# CASELABS



**MAGNUM Series Cases** 

**DRAFT COPY: 1-03-12** 

# **Welcome to CaseLabs**

We have been building enclosures for electronic, military, medical, and industrial applications since 1971.

When we needed to build a new workstation for engineering design and image rendering, finding an appropriate case proved to be the most challenging part of the project. They were either too limited to meet our changing needs or required way too much time and effort to set up.

In late 2010, we looked at what was available in the enthusiast case market and felt we could offer something that was significantly more flexible. Our goal was to design a case that was extremely modular and would allow a user to easily tailor the case to their exact needs without the need for difficult and time consuming modifications. The overwhelming majority of cases on the market impose strict design constraints; the choices for mounting hardware and cooling systems are very limited.

We wanted a design where we, as users, were in control, where we could make the design decisions, but we also didn't want to spend hours or days modifying an "open box", fabricating brackets, drilling holes, only to find out that we would need to change the layout again later. It needed to be easy to work on, where we could get in and out without any fuss. How many cases have you seen where the doors and covers are laying off to the side because they're too much of a hassle to keep taking off and on?

We needed something that we could put together quickly and modify quickly when our needs changed, using standard components that we didn't have to design and fabricate. Although we certainly had the resources to do that, it just didn't make sense from a time and cost perspective. There had to be a better way...

... and the M8 and CaseLabs were born.

# **About this Manual**

This manual is designed to help provide an understanding of how unique and flexible the Magnum line is. Although many cases are available: the M8, M10, T10, MH10 and TH10; they are all very similar in design and operation. The only differences are the size and format of the cases. All of the photos showing case function and operation have been shown using a M8. When specifications differ from model to model it will be noted in the text.

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# The Magnum line case features

#### A Modular design

At CaseLabs we believe PC enthusiasts shouldn't have to conform to the "like it or not, this is what you get" case. In today's market of enthusiast PC cases, time and money is spent modifying panels or creating custom parts to make them suitable. We give the user something better, an easy to work with and easy to modify option. We redefine modular so our customers can build a case the way they see fit. With features like CaseLabs' own Flex-Bay System and Accessory Mounting System, users can finally design a truly unique and flexible PC straight out of the box.

#### Case construction and operation

• The front and top covers are held on by metal spring clips attached to each corner. To remove the covers simply lift up on each corner.





 Both doors swing out a full 180 degrees. To remove them, take off the top cover, open the door and lift straight up.











• The motherboard tray is held in place by four self-retaining thumbscrews, and slides straight out of the rear of the case. The tray can also be converted into a mini Tech Station (standard feature on TH10 and MH10 cases – optional on the others).











(Mini Tech Station)

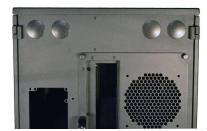
• All the Flex-Bay device mounts, Flex-Bay covers, HDD cages and accessories are held on by supplied thumbscrews.

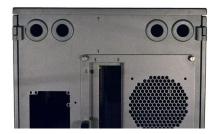


• A dual PSU mounting area is located in the rear of the case.



• There are 1.3" openings at the top rear part of the case. These openings are designed for running water lines (up to 1.00" in diameter) to an external radiator. Rubber grommets are included if this option is to be used. Just push out the plastic caps and replace with the supplied grommets.





• Holes in the center divider have been lined with a rubber edge guard for easy cable management. Specially designed lances have also been created as anchoring points for cable tie downs.



• Lamptron anti-vandal style power and reset switches have been preinstalled in the front of the case. The top switch has a blue LED ring and is the power switch. The bottom switch has a red LED dot representing HHD activity and is the reset. Both switches can also be easily swapped out for custom color applications.



#### The "Flex-Bays"

Imagine the flexibility of a rack-mounted cabinet; the vast array of different devices and configurations that can be utilized is incredible. CaseLabs has adopted this design into a PC case, and created the "Flex-Bays". The Flex-Bay System consists of either 10 or 13 (depending on model) 5.25" bays. Within the Flex-Bays, a wide variety of items can be mounted, such as: optical devices, fans, hard drives, radiators, and more! These devices can all be easily mounted and relocated as needed in the Flex-Bays. A wide variety device mounts are available. All cases come with four sets of standard mounts (MAC-125).

You can view all Flex-Bay device mounts, pictures and descriptions under Accessories, accessory mounts and their locations.







Mounts are attached to the device (MAC-125 shown) and then mounted in the Flex-Bays using locator pins and thumbscrews.



#### **The Accessory Mounting System**

The CaseLabs Accessory Mounting system provides mounting holes along both door perimeters of the case that can be used as mounting points for a wide variety of accessories or you can create your own. In conjunction with the door perimeters the Vertical and Horizontal Accessory mounts feature the same mounting design. Various fan mounts, radiator mounts and accessory mounts can be placed almost anywhere inside the case.







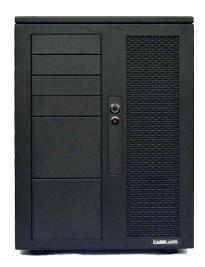




# **Different Models and Specifications**

## The M8:





#### Specifications:

Size: 15"W x 19.06"H x 20.06"D (381mm x 484mm x 510mm)

PCI Slots: 8

Form Factor: mATX - ATX/EATX (12.0" x 10.75") (305mm x 273mm)

Max Radiator Size: 120.3

Radiator Clearance Above the MB Tray: 100mm Radiator Clearance Below the MB Tray: 52mm

Cooling Tower Clearance: 180mm

Flex-Bays (5.25" Bays): 10

HDD Capacity: 12 (24 using Flex-Bays and HDD bays)

Weight: 19 lbs.

Note: Sizes shown are for the case only. Rubber feet add .75" (19mm) to height; optional casters add 2.63" (67mm).

## The M10:





#### **Specifications:**

Size: 15"W x 19.06"H x 20.06"D (381mm x 484mm x 510mm)

PCI Slots: 10

Form Factor: mATX - XL-ATX (13.60" x 10.75") (346mm x 273mm)

Max Radiator Size: 120.3

Radiator Clearance Above the MB Tray: 59mm Radiator Clearance Below the MB Tray: 52mm

Cooling Tower Clearance: 180mm

Flex-Bays (5.25" Bays): 10

HDD Capacity: 12 (24 using Flex-Bays and HDD bays)

Weight: 19 lbs.

Note: Sizes shown are for the case only. Rubber feet add .75" (19mm) to height; optional casters add 2.63" (67mm).

## The T10:





#### **Specifications:**

Size: 15"W x 25.06"H x 20.06"D (381mm x 637mm x 510mm)

PCI Slots: 10

Form Factor: mATX - XL-ATX (13.60" x 10.75") (346mm x 273mm) Max Radiator Size: 120.3 (120.4 may be mounted in the Flex-Bays)

Radiator Clearance Above the MB Tray: 173mm Radiator Clearance Below the MB Tray: 90mm

Cooling Tower Clearance: 180mm

Flex-Bays (5.25" Bays): 13

HDD Capacity: 16 (32 using Flex-Bays and HDD bays)

Weight: 24 lbs.

Note: Sizes shown are for the case only. Rubber feet add .75" (19mm) to height; optional casters add 2.63" (67mm).

## The MH10:





#### Specifications:

Size: 15"W x 19.06"H x 26.06"D (381mm x 484mm x 662mm)

PCI Slots: 10

Form Factor: mATX - HPTX (13.60" x 15.00") (346mm x 381mm)

Max Radiator Size: 120.4

Radiator Clearance Above the MB Tray: 59mm Radiator Clearance Below the MB Tray: 52mm

Cooling Tower Clearance: 180mm

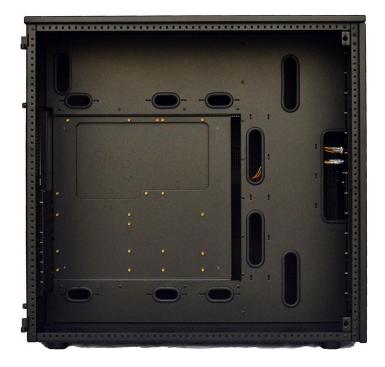
Flex-Bays (5.25" Bays): 10

HDD Capacity: 12 (24 using Flex-Bays and HDD bays)

Weight: 25 lbs.

Note: Sizes shown are for the case only. Rubber feet add .75" (19mm) to height; optional casters add 2.63" (67mm).

## The TH10:





## **Specifications:**

Size: 15"W x 25.06"H x 26.06"D (381mm x 637mm x 662mm)

PCI Slots: 10

Form Factor: mATX - HPTX (13.60" x 15.00") (346mm x 381mm)

Max Radiator Size: 120.4

Radiator Clearance Above the MB Tray: 173mm Radiator Clearance Below the MB Tray: 90mm

Cooling Tower Clearance: 180mm

Flex-Bays (5.25" Bays): 13

HDD Capacity: 16 (32 using Flex-Bays and HDD bays)

Weight: 31 lbs.

Note: Sizes shown are for the case only. Rubber feet add .75" (19mm) to height; optional casters add 2.63"

(67mm).

#### **Reverse Option:**

All cases have the option for a reverse format. The "reverse" option is a mirror image of the standard layout, but with an inverted motherboard.







#### The Pedestals:

As a true testament to extensibility, we have design the ultimate water-cooling accessory... the Pedestal. The CaseLabs Pedestal is an enclosure that mounts under any Magnum case and is capable of a multitude of configurations. Where the Pedestal truly shines is in housing multiple radiators in an area that is thermally isolated from the main enclosure.

Pedestals come standard with three Flex-Bays in the front and the rear can be outfitted with a dual PSU mounting area, two 140mm fan holes or a solid back. The standard Pedestal (for the M8, M10 and T10) can hold two 360 or two 420 radiators, and the extended version (for the TH10 and MH10) can hold either two 480 or two 560 radiators.

#### Standard Pedestal:





**Standard size:** 15.00"W x 8.00"H x 20.06"D (381mm x 203mm x 510mm)

Max Radiator Size: 140.3

#### **Extended Pedestal:**





Extended size: 15.00"W x 8.00"H x 26.06"D (381mm x 203mm x 662mm)

**Max Radiator Size: 140.4** 

Please note: The Pedestals are sold individually and do not include radiator mounts.

## **Rear Pedestal Options:**







Solid Dual PSU Two 140mm fan holes

#### Installation:

- If rubber feet are already installed on the bottom of the case, remove them first before proceeding.
- Place the case on top of the pedestal with the 3 Flex-Bays toward the front.
- Using the 4 supplied mounting screws thread in one screw on each corner at the bottom of the case.



# **Standard Features and Accessories**

#### In the kit:

 Four sets of standard 5.25" Flex-bay device mounts (includes sixteen 6/32 and M3 screws).



• 1 Motherboard door handle. (Installs at the rear PCI panel.)



1 Spare parts kit (6/32 thumb screws, 6/32 hexhead screws, rubber grommets and Tinnerman clips)



Motherboard M3 screws



 4 Rubber feet with mounting hardware (Installs in one of the 4 caster holes in each corner.)



4 Exterior grommets and 10 cable ties



 1 HDD hardware kit (sixteen special 6/32 screws and sixteen rubber shock pads).



 2 Large cable hole plugs (Included only on M8, M10 and MH10)



 1 Tech. Station kit (Standard only on TH10 and MH10, optional on others)



 1 set of cable extensions (Included only on TH10 and MH10 if I/O option selected)



#### Standard items in the case:

- 100% aluminum construction
- Integrated radiator/fan mounts top and bottom





**Bottom** 

Top

 Slide out motherboard tray with PCI cover panel (Hex mesh or fan holes)





 Four 1 unit Flex-bay cover plates, and 2 ("M" series) or 3 ("T" series) 3 unit Flex-bay cover plates.





One PSU cover plate



Three ("M" series) or four ("T" series) standard HDD bay cover plates.



 A set of 8 radiator/fan-hole covers installed top and bottom of the case.



 1 HDD cage assembly, either standard (right) or Flex-Bay mount (left). Please note that the Flexbay mount option deletes 1 of the 3 unit Flexbay cover plates.



 Brass motherboard standoff screws preinstalled in all possible locations.



 Lamptron anti-vandal switches with wiring harness fully sleeved and tested.



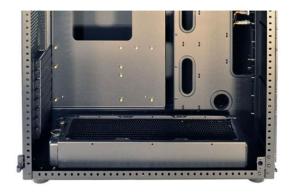
# **Accessories and their Locations**

#### **Radiator Mounts**

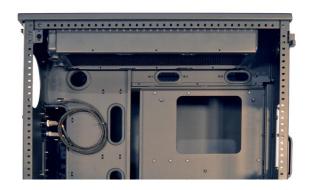
The Magnum line is water cooler's dream, designed for extreme water cooling applications with multiple radiators in multiple locations. Feel free to mount radiators almost anywhere; top and bottom of both the PSU side and the motherboard side, in the Flex-Bays, under extended top covers and even in the CaseLabs Pedestal. These cases and pedestals can hold radiators from a single 120.1 radiator to *dual* 560 radiators! (using the Extended Pedestal) Please note that some radiator positions are mutually exclusive.



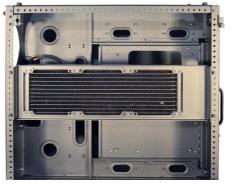
Bottom of PSU Side



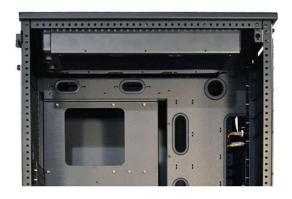
Bottom of Motherboard Side



Top of PSU Side



**Horizontal Mount** 



Top of Motherboard Side



Flex-Bay Mounted

#### Single 120.1 radiator mount:



#### Installation:

- Attach the radiator to the bracket via the 4 predrilled holes on each corner (hardware not included)
- Mount in accessory mounting area.

#### Flex-Bay radiator mounts:



240 Flex-Bay mount (Fits all cases)



360 Flex-Bay mount (Fits all cases)



480 Flex-Bay mount (Fits only the TH10 or T10)

#### *Installation:*

- Remove the grill by removing all screws down both sides of the bracket.
- Mount the radiator to the backside of the bracket. (Radiator and hardware not included)





• Mount fans on the front side of the bracket and/or the backside of the radiator. (fans and hardware not included)



Reinstalled the grill



• Line up the top grommet on the bracket to one of the guide-pins in the Flex-bay and secure in place with thumbscrews.



#### Horizontal/Super radiator mounts:



360 Horizontal Mount (MAC-122) (Fits M8, M10, T10 and standard Pedestal)



480 Horizontal Mount (MAC-155) (Fits TH10, MH10 and Extended Pedestal)



360 Extended Mount (MAC-172) (Fits TH10, MH10 and Extended Pedestal)



420 Horizontal Mount (MAC-156) (Standard Pedestal only)



560 Horizontal Mount (MAC-169) (Extended Pedestal only)



120.9 mount for TH10

120.9 mount for MH10

#### Installation:

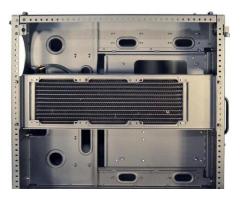
• Mount Radiator to the back side of the bracket. (Radiator and hardware not included)



 Mount fans on the front side of the bracket and/or the backside of the radiator. (fans and hardware not included)



• Secure horizontally in the PSU bay with the supplied thumbscrews



Please note; because the Horizontal mount uses one of The PSU bays, only one per case may be used. On the "M" series cases, it must be mounted in the upper PSU bay. The "T" series cases will also only accommodate one Horizontal mount, but it can be mounted in either the upper or lower bay. On cases with an XL window on the PSU side, standard machine screws are supplied to avoid clearance issues. Pedestals can have up to two horizontal mounts.

#### **Fan Mounts**

When it comes to air cooling, the Magnum line supersedes any PC case on the market. 120mm fans can be placed top and bottom of both chambers of the case. With use of Accessory Mounting System, multiple 120mm fans can be mounted in almost any physical location/orientation inside each chamber.

#### Standard fan mounts:



Flat mount (MAC-114 Fits all cases)



90 degree mount (MAC-157 Fits all cases)



.75" off-set mount (MAC-115 Fits all cases)

#### Installation:

- Mount a 120mm fan via the 4 predrilled holes on each corner. (Fan and hardware not included)
- Place anywhere in the Accessory mounting area or to vertical and horizontal accessory mounts with thumbscrews.

#### **Device bay fan mounts:**



Flex-May mount (MAC-113 Fits all cases)



HDD bay mount (PSU side) (MAC-170 Fits all cases)

#### Installation: Flex-Bay style:

- Remove the grill by removing all screws down both sides of the bracket.
- Mount a 120mm fan to the front of the bracket via the 4 predrilled holes. (Fan and hardware not included.)
   Reinstall grill.
- Line up the top grommet on the bracket to one of the guide-pins in the Flex-bay, and secure with thumbscrews



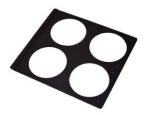
#### Installation: HDD bay style:

- Mount a 120mm fan to the front of the bracket via the 4 predrilled holes. (Fan and hardware not included.)
- Line up each of the 4 anti-vibration grommets with the 4 guide-pins in the HDD bay, and secure with thumbscrews



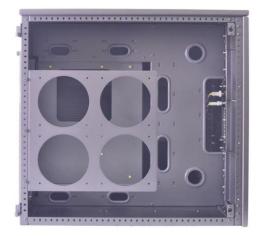
## The Quad mount (MAC-178):

The Quad mount is specifically designed to work with ventilated motherboard doors. Four 120mm fans are designed to be placed in-line with the motherboard and graphics cards to achieve maximum air cooling.



#### Installation:

- Mount 4 120mm fans in each location via the predrilled holes. (Fans and hardware not included)
- Mount on the motherboard side of the Accessory mounting area in front of the door perforations.





#### Note: All radiator mounts can double as fan mounts.

#### **Drive Cages**

Our drive cages are made from all aluminum construction. The standard HDD cage can be rotated 360 degrees in 90 degree increments, and the Flex-bay cage in 180 degree increments. HDD cages can also be purchased without an attach fan mount so that it can be mounted to an already existing device bay fan mount.

#### **HDD** cages:



Standard HDD Cage Assy (MAC-101)



Flex-Bay HDD Cage Assy (MAC-102)



#### Installation:

• Insert the shock pads into key holes







• Line up the screw holes on the hard drive with the sock pads and secure with shock mount screws. Only four screws in the front and rear are needed to hold a hard drive in place.



Mount a 120mm fan in the fan mount on the front of the cage if desired (not included).



• Line up the anti-vibration grommets on the front of the fan mount with the guide pins in one of the drive bays/Flex-bays and secure with thumbscrews





HDD bay Flex-Bay

#### SSD mount:



SSD mount (MAC-124)

#### Installation:

- Place up to 2 SSDs in-between the four 90 degree tabs and secure with supplied screws.
- The SSD mount installs in place of a hard drive.

#### **Accessory Mounts/Plate Attachments**

A wide variety of accessory mounts available makes installing all accessories a breeze. First we offer three sizes of Bottom Accessory Mounts, which are perfect for an extremely sturdy mounting surface for pumps and compression fittings. Plate attachments are another useful option for mounting pumps and reservoirs. Plate attachments can also be used to create a visual barrier, and can be mounted vertically, horizontally or even flat when utilizing our vertical and horizontal accessory mounts. The vertical and horizontal accessory mounts allow for fan mounts and plate attachments to be placed in almost any physical location inside the case.

#### Bottom accessory mounts:



(Single: MAC-128, Double: MAC-129 and Triple: MAC-130

#### Single bottom mount with cable/tubing management:



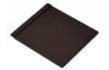
#### Installation:

Remove one or more fan-hole covers at the top or bottom of the case, and replace with mount



**Triple mount shown** 

#### Plate attachments:



Small Plate Attachment (MAC-116)



Small .75" Off-Set Plate Attachment (MAC-117)

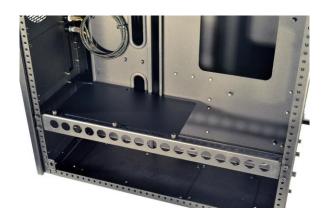


Large Plate Attachment (MAC-118)



Large .75" Off-Set Plate Attachment (MAC-119)

• Mount anywhere in the Accessory mounting area or on the vertical and horizontal accessory mounts with thumbscrews.



#### Vertical and horizontal accessory mounts:



Horizontal accessory mount (MAC-111: Fits M8, M10 and T10 only)



XL Horizontal accessory mount (MAC-154: Fits TH10 and MH10 only)



HD Horizontal accessory mount (Heavier gauge aluminum and C-channel design fits TH10 and MH10 only)



Vertical accessory mount (MAC-111: Fits M8, M10 and MH10 only)



XL Vertical accessory mount (MAC-152: Fits TH10 and T10 only)



HD Horizontal accessory mount: .125" aluminum and C-channel design fits TH10 and MH10 only)





#### **Flex-Bay Device Mounts**

Flex-Bay device mounts are what allow devices to mount in the Flex-Bays. Any 5.25" device will fit in the Flex-Bays.



Standard Device Mount (MAC-125)



Short Device Mount (MAC-158)



HD device Mount (2U) (MAC-159)



Short HD Device Mount (2U) (MAC-127)



Anti-Vibration Device Mount (MAC-126)



Short HD Anti-vibration Mount

#### **Doors and Top Covers**

Doors and top covers can be purchased at any time to accommodate changes in aesthetics and build design. Doors are available in solid, ventilated and various window options. Top covers are available in solid, standard ventilated, 64mm extended ventilated and 85mm extended ventilated.







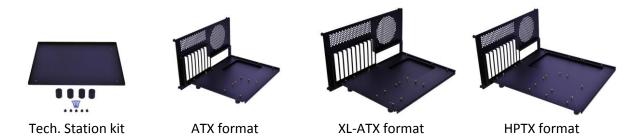
Standard top

64mm extended top

85mm extended top

#### **Tech Station Kits**

We understand when it's time for really tuning a computer, working inside the case is not an easy task. Our removable MB tray can be converted into a mini Tech Station to make life easier when testing or benchmarking your system. The backplate can also be used as added support for long heavy graphics cards and water blocks. MAC-103 for the M8 and MAC-104 for the M10/T10 (The TH10 and MH10 come standard with this option.)



#### Installation:

- Remove the motherboard tray.
- If not already installed place the motherboard back plate on the backside of the motherboard tray.
- Be sure all screw holes are aligned and install the rubber feet with the supplied 1" 6/32 screws on each corner, and one hex-head screw in the center hole.



Replace rubber feet with supplied 6/32 hex-head screws when inserting the Motherboard tray back into the
case.

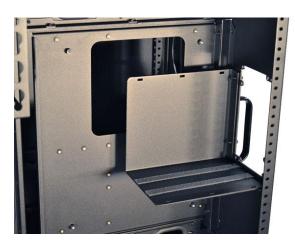
## **PSU** support bracket

The PSU support bracket was designed to help reduce strain on the mounting threads of long & heavy power supplies. Not required, but can be helpful on 1000+ watt PSU's. Foam tape is included to help reduce vibration.



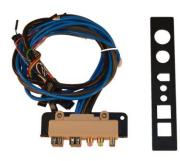
#### Installation:

- Place the supplied foam tape on the bottom of the bracket
- Line up the threaded holes on the side of the bracket with the holes beside the PSU mounting location at the rear of the case. Secure with supplied thumbscrews.



## I/O panel kit

The front mount I/O switch panel provides easy access for USB 2.0, Firewire and audio devices to be connected in the front of the case.





#### Installation:

- Disconnect leads from the motherboard
- Remove the front cover
- Remove the four screws securing the switch bracket and remove bracket
- Install I/O panel with the USB ports down
- Remove both switches
- Remove the two flange nuts top and bottom of the bracket
- Replace solid switch plate with new I/O switch plate
- Install switches
- Install flange nuts
- Reinstall switch bracket

#### **Ventilated Bay cover**



Fills one Flex-bay slot and can be used for ventilation or aesthetics.

#### **Casters**

Set of four casters with mounting hardware. These casters are rated at 75lbs each, and have wheel locks



## 3.5" Bay Adapter

This is an adapter to mount a 3.5" bay device (I/O panel, card reader, etc.) into a Flex-Bay.



#### **Silverstone PSU Spacer**

This is a spacer to correct a design problem with Silverstone 1500W PSU's. Because they use a nonstandard AC connecter, they cannot be mounted in cases with universal PSU mounts (able to rotate the PSU 180 degrees).



# **Ordering parts and accessories**

Please visit our website, <u>www.Caselab-Store.com</u>, to purchase cases and accessories. Also check out our newsletter for the latest news, info and products.

# **Caring for your case**

For general light cleaning, we recommend using a soft cotton cloth with any normal household cleaner (solvent free) for dust and other light debris. For heavier debris and light scratches in the powder coat use an automotive carnauba cleaner wax. The windows should only be cleaned with a clean microfiber cloth and either a Plexiglass cleaner or an ammonia free window cleaner.

# **Customer Support and Return Policy**

#### **Returns Policy:**

You may return most new, unopened items within 30 days of delivery for a full refund (excluding custom orders). We'll also pay the return shipping costs if the return is a result of our error (you received an incorrect or defective item, etc.). Undamaged open items may be subject to 10% restocking fee.

You should expect to receive your refund within four weeks of giving your package to the return shipper, however, in many cases you will receive a refund more quickly. This time period includes the transit time for us to receive your return from the shipper (5 to 10 business days), the time it takes us to process your return once we receive it (3 to 5 business days), and the time it takes your bank to process our refund request (5 to 10 business days).

If you need to return an item, simply login to your account, view the order using the "Complete Orders" link under the My Account menu and click the Return Item(s) button. We'll notify you via e-mail of your refund once we've received and processed the returned item.

#### **Shipping:**

We can ship to virtually any address in the world. Note that there are restrictions on some products, and some products cannot be shipped to international destinations.

When you place an order, we will estimate shipping and delivery dates for you based on the availability of your items and the shipping options you choose. Depending on the shipping provider you choose, shipping date estimates may appear on the shipping quotes page.

Please also note that the shipping rates for many items we sell are based on "dimensional weight" and rather than actual weight.