\Omega$
Rated load impedance	$47 \text{ k}\Omega$	Input impedance	$\geq 47 \text{ k}\Omega$
Rated output voltage	0.5 V (note 1)	Rated source e.m.f.	0.5 V
Minimum output voltage	0.2 V (note 2)	Source e.m.f. for rated recording level	0.2 V (note 4)
Maximum output voltage	2 V (note 3)	Overload source e.m.f.	$\geq 2 \text{ V}$

Notes 1. — Applying the relevant rated source e.m.f. to the input of the amplifier.

2. — Applying the relevant minimum source e.m.f. for rated output voltage to the input of the amplifier.

3. — Applying the relevant overload source e.m.f. to the input of the amplifier.

4. — The magnetic tape recorder should function at the given source e.m.f., however for practical reasons a lower value should be chosen to permit recordings from a source having an unusually low output voltage.

15. **Matching of auxiliary equipment and amplifiers**15.1 *Output*

Auxiliary equipment			Amplifier		
Output	Preferred values		Input for auxiliary equipment	Preferred values	
	Household	Sound reinforcement		General purpose input (Household)	Sound reinforcement
Output source impedance	$\leq 10 \text{ k}\Omega$	$\leq 1 \text{ k}\Omega$	Rated source impedance	$10 \text{ k}\Omega$	$1 \text{ k}\Omega$
Rated load impedance	$47 \text{ k}\Omega$	$10 \text{ k}\Omega$	Input impedance	$\geq 47 \text{ k}\Omega$	$\geq 10 \text{ k}\Omega$
Rated output voltage	0.5 V (note 1)	0.5 V	Rated source e.m.f.	0.5 V	0.5 V
Minimum output voltage	0.2 V (note 2)	0.2 V	Minimum source e.m.f. for rated output voltage	0.2 V	0.2 V
Maximum output voltage	2 V (note 3)	2 V	Overload source e.m.f.	$\geq 2 \text{ V}$	$\geq 2 \text{ V}$

Notes 1. — a) In the case of tape monitors, when reproducing a calibration tape in accordance with IEC Publication 94-2.

b) In the case of tuners, see Note 1 of Clause 12.

2. — a) In the case of tape monitors, when reproducing a tape modulated 8 dB below the recording level given in Note 1a).

b) In the case of a tuner, see Note 2 of Clause 12.

3. — In the case of a tuner, see Note 3 of Clause 12.