

Accessories recommendations

NOVOFLEX offers the apochromatic and digitally corrected lens head SCHNEIDER Apo-Digitar 4.5 / 90 mm (F) from Schneider Kreuznach, order code: PRO-APO-DIGI 90 optimized for the CASTBAL-PRO bellows. This lens head comes premounted on the necessary lens board. No extra adapter is required. The PRO-APO-DIGI 90 allows adjustment to infinity with all cameras. The setting for 35 mm cameras ranges from infinity to 0,8x enlargement.

For rough and fine presetting of the distance to the subject we recommend the stable professional focusing rack CASTEL XQ II.

PRO-APO-DIGI 90 with hood SON 40,5



CASTEL XQ II

Information

For more information, advice and tips concerning our products contact your photo dealer, the distributor of NOVOFLEX products in your country (have a look at the "Where to buy" section at our website to find your distributor) or visit our website www.novoflex.com

For personal advice about possible accessories which is suitable for your NOVOFLEX product please contact the following phone number or send us an E-mail.

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Bellows attachment
CASTBAL-PRO

USER MANUAL



Product description

The bellows attachment CASTBAL-PRO is mounted on the stepping motor controlled focusing rack CASTEL-MICRO and between camera and lens. The bellows increases the distance to the sensor plane. The lens can be brought closer to the subject and this can be displayed on a larger scale.

The fixed front standard allows for a constant distance to the subject and thus a uniform perspective, while the back standard (camera) is automatically being moved by the CASTEL-MICRO's sliding block.

Here, a larger number of shots is taken at different focus distances. The plane of greatest sharpness thus moves from shot to shot through the picture. In post the stacking software combines the multiple images taken at different focus distances to give a resulting image with a greater depth of field than any of the individual source images.



Manual lens

Canon EOS*:	* (see below)
Canon FD:	PROLEI and LEICAN
Contax/Yashica:	PROLEI and LEICONT
C-Mount:	PROLEI and LEICE
COPAL-0 flat:	PROCOPAL-oF
COPAL-0 recessed:	PROCOPAL-0
Hasselblad V:	PROHA
Leica M39:	PROLEI
Leica R:	PROLEI and LEI-F
Leica M:	PROLEI and LEI-M
M42x1:	PROLEI and LEICO
Mamiya 645:	PROMAM
MicroFourThirds:	* (see below)
Mikroskop-Objektive:	PROLEI and LEIMIK
Minolta MD/MC:	PROLEI and LEIMIN
Nikon G**:	PROLEI and LEINIK NT
Olympus OM:	PROLEI and LEIOM
Pentax 67:	PROPENT
Pentax K:	PROLEI and LEIPENT
Sony Alpha / Minolta AF**:	PROLEI and LEIMIN-AF NT
Sony E-Mount:	* (see below)

| Adapter

Adapter for BALUNI- and CASTBAL T/S rings:	UNIPRO
Shift-Adapter:	PROshift+

* The following adapter combination converts the CASTBAL-PRO-bellows into

a fullfledged Canon EOS-automatic bellows:
EOS-RETRO | RETRO/PRO | PRO/RETRO

a full-fledged MFT-automatic bellows:
MFT-RETRO | RETRO/PRO | PRO/RETRO

a full-fledged Sony E-Mount-automatic bellows:
NEX-RETRO | RETRO/PRO | PRO/RETRO

** Adapter with built-in aperture control.

NOVOFLEX Adapter rings

Camera

CANON EOS*:
 CANON EOS M:
 CANON EOS R:
 FOURTHIRDS:
 FUJI G:
 FUJI X:
 HASSELBLAD V-SYSTEM:
 HASSELBLAD X-SYSTEM:
 LEICA M (Live View):
 MAMIYA 645:
 MICROFOURTHIRDS:
 NIKON F:
 NIKON Z:
 PENTAX K/SIGMA:
 PENTAX 645:
 SAMSUNG NX:
 SONY ALPHA/MINOLTA AF:
 SONY NEX/E-MOUNT:

Adapter

| CANA-AF and APRO or PROshift+
 | EOSM/A and APRO or PROshift+
 | EOSRA and APRO or PROshift+
 | OMA-DIGI and APRO or PROshift+
 | FUGPRO
 | FUXA-K and APRO or PROshift+
 | HAPRO
 | HAXPRO
 | LEMA-K and APRO or PROshift+
 | MAMPRO
 | MFTA and APRO or PROshift+
 | NIKA and APRO or PROshift+
 | NIKZA and APRO or PROshift+
 | PENTA and APRO or PROshift+
 | TAXPRO
 | NXA and APRO or PROshift+
 | MINA-AF and APRO or PROshift+
 | NEXA-K and APRO or PROshift+



Result of a stack of 20 shots at f-stop 5.6, magnification approx. 1:2, step length 0.8 mm, full-frame camera with bellows attachment CASTBAL-PRO and Apo-Digitar 4.5 / 90mm lens.

Nomenclature

1	Front standard
2	Fixing screw adapter ring lens 2x
3	Fixing screw adapter ring camera 2x
4	Back standard
5	Fixing screw
6	Sliding block of the CASTEL-MICRO
7	Clamping screw front standard
8	Adapter ring APRO and camera adapter



Mounting on the CASTEL-MICRO

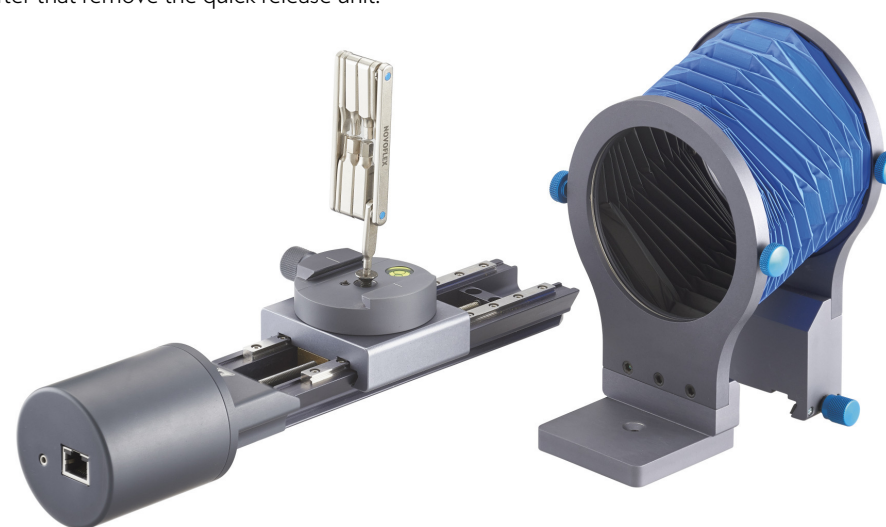
In order to fix the back standard of the bellows attachment on the sliding block of the CASTEL-MICRO, the quick release unit of the focusing rack has to be disassembled first.

First move the sliding block to a middle position of the rack and switch off the device.

Remove all cable connections.

Use a 3mm hex key to unscrew the fixing screw (5) counterclockwise.

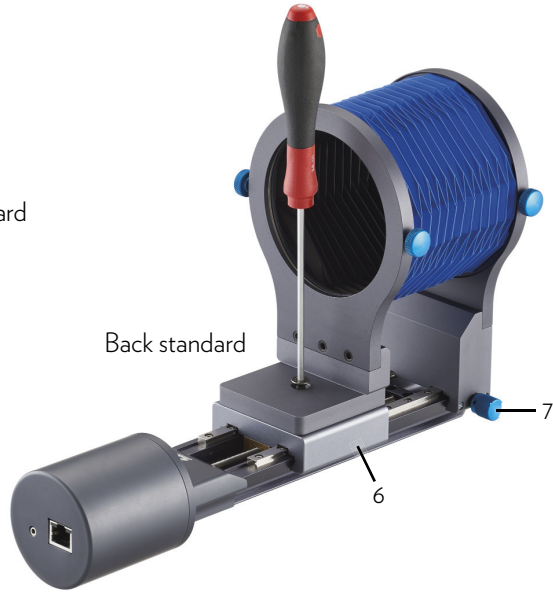
After that remove the quick release unit.





Now insert the front standard into the guide profile of the rack (pictured left). To do this, open the clamping screw (7) and slide the standard onto the focusing rack until it sits flush with the end of the rail and/or touches the two silver miniature guideways on the inner side.

Fix this position by tightening the front standard clamping screw (7).



The back standard must now be connected to the sliding block (6) of the CASTEL-MICRO (pictured right).

To do this, use the previously unscrewed fixing screw (5) of the quick release unit, insert it into the back standard's drilling hole and tighten the screw with a 3mm hex key.

Operation

By means of the appropriate adapter, the front standard can now be connected to the lens and the back standard to the camera. Once the cable connections have been made, the electronically controlled CASTEL-MICRO focusing rack is ready for use.



Attention: When using the focusing rack in combination with the bellows attachment **CASTBAL-PRO**, **only the Bellows Mode** must be used for control!

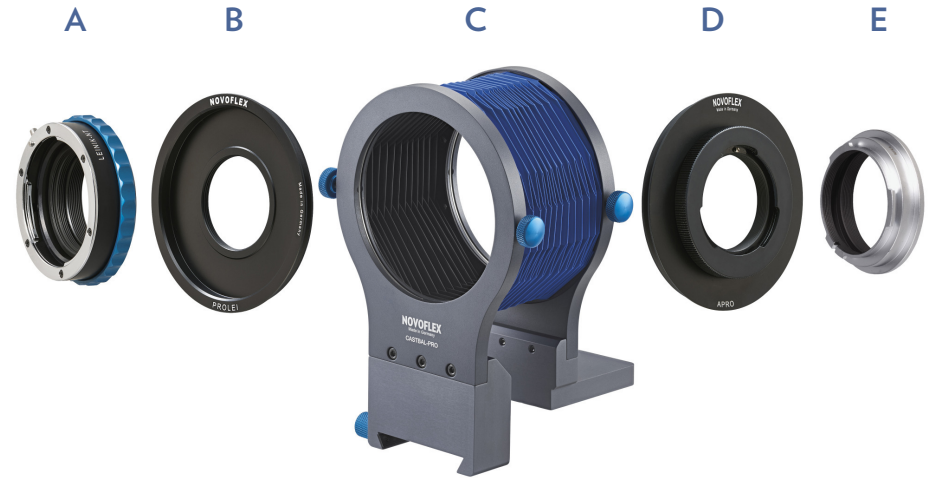
In this mode the max. travel of the sliding block is limited, so that the front standard can not be pushed from the rail by the rear standard.

NOVOFLEX Adapter System

Thanks to a complete adapter ring system (see table page 6-7) almost every combination of different lenses and camera systems is possible. This allows you to combine not only most medium format lenses but also almost all mechanical 35mm lenses or special lenses with camera housings of any size.

Attach the matching adapters to the lens or the camera (screw thread or bayonet lock).

Now insert the adapter rings into the bellows and lock them with the fixing screws (2) on the lens standard and with the fixing screws (3) on the camera standard.



A: Lens adapter

B: Intermediate adapter for lens connection - M39 thread

C: Bellows

E: Camera adapter

D: Intermediate adapter for camera connection **APRO** or alternatively **PROshift+** (see left)



PROshift+

For some medium format cameras and digital backs direct connections are available too.

ATTENTION:

Check the tight fit of the adapters before connecting your camera/lens.

