

***ITU-R BS.707-5

B1 PAL B

L K1 K SECAM D I H G D1

(2005-1998-1995-1994-1990)

.

/ / (

(

ITU-R BS.795

FM

(

NICAM-728

(

PCM

"

ITU-R BO.651

(

"(kHz 15

)

/MAC

ITU-R BO.650

(

(WARC BS-77) (1997)

FM

(

(

-

FM

(

-

MHz 7

(IEC)

*

: (

-

MHz 7 -

1974 CCIR FM (

1981

1988 1987 CCIR NICAM-728 (

/ (

1 FM 1

H G B1 PAL B

2 2

L K1 K SECAM D I H G D1 B1 PAL B

- 1

- 2

ITU-R BT.1214 - 3

1

FM

1

FM

(H G B1 B)

2	1	
⁽¹⁾ 0,2421875 + 5,5	⁽¹⁾ 5,5	<i>RF</i>
20–	13–	(MHz)
FM	FM	(dB)
50±	50±	(kHz)
15 000 40	15 000 40	(Hz)
50	50	(µs)

$$(\quad)_1$$

2	1	
1 B 2	1 (A + B)/2 1	<i>AF</i>
(⁽³⁾ 54,6875 × 3,5) AM ⁽⁴⁾ 50 0 117,5 (133/ 274,1 (57/ 2,5±		(⁽²⁾ (kHz) (%) (Hz) ⁽³⁾ (kHz)
		(⁽⁵⁾

$$\text{.kHz } 242,1875 = \quad \times 15,5 \quad (1)$$

(2)

(3)

(4)

(5)

2

L I H G B1 B

1

D D1 B1 B

.L K1 K I H G

2

728 :

ms/ :

2.1

8 :

5 :

		11	:	
		704	:	/
		728	:	
			720	/MAC
/MAC				MAC
	.(3.3	)	(2.3	)
		(FAW)		
			2.2.3	
				2.2
			/	
			:	
	704	11	5	
16		AD ₀ → AD ₁₀	C ₀ → C ₄	
		14,15,16,17,18,19,20,21,22,23,24	9,10,11,12,13	1,2,3,4,5,6,7,8
25,69,113,157.....	685			
26,70,114.....	686			
27,71,115.....	687			
28,72,116.....	688			
- - -.....	-	44		
- - -.....	-	11 × 4		
- - -.....	-			
- - -.....	-			
68,112,156.....	728			
				3.2
			.(PRBS)	
			PRBS	
.111111111		x ⁹ + x ⁴ + 1 PRBS		
				3
				1.3
			01001110	
				2.3
C ₃ C ₂ C ₁		C ₀		
			.C ₄	

1.2.3

"0" 8 "1" C₀
16
8 1 1 = C₀
16 9 0 = C₀

2.2.3

704 /
1
1 704 / 16
16

704 /			
	⁽¹⁾ C ₃	C ₂	C ₁
B A	0	0	0
(M2 M1)	0	1	0
kbit/s 352	0	0	1
kbit/s 704	0	1	1

1 = C₃ ⁽¹⁾
1 = C₃

3.2.3

0 = C₄
) 1 = C₄
(M1

3.3

2.2 AD₁₀ AD₀

/ 4.3

kHz 32 :
14 :
(ms 1) 32 :
2 :
ITU-T J.17 :

	kHz 2,0	dBu0 12+	∴H	G	D1	B1	B	:	
		kHz 2,0	dBu0 14,8+	∴I					
		kHz 2,0	dBu0 12+	∴L				:	
								:	
() B								:	
M2				M1				:	
M1									
.								:	
								.	
					64	63	62	61	60
					59	58	57	56	55
									.
									4
L	K1	K	D	I	D1	B1	B		1.4
						H	G		
									1.1.4
ITU-R BT.470		ITU-R BT.470		ITU-R BT.470					
:									
.		MHz 5,1							
L									
		%5							
.									
			ITU-R BT.470						2.1.4
	40:1	10:1		10:1		20:1			3.1.4
		I			D	D1	B1	B	2.4
					L	K1	K	H	G
		(DQPSK)							1.2.4
		⁶ 10 ± kbit/s 728							2.2.4
)		MHz 6,552			)	MHz 5,85			3.2.4
					(				
.(					.				

1

500

I

H

G

B1

B

1

100

.L

K1

K

D

4.2.4

kHz

364

5.2.4

L

H

G

D

D1

B1

B

I

$$H(f) = \begin{cases} 1 & \text{for } f < \frac{1-k}{2t_s} \\ \cos\left[\frac{\pi t_s}{2k}\left(f - \frac{1-k}{2t_s}\right)\right] & \text{for } \frac{1-k}{2t_s} \leq f \leq \frac{1+k}{2t_s} \\ 0 & \text{for } f > \frac{1+k}{2t_s} \end{cases}$$

$$k = 0.4 \quad t_s = \frac{1}{364} \text{ ms}$$

%100

$$H(f) = \begin{cases} \cos\frac{\pi t_s f}{2} & \text{for } f \leq \frac{1}{t_s} \\ 0 & \text{for } f > \frac{1}{t_s} \end{cases}$$

$$t_s = \frac{1}{364} \text{ ms}$$

%40