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# ICE X

## 3001
## 3002

# USER GUIDE

REV.0 04/2019

## TECHNICAL SPECIFICATIONS

| PARAMETER | ICE X 3001 | ICE X 3002 |
|---|---|---|
| Total Power 14,4 @ 1 Ohm | 3600 WRMS | - |
| Total Power 14,4 @ 2 Ohms | 2400 WRMS | 3700 WRMS |
| Total Power 14,4 @ 4 Ohms | - | 2300 WRMS |
| Total Power 14,4 Bridged @ 2-4 Ohms | - | - |
| Total Power 12,6 @ 1 Ohm | 3000 WRMS | - |
| Total Power 12,6 @ 2 Ohms | 1800 WRMS | 3000 WRMS |
| Total Power 12,6 @ 4 Ohms | - | 1700 WRMS |
| Total Power 12,6 Bridged @ 2-4 Ohms | - | - |
| Efficiency @ 8 Ohms | - | - |
| Efficiency @ 4 Ohms | - | 84% |
| Efficiency @ 2 Ohms | 82% | 80% |
| Efficiency @ 1 Ohm | 75% | - |
| Input Voltage | 9 - 15V | |
| Input Impedance | 100K Ohms | |
| THD+Noise | 0,10% | |
| Input Sensitivity | 110mV - 8V | 140mV - 8V |
| SNR | 82dB | 86dB |
| Frequency Response (Key OFF) | 5 to 22kHz (-3dBs) | |
| Frequency Response | 20 to 20kHz (-3dBs) | |
| Bass Bosst @ 45Hz | Variable 0 to +18dBs | |
| HPF (High Pass Filter) | 20 to 80Hz @ 12dB/octave Linkwitz-Riley | |
| LPF (Low Pass Filter) | 80 to 20kHz @ 12dB/octave Linkwitz-Riley | |
| Recommended Fuse | 150 A | |
| Current at Rest | 2A | |
| Average Current Draw (Sinusoidal) | 320 A | 315 A |
| Average Current Draw (Music) | 160 A | 155 A |
| Power Wire Gauge (min. Recommended) | 21mm / 4 AWG | |
| Speaker Wire Gauge (min. Recommended) | 2 x 4mm / 2 x 11 AWG | |
| Weight (Lb) | 10,8 | 10,8 |
| Height (in) | 2,4 | 2,4 |
| Width (in) | 10,6 | 10,6 |
| Depth (in) | 12,3 | 12,3 |

*** The amplifier are not supplied with internal fuse. Make sure you install in-line fuse holder from positive terminal of battery.**

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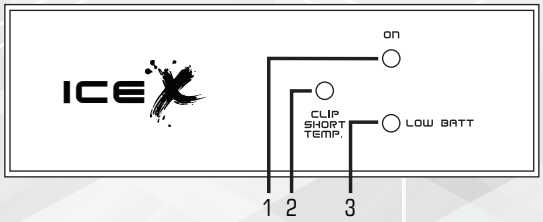
## FRONTAL PANEL AND CROSSOVER KEY

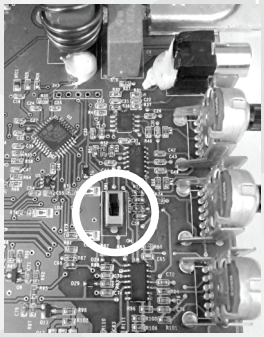
### FRONTAL PANEL

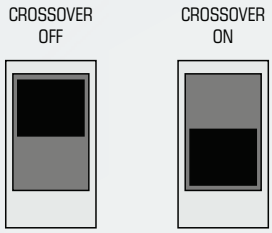



Source and powered amplifier indicator
1. Blue LED: Source and powered amplifier indicator
2. Red LED: output distortion (clipping), shorting and thermal protection indicator
3. Yellow LED: below specified voltage indicator (flashing)

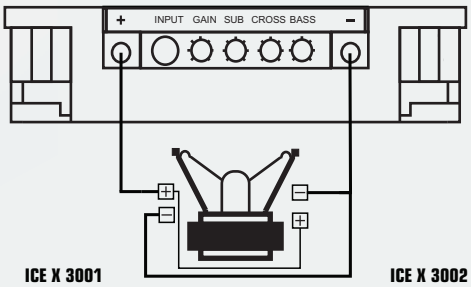
### CROSSOVER KEY

Enables to turn on/off the subsonic, crossover and bass boost settings.
This function, when OFF selected, leaves the product with, only, the setting of signal gain (input sensitivity), making the amplifier totally FLAT (5Hz - 22kHz @ -3dB response)
We recommend the use of this function only to more experience users.
To access this resource, remove the product's cover and select the position of the key, placed close to the indication LEDs.



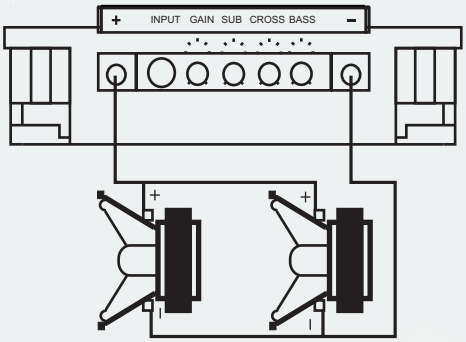




## CONNECTION EXAMPLES




**ICE X 3001**
Woofer or Subwoofer
2+2 Ohms connected in parallel
resulting in
3000Wrms @ 1 Ohm

**ICE X 3002**
Woofer or Subwoofer
4+4 Ohms connected in parallel
resulting in
3000Wrms @ 2 Ohms




**ICE X 3001**
2 Woofers or Subwoofers
2 Ohms 1500Wrms each
connected in parallel
resulting in 3000Wrms 1 Ohm

**ICE X 3002**
2 Woofers or Subwoofers
4 Ohms 1500Wrms each
connected in parallel
resulting in 3000Wrms 2 Ohms

NOTE: these projects are basic, just an example. This device works on multiple types of system, as long as the minimum impedance is respected.

## POSSIBLE PROBLEMS SOLUTION

| Protection system | **Problem** | **Solution** |
|---|---|---|
| Blue and Red LEDs on | The amplifier's temperature has reached its operation limit (approximately 185° F at the external part) | Install the device at an airy place and guarantee that the ventilation system is not obstructed. The amplifier will be operating normally as soon as the temperature cool down. |
| Blue LED on and Red flashing without output audio | Shorting on the audio output or speaker's impedance below the nominal amplifiers impedance | See if there are no shorting on the speakers connecting cables and if there are not any shorting speakers connected to the system or if the speaker's impedance is not lower than the minimum amplifier's impedance. |
| Blue LED on and Red flashing according to the song | Clipping LED indicating that the distortion on the output is over 5% | The system can operate with the clipping LED flashing, but the speakers connected on the output will suffer overheating from the voice coil, due to the distortion by clip. |
| Yellow LED flashing | Amplifiers Input voltage below 9V | Check the charge of the batteries where the amplifier is connected. In addition to that a bad connection on the power cables can also generate voltage drops. Check the voltage on the amplifier's input and batteries output, to verify if the voltage drop is not happening on the cables or connections. |
| Yellow and Red LEDs on | Problem with the amplifier | Send it to our closest authorized assitance. |