

# ITU-T

TELECOMMUNICATION  
STANDARDIZATION SECTOR  
OF ITU

# G.727

**Corrigendum 1**  
(05/2005)

SERIES G: TRANSMISSION SYSTEMS AND MEDIA,  
DIGITAL SYSTEMS AND NETWORKS

Digital terminal equipments – Coding of analogue signals  
by methods other than PCM

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5-, 4-, 3- and 2-bit/sample embedded Adaptive  
Differential Pulse Code Modulation (ADPCM)

**Corrigendum 1: Correction to Annex A:  
Extensions of Recommendation G.727 for use  
with uniform-quantized input and output**

ITU-T Recommendation G.727 (1990) – Corrigendum 1

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# **ITU-T Recommendation G.727**

## **5-, 4-, 3- and 2-bit/sample embedded Adaptive Differential Pulse Code Modulation (ADPCM)**

### **Corrigendum 1**

#### **Correction to Annex A: Extensions of Recommendation G.727 for use with uniform-quantized input and output**

##### **Summary**

ITU-T Rec. G.727 contains the specification for the embedded adaptive differential PCM voice-coding algorithm at 16, 24, 32, and 40 kbit/s. Its Annex A contains the specification for linear PCM input and output. This corrigendum fixes an omission in Decoder Block LIMO of Annex A/G.727, which limits the output linear two's complement sample to a 14-bit value. The pseudo-code, as originally published, misses the case for reconstructed samples  $SR_{FF}$  equal to 57 344.

##### **Source**

Corrigendum 1 to ITU-T Recommendation G.727 (1990) was approved on 14 May 2005 by ITU-T Study Group 16 (2005-2008) under the ITU-T Recommendation A.8 procedure.

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## ITU-T Recommendation G.727

### 5-, 4-, 3- and 2-bit/sample embedded Adaptive Differential Pulse Code Modulation (ADPCM)

#### Corrigendum 1

#### Correction to Annex A: Extensions of Recommendation G.727 for use with uniform-quantized input and output

##### Description

In the LIMO (decoder only) routine in A.3.5/G.727, *Output limiting (decoder only)*, "SR<sub>FF</sub> & 16 383, SR<sub>FF</sub> < 8192 or SR<sub>FF</sub> > 57 344" should be replaced with "SR<sub>FF</sub> & 16 383, SR<sub>FF</sub> < 8192 or SR<sub>FF</sub> > 57 343". The code is missing the case for SR<sub>FF</sub> = 57 344.

*Amend Block LIMO as indicated:*

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##### LIMO (decoder only)

Input: SR<sub>FF</sub>

Output: SO

Function: Limit output to 14-bit two's complement value

SO =	8191,	SR <sub>FF</sub> > 8191 and SR <sub>FF</sub> < 32 768
	SR <sub>FF</sub> & 16 383,	SR <sub>FF</sub> < 8192 or SR <sub>FF</sub> > 57 343
	57 344,	SR <sub>FF</sub> > 32 767 and SR <sub>FF</sub> < 57 344

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