

BAADER CANON-ASTRO-UPGRADE



Conversion of a Canon DSLR camera with Baader ACF and BCF filters

1. Prices

Prices listed on our website for available ACF filters do not include installation costs. The price for the ACF filter no. 2459212 (EOS 350D/20D/10D), for example, is EUR 85.00, and the BCF filter no. 2459213 (EOS 40D/50D/400D/450D/1000D) costs € 65.00. VAT (19%) is included, but not the installation cost.

Provided that the installation is not hampered by more serious difficulties than the usual ones, and provided that the camera's filter fixture is not bent, broken or otherwise damaged as a result of previous installation attempts, please add the following installation costs to the price of the filter:

# 9002126	EOS 40 D and 450 D / Astro-Upgrade w. Baader-Filter:	€ 395.00
# 9002120	EOS 300 D and 350 D / Astro-Upgrade w. Baader-Filter:	€ 215.00
# 9002121	EOS 20 D / Astro-Upgrade w. Baader-Filter:	€ 225.00
# 9002123	EOS 10 D / Astro-Upgrade w. Baader-Filter:	€ 245.00
# 9002122	EOS 5 D and 30 D / Astro-Upgrade w. Baader-Filter:	€ 255.00
# 9002125	EOS 400 D, 450 D and 1000 D / Astro-Upgrade w. Baader-Filter:	€ 255.00

Forwarding expenses: shipment and insurance within Germany € 15.00; UPS shipment plus full insurance against damage, loss & theft to other destinations within the EU € 35.00; shipment, insurance plus customs documents to non-EU destinations € 60.00 (see item 3 below).

2. Procedure

- Please send your **order**, stating the camera type and your full address, by email.
- You will immediately receive a **confirmation** of receipt, which also indicates when you can expect us to start working on your camera. Your order is added to our **waiting list** which is processed according to incoming date.
- As soon as it is your camera's "turn", you will receive a **prepayment notification**, including the request to send in your camera at your own cost. **Do not send your camera before you have received our prepayment request!** We trust that you understand our prepayment policy and would like you to know that even longstanding Baader clients are expected to pay in advance so that processing according to incoming date remains consistent. As soon as we have received your payment and the camera, we start the replacement work.
- After about 2-3 weeks the replacement is done and your camera is returned to you, fully insured, by UPS.
- **Orders from countries outside the European Union are handled differently. See number 3 below.**

3. Procedure / Orders from outside the EU

The **ONLY** means of shipment from countries outside the European Union is by UPS and your camera will be collected by UPS at our discretion. Items listed on your prepayment request include: *filter change, depending on filter type; *the filter itself; *UPS shipment from your address to our company; *return shipment after filter replacement; *import and export documents (€ 25.00).

To avoid problems with insurance and customs, **NO OTHER FORM OF SHIPMENT CAN BE ACCEPTED.** Thank you for understanding.

4. Inspection upon receipt of camera

We reserve the right to reject a modification order if on first inspection it transpires that the camera has been opened before and/or treated inexpertly or that the camera is damaged on the outside or inside (e.g. the filter's fixture is bent) or if there is malfunctioning due to damaged hardware or software.

If you want to send us an older camera that has already been opened by other service providers we recommend that you let us know **BEFOREHAND** so that we can discuss possible extra costs which may arise from an increased amount of work involved. We do not repair defect cameras or change their software. The charge for the inspection upon receipt is € 25.00. If the modification can be done this amount is seen as part of the Astro-Upgrade w. Baader-Filter cost listed above. If the replacement cannot be done because of any of the reasons above, the camera will be returned to you in exactly the same condition as we received it. Your prepayment request will be for a total of € 50.00 for the initial inspection as well as return shipping and insurance. For shipment to countries outside the EU please add € 25.00 for customs documents.

Please take note that we are not liable in any way for any defects or malfunctioning that you might identify after a camera which we did not accept for modification has been returned to you. Those are the defects which we noted during the inspection and they are the very reason why we declined modification of the camera. Please do not send us a camera for modification if you are aware of technical problems or faulty software. You can save yourself and us a lot of trouble and correspondence.

Of course you are always welcome to buy the ACF filter and have the modification done by another service provider. If, on the other hand, you have bought the ACF filter elsewhere and would like us to do the conversion, please add € 30.00 to the appropriate conversion charge listed above.

5. Sending in your camera

Please remember to send the front lens with camera models 10D and 5D (that is, all cameras without the EFS bayonet) so that proper white-balancing can be done! For EFS models 300D / 350D / 20D, etc. only send the camera body. Always include the battery, disconnected from the camera and wrapped separately.

6. Expiry of manufacturer warranty

In principle the rule is that the warranty of the manufacturer (in this case Canon) expires when an alteration of such magnitude is carried out on the camera. Therefore modification orders can only be accepted if both parties are aware of this fact.

7. Daylight photography

Astrophotography has top priority in the design of our new ACF filters. We did, however, take the needs of daylight photography into consideration as far as possible. With a modified camera the reproduction of colour (white balance) is adaptable to very high levels in daylight photography, but not each and every theoretically existing shade of colour can be reproduced. In everyday photography this does not matter, and only in rare cases could it happen that shades differ slightly. Colour moiré structures are not entirely suppressed as the softening AA filter was removed. This is preferable for astrophotography because the AA filter causes a slight loss of depth. Without colour moiré suppression linear structures like a chequered shirt may show traces of colour borders in daylight photography.

8. Time needed for conversion

The waiting time for modification depends on the number of earlier orders and currently is about two to **six** weeks. Orders are strictly processed according to incoming date. Please do not send your camera before you have received our prepayment request.

9. Our guarantee

We guarantee a flawless, proper and professional modification of your camera into an ACF camera – as long as a fully functional CANON EOS was delivered to us, without hidden software defects or internal mechanical damage. We cannot vouch for the complete absence of dust inside the camera or on the chip. Our optical workshop cleans the chip and filter while exposed to ionized air flows in order to avoid static charging. Remaining dust grains may be removed from the image with the usual technique of flatfielding.

Our company has been in existence for more than forty years now. You can rest assured that we do our work conscientiously and to the very best of our knowledge so that a flawless ACF Astro DSLR camera will be returned to you in exchange for the flawless camera you sent in.

Legal notice: The brand names CANON and Canon EOS are the property of Canon Inc. This text and all its wording are our intellectual property and subject to copyright. All rights reserved. We explicitly prohibit the reproduction and reuse of any of the above content and information by other providers. If necessary, we reserve the right to take legal action.

10. FAQs: some frequently asked questions, answered in brief:

- **Will the conversion affect the position of the focal plane?** *The ACF replacement filter has exactly the same effective optical thickness as the original AA filter. During the conversion process the focus is calibrated to the best of our ability.*
- **Will the conversion affect the auto-focus function?** *Not to our knowledge.*
- **What will the total conversion cost be (excluding my forwarding expenses to you)?** *It depends on your camera type. Take the cost of the ACF filter in question (e.g. EUR 85.00 for the 350D), add the labour cost for the conversion (e.g. EUR 185.00 for an EOS 20D) plus postage & insurance (typically EUR 35.00 within Europe).*

- **How long will it be until I have my camera back?** *That depends on the number of cameras waiting for our attention. Our services are very much in demand and we have to ask you to wait for our prepayment request before you send in your camera. We will return it to you after 4-5 weeks (excluding shipment time). Please do not worry if you do not receive a payment request straight away when you have informed us about your decision to have your camera transformed into an H-alpha-sensitive Deep Sky imager. Your order, however, will be confirmed and fed into the system immediately, and as soon as it is your camera's turn your payment request is on its way – the waiting time is up to four weeks at present. If it continues to increase we will consider expanding our capacity.*
- **Do you recommend any other adjustments to the camera (while you are busy with it)?** *No - we only do the filter conversion and adjustments which are directly related to that. We do not offer software upgrades, repair services or cleaning services (other than cleaning the filter and chip to the best of our ability - see the pdf file on our website).*
- **When do I pay?** *Payment is strictly in advance. For fairness' sake we do not run a dual system of billing some customers in advance and others after the job is done. Instead we decided to process orders by date. After confirming receipt of your order we will send the prepayment request only when we are ready to proceed with your camera because we want neither your payment nor your camera to gather dust.*
- **Do you accept bank transfers via internet?** *We gladly accept transfers via internet banking facilities as long as you cover ALL fees and charges. Please understand that we expect to see the full amount, as invoiced, in our account before we proceed with your order. Our IBAN and BIC codes appear on our prepayment request.*
- **To which address should I send my camera?**

For shipments from within the European Union to our company address below:

Company:	BAADER PLANETARIUM GmbH
Contact:	Angelika Hauser
Street:	Zur Sternwarte
Zip Code:	82291
City:	Mammendorf
Country:	Germany

VERY IMPORTANT: the ONLY means of shipment from countries outside the European Union is by UPS and your camera will be collected by UPS as directed by us! Items listed on your prepayment request include: *filter change, depending on filter type; *the filter itself; *UPS shipment from your address to our company; *return shipment after filter replacement.

To avoid problems with insurance and customs, NO OTHER FORM OF SHIPMENT CAN BE ACCEPTED.

- **NEW: Why do you now offer a filter for the 400D?**

The demand for a filter solution for the 400D has increased tremendously. We developed a new 400D BCF filter mainly because we managed to fully retain the function of the Piezo actuator / dust remover.

With our new 400D BCF filter the astro-conversion of the Canon 400D body is very easy as only the rigid part of the filter needs to be exchanged. All the Piezo mechanisms remain untouched!

The 400D BCF filter is plane-optically polished to a thickness tolerance of just +/- 1/100 of a millimetre.

Mechanical thickness is matched to comply with the effective optical thickness of the original Canon filter, but otherwise it is slightly different, taking the different diffraction indexes of the Canon filter and the Baader substrate into account.

High demands are made on proper antireflection coatings to allow highest optical throughput and to prevent internal reflections. The BCF filter has the best VBBAR coating available today.

Take care when applying the BCF substrate! It has to be applied very delicately, just a few hundredth of a millimetre more than 0.5 mm.



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