



NRG Edison 15 NRG Edison 20 220-240V AC Duplex Outlet

Installation Instructions

EN Important Information

Warning: AC power is potentially hazardous and lethal if electrical shock occurs! Installation of AC wiring and installation of the AudioQuest NRG 15 or 20 AC duplex outlet should be performed by a qualified licensed electrician.

This AC outlet is intended for single phase AC branch circuits ranging from 220 to 240 volts AC, with either a 50 or 60 Hertz sine wave frequency. If the branch circuit uses a 15 amp circuit breaker, it is appropriate to employ the NRG Edison 15. For a 20 amp service, use an NRG Edison 20. The service circuit breaker should be 20 amp rated with *at least* #12 AWG wiring or heavier (lower number) gauge.

Recommendations for dedicated wiring:

The AudioQuest NRG Edison 15 & 20 AC duplex outlet can accommodate up to #8 AWG wiring, although #10 or #12 may have superior properties versus #8 AWG wire in terms of noise dissipation, that is, routing RF noise back to the electrical panel and ground rod-stake. This is due to skin effect at radio frequencies favoring thinner wire gauges, thus making noise reduction more efficient with a thinner wire gauge. This is an important consideration when optimizing your system with a dedicated line, that is, a *discrete* Line, Neutral, and Ground wire that travels back to your primary electrical panel without other AC outlets being daisy-chained or series connected to or from any of these wire leads.

The lower the wire resistance (using heavier wire-cable), the lower the AC impedance that is present at 50-60 Hz. This is an advantage for any power amplifier. However, it is equally true that providing optimal noise dissipation (routing radio frequency noise away from your system's delicate components), is more efficient with *slightly* smaller wire diameters. Whenever possible, solid core electrical grade AC wiring will yield superior results. We find that when a *dedicated AC line* is installed, #10 to #12 AWG wiring is the best compromise regardless of whether the branch circuit is meant for 15 or 20 amp operation.

A dedicated line may not be possible (nor is it *absolutely necessary*), particularly if the installation is in a rented, leased, or temporary space. Even with stock wiring of a 10 or 15 amp service, your system will benefit greatly from the installation of the NRG Edison AC duplex outlet.

Installation Instructions *(for qualified licensed electrician only):*

Warning: AC power is potentially hazardous and lethal if electrical shock occurs! Please leave all installation of AC wiring and installation of the AudioQuest NRG Edison 15 or 20 AC duplex outlet to a qualified licensed electrician.

Note to Licensed Electricians:

We understand you have safely installed thousands of AC outlets within your career as a professional licensed electrician. Please observe (at a minimum) notes **3 through 5 and 14** as these are the instructions that are **unique** to either this specific outlet or this application. The installation will be superior in electrical performance for having done so, and the device will operate more reliably.

1. Shut off the branch service for the chosen outlet to be replaced with the AudioQuest NRG Edison 15 or 20 AC duplex outlet.
2. Remove the existing cover plate and disconnect the existing AC duplex receptacle from the wall's mounting tabs or back box.
3. Loosen the wires from the existing outlet, or, if there is enough wire or service loop (excess wire), cut the wire flush to the existing outlet at all three connection points. The latter method is **preferred** as it will yield fresh un-oxidized or un-marred copper wire leads with which to work. This will yield the *best results* for RF noise dissipation.
4. Trim the Line and Neutral insulation **0.75"** from the AC cable's exposed edge. Trim the ground wire's insulation back **0.25"** from the lead or cable's exposed edge. Use the **#10 Direct-Silver Plated spade lug** that is included with the AudioQuest NRG Edison AC duplex outlet. A standard #10 ring or spade lug crimping tool should be used to connect the exposed 0.25" copper lead with the spade lug's barrel. Make sure the connection is airtight and that the lead cannot move after the lug is crimped over the wire lead.
5. Remove the NRG Edison ground screw adjacent to the green tap. Place the screw through the center-bottom of the "U" section of the spade lug. Place it flat against the silver surface of the ground screw threaded hole, and thread the ground screw with a #2 Philips screwdriver until the spade lug and ground wire are tight and secure.
6. Install the Line lead into any of the two lower "Line" wire holes labeled "Black L." Make certain the fastening screws to the left are fully extended (loose), and that your thumb is applying pressure to it while you thread the 0.75" wire Line lead into the hole.
7. Once the wire is seated fully into the receptacle's wire clamping mechanism, use a #2 Philips screwdriver to secure the lower left Line wire lead securing screw. Secure the screw immediately above it as well.
8. Install the Neutral lead into any of the two lower "Neutral" wire holes labeled "N White." Make certain the fastening screws to the right are fully extended (loose), and that your thumb is applying pressure to it while you thread the 0.75" wire Neutral lead into the hole.
9. Once the wire is seated fully into the receptacle's wire clamping mechanism, use a #2 Philips screwdriver to secure the lower right Neutral wire lead securing screw. Secure the screw immediately above it as well.
10. While holding the outlet by its upper and lower mounting tabs, pull each lead away from its securing screw to establish that it is secure. Apply a little extra tension to each wire screw to assure they are well and permanently seated.
11. Use the clamp-on screw mounts at the top and bottom of the NRG Edison AC duplex outlet to attach to the wall frame or backing box. Make certain it's secure as the clamping force of this outlet is unusually tight, and we would not wish for this wall mount to become loose because of AC cord plugs that must be wiggled from side to side during removal from the outlet.
12. Remove the black Philips screw located in the center of the duplex outlet's front surface.
13. Place the piano black AudioQuest NRG Edison mounting plate over the duplex outlet, and secure with the black Philips screw you previously removed. A #2 Philips screwdriver is best for this operation.

NOTE: These outlets have a VERY tight grip!

14. Take a standard AC cord, and exercise it into the top and bottom outlet 5 to 10 times to help properly seat the spring tension. Note that the outlet will be VERY tight compared with any other AC outlet, even hospital-grade outlets. This clamping strength is necessary to ensure optimum performance and the lowest possible impedance. However, the installation and retraction of AC cords will become a little easier with use. This exercising will not impede performance in any way, and is not required for optimum performance; it is optional.
15. Apply the branch's circuit breaker and ensure with your AC voltmeter that an appropriate AC voltage is present Line to Neutral, and Line to Ground. The appropriate voltage is 220 V AC to 240 V AC, depending on your area.

Important Note for Hong Kong and China:

The North American or Japanese NEMA Edison AC outlet does not follow CCC guidelines for a compliant AC wall outlet and as such, cannot be *necessarily* endorsed for installation by AudioQuest in Hong Kong or China. However, if it were to be installed, the above installation instructions would be the same except that you would require a NEMA type backing box, and the Line wire would be Brown, while the Neutral wire would be Blue.

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ZH 重要讯息

警示： 交流电源有潜在的危險甚至致命！请聘用合格的电工安装 AudioQuest NRG爱迪生 15 或 NRG 20双插座。

这款交流插座适用于从220到240伏50或60赫兹正弦波频率的单相交流电流。如果电源使用15安培的断路器，请采用NRG爱迪生15产品。如果电源使用20安培的断路器，请采用NRG爱迪生20产品。总闸断路器应该使用至少20安培，12AWG或更粗的电源线。请注意线规号码越小电线越粗。

专用布线建议：

AudioQuest NRG爱迪生15或20双插座可连接最大至8AWG的电线，尽管10号或12号在噪音消散上有比8AWG电线更优越的性能。这是由于表面效应在无线射频时较有利于细线。射频噪音通过电线回到电器面板和接地棒，而且，在细线上会更有效率。使用一条正确的专用来线对于优化系统时的一个重要考虑因素。此专线是一条分离的中性地线。它联通到主电气面板，不经过其它交流面板或线路。

线材导体越粗，电阻越小，呈现在50到60Hz交流电的阻抗也就越小。这对任何电源放大器来说都是一个优势。然而，稍微较细线径的芯线能更有效率的消散噪音（使得无线频率噪音远离音响系统的精密配件）。而且，只要有可能，采用实心导体电级的交流线会产生更优质的音响效果。事实证明，当安装专用的交流线路时，不论分流是15amp或20amp的操作系统，10号线至12号线都是最好的折中选择。

如果安装的地方是临时租用的。或者现有的是10或15安培的布线。加装专用线路不太可能实现，使用NRG爱迪生交流双插座 同样会使你的系统获得巨大受益。

安装说明（只针对合格的电工）：

警示： 交流电源有潜在的危險甚至致命！请聘用合格的电工安装 AudioQuest NRG爱迪生15或NRG 20双插座。

合格电工须知：

我们知道在作为一个专业电工的职业生涯中，您已经安全地安装过数以千计的交流电源插座。但是，请至少细读注意事项#3到#5和注意事项#14，这些都是对这个特定的插座或应用的独特说明。正确安装会使系统更优越，运作更为可靠。

1. 关闭替换插座的所在电路的电源开关。
2. 移除现有的盖板并将现有交流双插座自墙面或背箱上断开。
3. 将导线从现有插座松开，或者，如果有足够的线或服务线圈（多余的线），将三个接点的线都裁切至跟现有插座齐平。后者的方法较优选，因新的未氧化或未损坏的铜线能对RF噪音消散产生最好的效果。
4. 将电源相线和中性线的绝缘剥开至0.75”，将地线绝缘剥开至0.25”，AudioQuest NRG爱迪生交流插座配置有10号直镀银Y插。请使用标准的10号环或配置的Y插。使用压接工具将Y插与0.25”的铜引线相连接，确保压接后引线无法移动。
5. 移除邻近绿色标示的接地螺丝。将螺丝通过Y插“U”部份的底部中心，使它平贴于接地螺丝螺牙孔，使用2号十字螺丝刀将螺丝与之锁紧直到Y插和地线锁牢。
6. 将相线安装入任何一个下方标记为“黑色L”的“相性”线孔。紧固螺丝向左完全扩展（松），使用您的拇指用力将0.75”相性线穿入孔内。
7. 一旦导线完全插入插座的夹线机构座，使用2号十字螺丝刀来固定下方左相线螺丝。同时固定上方螺丝。
8. 将中性线安装入任何两根下方标记为“N 白色”的“中性”线孔。确定紧固螺丝向右完全扩展（松），使你的拇指用力将0.75”中性线穿入孔内。
9. 一旦导线完全插入插座的夹线机构座，使用2号十字螺丝刀来固定下方右边中性线螺丝。同时固定上方螺丝。
10. 抓住插座上下两个底架，试拉每条引线确保它是牢固的。检查每根线的螺丝确保它们是连接良好。
11. 用螺丝将NRG爱迪生交流双插座的顶部和底部附在墙壁或背箱上，确保它是安全的。因为该插座的夹紧力异常牢固，插头拔出时必须左右晃动，我们不希望在拔电源插头时插座变得松动。

12. 将双孔插座前面中间处的黑色十字螺丝拿掉。
13. 将钢琴烤漆的AudioQuest的NRG爱迪生面板放在双孔插座上，用你之前去掉的黑色十字螺丝来固定。一个2号十字螺丝是最好的操作工具。

注意：这些插座内夹力很紧。

14. 请拿一个标准的电源线，在插座的上下来回插拔5到10次以帮助适当调试弹力。注意，该插座比其它普通插座，甚至比医疗用插座都要紧。这个夹紧力是保证最佳性能和最低可能阻抗的必须要件。然而，插拔电源插头会使其较松。这阻碍任何性能表现。
15. 开启电源，使用您的交流电表测量相线、中性线和地线。相线到电线的最适电压处在220V AC到240V AC之间。

重要讯息：中国和香港客户

北美和日本的NEMA爱迪生交流插座不需要遵循3C准则，所以AudioQuest对您安装与中国大陆或香港安装不做保证。然而，若您选择安装，安装指令请同上，但您需要NEMA型号底盒，且相线需为棕色，中性线为蓝色。

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