

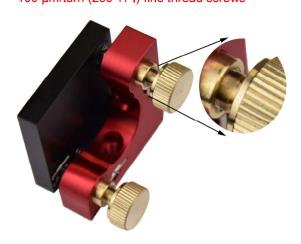
We, Radiant Dyes Laser Accessories GmbH, produce **high-quality** opto-mechanical components in our own manufacturing centre. The screws are made in **single-part production** and are **aligned to the nuts.** This guarantees that the screws **do not scratch** or **bounce** and they can **turn smoothly without jerking.**

We offer a **wide range of front plates** for the various mirror mounts from closed up to two inch and for special applications for optics up to six inch.

Due to the fact that we produce everything in our own factory, we are able to manufacture also custom-made products.

Our **high-quality and stable** optomechanical components will help you to build up successful experiments.

100 µm/turn (250 TPI) fine thread screws



Options for all Mirror Mounts

Colors

All mirror mounts are available in six colors to signalize different optical beams:

Red Black Gold Silver Violet Orange

The standard color is red. Other colors on request



Custom designed Optomechanics





You design it - We manufacture it!

Customized optomechanics:

- From 2 inch up to 20 inch diameter
- From aluminum to ceramic
- From red to black
- Spherical or cylindrical lenses
- Rectangular or round filter

Customized Prism Mounts

Customized Breadboards

Customized Posts & Pedestals

For further questions please feel free to contact us.

Operational Safety

For optimal operational safety all optomechanical components are also available with a sandblasted surface.



MIKRO

These mirror holders are manufactured of a special steel. They allow the assembly of a rigid resonator in a very small housing.

MRO-UL

Front plate 20 x 15 mm

MRO-ST-TR

- Beam splitter and trans adjustment
- Front plate 20 x 15 mm
- With 10 mm notch

Other versions on request.



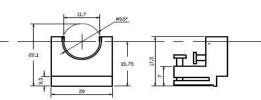












MNI



The **MNI** mount is a very compact mirror mount which is ideal for application with low space. It can be used for optics up to one inch.

Features:

- Small stable mirror mount
- Open or closed back plate
- Different front plates available
- M4 thread
- #8-32 thread available on request

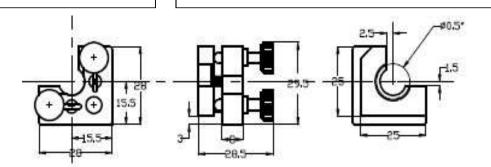
Screw Options:

Fine thread screws Model 1:

with 150 μm/turn (170 TPI) with 100 μm/turn (250 TPI)

Micrometer screws:





Mirror Mounts

Back plates



Front plates



The order number of the desired MNI mirror mount consists of the number of the back plate including the quantity of the screws and the number of the chosen front plate.

100 µm/turn (250 TPI) fine thread screws



MNI-HS



The **MNI-HS** is the high stable version of the MNI mirror mount. The MNI-HS can be used for applications where a high stability is necessary.

Features:

- Small high stable mirror mount
- 4 springs
- Open or closed back plate
- Different front plates available
- Stainless steel insert for stabilization
- M4 thread
- #8-32 thread available on request

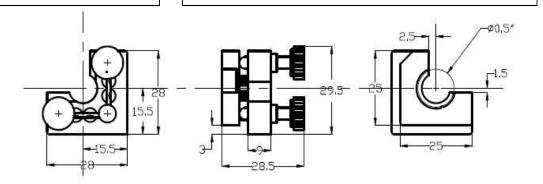
Screw Options:

Fine thread screws Model 1:

with 150 μ m/turn (170 TPI) with 100 μ m/turn (250 TPI)

Micrometer screws:





Back plates



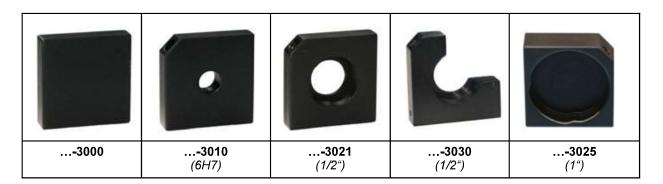




MNI-HS-2G-...

Due to strong spring forces we offer the MNI-H only with two alignment screws. If a third screw should be necessary, we recommend the screw as hexagon socket for easier alignment.

Front plates



The order number of the desired MNI-HS mirror holder consists of the number of the back plate including quantity of the screws and the number of the chosen front plate.

MNI-H-U

- Extra small mirror mount
- 4 strong springs
- High-precision screws with hexagon socket
- with M4 inner lowering
- Option: with locking device

MNI-H-U-2-3030 MNI-H-U-3-3030



MDI



The **MDI** is our most popular mirror mount. The mount is available with different front plates (from closed up to two inch) and two or three screws. It is our standard mirror mount which can be used for most applications in the laboratory.

Features:

- Stable mirror mount
- Open or closed back plate
- Different front plates available
- M6 thread with M4 inner
- lowering (standard)
- M4 or M8 thread available on request
- #8-32 or #1/4-20 thread available on request

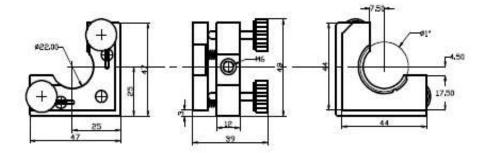
Screw Options:

Fine thread screws Model 4:

with 250 μm/turn (100 TPI) with 150 μm/turn (170 TPI) with 100 μm/turn (250 TPI)

Micrometer screws:





MDI-HS







The **MDI-HS** is the high stable version of the MDI mirror mount. The MDI-HS can be used for applications where a high stability is necessary.

Features:

- High stable mirror mount
- 4 springs
- Stainless steel insert for stabilization
- Thicker open back plate
- Different front plates available
- M6 thread with M4 inner
- lowering (standard)
- M4 thread available on request
- #8-32 or #1/4-20 thread available on request

Screw Options:

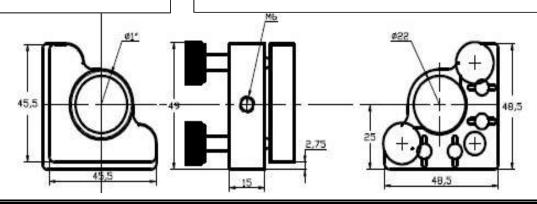
• Fine thread screws Model 4:

with 250 μm/turn (100 TPI) with 150 μm/turn (170 TPI) with 100 μm/turn (250 TPI)

Micrometer screws:

with **500** μm/turn with **250** μm/turn with **100** μm/turn





Back plates MDI



The order number of the desired MDI mirror mount consists of the number of the back plate including quantity of the screws and the number of the chosen front plate.

Back plates MDI-HS



Due to strong spring forces we offer the MDI-HS only with two alignment screws. If a third screw should be necessary, we recommend the screw as hexagon socket for easier alignment.

MDI-HS-2-...

The order number of the desired MDI-HS mirror mount consists of the number of the back plate including quantity of the screws and the number of the chosen front plate.

100 μm/turn (250 TPI) fine thread screws

Front plates



MDI-H



Features:

- High stable mirror mount
- Standard MDI-H with axial mounting ring for distortion free wavefront
- 4 springs
- Stainless steel insert for stabilization
- Thicker open back plate
- Thicker front plate
- Different front plates available
- M6 thread with M4 inner lowering (standard)
- M4 thread available on request
- #8-32 or #1/4-20 thread available on request

The **MDI-H** is the most stable mirror mount in our product range. The optics are fixed by a retaining ring instead of a set screw.

The order number of the desired MDI-H mirror mount consists of the number of the back plate including quantity of the screws and the number of the chosen front plate.

Screw Options:

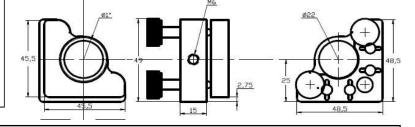
Fine thread screws Model 4:

with 250 μm/turn (100 TPI) with 150 μm/turn (170 TPI) with 100 μm/turn (250 TPI)

Micrometer screws:

500 μm/turn (**50** TPI) **250** μm/turn (**100** TPI) **100** μm/turn (**250** TPI)





Back plates



MDI-H-2-...

Due to strong spring forces we offer the MDI-H only with two alignment screws. If a third screw should be necessary, we recommend the screw as hexagon socket for easier alignment.

Front plates



E-MDI

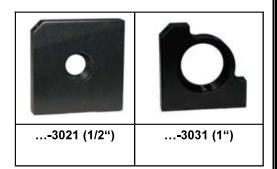


E-MDI

The **Easy MDI** is a low cost version of the MDI mirror mount. But the Easy MDI also guarantees a precise and repeatable adjustment for one inch optics.

Features:

- Precisely adjustable
- Low price
- Available with following front plates



The difference to the original MDI:

- no carbide spikes
- smaller back plate
- without thread but with lowering for M4 screws
- only available with 2 screws with 250 μm/turn (100 TPI)

Stainless Steel mirror mounts

MNI-HSS

As special option for ultimate stability we offer the **MNI-HSS**. The back plate, the front plate and the screws are made of stainless steel.

This mirror mount guarantees high thermal and highest dimensional stability.

- Thick back plate and thick front of special stainless steel
- 4 strong springs
- Equipped with two stainless steel or brass fine thread screws with 150 μm/turn (170 TPI) thread
- M4 thread (standard)
- #8-32 thread available on request



MDI-HSS

As special option for ultimate stability we offer the **MDI-HSS**. The back plate, the front plate and the screws are made of stainless steel.

This mirror mount guarantees high thermal and highest dimensional stability.

- Thick back plate and thick front of special stainless steel
- 4 strong springs
- Equipped with two stainless steel or brass fine thread screws with 150 μm/turn (170 TPI) or 250 μm/turn (100 TPI) thread
- M6 thread with M4 inner lowering (standard)
- M4 thread available on request
- #8-32 or #1/4-20 thread available on request



Stainless Steel & Ceramic mirror mounts

MXI-HSS

As special option for ultimate stability we offer the **MXI-HSS**. The back plate, the front plate and the screws are made of stainless steel.

This mirror mount guarantees high thermal and highest dimensional stability.

- Thick back plate and thick front of special stainless steel
- 4 strong springs
- Equipped with two stainless steel or brass fine thread screws with 150 μm/turn (170 TPI) thread or 250 μm/ turn (100 TPI) thread
- M6 thread with M4 inner lowering (standard)
- M4 thread available on request
- #8-32 or #1/4-20 thread available on request



MDI-HC

For ultimate thermal stability we offer the **MDI-HC**. The back plate and the front plate are made of ceramic. This mirror mount is available with brass or stainless steel screws.

- Thick back plate and thick front plate of ceramic
- 4 strong springs
- Equipped with two brass or stainless steel fine thread screws with 150 μm/turn (170 TPI) thread or 250 μm/ turn (100 TPI) thread
- Inner lowering for M4 screws



MXI



The **MXI** mirror mount is our standard mount for two inch optics. Due four strong springs this mount is high stable.

Features:

- High stable mirror mount
- 4 springs
- Thicker back plate
- Different front plates available
- M6 thread with M4 inner
- lowering (standard)
- M4 thread available on request
- #8-32 or #1/4-20 thread available on request

Screw Options:

Fine thread screws Model 5:

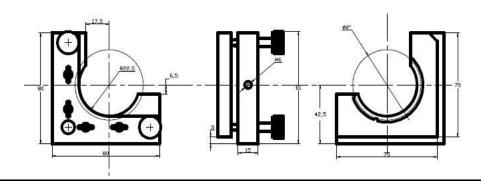
with 250 μm/turn (100 TPI) with 150 μm/turn (170 TPI) with 100 μm/turn (250 TPI)

Micrometer screws:

500 μm/turn (50 TPI) 250 μm/turn (100 TPI) 100 μm/turn (250 TPI)



The order number of the desired MXI mirror mount consists of the number of the back plate including quantity of the screws and the number of the chosen front-plate.



Mirror Mounts

Back plates



Front plates



MXI-HS-C



The **MXI-HS-C** is the high stable version of the MXI mirror mount. This mount is more compact than our MXI mount.

M6 thread with M4 inner lowering

Only availabe with following front plates:

- ...-3030 (1,5")
- ...-3030 (2")
- ...-3027 (2")

RD1



The RD1 is a small stable mirror mount with an integrated base.

Features:

- Very stable mirror mount
- Available in "right hand" and "left hand"
- Different front plates available
- With M6 thread (standard)
- M4 and M8 thread are also available
- #8-32 or #1/4-20 thread available on request

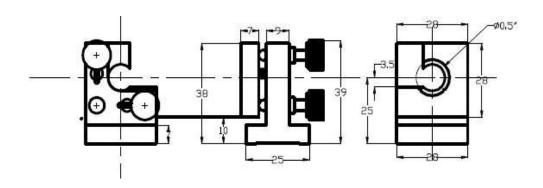
Screw Options:

Fine thread screws Model 2:

with 150 μm/turn (170 TPI) with 100 μm/turn (250 TPI)

Micrometer screws:





Back plates



Front plates



The order number of the desired RD1 mirror mount consists of the number of the back plate including quantity of the screws and the number of the chosen front-plate.

RD1-HS



The **RD1-HS** is the high stable version of the RD1 mirror mount. The RD1-HS can be used for applications where a high stability is necessary.

Features:

- High stable mirror mount
- Available as "right hand" and "left hand" version
- 4 springs
- Stainless steel insert for stabilization
- Different front plates available
- With M6 thread (standard)
- M4 and M8 thread are also available
- #8-32 or #1/4-20 thread available on request

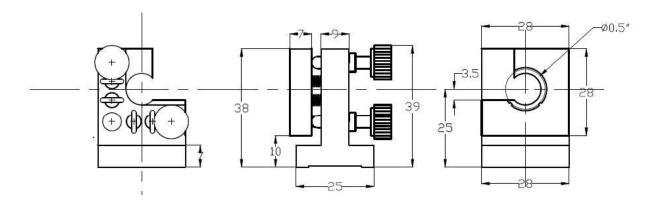
Screw Options:

Fine thread screws Model 2:

with 150 μm/turn (170 TPI) with 100 μm/turn (250 TPI)

Micrometer screws:





Back plates







RD1-HS-R2-40...

Due to strong spring forces we offer the RD1-HS only with two alignment screws. If a third screw should be necessary we recommend the screw as hexagon socket for easier alignment.

Front plates



The order number of the desired RD1-HS mirror mount consists of the number of the back plate including quantity of the screws and the number of the chosen front-plate.

RD2



The **RD2** is a stable mirror mount with an integrated base. It can be used for optics up to two inch.

Features:

- Very stable mirror mount
- Available as "right hand" and "left hand" version.
- Different front plates available
- With M8 thread (standard)
- M6 thread is also available
- #1/4-20 thread available on request

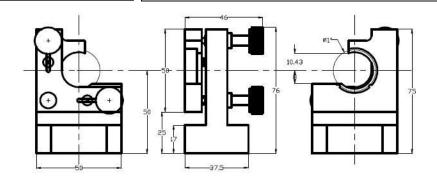
Screw Options:

Fine thread screws Model 5:

with 250 $\mu m/turn$ (100 TPI) with 150 $\mu m/turn$ (170 TPI) with 100 $\mu m/turn$ (250 TPI)

Micrometer screws:





RD2-HS



The **RD2-HS** is the high stable version of the RD2 mirror mount. The RD2-HS can be used for applications where a high stability is necessary.

Features:

- High stable mirror mount
- Available as "right hand" and "left hand" version
- 4 springs
- Stainless steel insert for stabilization
- Different front plates available
- With M8 thread (standard)
- M6 thread is also available
- #1/4-20 thread available on request

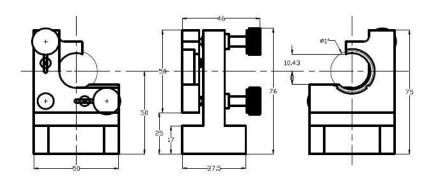
Screw Options:

Fine thread screws Model 5:

with 250 μm/turn with 150 μm/turn (170 TPI) with 100 μm/turn (250 TPI)

Micrometer screws:





Mirror Mounts

Back plates RD2



The order number of the desired RD2 mirror mount consists of the number of the back plate including quantity of the screws and the number of the chosen front plate.

Back plates RD2-HS



The order number of the desired RD2-HS mirror mount consists of the number of the back plate including quantity of the screws and the number of the chosen front plate.

Front plates



...**-D(own)** (1") ...-RM (Rotation Mount)

RD-VO



RD-VO-2-3030 (1") RD-VO-2-3025 (1") RD-VO-2-3027 (2")

These mirror holders can be used from top, allow a smooth and very precise adjustment without the danger to reach into the beam path. The translation of the rotary motion through a ball facilitate a resolution of 0.125 mm per turn.

Because of their robust construction the mirror holder can be built into resonators without any problems.

Available in the following versions:

- RD-VO-1-... One fine thread screw
- RD-VO-2-... Two fine thread screws
- For 1/2, one or two inch optics
- four different front plates





MNI-VO

- For 1/2" optical devices
- Ideal for fitting into small spaces
- Hysteresis free
- 170 TPI fine thread screws
- M4.5 adjusters
- Mounting hole M6
- 2 strong springs
- Available with 1/2" closed front plate



MNI-HS-VO

- For 1/2" optical devices
- Ideal for fitting into small spaces
- Hysteresis free
- 170 TPI fine thread screws
- M4.5 adjusters
- Mounting hole M6
- 4 strong springs
- Available with 1/2" closed front plate



MDI-HS-VO-R/L

- For 1" optical devices
- Left

 and right-handed
- Ideal for fitting into small spaces
- Hysteresis free
- 170 TPI fine thread screws
- M4.5 adjusters
- Mounting hole M6
- 4 strong springs
- Available with all front plates of our MDI/MDI-HS Series



Fine Adjustment

The *Fine Adjustment* mirror mounts do not have the quality of the Radiant Dyes Mirror mounts. The screws of these mounts have a standard pitch of 170 TPI but they are made in serial production and are not aligned to the nut.





Venus Series

- 170 TPI fine thread screws made of brass
- M4 inner lowering
- Low price
- · Available with following front plates
- Part. No. = Venus-2-(name of front plate)







1/2" open

1/2" closed

closed

Earth Series

- 170 TPI fine thread screws made of brass
- M6 inner lowering
- Low price
- Available with following front plates
- Part. No. = Earth-2-(name of front plate)







1" open

1" closed

closed

Gimbal Mirror Mounts

SK-FGS

Features:

- Gimbal Mount
- 2 brass screws with 0.25 mm pitch is standard
- Option: with 150 µm fine thread screws
- On request micrometer screws with 0.25 mm or 0.5 mm pitch or stainless steel fine thread screws are available.

SK- FGS-1
Cardanic mirror mount for 1" optics
SK-FGS-0.5
0,5" inserts for cardanic mirror mount





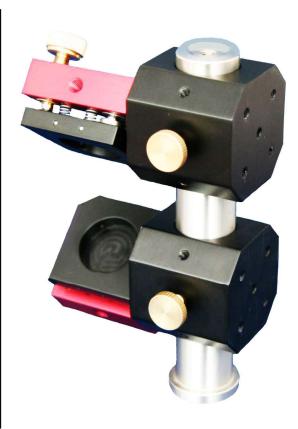
Beam Height Adjustment Unit VSHW

This system offers the possibility to adjust the beam height over a broad range and to turn the beam direction at the same time continuously around an angle of 90° - 270°. It is possible to carry out a specific adaptation of the polarization direction, because with a change of the angle a turn of the polarization is combined.

The installation sheet consists of different scanning and fastening possibilities.

VSHW includes:

- Two mirror mounts (you can chose between MDI or MDI-HS) with two fine thread screws and adapters
- Stainless Steel Pedestal (Standard length 200 mm, on request up to 300 mm)
- Holding Fork
- Option: with 150 µm fine thread screws
- On request stainless steel fine thread screws are available.



Flip Mounts





Our Flip Mount allows the user to flip an optic out of the beam path and back again without any realignment.

With M4 thread

The Flip Mount is available in one and two inch (1" and 2").

Magnet Plates

The stable, repeatable and better option to flip mounts. 2 plates with 3 point bases fixed by a magnet.

RD-MP

With M4 thread



Magnet Plates for Prism Turn Tables

Repeatable, demountable option for Prism Turn Tables with magnets.

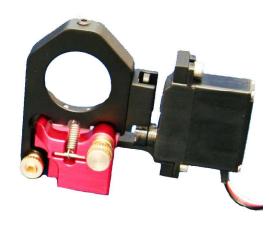
RD-MP-PDT-S for RD-PDT-S for RD-PDT-B





Flip Mount Motorized





Left-handed (standard)

right-handed

Both Flip Mounts (1" and 2") are also available as motorized version.

RD-KLS-1"-M(otorized)
RD-KLS-2"-M(otorized)

Option: Motor left or right handed

Flip Mount Controller

Position control is realized by Atmel RISC processor ATmega8 and standard servomechanism (servo) used in automation. RS-232C interface is used to control position and speed of the servo, connected to a mirror mount. Alternatively, the position can be controlled manually by switch. All parameters are stored in EEPROM memory and can be controlled by the user. LabVIEW sample driver is included. Depending on HW/SW versions concurrent control of one or two servos is possible.





Adapters for Optomechanics

Cube Holders









- Cube Holders
- Can be mounted on mirror mounts with an intake of 0,5 inch or 1 inch

For 0,5 inch intakes and cubes up to 0,5 inch

RD-CH-05-05

For 1 inch intakes and cubes up to 0,5 inch

RD-CH-1-05

For 1 inch intakes and cubes up to 22 mm

RD-CH-1-22

For 1 inch intakes and cubes up to 1 inch

RD-CH-1-1





90° Adapter

- 90° Adapters for mirror mounts
- For optics 0,5 inch or 1 inch
- Intakes 0,5 inch or 1 inch

For 0,5 inch intakes and 0,5 inch optics

RD-90°M-05-05

For 1 inch intakes and 0,5 inch optics

RD-90°M-1-05

For 1 inch intakes and 1 inch optics

RD-90°M-1-1



