

External AMD Graphics on macOS High Sierra

Support for external AMD Graphics on macOS High Sierra will be officially beta until spring 2018. *Currently internal video is not accelerated by the external graphics card.* Sonnet has organized what we consider to be the most accurate of the information available in this installation guide. Note that you may not be able to obtain support from Apple or AMD for external graphics under macOS at this time. If you have any issues using any Sonnet product, please contact Sonnet customer service at support@sonnettech.com. Be sure to save and attach a System Report.

Compatible Macs

Check that you have a Macintosh with beta support for external AMD Graphics. All Macs with Thunderbolt 3 are included:

• iMacs	2017 models	18,1–18,3
• MacBook Pro	2016 models	13,1–13,3
	2017 models	14,1–14,3

As of macOS 10.13.2, many Thunderbolt 2 and Thunderbolt Macs work with external AMD graphics. You will also need a [Thunderbolt cable](#) and an [Apple Thunderbolt 3 \(USB-C\) to Thunderbolt 2 Adapter](#). (This Adapter is reversable and will also work from a Thunderbolt 2 Mac to a Thunderbolt 3 peripheral.)

• iMac	Mid 2011 <i>(with AMD Graphics)</i>	12,1–12,2	Not Yet Tested
• iMac	Late 2013-Late 2015 <i>(with Intel or AMD Graphics)</i>	14,1–17,1	√
• iMac	Late 2012-Late 2013 <i>(with NVIDIA Graphics)</i>	13,1–14,2	Incompatible
• Mac mini	Mid 2011–Late 2015 <i>(with Intel Graphics)</i>	5,1– 7,1	√
• Mac mini	Mid 2011 <i>(with AMD HD 6630M Graphics)</i>	5,1– 5,2	Incompatible
• Mac Pro	Late 2013	6,1	Incompatible
• MacBook Pro	Early 2011–Early 2015 <i>(with Intel or AMD Graphics)</i>	8,1–12,1	√
	Mid 2012–Late 2013 <i>(with NVIDIA Graphics)</i>	9,2–11,3	Incompatible

Compatible AMD graphics

Check that you have an AMD Graphics card compatible with macOS High Sierra.

These configurations are plug-and-play compatible with macOS High Sierra 10.13.2.

Breakaway Puck with Radeon RX 570 (but not model with RX 560)

Breakaway Box 350 with Radeon RX 470, 480, 570 or 580

Breakaway Box 350 Developer Edition bundled with Sapphire Radeon PULSE RX 580

Breakaway Box 550 with Radeon RX 470, 480, 570, 580, or Vega 56

Breakaway Box (any edition) upgraded¹ to 650W with Radeon Vega 64 or AMD WX9100

Breakaway Box 350 upgraded² to 650W with Radeon Vega 64 Liquid Cooled

Setup

1. If you have a Breakaway Box, plug the compatible graphics card into the Box, plug the auxillary power connectors to the card, and close the Box.
2. Plug in power to your Breakaway Box or Puck. If your Breakaway Box has a power switch, turn it on. [*Note: The Box or Puck will not turn on until it is connected to an active computer via Thunderbolt 3.*] Connect you Breakaway Box or Puck via Thunderbolt to your computer and boot macOS. Booting may take longer than normal; be patient.
3. Set up your monitor(s). [*Note: Internal/ built-in video is not accelerated by the external graphics card.*]
Set the external monitor as the main monitor to obtain graphics acceleration for games and many other applications. Open **System Preferences:Displays**, select **Arrangement** and drag the menu bar to the external monitor. Drag the monitors to mimic the physical arrangement.
4. Note that the following restrictions:
 - a. External graphics does not accelerate the internal display on iMac or MacBook Pro.
 - b. An AMD external graphics card may not identify itself correctly. The Sapphire RX 580 Pulse 8GB bundled in the Breakaway Box 350 Developer Edition is identified correctly in macOS as "Radeon RX 580". Any other GPUs are identified incorrectly, such as "AMD R9 XXX".
 - c. Mirroring to a display attached the the External Graphics is not yet supported.
 - d. AutoLogin will not work if the External Graphics is attached at the time the system is booted/restarted.
 - e. Hot-plug and un-plug of the External Graphics requires returning to the Login screen.
 - f. A maximum of only four monitors may be connected to External Graphics
 - g. Boot Camp is not supported
5. Please share your experience with the community whether you were successful and which computer and graphics card you were using, by visiting our Breakaway Box blog on our Facebook page at <https://www.facebook.com/SonnetTech/>

Troubleshooting

Graphics Card Is Not Recognized in Breakaway Box

Check whether you plugged in the auxiliary power connector(s) to the top (or sometimes rear) of the external graphics card.

Monitor's Full Resolution Is Not Available

Open **System Preferences:Monitors**. Option-click the **Scaled** button. All the available resolutions should appear.

External Monitor Has Black Screen or Multiple Monitors Fail to Appear

Log out and log in again. If that doesn't work, [reset your NVRAM](#).

¹AMD Radeon Vega 64 (air cooled) or WX9100. Sonnet has Thunderbolt certified the eGFX Breakaway Box models including their power supplies, and we cannot officially recommend changing the power supply. if you must have Vega 64 or WX9100 support now, you can replace the stock power supply in either a Breakaway Box 350 or Breakaway Box 550 with an Enermax ERV650SWT Revolution SFX 650W Plus Gold. If you upgrade to this power supply, Sonnet will honor the warranty for all other covered components.

²AMD Radeon Vega 64 (liquid cooled). This card requires a 650W power supply and a Power Delivery limit of 15W. Sonnet has Thunderbolt certified the eGFX Breakaway Box models including their power supplies, and we cannot officially recommend changing the power supply. if you must have Vega 64 (liquid cooled) support now, you can replace the stock power supply in the Breakaway Box 350 which is programmed for 15W PD (but not the Breakaway Box 550, which is programmed for 87W PD, or not the Breakaway Box 350 Developer Edition which is programmed for 60W PD) with an Enermax ERV650SWT Revolution SFX 650W Plus Gold. If you upgrade to this power supply, Sonnet will honor the warranty for all other covered components.