

THIS BOX SHOULD CONTAIN



- One unit of TPC-I mk2
- TPC-I mk2 operating instructions
- TPC-I mk2 power cord
- Spare parts: two mounting hooks for a 19" rack, one fuse placed in the power outlet

A LETTER FROM THE HEAD OF TECHNOLOGY

CHERCHEZ LA FEMME

The creation of the product was inspired by the woman whom I love deeply. She happens to be my wife and a jazz vocalist. To make her happy and combine this endeavour with another true passion of mine – which is Electronics – I decided to design a mic preamp for Anastasiia.

When designing the channel strip, we collaborated with the recording studio where my wife records and all involved were very pleased with the results. Anastasiia's tracks sound more uniquely since we started to use our equipment to record her.

10 years later, our home-grown project gathered a team of engineers around it. Today, sound recording professionals from Europe and the US are the happy owners of our channel strips. You are welcome to check out our demo tracks recorded through different models of the gear, find them on our [Soundcloud page](#).

We are pleased that our equipment will help you achieve your goals. Enjoy your journey the way we do with our channel strip models!

Sincerely,
Roman Shevchenko

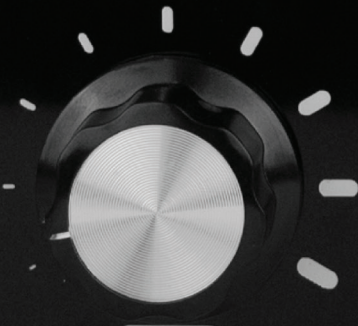


RSE

TPC-1 mk2



DI



GAIN

2K



INPUT

500R

ON



48V

OFF



OUT



GR

OPERATING INSTRUCTIONS

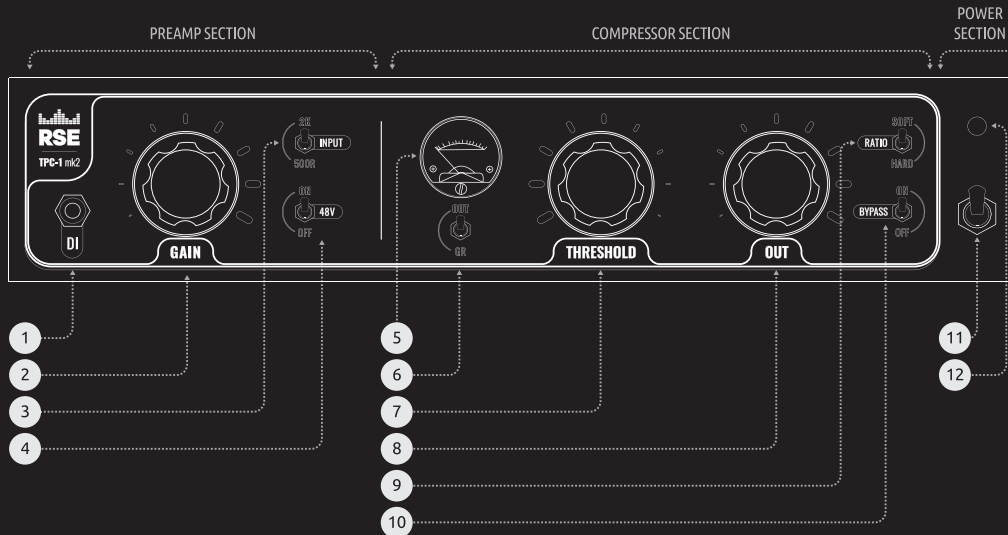
This manual provides preparation for use, installation and operating instructions for the TPC-I mk2 channel strip.

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PANEL SCHEME AND COMPONENTS

This manual provides preparation for use, installation and operating instructions for the TPC-1 mk2 model of the channel strip.



Pic 1 – Scheme of the front panel

EXPLANATION OF THE PANEL KNOBS AND SWITCHES

PREAMP SECTION

An audio signal needs to be raised loud enough so that a processor can work with it. The microphone preamp section boosts the signal.

- 1 **Direct input (DI)** – The connector is for an instrument such as a guitar or bass.
- 2 **Gain knob** – The controller of your input signal's gain. Dial it clockwise to make the signal louder. Dial it fully counterclockwise to set the controller to its minimal value (this position equals to $-\infty$ dB).
- 3 **Input switch** – This is the microphone impedance controller. See your microphone technical specifications to learn what output impedance it has. Generally, microphones can be divided into low (500+ ohms) and high (2k ohms) impedance.
- 4 **48V switch** – This switch is for the phantom power. The switch should be turned on **ONLY** if your microphone requires the phantom power, which generally means capacitor/condenser microphones. Check the specifications of your microphone if unsure.

EXPLANATION OF THE PANEL KNOBS AND SWITCHES

COMPRESSOR SECTION

Compressors turn down the loudest part of signal fluctuations, while determining which signals to consider as loud ones and what shouldn't be compressed at all.

- 5 **VU Meter** – The display that shows either the channel strip's final output after compression OR the amount of your compressor/gain reduction (GR) taking place.
- 6 **VU Meter mode switch (Out/GR)** – This governs which mode the VU meter displays. If set to OUT (its UP position), then the final output (post compression) is displayed. If set to GR (its DOWN position), then the meter shows the gain reduction value.
- 7 **Threshold knob** – This controls the level at which the compressor starts to work. Below the threshold point, the volume of a signal is unchanged. Above it, the volume is reduced. If the compressor's threshold is set to its minimum (fully clockwise position), incoming signals will be unaffected.
- 8 **Out knob** – This is used to make up gain or attenuation. Dial it clockwise to increase the amplitude of the output signal. Dial it fully counterclockwise to attenuate the output all the way to mute.
- 9 **Soft/hard switch** – This sets the RATIO of the compression and the attack/release time. The compression ratio at the SOFT position equals 1/5 and the attack/release time is 200/2000 ms. The compression ratio at the HARD position equals 1/100 and the attack/release time is 5/1500 ms. Basically, while at the HARD position, the compressor works as a limiter.
- 10 **Bypass switch** – This enables bypassing the compressor effect. Turn it ON if you do not want your signal to be compressed. Set it to OFF position when you decide to use the compressor effect. It's great for comparing pre/post compression.

EXPLANATION OF THE PANEL KNOBS AND SWITCHES

POWER SECTION

Power section combines Power switch and Power indicator. The latter indicates whether the equipment is turned on. The equipment is designed for the following power supply voltage: 220-240 V~, 50 Hz-60 Hz.

NOTE

If your voltage does not meet the above-mentioned specifications, then the protection mode will be triggered. In this case, the equipment will need 15 minutes to return to its operating mode. Before reconnecting the equipment to the power supply outlet, make sure that the voltage does not exceed the acceptable limits. If the equipment does not turn on automatically, disconnect the power cord from an outlet and from TPC-I mk2 itself. Verify the fuse integrity. If it's blown out, install a replacement fuse from the replacement fuse compartment.

3-MINUTE GETTING STARTED GUIDE

Our 3-minute guide will tell you everything you need to know about TPC-1 mk2 to get your device up and running.

GETTING STARTED

STEP 1 ▶ Decide where the TPC-1 mk2 should be physically placed. Place it there.

STEP 2 ▶ Mute your processor monitors. Using a balanced cable with XLR connectors, connect the TPC-1 mk2 rear panel output to the appropriate input on your interface or mixing desk.

STEP 3 ▶ Set the **Gain knob** ② on the left side of the front panel to its minimal position (counter clockwise). Ensure that NO Phantom power is being applied (**48V switch** ④ turned off).

STEP 4 ▶ Connect the desired input source to the TPC-1 mk2 rear panel input. Connect your instrument such as a guitar or bass to the front-placed DI.

STEP 5 ▶ Make sure the **Power switch** ⑪ on the right side of the front panel is off (down) and then connect the power cable from the box or a similar one to the rear panel AC power connector.

STEP 6 ▶ On the right side of the preamp section, turn the **Input switch** ③ to the position relevant to your microphone type.

3-MINUTE GETTING STARTED GUIDE

STEP 7 ▶ On the right side of the compressor section:

1. set the **Bypass switch** 10 to its ON position;
 2. set the **Threshold knob** 7 to its minimal value which is fully clockwise;
 3. set the **Out knob** 8 to its middle position which is vertically upwards;
 4. set the **Meter switch** 6 to OUT so that it shows the output level of the signal entering processor.
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STEP 8 ▶ Power on the equipment. The light on top of the **Power switch** 11 will turn on and the **VU meter display** 5 will light up.

STEP 9 ▶ Let the equipment warm up. It takes approximately 1 minute. During the warm-up period, the needle of **VU Meter** 5 slowly moves to its right position and sets back to its 0 position. When ready, the equipment activates the input of your signal source automatically.

STEP 10 ▶ If a microphone requiring 48 volts of phantom power is connected to the equipment, turn on the **48V switch** 4 (up position).

STEP 11 ▶ Unmute your monitors. Slowly increase the **Gain controller** 2, while your input signal flows. You should now be hearing the signal louder and the needle of the **VU meter** 5 will proportionally show the output signal going to your processor (if the **VU Meter mode switch** 6 is set to OUT).

3-MINUTE GETTING STARTED GUIDE

STEP 12 ► Experiment with differing degrees of preamp **Gain** ② and **Input switch** ③ to hear the various amounts of coloration the equipment can impart to your signal.

STEP 13 ► Set **Bypass switch** ⑩ to OFF position to activate the compressor. Set the **Out/GR switch** ⑥ to the GR position.

STEP 14 ► The **VU Meter** ⑤ will show the compressor's activity when the **Threshold knob** ⑦ position is being changed.

STEP 15 ► Experiment with the equipment's compressor affecting your source signal.

STEP 16 ► Enjoy your unique sound with different positions of **SOFT/HARD switch** ⑨ and **GAIN** ②/**Threshold knobs'** ⑦ ratios.

SAFETY INSTRUCTIONS

Our safeguards will help you to use your equipment to its fullest so that you can achieve consistent results in meeting your goal.

1. Please familiarize yourself with all the warnings listed below.
2. To protect against electrical shock, do not place any part of the equipment in water or other liquid. It is dangerous to store or use it even close to a bathtub, shower, sink, swimming pool and other sources of water.
3. Clean the equipment only with a dry cloth.
4. Do not spill fluids inside the equipment.
5. This device must be installed in a way that ensures its adequate ventilation: on a flat surface, two to four inches away from the wall. For instance, the device should not be put on a bed, sofa, or other soft surface that may block its ventilation openings. Do not place your equipment into built-in shelves or storage unit cabinets that may hinder a free air flow.
6. The equipment should be located away from heat sources such as radiators or other heat-producing devices.
7. The equipment should be connected only to the power source specified in these instructions.
8. Do not damage the power cord by putting any objects on it; do not let the cord hang over the edge of the surface where it could be pulled on inadvertently by children or pets, or touch hot surfaces which could damage the cord. Pay special attention to the place of connection sockets.

SAFETY INSTRUCTIONS

9. Any maintenance other than cleaning should be performed by an authorized service center. Please let the qualified personnel to examine, repair, and adjust the device electrically/mechanically in the following cases:
 - if your cord or plug is damaged;
 - any objects or liquids have been ingested;
 - after operation of the equipment in the rain;
 - if the equipment does not operate normally, or if there is a visible change in its performance;
 - if the equipment malfunctions, is dropped, or the casing is damaged in any manner.
10. The user **MUST NOT** perform any adjustments to the inner components of the equipment rather than removing and replacing the fuse.
11. To prevent the electric shock, do not use a polarized plug.
12. Pay close attention to ensure that the grounding and polarization of the device are not violated.
13. During thunderstorms, we recommend unplugging the equipment from your power outlet. It is also recommended to unplug it when not in use.

TROUBLESHOOTING CASES

CASE 1: NO POWER SUPPLY

Should you consider your equipment to malfunction, the troubleshooting cases from below could be your first-aid to get you up and running as soon as possible.

▶ Is your equipment connected to a power supply? If YES, make sure there is power in the outlet. To do so, you can check it with a tester.

▶ Is the **Power switch** 11 ON? If NOT, turn it on.

▶ Can you see the Power indicator's light on top of the **Power switch**? If NOT, check the power in your outlet. If YES, check another case from below "No sound".

▶ Has the fuse burned out? If the Power indicator's light on the front panel does not light up, and you are sure that the AC outlet works, it is possible that you have a blown fuse.

TO REMOVE AND REPLACE THE FUSE

1. Unplug the power cord from the outlet.
2. Remove the fuse compartment with a small screwdriver. It will fully extend.
3. Remove the fuse and replace it with a spare one or an equivalent type of the fuse (220v 4A).
4. Insert the fuse compartment back in its place.
5. Plug in the power cord and turn the Power switch ON.

NOTE

In case the second fuse blows after all these replacement steps, it could mean there is something wrong with the equipment. Contact an authorized service centre in this case.

TROUBLESHOOTING CASES

CASE 2: NO SOUND OR WEAK SOUND

Should you consider your equipment to malfunction, the troubleshooting cases from below could be your first-aid to get you up and running as soon as possible.

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- ▶ **Threshold knob** ⑦ is set to its maximum. Above the value, your signal volume is reduced. If the compressor's threshold is set to its minimum (fully clockwise position), incoming signals will be unaffected. Try this.
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- ▶ **Gain knob** ② and **Output knob** ⑧ set to their minimal value also means no sound. Experiment with the knobs' values.
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- ▶ Is your signal source ON? Check the incoming signal strength with your mixing. If you are using a microphone needing the Phantom power, turn ON the **48 V switch** ④ on the front panel.
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- ▶ In case the **VU Meter** set in the OUT mode displays the maximum value, whereas the Input signal indicator of your interface or mixing desk (the receiver of TPC-I output signal) shows a low/weak signal, check the cord that you apply to connect TPC-I and the interface or mixing desk. The cord should be balanced or unbalanced in accordance with the type of your interface or mixing desk's input. Check relevant specifications if unsure.
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NOTE

If there is still no sound, or you can hear a broken glass sound coming out of the equipment, there could be a problem with its tubes. Tube replacement should be done by an authorized service centre. The replacement of the tubes should be performed **ONLY** when the Power switch is OFF, and no earlier than 20 minutes after the equipment is out of power, due to the equipment's storage capacitors.

Users agree that any selfservice is done at their own risk!

SPECIFICATIONS

Microphone Input Impedance Selectable 500 Ω (ohms) or 2k Ω

Hi-Z Input Impedance 1 M Ω

Maximum Output Level +15 dBu

Internal Output Impedance 120 Ω

Recommended Minimum Load 600 Ω

Frequency Response 20 Hz to 20 kHz +0.5 dB

Maximum Gain +72dB

COMPRESSOR SOFT MODE

Ratio ~ 5:1, soft knee

Attack Time ~ 200 ms

Release Time ~ 2000 ms

COMPRESSOR HARD MODE

Ratio ~ 100:1, soft knee

Attack Time ~ 5 ms

Release Time ~ 1500 ms

Power voltage 230VAC +/-10%

Power Consumption ~ 30 watts

Dimensions 19" W x 3.5" H x 6.7" D

Weight 2.7 kg
