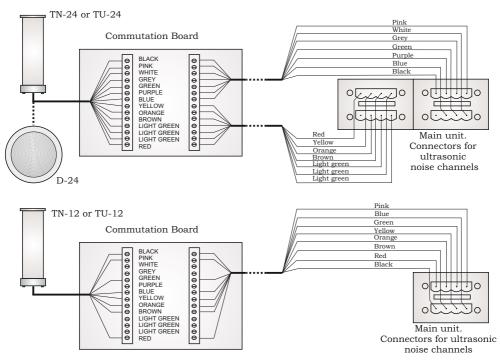
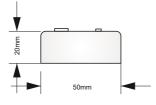


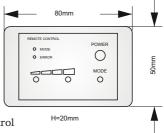
### WIRING DIAGRAM FOR ULTRASONIC EMITTERS OF THE TYPES TN, TU and D



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FUNCTIONS of the controls of the wired remote control and RF remote control units





FUNCTIONS of control buttons of the wired remote control POWER — Turning the device ON/OFF.

MODE — switching between operation modes.

Pressing the button MODE once activates the amplifier channel of the low frequency amplifier #1, meanwhile the outlet of connector "Connecting auxiliary equipment" is activated. The MODE indicator slowly flashes green.

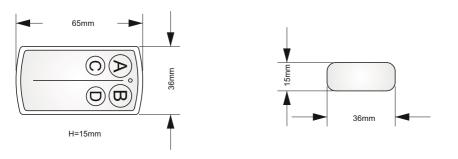
Subsequent pressing activates the amplifier channel of the low frequency amplifier #1, meanwhile the output of the connector "Connecting auxiliary equipment" is activated. The MODE indicator frequently flashes green.

Subsequent pressing deactivates all of the emitters of the low frequency amplifier, turns off the output "Connecting auxiliary equipment". Only the generators of ultrasonic noise are in operation. The MODE Indicator glows green.

- adjusting the volume of the human voice-like noise signal from the low frequency amplifiers #1 and #2.

FUNCTIONS of indicators of wired remote control

MODE —operation mode depends on the number of times the MODE button was pressed. ERROR – malfunction indicator. Glows red in case of any malfunction. For detailed information, see the indicators on the main unit.



FINCTIONS OF THE BUTTONS AND INDICATOR of RF remote control

- A Turning the device ON/OFF, duplicates the "POWER" button of the wired remote control.
- B Choice of operation mode, duplicates the "MODE" button of the wired remote control.
- C Decrease of the volume of human voice-like noise.
- D Increase of the volume of human voice -like noise.

LED indicator – glows when the button in the remote control is pressed and it shows that the remote control works.

#### SWITCHING ON FOR THE FIRST TIME

1. Check whether the equipment is connected correctly. Apply power to the input "POWER 24 V, 5 A" and, when necessary, to the input of the "POWER to low frequency amplifier #2". After the voltage is applied tests of the LED indicators are performed and the POWER indicator turns ON. The device is ready for operation.

2. Turn the device on by pressing the POWER button on the wired remote control or button "A" on the RF remote control. When the device is set up correctly, the MODE indicator starts glowing.

Make sure that ultrasonic channels are functioning.

4. Press the MODE button to make sure that the human speech-like noise of low frequency amplifier #1 is functioning, adjust the volume using the jumper "mode" and "Gain of the low frequency amplifier #1" controls.

5. Adjust the gain using wired remote control.

6. If the signal level does not match to desired volume, re-adjust it with jumpers or controls. 7. Press the MODE button and make sure that the human speech-like noise of low frequency amplifier #2 is functioning; adjust the volume using the jumper "mode" and "Gain of the low

frequency amplifier #2" controls.

8. Adjust the gain using the wired remote control.

9. If the signal level does not match to desired volume, re-adjust it with jumpers or controls.

#### ADDITIONAL FEATURES

The architecture of the device design allows one to activate up to four main units concurrently. It can be used for:

- The increase of the number of connected ultrasonic emitters up to 192 pieces;

- The increase of the power and number of connected acoustic and vibro-acoustic emitters to the outputs of the low frequency amplifier #1 and the low frequency amplifier #2. (see the section wiring diagram OF SEVERAL MAIN UNITS).

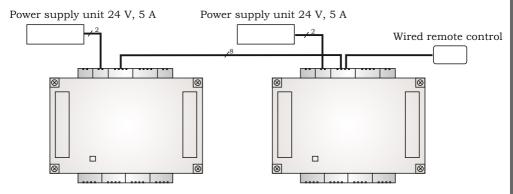
Data to calculate power consumption of the device:

The maximum input current is 4.2 A,

Current consumed by 48 piezo-emitters is 2.2 A.

The remaining current may be used for a human voice-like noise signal and to power additional equipment from the outlet connector "Outlet 12 V, 1 A". It amounts to 1.9 A and it allows one to obtain 37 W power for load in all channels of the low frequency amplifiers #1 and #2 (when using the power sources, which are included in the package).

### WIRING DIAGRAM OF SEVERAL MAIN UNITS



ATTENTION! Maximum number of connected main units is four.

## ULTRASONIC EMMITERS OF THE TYPES TN, TU, D

They are designed for emission of ultrasonic noise signals. It operates in combination with the Tambourine Ultra MAX.

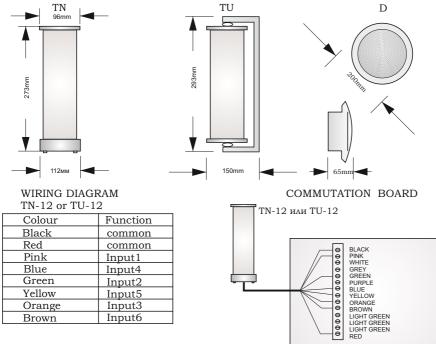
Parameter	TN 12/55	TN 24/55	TN 24/110	TU 12/55	TU 24/55	TU 24/110	D 24/55
Number of ultrasonic emitters, pcs	12	24	24	12	24	24	24
Radiation angle of ultrasonic noise, at the level of -6 Db, degrees	55	55	110	55	55	110	55
Emission range ultrasonic noise, KHz	24-26						
Type of mounting and installation	Desktop			Universal			Ceiling
Range of operation temperature, C <sup>o</sup>	+5+40						
Relative humidity				85%			
Overall dimensions, mm	Ø120 x280	Ø120 x280	Ø120 x280	Ø120 x295	Ø120 x295	Ø120 x295	Ø200 x65
Net weight, max, g	900	900	900	900	900	900	600

### TECHNICAL SPECIFICATIONS

BOX CONTENTS

- 1. Device of the type TN, TU, D, 1 pcs.
- 2. Commutation box, 1pcs.
- 3. Packing, set, 1 pcs.
- 4. Operation manual, 1 pcs.

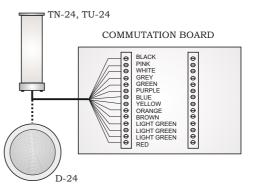
EXTERIOR APPEARANCE AND OVERALL DIMENSIONS



# FUNCTIONS OF THE TN-24/55(110), TU-24/55(110), D24 WIRES

WIRING DIAGRAM

ColourFunctionChannelsBlackcommonPinkInput1WhiteInput4GreyInput2GreenInput5PurpleInput3BlueInput6YellowInput2GrownInput4CHANNEL OFTHE LOWFREQUENCYAMPLIFIER #1Light greenInput6Input1CHANNEL OFLight greenInput4Light greenInput5Redcommon			
PinkInput1WhiteInput1WhiteInput4GreyInput2GreenInput5PurpleInput6BlueInput6YellowInput2GreynInput6BrownInput2Light greenInput4Light greenInput4Light greenInput4Light greenInput5	Colour	Function	Channels
WhiteInput4CHANNEL OFGreyInput2THE LOWGreenInput5PurpleInput3BlueInput6YellowInput6BrownInput2Light greenInput4Light greenInput4Light greenInput5	Black	common	
WniteInput4GreyInput2GreenInput5PurpleInput3BlueInput6YellowInput6OrangeInput6BrownInput2Light greenInput4Light greenInput4Light greenInput5	Pink	Input1	
GreyInput2GreenInput5PurpleInput3BlueInput6YellowInput6BrownInput6BrownInput2Light greenInput4Light greenInput5	White	Input4	
GreenInputsPurpleInput3BlueInput6YellowInput3OrangeInput6BrownInput2Light greenInput1Light greenInput4Light greenInput5	Grey	Input2	
Purple Inputs   Blue Input6   Yellow Input3   Orange Input6   Brown Input2   Light green Input4   Light green Input5	Green	Input5	
YellowInput3OrangeInput6BrownInput2Light greenInput1Light greenInput4Light greenInput5	Purple	Input3	AMPLIFIER #1
OrangeInput6BrownInput2Light greenInput1Light greenInput4Light greenInput5	Blue	Input6	
BrownInput2CHANNEL OFLight greenInput1THE LOWLight greenInput4Light greenInput5	Yellow	Input3	
BrownInput2Light greenInput1Light greenInput4Light greenInput5	Orange	Input6	CHANNEL OF
Light green     Input1     FREQUENCY       Light green     Input4     AMPLIFIER #2       Light green     Input5     AMPLIFIER #2	Brown	Input2	THE LOW
Light green Input4 Light green Input5 AMPLIFIER #2		Input1	
Light green Input5	Light green	Input4	
Red common	Light green	Input5	1  min  Dir  IDR  # 2
	Red	common	



FOR	NOTES
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TAMBOURINE ULTRA MAX

FOR NOTES

TAMBOURINE ULTRA MAX