

# TM-800 A2/NICAM STEREO TV MODULATOR

# OPERATING INSTRUCTIONS

TM-800 is a stereo/multistandard mono modulator, which can be used on the adjacent channels (VSB modulation) from S2 to E69.

TM-800 series consist of optionally one, two or three VSB modulators, common control board and power supply.



#### INSTALLATION

The modulator is designed for standard 19" rack mounting. Sufficient air current must pass around the unit. Do not cover the air passage holes.

Video signal is connected to **VIDEO IN** connector and audio signals in **AUDIO IN** connectors. **RF OUT 1** ... **RF OUT 3** are connected to the network via a tap or RF combiner.

### **PROGRAMMING**

**Note!** There can be interference in the picture during programming. The interference disappears after programming is ready.

To open the locking code press first **SELECT** and then **UP** and **DOWN** at the same time. Firstly release **UP** and **DOWN** and then **SELECT**. The display lights up (**CH 1**).

If it is a dual or triple modulator system, select a modulator unit (CH 1  $\dots$  CH 3) with the UP or DOWN push button and press then SELECT.

If it a single modulator, press **SELECT** (within 10 seconds) to adjust the parameters.

Reading on the display is the output frequency.

The frequency can be changed by push buttons **UP** and **DOWN**. The parameters are stored with the **SELECT** push button.

Move to the next adjustable parameter by pressing **SELECT** push button. Next function must be selected during 15 seconds, otherwise the display, except LOCK led, is cleared and the modulator is locked.

Select the required value by **UP** and **DOWN** push buttons.

All features can be adjusted as above. All programmable functions are shown in the Table 1.

ADJUSTABLE FEATURE	DISPLAY	EXPLAIN
Output frequency	112.25855.25	Output frequency of TM-200
Output level	L 020	Attenuator 020 dB
Audio mode	StErE	A2 or NICAM stereo
	mono	mono
Transmission standard	nor b	B/G-standard
	nor i	I-standard *)
	nor L	L-standard *)
	nor d	D/K-standard *)
	nor n	M/N-standard *)
Test signal	t onoFF	Test signal on/off.

Table 1.

# **TECHNICAL SPECIFICATION**

## RF

Modulation		AM VSB
Number of modulators	TM-818	1
	TM-828	2
	TM-838	3
Output frequency range		112,25855,25 MHz
		S2 E69
Transmission standard		B/G (A2 and Nicam audio), I, L, D/K, M/N (mono)
Output level	TM-818	105 dBμV, adjustable -20dB/75ohm
	TM-828	105 dBμV, adjustable -20dB/75ohm
	TM-838	105 dBμV, adjustable -20dB/75ohm
Spurious products		≤ 60dbc
C/N	in-band	59 dB with 115 dBuV output level
	out-band	69 dB with 115 dBuV output level
S/N		55 dB
Output impedance		75 ohm
Video		
Nominal input level		10 V

Nominal input level	$1,0 V_{pp}$
Input impedance	75 ohm

## Audio

Nominal input level	$0.5 V_{rms}$
Input impedance	4,7 kohm

## General

Power		100-240VAC, 50-60 Hz
Operating temperat	ture	-10+50 °C
Dimensions		19", 1RU
Weight	TM-818	2,5 kg
	TM-828	2,7 kg
	TM-838	2.9 kg

<sup>\*)</sup> Deviation and I-, L-, D/K-, M/N-standards are available only in **mono** mode.