

## eGFX Breakaway Box General Information and Known Issues

### Keeping the Installed Card Cool

With its optimized airflow design and temperature-controlled main fan providing cooling at all times, eGFX Breakaway Box provides adequate cooling for the installed card. *Do not block any of the vents!* Otherwise, the card and Breakaway Box's components may overheat.

### Main Fan and Power Supply Fan Operation

The Breakaway Box's main fan does not operate when the computer to which the box is connected is sleeping or turned off. The Breakaway Box's power supply fan runs whenever the box is powered and switched on, even when disconnected from a computer, or connected to a computer that is off or sleeping.

### Power Indicator LED Operation

The Breakaway Box power indicator LED only turns on when the computer to which the Box is connected is on, and turns off when the computer is sleeping or powered off.

### eGFX Breakaway Box Has Only One Thunderbolt 3 Port

As a requirement for Thunderbolt certification as an external GPU-ready enclosure, the eGFX Breakaway Box was designed with a single Thunderbolt 3 port. Connecting additional devices, especially a Thunderbolt display, could rob critical PCIe bandwidth from a GPU card.

### Not All Computers' Thunderbolt 3 Performance is Equal

While the eGFX Breakaway box features a 40Gbps Thunderbolt 3 interface, some computers equipped with Thunderbolt 3 use an x2 PCIe (2-lane) implementation of Thunderbolt 3 technology that limits PCIe performance to 20Gbps. For more computer information, visit <http://gtrusted.com/technology/thunderbolt/thunderbolt3-hosts/>

### GPU Card Power Requirements

Visit the eGFX Breakaway Box product page on the Sonnet site at [sonnettech.com/product/egfx-breakaway-box.html](http://sonnettech.com/product/egfx-breakaway-box.html) for a power requirement list.

### Replacing a Card After Initial Installation

If you decide to swap the card after the initial setup, shut down the computer, and then disconnect the power cord and Thunderbolt cable from the Breakaway Box before replacing the card.

### PCIe CARDS ARE NOT HOT-PLUGGABLE!

Never install a PCIe card into Breakaway Box while it is connected to a computer or power outlet! If you do, you risk injury, and damage to the card, chassis, and computer.

### Most GPU Cards Will Not Perform at 100%

eGFX Breakaway Box performance is defined by the host system, graphics card, and Thunderbolt bandwidth. While you may not achieve full desktop performance in all applications, you will see a significant graphics performance boost.

### eGFX Breakaway Boxes Provide Upstream Power

The eGFX Breakaway Box is designed to provide 15 watts of upstream power, the eGFX Breakaway Box (Developer Edition) provides 60 watts, and the eGFX Breakaway Box 550 & eGFX Breakaway Box 650 models provide 87 watts of upstream power, useful for charging your notebook.

### Using the eGFX Breakaway Box to Charge Your Notebook or Laptop Computer

Apple® MacBook Pro® computers with Thunderbolt 3 and some Windows laptops with Thunderbolt 3 may be charged via the eGFX Breakaway Box's Thunderbolt 3 port, but some PC laptops will not accept charging from a Thunderbolt peripheral; see <https://gtrusted.com/technology/thunderbolt/thunderbolt3-hosts/> for more information. Computers with Thunderbolt 2 or Thunderbolt ports may not be charged via Thunderbolt.

### How to Identify Thunderbolt 3 (40Gbps) Cables

Look for the Thunderbolt icon (⚡) AND the number 3 on the connector housings to identify these cables. Cables with USB-C connectors that only have the Thunderbolt icon without the number 3 support 20Gbps speeds, and are not recommended for GPU and other PCIe cards with high bandwidth requirements.

### Not All Thunderbolt 3 Cables Deliver Full Performance or Power Delivery Capabilities

Full performance and power delivery capabilities from the eGFX Breakaway Box require the use of the included Thunderbolt 3 (40Gbps) cable (which also supports up to 100W power delivery), or a comparable Thunderbolt 3 (40Gbps) cable. When shopping for a Thunderbolt 3 cable, please be aware that some cables support only lower data transfer speeds (20Gbps) and/or power delivery capabilities (60W).

### Operating System (OS) Updates May Break Compatibility

*Specific device drivers that work under one OS version may not work under a later version. Before updating your computer to the latest OS, we recommend that you contact Sonnet or your PCIe card's manufacturer to verify that the existing drivers work. Note that other software updates for the computer may also break compatibility.*