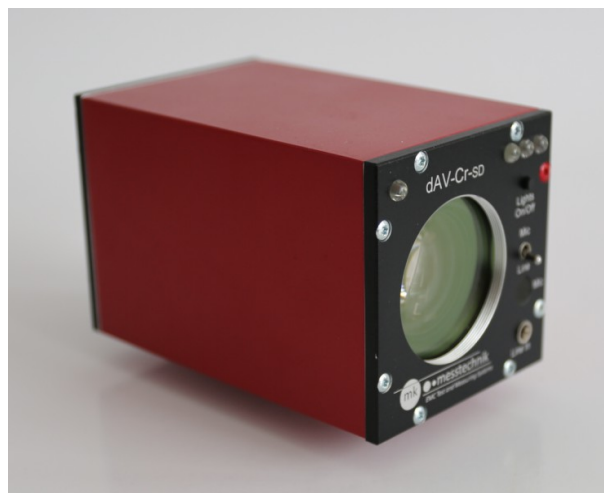


dAV-C(r)-SD/HD

Camera system with digital
transmission of analog A/V – signals

Manual



messtechnik

EMC Test and Measuring Systems

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Please check box contents regarding ordered options.

1 Box contents

Quantity	Description
1	digital video-camera dAV-C with tripod mount (with options, if ordered)
1	digital A/V- receiver dAV-R (with options, if ordered)
1	Setup display ED-35
1	simplex optical fiber 62,5 / 125µm
2	External battery pack 12V/4Ah as power supply for dAV-C Alternative: shielded external battery pack
1	Charger for battery packs
1	External power supply (110V-230V, 50-60Hz) for dAV-R
1	A/V - cable
1	Manual

The box content varies, if options have been ordered.

Available options for the digital camera system:

- Remote control of all camera-functions (option -r)
- Pan/tilt unit PT-02 or PT-03(available together with option -r)
- Wide angle and close-up lens
- External battery pack BP120-5f
- Shielded external power supply for wall mount setups
- Wooden head rest mount camera holder with 2D pan/tilt attachment
- Height adjustable wooden seat box camera holder with 2D pan/tilt attachment
- External loudspeaker

The shipment includes charged batteries. However, due to the self-discharging of NiMH-batteries they should be recharged again before use.

Please read chapter 4 (Maintenance) before charging the batteries!

Read chapter 4
before charging!

2 Characteristics

The camera system can be used to monitor displays, vehicles and any other device under test (DUT) during EMC-tests. Together with the optional pan/tilt unit and an optional shielded external power supply, the camera can be used to monitor absorber lined chambers. With its wide zoom range and adjustable settings, the system can be adopted to many use cases. The integrated microphone allows the additional acoustical monitoring of the device under test.

The camera comes with a 1/4" tripod mount and two shielded battery connection cables with different lengths. Depending on the range of use, the battery pack can be placed close to the camera (if high field strengths are suspected at the cameras place) or it can be placed on the ground floor or at a place which is better to reach, if the camera is mounted in a place which is difficult to access.

3 Field of application

- Video monitoring of DUTs and/or absorber lined chambers or free field tes sites (dry conditions) during EMC-tests
- Audio monitoring of DUTs and/or absorber lined chambers during EMC-tests
- Transmission of camera pictures over long distances without loss of signal quality.

4 Maintenance

Maximum charging current is 1A!

Recharge the external batteries after use with the enclosed charger for NiMH batteries. The batteries have a very low memory effect and therefore can be recharged right after using, even if not completely discharged.

Only use power supplies, battery chargers and power connector cables which are approved by us. Please call your distributor.

Fig. 4.1 shows the pinning of the 3 poled power connector of the camera. Battery packs are connected to pin 1 (+) and pin 3 (GND). The shielded external power supply is connected to pin 2(+) and pin 3. The *Pwr On/Off* button is without function then. The camera is turned on and off with the power supply.

Pinning of power connector at the camera

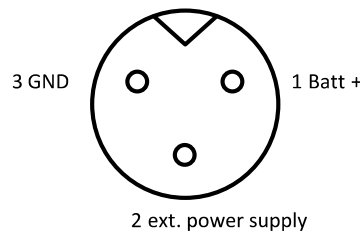


Fig. 4.1: Pinning of the power supply connector at the camera

Fig. 4.2 shows the pinning of the 5 poled plug of the battery packs. They are charged with pins 2 (+) and 4 (GND). Pins 1 and 5 are used for temperature surveillance.

Pinning of battery plug

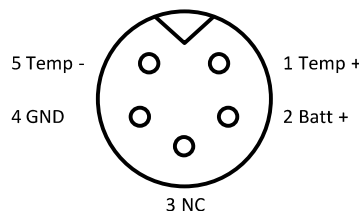


Fig. 4.2: Pinning of the battery pack plug

Due to self-discharge issues with NiMH batteries, recharge batteries before use, if the system has not been used for a longer time.

Do not use cleaning agents or solvents to clean the devices, only use a slightly moistened, soft cloth.

Do not open the devices!
Short cut / fire hazard!

Do not open the devices, as there are no parts inside which have to be maintained. The opened housing can pose a fire hazard through short-circuit currents! Please contact your distributor or the manufacturer if you have any problems. Send in the complete camera system, if a problem cannot be solved by turning the devices off and on again or by checking the positions of the switches or other reasons from the trouble shooting list (chap. 5). Please contact us in any case before sending in the devices.

5 Trouble shooting

The following trouble shooting list is provided to assist you while having problems. It might let you use the system again without a long down time:

Error:	Possible reasons:	Solution:
No or erroneous transmission	Receiver does not receive an optical signal Cables damaged or not attached properly Wrong optical fibers (diameter) Low battery System turned off	Check optical fibers and connections, change fibers if necessary Connectors and cables regarding damages Use fiber with 62,5/125µm Charge batteries Turn on all devices
No transmission, noise at output	Low battery No optical signal Position of mic-/line IN switch is wrong	Charge batteries Check for light at optical output. Replace optical fiber Check switch position
Device cannot be turned on, cannot be charged	Batteries damaged Charger or cable damaged Batteries over discharged	Send device to us Check / replace charger and charging cable Charge batteries, maybe use other charger (10 battery cells)
High pitched whistle	Acoustic feedback	Turn down speaker volume of receiver Change position of microphone
Common problems	Defective optical or electrical cables or connectors	Check connectors, fibers and cables. Test with other ones. Replace cables

Error:	Possible reasons:	Solution:
Camera does not respond to remote control (video signal is working)	Wrong camera-ID set optical fiber is not attached or defective	Set the correct ID in the setup of the camera (number of the receiver output the camera is connected to, set to 1 for one-channel receiver dAV-Rr) Check / replace optical fiber
Pan/tilt unit does not respond to remote control	Camera-ID and unit-ID do not correspond Cable is not attached or defective	Test all available channels, then set camera-ID to unit-ID Check/replace

6 Accessories / Spare parts

Part	Order number	Comment
Optical fiber	LWL-1-xm	x = length in m, simplex
External battery	BP120-5f	12V/4Ah
Pan/tilt unit	PT-02	Pan/tilt unit for dAV-Cr
Wide angle lens 0.5	WW-0.5	Attachable to camera-front (37mm thread)
Close-up lens	CU	Attachable to camera-front (37mm thread)
Short connector cable for BP-120	AK-BP-S	Length approx. 15cm, with ferrites
Medium connector cable for BP-120	AK-BP-M	Length approx. 40cm, with ferrites
Long connector cable for BP-120	AK-BP-L	Length approx. 150cm, with ferrites
Charger with connector plugs	CH-10	Standard charger
Shielded external power supply	PS-12E	12V 1A shielded power supply for dAV-C(r)

Part	Order number	Comment
External loudspeaker	LE-M1-xm	X = length of connection cable in m, standard is 1m
Head rest mount	AV-HM	Made of wood, with 2D pan/tilt for camera and place for external battery
Seat box	AV-SB	Made of wood, height adjustable, with 2D pan/tilt for camera and place for external battery
Manual	MA-dAV-C/R	German or English

Date:
09/19/13

dAV-C / dAV-R



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