

1-Safety Instructions

1.1- Symbols used



The “CAUTION” symbol indicates a risk of product degradation.



The “WARNING” symbol indicates a risk to the physical integrity of the user and any other person present. The product may also be damaged.



CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

Attention: To reduce the risk of electric shock, do not remove the covers. It is no user-serviceable user-serviceable piece inside. Contact a qualified service technician for maintenance of this unit.



Noise Levels: PA systems are capable of delivering sound level (SPL) harmful to human health. The sound pressure levels are apparently not critical damage your hearing if the person is exposed over a long period. Do not park in the immediate vicinity of loudspeakers in operation.



The symbol lightning-shaped in an equilateral triangle is intended to alert the presence, inside the box, non-insulated parts tensions high enough to constitute a risk of electric shock.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of maintenance or operations in the device documentation.



Risk of Electric shock: To prevent the risk of electric shock, do not use extension cords, making multiple of other connection system without metal parts in contact are completely out of reach.

1.2- Instructions and Recommendations

1- Read the instructions: It is recommended to read all instructions and operating instructions before using the appliance.

2- Retain instructions: It is advisable to keep the instructions and operations later.

3- Consider the warnings: It is advisable to take into account all the warnings and operating instructions for the product.

4- Follow the instructions: It is advisable to follow all operating instructions and use.



5- Water and Moisture: Do not use this unit near water, for example near a bathtub, washbowl, kitchen sink or basin, or in a damp place or near a swimming pool, etc.



6- Facility: Do not place this product on a rolling stand, tripod, bracket or unstable table. The product may fall causing serious injury to a child or an adult and is seriously damaging. Use only a loose belt, a shelf, tripod, bracket, or table recommended by the manufacturer or sold with the apparatus. In all cases to install the device it is advisable to follow the manufacturer's instructions and use tools recommended by the latter. It is strongly advised to move cautiously rolling cabinet when the unit is on. Crashes, excessive thrust and rough surfaces might overthrow all.

7- Mounting on a wall or ceiling: It is recommended that you contact your dealer before any installation.



8- Aeration: The slots and openings in the housing are provided for ventilation. To ensure use of the product with confidence and to avoid overheating, these openings must not be blocked or covered. Beware never block these openings by placing the product on a bed, sofa, rug or other similar surface style. This product should not be placed in such a closed suitcase or rack unless ventilation has been provided or the manufacturer's instructions have been followed.



9- Heat: It is advisable to keep the product away from heat sources such as radiators, the stoves, the heat reflector or other products (and the amplifier) which produce heat.



10- Electric power: This product works only on the voltage indicated on a label on the back of the unit. If you are not sure of the voltage of your electrical installation, consult your dealer or local power company.



11- Protection of electric cables: Must ensure that the cables are not likely to be walked on or pinched by items placed upon or against, paying particular attention to cords at plugs and the point where they exit from the appliance.



12- Cleaning: Unplug the unit before cleaning. Do not use accessories not recommended by the manufacturer. Use a damp cloth on the surface of the device. Do not move the device under water.



13- Period of non-use: Unplug the power cord from your drive if you do not use it for a long time.



14- Penetration of objects or liquids: Never let penetrate any kind of objects into this unit through openings as they may cause fire or electric shock. Never spill any kind of liquid on the product.



15- Damage requiring service: Please contact qualified personnel in the following cases:

- When the power cord or plug is damaged.
- If liquid has been spilled or objects have fallen into the apparatus.
- If the product has been in contact with rain or water.
- If the product does not operate normally by following the instructions.
- If the product has taken a shock



16- Maintenance/revision: Do not try to revise this product yourself, it may expose you to dangerous voltage. Please contact a qualified staff.



17- Operating environment:

- Temperature and humidity of the operating environment: +5° ~ +35°
- Relative humidity below 85% (unobstructed vent)
- Do not install the unit in a poorly ventilated area, or in a place subject to high humidity or direct sunlight (or strong artificial light).

2-Various tips

Output signal

The EQ is a device used to change the volume and structure of a sound signal. This is likely to create distortions harmful to your equipment distribution. Always make sure that the output of your EQ is clear, without distortion, and an acceptable level for downstream devices. Indeed, a simple check of the output volume is not sufficient. A saturated signal, even at an acceptable level, can damage your equipment or create hearing problems.



3-Preparation

3.1-Check the contents of the pack

The package must contain the following:

- The EQ
- The user guide
- 1 power cord

4-General Characteristics

Single 31-band, 1/3-octave constant Q frequency bandwidth inputs/outputs balanced and unbalanced – 19-inch rack.

The EQ is a professional tool for changing the sound level by frequency bands and thus change the look of a sound source, by reducing or increasing parts of the spectrum.

- Single 31-band equalizer, 1/3 octave of 20Hz to 20KHz.
- Adjustable output level: +12/-12dB
- 20mm faders

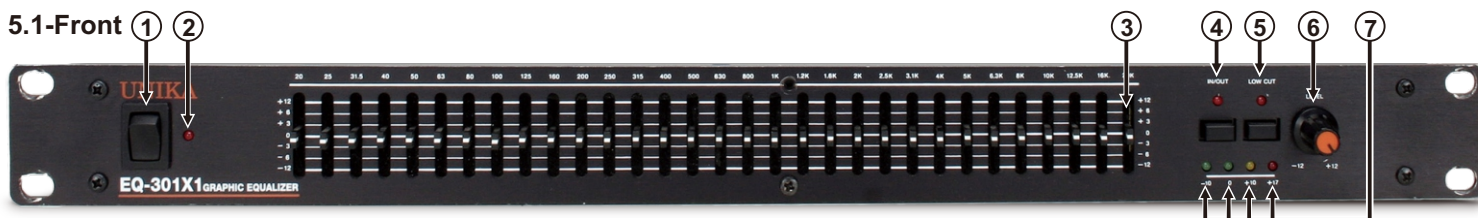
3.2-Installation of the device

- EQ installs on a flat surface or in a rack mount kit provided for this purpose.
- Make sure the unit is installed in a properly ventilated area and where it will not be exposed to direct sunlight, or in excessively high temperatures or high humidity.

- Frequency response: 20Hz~20KHz ± 1 dB
- Frequency-set: ± 12 dB (± 0.5 dB)
- 3dB down @60Hz low-cut filter
- Balanced inputs: XLR, Jack 6.35 TRS
- Unbalanced inputs: RCA
- Balanced outputs: XLR, Jack 6.35 TRS
- Unbalanced outputs: RCA
- Output (REC OUT) Unbalanced RCA (output -10dB)
- Level indicator signal: -10dB, 0dB, +10dB, +17dB
- Low-cut indicator and bypass
- Rack 19", 1U rack space

5-Front and Rear Panels

5.1-Front



- Power button** - This button turns the unit on or off.
- Power indicator** - This LED lights up when the EQ is in working condition.
- Faders frequency setting** - These faders allow you to adjust each frequency with an effective range of ± 12 dB. The value of the frequency is indicated about each fader, and is expressed in Hertz (Hz).
- Key IN/OUT** - This button, once pressed, bypasses the EQ section.

- Low Cut** - This button will activate the low-cut integrated equalizer. This is cut down from 60Hz, with a slope of -3dB.
- Output gain** - This potentiometer controls the gain of the total output of the EQ. This setting is particularly useful to catch the fall or rises in level due to this type of treatment. Adjustment range is -12dB/+12dB.
- Output Level Bar Graph** - These 4 LEDs indicate the output level. Each LED illuminates when the signal reaches the level that corresponds to it. Values are expressed in dB. When +10 and +17 LED indicators light up, the risk of saturation is high.

5.2-Rear



- Jack 6.35 TRS and XLR Inputs** - These connectors are used to receive the input signal and accept balanced and unbalanced signals.
 - XLR: pin1 = Ground; pin2 = Positive signal; pin3 = Negative signal
 - Jack 6.35 TRS: (In parallel with the XLR) Tip = Positive signal; Ring = Negative signal; Body = Ground. The input impedance is greater than 40K Ω .
- Jack 6.35 TRS and XLR Outputs** - These forms are used to output the processed signal and accept balanced and unbalanced signals, the pinout is the same as the input jacks.
- Input RCA** - This entry is formatted RCA (-10dB). It serves to receive the incoming signal.

- Output RCA** - This output format is RCA (-10dB). It can be used simultaneously with the XLR or Jack 6.35.
- Rec Out** - This output format is RCA (-10dB). It can be used simultaneously with the XLR, Jack 6.35 or RCA. Its signal output is identical to the output RCA.
- Fuse** - In case of failure, replace the original fuse by an equivalent in type and characteristics.
- Voltage Selector** - This switch, protected by a cover, you can use the device at mains voltage 220Vac or 110Vac. Always check that the mains voltage corresponds to the voltage selected on the back of the unit.
- General Power** - Power cord before connecting to the mains, always check that the mains voltage corresponds to the voltage selected on the back of the unit.

6-Specifications

Equalization

- Frequency bands: Single 31-band, 1/3-octave of 20Hz to 20KHz.
- Filter types: Linear accuracy of 3%.
- Excursion cursors: 20mm total midpoint
- Ranges: ± 12 dB

Connector Input-Output

- XLR: Symmetric
- Jack 6.35 TRS stereo: Symmetric
- RCA: Asymmetric

Audio features

- Output impedance: Balanced 60 Ω , Unbalanced 30 Ω
- The maximum output level: 5.5V
- Frequency response: 20Hz~20KHz ± 1 dB
- THD + Noise: $< 0.05\%$ @ 0dB, 1KHz
- SNR: Typically > 90 dB
- Channel Separation: > 60 dB

Electrical characteristics

- Supply: Switchable, 110V-120V/60Hz; 220V-240V/50Hz
- Power Consumption: 15W

Other

- Dimensions: 44 x 483 x 171mm
- Weight: 2.2kg