



G-Technology®

# BARE METAL RECOVERY

ESSENTIAL GUIDE

## **G|RACK™ 12**

High-Performance NAS



# **G|RACK™ 12**

## **Bare Metal Recovery**



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**Safety Notice**

Please read and observe the following precautions to assure personal safety. Improper use can result in hazardous situations.

1. The G-RACK 12 operates normally in the temperature range of 0°C–50°C and relative humidity of 8%–90%. Please make sure the environment is well ventilated.
2. The power cord and devices connected to the G-RACK 12 must provide correct supply voltage (100W, 90–264V). If unsure, please contact the distributor or the local power supply company.
3. Do NOT place the G-RACK 12 in direct sunlight or near chemicals.
4. Unplug the power cord and all the connected cables before cleaning. Wipe the G-RACK 12 with a dry towel. Do NOT use chemical or aerosol to clean the G-RACK 12.
5. Do NOT place any objects on the G-RACK 12 during normal system operations to avoid overheat.
6. Use the flat head screws in the product package to lock the hard disk drives in the G-RACK 12 when installing the hard drives for proper operation.
7. Do NOT place the G-RACK 12 on any uneven surface to avoid falling off and damage.
8. Do NOT expose the G-RACK 12 to dampness, dust, corrosive or any liquids.
9. Do NOT attempt to repair the G-RACK 12 in any occasions. Improper dissemblance of the product may expose you to electric shock or other risks. For any inquiries, please contact the distributor.
10. Do NOT use the G-RACK 12 near water, for example, in a wet basement or near a swimming pool.
11. Do NOT place any object on the power cord. Do NOT locate the G-RACK 12 where it can be stepped on or tripped over.
12. Do NOT install, use, or service the G-RACK 12 during a thunder storm. There is a remote risk of electric shock from lightning.
13. If an extension cord is used with the G-RACK12, make sure that the total ampere rating of the equipment plugged into the extension cord does not exceed the extension cord ampere rating. Also, make sure that the total rating of all products plugged into the wall outlet does not exceed the fuse rating.
14. Do NOT drop the G-RACK 12.
15. Do NOT use the G-RACK 12 outside, and make sure all the connections are indoors.
16. Never push objects of any kind into the G-RACK 12 through the chassis slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock.
17. ONLY qualified service personnel should service or disassemble the G-RACK 12.
18. If the power adapter or cord is damaged, remove it from the power outlet. Do NOT attempt to repair the power adapter or cord. Contact your local vendor to order a new one.

The term “bare metal recovery” comes from the idea that you are restoring a device to working order after a catastrophic failure. While the process will get your G-RACK 12 in working order it does not restore data that was on the drives. For that you will have to run your backup/restore software against the backups you were taking all along.

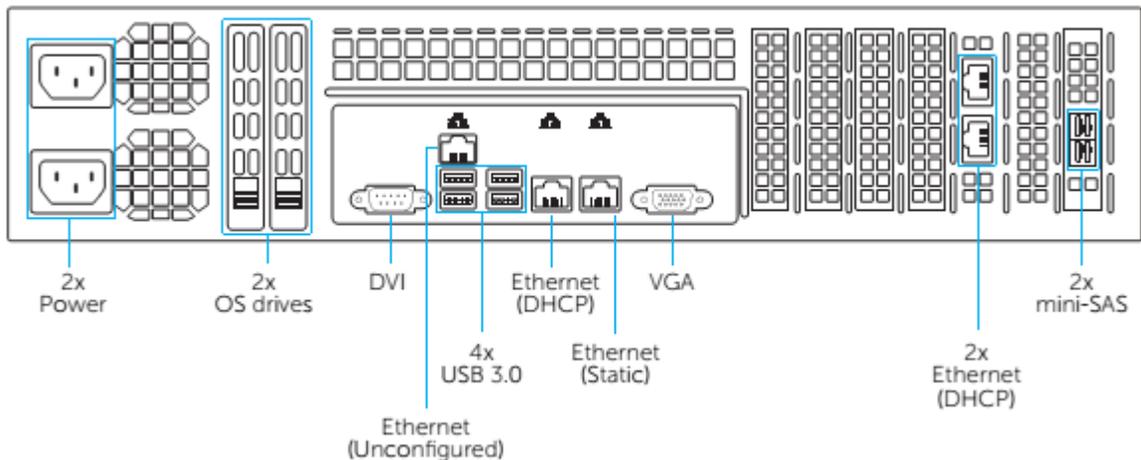
### What you need to get started.

There is a list of items you need to complete this task:

- G-RACK 12 with all the electronic components in place and properly working. This process fails if you do not have the drives in the unit.
- A G-Technology provided USB key with the restoration software pre-loaded.
- USB Keyboard
- Monitor

### Connections

- With the unit powered off attach the keyboard and USB Key to the USB ports on the rear of the unit.
- Attach the monitor to either the VGA or the DVI ports.
- Make sure you have power cords attached to the power supplies
- To aid in the recovery process you should also have the Ethernet cable attached to either the DHCP or Static ports
- DHCP or Static ports



### Powering Up.

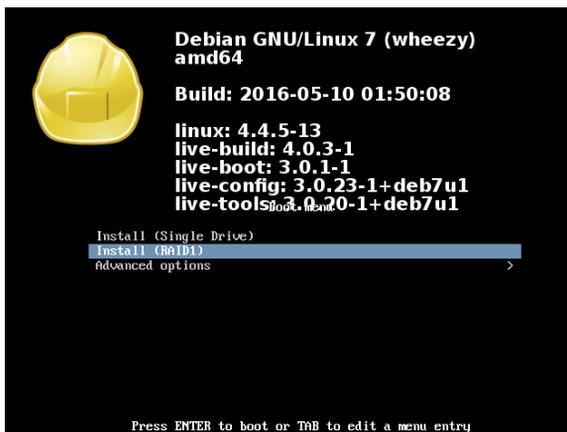
When you first power up the unit look at the monitor for a sign that the USB key is booting the recovery software. If you get no change or you get an error message that you can't boot there is an excellent change the BIOS is not set to boot of the USB key. If this is the case you will need to reboot and enter the BIOS screen. Select USB boot as an option. Save the BIOS configuration and reboot once more.

Once you are configured to boot from USB you will see the OS install process start.

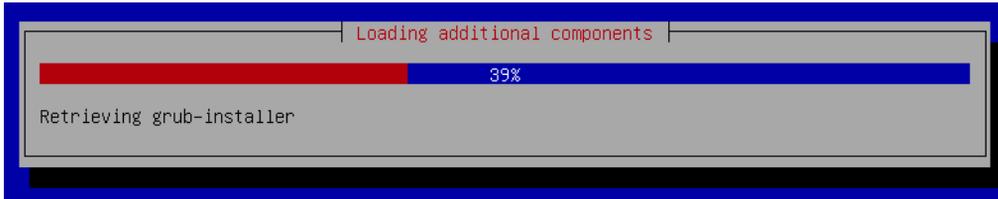
1. The first screen you see should look very much like this:



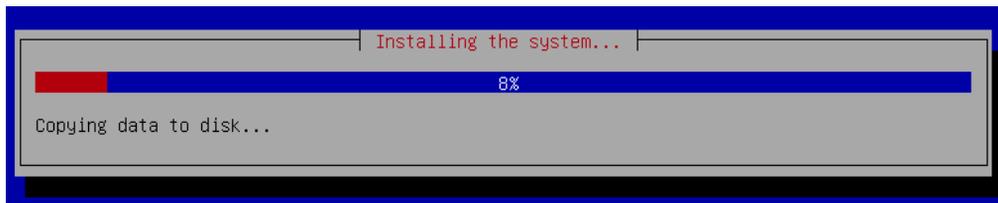
2. Using your keyboard scroll down to the second option "Install (RAID1)" and press Enter.



3. Immediately, the install process starts.



4. As it progresses you will see the update bar change.



5. If you see this screen you have successfully installed the software. The server is ready to reboot. Remove the USB key from the back of the unit and press Enter.



6. You can expect to see messages like the ones below scrolling past the screen as the OS is fully loaded.

```
modprobe: module microcode not found in modules.dep
modprobe: module microcode not found in modules.dep
[   3.941706] microcode: CPU0 update to revision 0x29 failed
[   3.943419] microcode: CPU0 update to revision 0x29 failed
mdadm: /dev/md0 has been started with 2 drives.
Scanning for Btrfs filesystems
INIT: version 2.88 booting
Using makefile-style concurrent boot in runlevel S.
Starting the hotplug events dispatcher: udevd.
Synthesizing the initial hotplug events...done.
```

7. When you get to this screen your restoration is complete. It will be save to remove the USB keyboard and the monitor from the connectors.

```
gtech 2.1.1.29 (G-RACK 12 OS) grack12 tty1
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To manage the system visit the gtech web management
interface via a web browser:

eth0: 192.168.99.100

The default web management interface administrator has
the username 'admin' and password 'gtech'.
It is recommended that you change the password for this account
via the web management interface or using the 'gtech-firstaid'
CLI command.

For more information regarding this appliance, please visit
the web site: http://www.g-technology.com

NOTE: changes made to the system from the console level may not be reflected
in the web admin tool. These changes may also render the system unusable. By
accessing the console you acknowledge and accept these risks.

grack12 login: _
```

8. At this point you can use the Administration software using a web browser. The screen above indicates the IP address you can enter in your URL bar.
9. Normal operation can resume. If you have an available backup of the configuration files and data you can now follow the process in the User's Guide to reload the data on to the G-RACK 12