

Camera Monitor

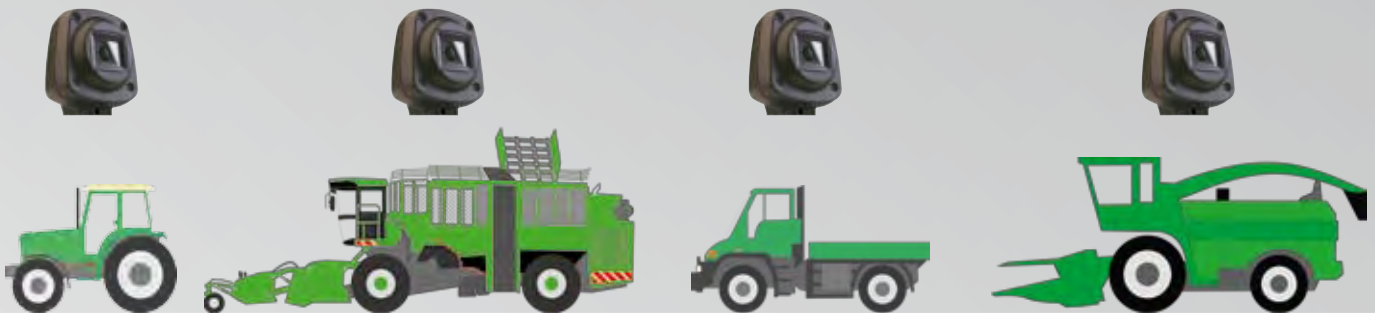
Exchange Components

From sowing to harvest - versatile Camera Monitor system for all seasons

Monitor set



Accessories (optional)



Through power input 3P/12V acc. to DIN 9680, available in all up-to-date agricultural vehicles, MEKRA camera system MCM-2070 can easily and swiftly be transferred from vehicle „A“ to „B“ by means of our optional system connecting cable MSC-2070. MEKRA Lang's optional magnetic base further simplifies the variable use of MEKRA cameras in different vehicles.

This is how it works:

- Mounting of the monitor with standard bracket MMB-2070 (1 bracket included) in „vehicle A“
- Connection of the monitor by means of the included power supply cable and the 4-fold connection cable (both included with the monitor)
- Depending on the application 1 to 4 cameras with magnetic base can be connected to the vehicle
- Depending on the distance between monitor and camera additional MEKRA camera cables may be required.

Transfer from „vehicle A“ to „vehicle B“:

- Unscrew monitor in „vehicle A“ from bracket and disconnect power supply and camera connector from monitor.
- Equip „vehicle B“ with standard bracket MMB-2070 and with camera connecting cables respectively.
- Mount monitor onto the bracket and connect cable MAC-2070 (4 camera inputs) and system cable MSC-2070 (with 3P/12V connectors).
- Attach camera with magnetic base to the vehicle and connect cables.



Monitor MCM-2070



Color camera



Color camera with standard bracket MCM-3000



Magnetic base MCB-3003 for standard camera bracket

Monitor

MCM 2070

LCD display ratio	TFT, 16 : 9 (7")
Lens angle	40 / 40 (top / down) 60 / 60 (left / right)
Resolution	480 x 234 (WxH) pixels
Brightness	(cd/m ²) 350
Contrast ratio	300 : 1
Operating voltage	12 / 24 V DC
Power consumption	5 W
Operating temperature	- 20° C to + 70° C
Storage temperature	- 30° C to + 80° C
Split-screen function	up to four cameras simultaneously representable
System control	integrated control unit
Dimensions (mm)	182 (L) * 124 (W) * 39 (D)
Weight incl. bracket	approx. 520 g
Accessories	connecting cable, sun shade, clamp, mounting accessoires, remote control, documentation
Use	solely for interior operation

CMOS color cameras

Image sensor	1/4 inch, CMOS
CMOS resolution	640 (H) x 480 (V) pixels
TV system	NTSC or PAL
Imaging	525 lines 60 frames/sec.
Image output	720 (H) x 468 (V) pixels
Exposure time	1/30...1/62.500 sec.
Minimum illumination	< 1 lux
Resolution	> 300 TV lines
Mirror function	switchable (horizontally)
Video output	FBAS 1 Vss at 75 Ω

Optical Data

Camera model	MCC-4120	MCC-4100	MCC-4070	MCC-4040
Horizontal lens angle	120°	100°	70°	40°
Vertical lens angle	85°	72°	50°	30°
Focal length	1.9 mm	2.1 mm	2.8 mm	4.7 mm

Electrical Data

Operating voltage	12 V and 24 V systems
Power consumption	Heating on: < 1 W, Heating off: < 3.5 W
Heating	Automatic activation under low temperature conditions
Operating temperature	- 40° C bis + 85° C
Storage temperature	- 40° C bis + 90° C
Cable	Proprietary MEKRA Lang design, Ø 6 mm, PUR jacket material, oil and gasoline resistant, ADR tested
Connector	Proprietary MEKRA Lang design, Ø < 18 mm, ADR tested, protection class IP 69K

Mechanical Data

Housing	Metal, resistant to gasoline, cleaning agents and alcohol solutions, salt spray test according to DIN 50021, protection class IP 69K according to DIN 40050-9, flying stone test according to MEKRA TS 208.02.06
Shock and vibration resistance	Shock resistant according to MEKRA TS 208.02.06 based on DIN EN 60068-2-27 vibrations, broadband and random according to MEKRA TS 208.02.06 based on DIN EN 60068-2-64
Outside dimensions excl. brack.	65 (B) x 59 (H) x 50(D) mm
Weight excl. bracket	approx. 180 g
Bracket	various brackets to select

MEKRA Lang GmbH & Co. KG

Corporate Headquarters
D-90765 Fürth
Alfred-Nobel-Str. 55 - 57
Fon +49 - 911 / 9762 - 0
Fax +49 - 911 / 9762 - 120
www.mekra.de

Administration, Development & Production
D-91465 Ergersheim
Buchheimer Str. 4
Fon +49 - 9847 / 989 - 0
Fax +49 - 9847 / 989 - 200
www.mekra.de

Sales Electronic Systems
D-91465 Ergersheim
Buchheimer Str. 4
Fon +49 - 9847 / 989 - 8076
Fax +49 - 9847 / 989 - 8120
kms@mekra.de
www.kamerasysteme.org

