HeinrichsWeikamp

Manual

Engineering office HeinrichsWeikamp GbR
Adlerstr. 7
79098 Freiburg
Germany
www.heinrichsweikamp.com
info@heinrichsweikamp.com

Manual for Digital Adapter Mk. II

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Welcome

Thank you for purchasing a *Digital Adapter 2*. Please read the manual to understand the features and options of the converter.

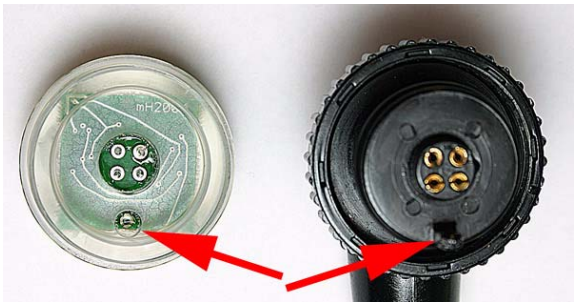
Important:

Your Digital Adapter 2 is already pre-configured for all common compact digital cameras. Most of the users won't need to change any setting at all and can start taking pictures!

Installation

Connect *Digital Adapter 2* and your strobe as shown, match the markings on connector and Digital Adapter 2 and insert connector as usual. Tighten screw carefully. Through the transparent housing you can see if the O-Ring is in place. :

Nikonos-Version



Sea&Sea-Version

- Insert connector only if strobe is set to OFF
- Disconnect only after the strobe is powered off. When using a dual sync cord both strobes must be set to Off.
- Avoid unnecessary opening of the connection in humid environments (e.g. on a live aboard)
- Do regularly maintaince on the O-Ring with the appropriate grease.

The *Digital Adapter 2* has to be installed outside of your UW camera housing. The internal flash has to shine on the Digital Adapter 2. Due to the plenty different housings on the market, we can only give some guidelines on installing the Digital Adapter 2:

-Solid: What ever you do, think about the harsh environment e.g. on a crowded RIB with much grounds well

-When using the *Digital Adapter 2* in the pre-configured „recorded-TTL“ mode it is not required that the Digital Adapter 2 is right in front of the internal flash.

-Cover the internal flash with tape or use an infrared filter to avoid backscatter on your exposures.

-Secure the cable additionally at the housing

-The photo detector is on the backside of the PCB but scattered light is enough to trigger the unit reliable.

-You'll find mounting examples for different housings in the „Gallery“ on the homepage

Digital Adapter 2 mounted on an Olympus PT-015 housing

Configuration

Your *Digital Adapter 2* has several options to configure. For a better understanding of the different modes we recommend to read the explanations on the homepage, section „Manual“. In most cases you’ll not need to change anything. The Digital Adapter 2 is pre-configured for TTL use with compact digital cameras. The default setting („1-1-1-1-1-1“) will work very well with common pre-flash cameras like Olympus, Canon or Nikon.

Settings will be made using the supplied magnet. The current settings will be displayed using low-power flashes of the attached strobe.

Position of magnet for configuration

-Connect your strobe
-hold magnet in place as shown above
-Turn on strobe. The strobe has to be set to TTL or (if a manual strobe is used) to the lowest manual power setting

A few seconds later, the attached strobe will fire two low-power TTL flashes with a 0,3sec. intervall. The configuration mode is now selected and the magnet has to be removed. **Do not turn off the strobe during the configuration process.**

After the double flash the current setting will be displayed using low-power TTL flashes with an interval of approx. 1sec. With the help of the magnet the settings can be increased, the current setting will roll-over to 1 if the maximum setting is reached. Hold magnet near to the reed contact. The changed setting will be displayed with the low-power flashes again. You can only increase the current setting if the display procedure is finished, that means no flash for more >1sec was fired. After several seconds of idle time the Digital Adapter 2 changes into the next menu using a fast double flash. You can change the settings of the next menus in the same way. After menu 5, a double-flash shows you that all settings were successfully saved. Turn off the strobe now and turn it on after some seconds again to use your new settings.

The following option are selectable

Menu	Name	Max.	Default	Description
1	Ignore preflashes (Only for „Normal-TTL“)	4	1	1=no preflash will be ignored 2=1 preflash will be ignored 3=2 preflashes will be ignored 4=3 preflashes will be ignored
2	Mode	4	1	1=Recorded-TTL 2=Normal-TTL 3= Digicam-TTL 4=Multi-TTL
3	Turn-On delay In Multi-TTL mode: multiplication factor*	11	1	1= no delay 2=50µs delay... ...3=100µs delay 11=500µs delay
4	Turn-Off delay (No meaning in Multi-TTL mode)	11	1	1= no delay 2=50µs delay... ...3=100µs delay 11=500µs delay
5	Asssit light control Z220	2	1	1=Normal 2=Disabled

Mode 1: Recorded-TTL
Feedback-free "recorded-TTL"! When using the old Digital Adapter in macro the external strobe often overmodulated the adapter's photocell and so the end of the internal flash was not recognised. This mode fires the external strobe after the internal is quenched - with the recorded duration and only some µs delay! During our intensive tests this mode worked in such manner

troubleless that we decided to make this the new default mode. Hardly anyone will change this modesetting anymore!
First, the duration of the internal flash is recorded with a resolution of 1µs. If the internal flash is quenched, the external will be fired. In this mode only one, the external or the internal strobe is burning at the same time. You are not able to see two seperate flashes because of the extremly short delay between them. A full dump of the YS60 will take about 1/500, to avoid cutting the strobe with the shutter try to keep shutter speed below 1/250 (1/500 for the internal and 1/500 for the external flash).When using low power flashes in mixed-light situations you can go up to 1/2000s.

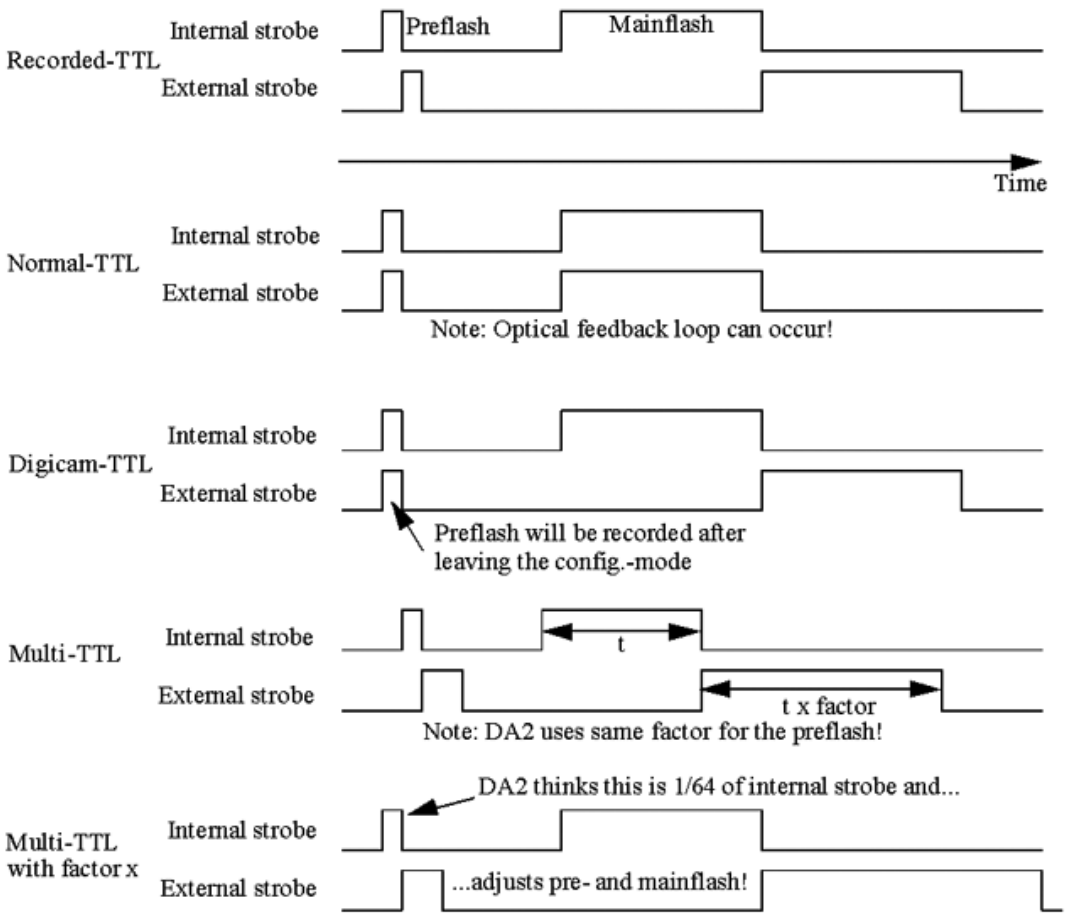
Mode 2: Normal-TTL
The duration of the internal strobe is copied 1:1 to the external. In this mode you can select to ignore up to 3 preflashes (For manual triggering a strobe on the mainflash, for example). This mode has to be used for non-preflash cameras with real-time evaluation, like the Fuji F810. Make sure no light from the external strobe comes on the Digital Adapter. This might cause an optical feedback-loop resulting in overexposures.

Mode 3: Digicam-TTL
The recorded-TTL mode fires the preflash delayed (recorded), as well. We tested this mode with all comon compact digital cameras and it was no problem for the evaluation process of the camera if the preflash is delayed some µs. If a future camera does not work with the recorded-TTL the digicam-TTL will do it. The preflash is fired in realtime (once recorded) and the mainflash in standard recorded-TTL mode. This archieves maximum compability with preflash digital cameras. After leaving the setup procedure the DA2 will record the preflash at the very next picuture. Two short flashes will go off instead of a normal exposure. After that, the Digicam-TTL mode is fully operational. This mode is recommeded if the recorded-TTL does not work well.

Mode 4: Multi-TTL
This Mode is an experimental mode for professional underwater photographers. The duration of the internal strobe will be multiplied with a factor (fix factor or even progressive factor!) and "replayed" by the external strobe. This enables the user to compensate the different flash durations of big-sized ring tubes as used in the Sea&Sea YS350. The calculations will be done in realtime so even in this mode sync speed up to 1/500 are usable! If the Digital Adapter 2 is set to Multi-TTL the "setting 3" (pre-trigger delay) will set the multiplikation factor. The following factors are useable (1 (default), 0.5, 0.625, 0.75, 0.875, 1.125, 1.25, 1.5, 1.75, 2, x), where x is an highly experimental progressive factor depending on the preflash length. Do not use this mode until you are familiar with flash durations.

Mode 5: Assist light control (Inon Z220 strobe ONLY)
1=Default
2=Disabled

:



All operating modes of the DA2

Reset:
If you would like to reset all settings, just turn off the strobe after entering the configuration mode for at least 20 seconds. All settings will be set to 1-1-1-1-1.

Settings can be changed often but usually the Digital Adapter 2 does not need any configuration at all. It's preconfigured to work with all common compact digital cameras like Olympus, Canon, Sony or Nikon.

HeinrichsWeikamp GbR - Adlerstr. 7 - 79098 Freiburg - Germany - info@heinrichsweikamp.com

(D) CE Konformitätserklärung

Die eTTL, iTTL und Olympus-TTL Produkte der HeinrichsWeikamp GbR entsprechen den Anforderungen der Richtlinie des EU-Rates 89/336/EEC (EMV) und 2004/108/EC (EMV), ggf. ergänzt, in der Angleichung der Rechtsvorschriften der Mitgliedstaaten in Bezug auf die elektromagnetische Verträglichkeit.

(GB) CE Declaration of conformity

Products by HeinrichsWeikamp for eTTL, iTTL and Olympus-TTL comply with the requirements of the Council Directives 89/336/EEC (EMC) and 2004/108/EC (EMC), as amended where applicable on the approximation of the laws of the member states relating to Electromagnetic Compatibility.

HeinrichsWeikamp GbR, D-79098 Freiburg
Freiburg, 2006

Christian Weikamp

Matthias Heinrichs

(D) RoHS Konformitätserklärung

Die HeinrichsWeikamp GbR erklärt hiermit, dass alle von uns ab Januar 2006 hergestellten Produkte RoHS konform sind gemäss EU Richtlinie 2002/95/EG bezüglich folgender Substanzen:

Blei (Pb)
Cadmium (Cd)
sechswertiges Chrom (Cr(VI))
Quecksilber (Hg)
Polybromierte Biphenyle (PBB)
Polybromierte Diphenylether (PBDE)

(GB) Declaration of RoHS Compliance

HeinrichsWeikamp GbR herewith declares that as from January 2006, all of our products are manufactured RoHS conformal in full compliance with EU Directive 2002/95/EC with respect to the following substances:.

Cadmium (Cd)
Hexavalent chromium (Cr(VI))
Lead (Pb)
Mercury (Hg)
Polybrominated biphenyls (PBB)
Polybrominated diphenyl ethers (PBDE)

HeinrichsWeikamp GbR, D-79098 Freiburg
Freiburg, 2006

Christian Weikamp

Matthias Heinrichs