TYPE: C0 Control Character Set	REGISTRATION NUMBER: 135 DATE OF REGISTRATION:

ESCAPE SEQUENCE:

G0: -
G1: -
G2: -
G3: -
C0: ESC 2/1 4/11
C1: -

NAME Primary Control SEt of Data Syntax III of CCITT Rec. T.101.

DESCRIPTION

A control character set comprising of 17 control characters for use as a C0 set in videotex applications. The remaining 15 code positions shall not be used.

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ORIGIN

CCITT Rec. T.101, Data Syntax III

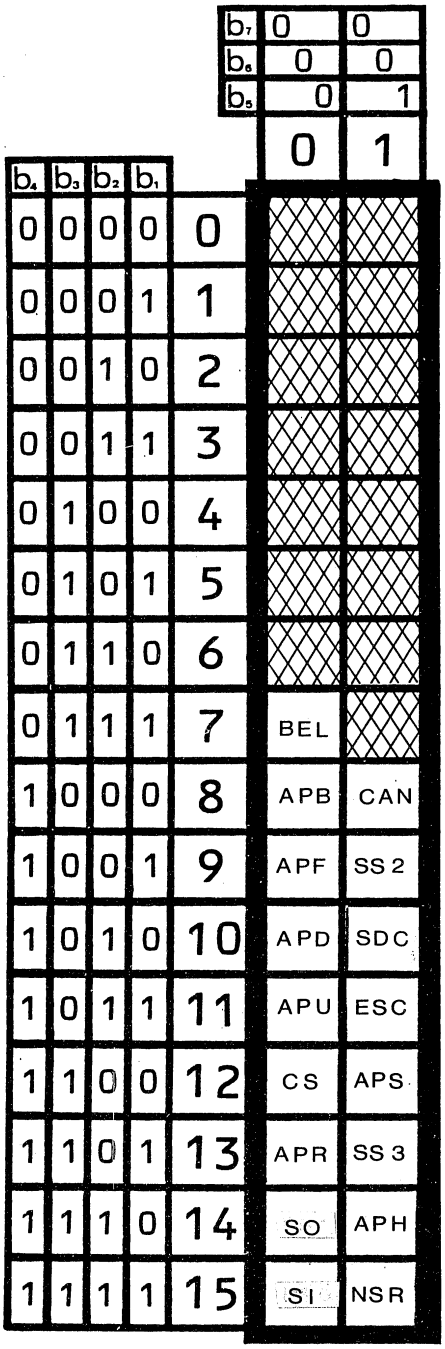
FIELD OF UTILISATION

Videotex and Broadcast Videography (Teletext) applications.

This registration is sponsored by CCITT. If required at a later stage, this registration may be amended under the procedure of clause 8.2 of ISO 2375. In this case the already allocated escape sequence will remain unchanged.

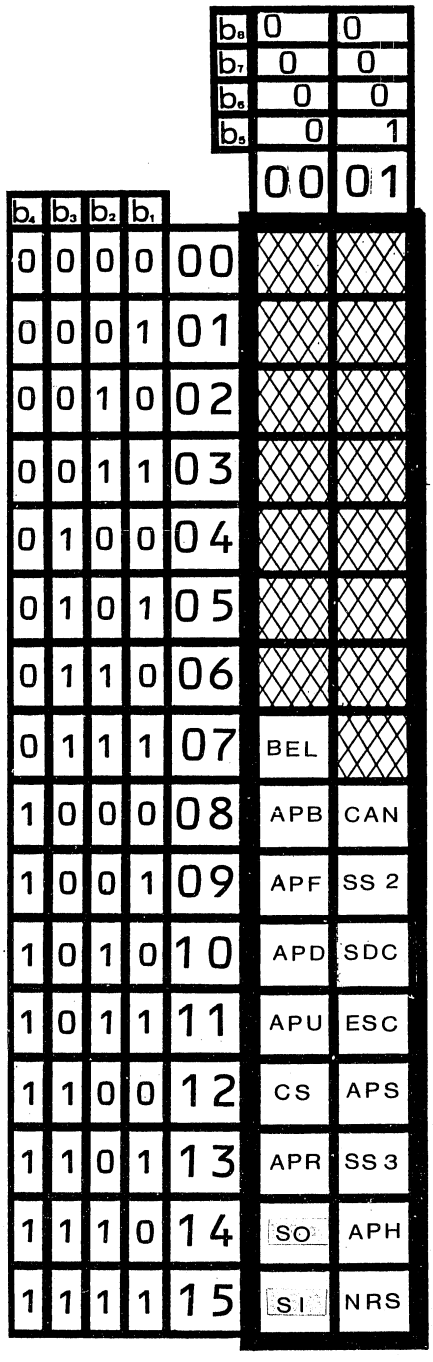
C0 SET

7-bit coding



b_4	b_3	b_2	b_1		b_7=0, b_6=0, b_5=0	b_7=0, b_6=0, b_5=1
					0	1
0	0	0	0	0		
0	0	0	1	1		
0	0	1	0	2		
0	0	1	1	3		
0	1	0	0	4		
0	1	0	1	5		
0	1	1	0	6		
0	1	1	1	7	BEL	
1	0	0	0	8	APB	CAN
1	0	0	1	9	APF	SS 2
1	0	1	0	10	APD	SDC
1	0	1	1	11	APU	ESC
1	1	0	0	12	CS	APS
1	1	0	1	13	APR	SS 3
1	1	1	0	14	SO	APH
1	1	1	1	15	SI	NSR

8-bit coding



b_4	b_3	b_2	b_1		b_8=0, b_7=0, b_6=0, b_5=0	b_8=0, b_7=0, b_6=0, b_5=1
					00	01
0	0	0	0	00		
0	0	0	1	01		
0	0	1	0	02		
0	0	1	1	03		
0	1	0	0	04		
0	1	0	1	05		
0	1	1	0	06		
0	1	1	1	07	BEL	
1	0	0	0	08	APB	CAN
1	0	0	1	09	APF	SS 2
1	0	1	0	10	APD	SDC
1	0	1	1	11	APU	ESC
1	1	0	0	12	CS	APS
1	1	0	1	13	APR	SS 3
1	1	1	0	14	SO	APH
1	1	1	1	15	SI	NRS

Acronym	Name	Description
BEL	BELL	This control character momentarily rings a bell or effects another transient indication.
APB	ACTIVE POSITION BACKWARD	This control character moves the cursor a distance equal to the intercharacter spacing lying parallel to the character path in the direction opposite to the character path (i.e. 180^0 from the direction of the character path). If such a movement would cause any part of the full corresponding character field to be outside of the display area (or outside of the active field, if the character field was entirely within the active field immediately before the movement), then the cursor is instead moved to the opposite edge (along the character path) of the display area (or active field) and an automatic APU is executed.
APF	ACTIVE POSITION FORWARD	This control character moves the cursor a distance equal to the intercharacter spacing lying parallel to the character path in the direction of the character path. If such a movement would cause any part of the full corresponding character field to be outside of the display area (or outside of the active field, if the character field was entirely within the active field immediately before the movement), then the cursor is instead moved to the opposite edge (along the character path) of the display area (or active field) and an automatic APD is executed.
APD	ACTIVE POSITION DOWN	This control character moves the cursor a distance equal to the interrow space lying perpendicular to the character path in a direction perpendicular to the character path (-90^0). If such a movement would cause any part of the full corresponding character field to be outside of the display area (or outside of the active field, if the character field was entirely within the active field immediately before the movement), then special action is taken that is dependent on whether or not scroll mode is in effect.
APU	ACTIVE POSITION UP	This control character moves the cursor a distance equal to the interrow space lying perpendicular to the character path in a direction perpendicular to the character path (90^0). If such a movement would cause any part of the full corresponding character field to be outside of the display area (or outside of the active field, if the character field was entirely within the active field immediately before the movement), then special action is taken that is dependent on whether or not scroll mode is in effect.
CS	CLEAR SCREEN	This control character moves the cursor to the upper left character position of the display area, in which the top of the character field coincides with the top boundary of the display are. In colour modes 0 and 1, it clears the display area to nominal black. In colour mode 2, it clears the display area to the background colour.

Acronym	Name	Description
APR	ACTIVE POSITION RETURN	This control character moves the cursor to the first character position within the display area (or within the active field, should the full character field corresponding to the cursor lie entirely within the active field before the movement) along the character path.
SO	SHIFT-OUT	This control character invokes the G1 set into columns 2 to 7 of the code table.
SI	SHIFT-IN	This control character invokes the G0 set into columns 2 to 7 of the code table.
CAN	CANCEL	This control character terminates processing of all currently executing macros. Execution is resumed at the next presentation layer character following the terminated macro call. The effect of CAN is immediate, i.e. it is not put at the end of any existing queue of unprocessed presentation layer code. The operation of the CAN character is not guaranteed unless it is guaranteed to be delivered by the lower layers.
SS2	SINGLE-SHIFT TWO	This control character invokes a single character from the G2 set.
SDC	SERVICE DELIMITER CHARACTER	This control character shall be executed as a null operation at the presentation layer and any other use is implementation-dependent.
ESC	ESCAPE	This control character is used for code extension.
APS	ACTIVE POSITION SET	This control character sets the cursor position without resetting any parameters or attributes. The two bytes immediately following an APS shall both belong to columns 2 to 7 or 10 to 15 of the table. They represent the row address and column address, respectively, to which the cursor is to be moved. The row address is obtained from the first byte following as APS by taking the integer represented in binary notation by bits b7 to b1, b7 being the MSB, and subtracting 32. Similarly, the column address is obtained from the second byte following an APS by taking the integer represented in binary notation by bits b7 to b1, b7 being the MSB, and subtracting 32. This gives an address range from 0 to 95 for the row and column addresses. If either of the characters following APS is a C0 or C1 control character, APS is ignored and the C0 or C1 control character is executed. Rows and columns are numbered starting with row 0, column 0, in the lower left-most character position of the display area, and refer to the nominal screen format established by the current character field size (with the default intercharacter and interrow spacing). The cursor is positioned assuming zero character rotation to establish the character field origin. Once the character field origin is established, the character field and cursor are rotated, if necessary.

Acronym	Name	Description
SS3	SINGLE-SHIFT THREE	This control character invokes a single character from the G3 set.
APH	ACTIVE POSITION HOME	This control character moves the cursor to the upper lesft character position in the display area, in which the top of the character field coincides with the top boundary of the display area.
NSR	NON-SELECTIVE RESET	This control character serves two functions : it non-selectively resets the presentation process as defined below and it can be used as an alternative means to position the cursor. When an NSR is received, the following action is taken : 1) The G0, G1, G2, G3, C0 and C1 sets are designated to their default states and the code table in invoked to its default state. 2) The DOMAIN parameters are set to their default values. 3) The text parameters (from the TEXT opcode, from the C1 set and the active field), are set to their default values. 4) The TEXTURE parameters are set to their default values. The programmable masks are not cleared. 5) The colour mode is set to colour mode 0 and the drawing colour is set to nominal white. The colour map is not changed. 6) If the two bytes that immediately follow NSR both belong to columns 4 to 7 of the table, the cursor is positioned. These two bytes represent, in binary form (i.e. the integer represented by bits b6 to b1, b6 being the MSB), the row and column address, respectively, to which the cursor should be moved. Rows and columns are numbered starting with row 0, column 0 in the upper leftmost character position in the display area and refer to the nominal screen format established by the default character size. The top of the character field for row 0 coincides with the top boundary of the display area. If either of the two bytes following NSR does not belong to columns 4 to 7 (or columns 12 to 15) of the table, the non-selective reset function of NSR is executed and the cursor is not repositioned. If the two bytes belong to columns 2 and 3 (or columns 10 and 11), they are ignored. If either of the two bytes represents a C0 or C1 control character they terminate the NSR sequence and the control character(s) is executed.