



TMS-4; FOUR CHANNEL MODULATOR SYSTEM

OPERATING INSTRUCTIONS

TMS-4 consists of power supply, four DSB TV-modulators and a common output amplifier.

INSTALLATION

TMS-4 can be installed on the wall by using the fixing holes (Fig. 1.). TMS-4 system must be installed in a dry and locked room. Sufficient air current must pass around the unit. Do not cover the air passage holes.



Fig 1.

TMS-4 is supplied with the external power supply, which is connected to **DC IN** connector.

VIDEO/AUDIO OUT of source are be connected to the VIDEO/LEFT, RIGHT connectors of TMS-4 with the RCA cables.

The **RF OUT** is connected to the cable network via RF combiner.

PROGRAMMING

The parameters of modulators are controlled with the pushbuttons **UP**, **DOWN** and **SELECT**.

When TMS-4 is powered, it goes to "lock mode".

To open the locking code press **SELECT**, **UP** and **DOWN** down at the same time. Firstly release **UP** and **DOWN** and then **SELECT**.

The display lights up showing the output frequency band (**HI S**, **HYP** or **UHF**) of TMS-4. The output band of TMS-4C is fixed **UHF**. The output band of TMS-4A (**HI S** = 175,25...303,25 MHz or **HYP** = 280,25...463,25 MHz) can be selected with **UP** or **DOWN** pushbutton.

After selecting the output band press **SELECT** (from 1 to 5 times) to program RF level or the parameters of modulators.

Press **SELECT** once and then **UP** to program a RF level output (**rF L**) or press **SELECT** (2-5 times) and then **UP** to program modulators (**mod 1**, **mod 2**, **mod 3** or **mod 4**).

The parameters of modulators are adjusted according to the Table 1.

The value of adjustable parameter is changed with the **UP** and **DOWN** push buttons. Adjustable parameters with the comments are in the Table 1. Next parameter is selected with the **SELECT** push button.

After changing the value of parameter the **lock** led lights up within **5 seconds** showing that the value is stored. Next parameter must be selected within **30 seconds** after the value is stored.

PARAMETER	DISPLAY	EXPLAIN
1. Output frequency band	HI S HYP UHF	TMS-4A: HI S = 175,25...303,25 MHz HYP = 280,25...463,25 MHz TMS-4C: UHF = 471,25...855,25 MHz
2. Output level (rF L)	L 0...-20	Output level adjustable 20 dB (85...105 dB μ V)
3. Modulation depth	br 0...2	Brightness. Factory preadjusted value is 1.
4. Audio deviation	AL o 0...3	Modulator audio level. Factory preadjusted value is 3.
5. Output frequency	175...303 280...463 471...855	Output frequency of TMS-4A + 0,25 MHz at HI S Output frequency of TMS-4A + 0,25 MHz at HYP Output frequency of TMS-4C + 0,25 MHz
6. Transmission standard	nor b nor i nor d nor L nor n	B/G-standard I-standard D/K-standard L-standard M/N-standard
7. Test signal	t on/oFF	Test signal on/off.
8. RF carrier	rF on/oF	RF carrier on/off.

Table 1.

TECHNICAL SPECIFICATION

RF

Modulation		AM DSB
Frequency range	Type A	175.25...463,25 MHz
		Ch: E5....S41
	Type C	471.25...855.25 MHz
		Ch: E21 ... E69
Transmission standard		B/G, D/K, I, M/N,L
Output level		85...105 dB μ V
Spurious products		\leq 60 dBc
Nominal impedance		75 ohms

VIDEO

Nominal input level	1,0 Vpp/processor adjustable
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AUDIO

Nominal input level	0,5 Vrms/27 kHz dev. Processor adjustable
Pre-emphasis	50us

GENERAL DATA

Input Power	DC 15 V
Current consumption	Max. 0,5 A / 15V
Operating temp.	-10 °C - 40 °C
Dimensions	55 mm H, * 265 mm W, * 40 mm D
Weight	1 kg