

Weapon adjustment system Video boresight



We make it visible.

Video boresight



The higher the hit probability, the greater the combat value of a weapon. This requires the precise basic adjustment of the weapon and the targeting optics.

Video boresight

- Used to make and inspect the basic adjustment
- Can be operated by one person
- Ensures accuracy of 0.1 mrad
- Permits tracking of slow-moving and flying targets with a comparison of a second system image
- Permits the use of a 10.4" TFT HR monitor and control unit on the weapon, in the weapons center or at control stations

The system

The video boresight consists of the TFT HR monitor with control unit, the video boresight camera, a power source and booster box, and the cable set.

Application

With the video boresight, Carl Zeiss Optronics offers a state-of-the-art system for performing and checking the basic adjustment of a weapon for all types of weapons. Combined with the calibre bars of the proven SKS system, it ensures accuracy of 0.1 mrad. 10 m, 25 m, and 40 m lenses attached to the objective are used for adjustment at short range. The video boresight permits the tracking of slow-moving and flying targets. The image displayed on the TFT HR monitor can be compared, for example, to the camera image of a radar platform.

The monitor and control unit can be used directly on the weapon, in turrets or at control stations. The video signal can be recorded with a suitable video device via the BNC socket of the booster box. With the control unit, the reticle can be moved horizontally and vertically, stored and protected against unintentional shifting. The reticle can be displayed in black or white; the center faded. Brightness and contrast of the monitor can be adjusted.

Before the adjustment, the video boresight is adjusted in the barrel of the weapon using a 180° adjustment test; the values are stored. It is also possible to acquire the target with an elevated barrel. The system can be operated by one person.



Technical Data

	10.4" TFT HR monitor with control unit	Video boresight (container)	Video boresight camera	Booster box	Power supply
Electrical data					
Input voltage	24 V		9 V to 15 V DC	C3: 220 V 50 Hz/ 110 V 60 Hz	18 V to 35 V DC
Power consumption	max. 50 W		1.8 W	max. 80 W	max. 80 W
Output			PAL video (CCIR)	C1: 12 V DC/1.8 W C0: 24 V; 1.8 A max. BNC: PAL video (CCIR)	C6: 12 V/1.8 W C4: PAL video (CCIR) C0: 24 V/ 2 A max./ 50 W
Automatic Gain Control	Yes				
Effectiveness					85%

Size and weight

Size (L x W x H in mm)	392 x 245 x 68.2	(762 x 562 x 225)	206 x 66 (Ø)	185 x 125 x 135	225 x 125 x 75
Weight	4.1 kg	(13.2 kg empty)	0.8 kg	1.2 kg	0.8 kg

Mechanical Data

Mounting hole			12h6		
Adjustment accuracy with alignment rod			±0.1 mrad		
Adjustment range			min. ±5 mrad		

Optical Data

Display	1024 x 768 pixels				
Camera chip			VCAM-003-1, 1/3" (752 x 582 pixels)		
Field of view angle			2.29° x 1.72°		
Adjustment of the optical system			∞		

Environmental sturdiness

Housing	Protected against spray water in accordance with IP 65
Temperature range	-10 °C to +40 °C (total length)

Subject to change in design as a result of ongoing technical development.

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