

HD-SDI 1080P conversion for the Aaton Minima SD video assist

This HD conversion is designed to produce a near flicker free image for a camera speed of 24fps, and a flicker free image for camera speeds of 25fps and 30fps. It has two video outputs: digital HD-SDI and analog SD-PAL/NTSC. A Sony 2.1MP image sensor provides the video assist with a high resolution of 1080P, as well as high sensitivity and outstanding color fidelity. The HD image parameters are controlled by OSD (On-Screen Display) function set by joystick. The power necessary to supply the video assist is taken internally from the camera's electronics. The low power consumption, only 130mA, gives your camera battery a longer life.

Specifications

HD active picture elements: 1920 (H) x 1080 (V)

Digital video output - BNC connector: HD-SDI (SMPTE292M Compliant) 1080P 30/25, 720P 60/50

Analog SD video output - 4pin Fischer accessory connector: CVBS PAL/NTSC formats set by - OSD

Minimum illumination: 0.1 Lux

Sync. system: internal

Mode: color or b&w through preset by OSD function

Electronic shutter: auto or manual through preset by OSD function

White balance: auto or manual through preset by OSD function

Auto gain control on/off through preset by OSD function

Gamma: selectable gamma through preset by OSD function

Dynamic noise reduction DNR through preset by OSD function

The image enhancement for low contrast through preset by OSD function

Input voltage: 10 to 15 VDC, typical: 12 VDC

Operational temperature: -15 to 40 C deg.

OSD Controller-Joystick

By pressing the joystick, the OSD menu will be activated. We can set the parameters by the joystick's directions: <up>, <down>, <enter>, <left>, <right>. The arrow displayed in the OSD menu indicates to press joystick <enter> to get next level off settings. The settings can be saved. To minimize image flickering on the monitor when the camera is operating 24fps we should set SYSTEM/ FREQ 50Hz, FRAME RATE 1080P 25 and EXPOSURE/MANUAL/SHUTTER SPEED 1/25. In this setting, 1/25 the monitor image does not flicker when the camera is operating at 25 frames per second. To get a flicker-free image on the monitor for 29.97 or 30fps camera speed, set SYSTEM/ FREQ-60Hz, FRAME RATE 1080P 30 and set EXPOSURE/MANUAL/SHUTTER SPEED to 1/30.

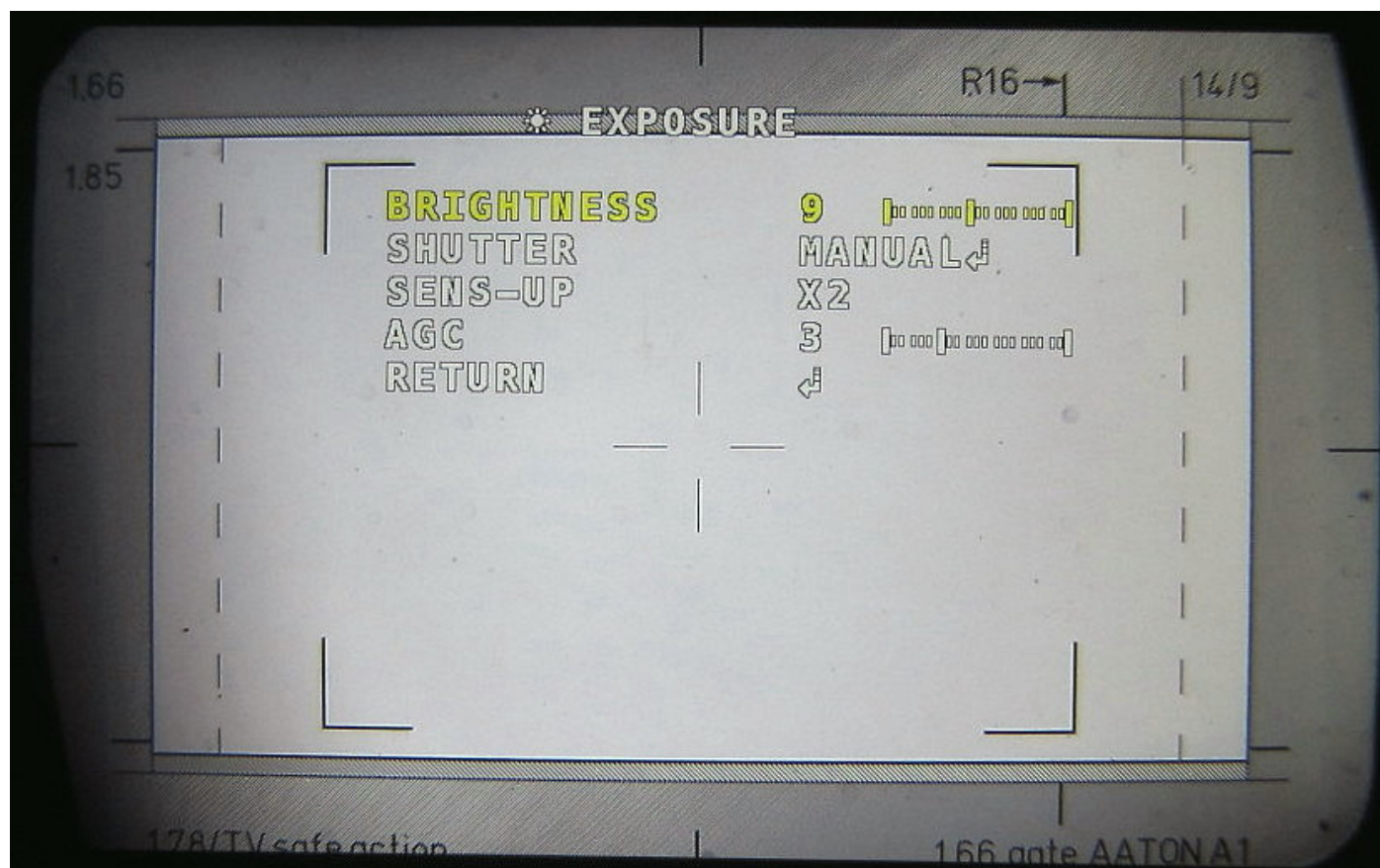
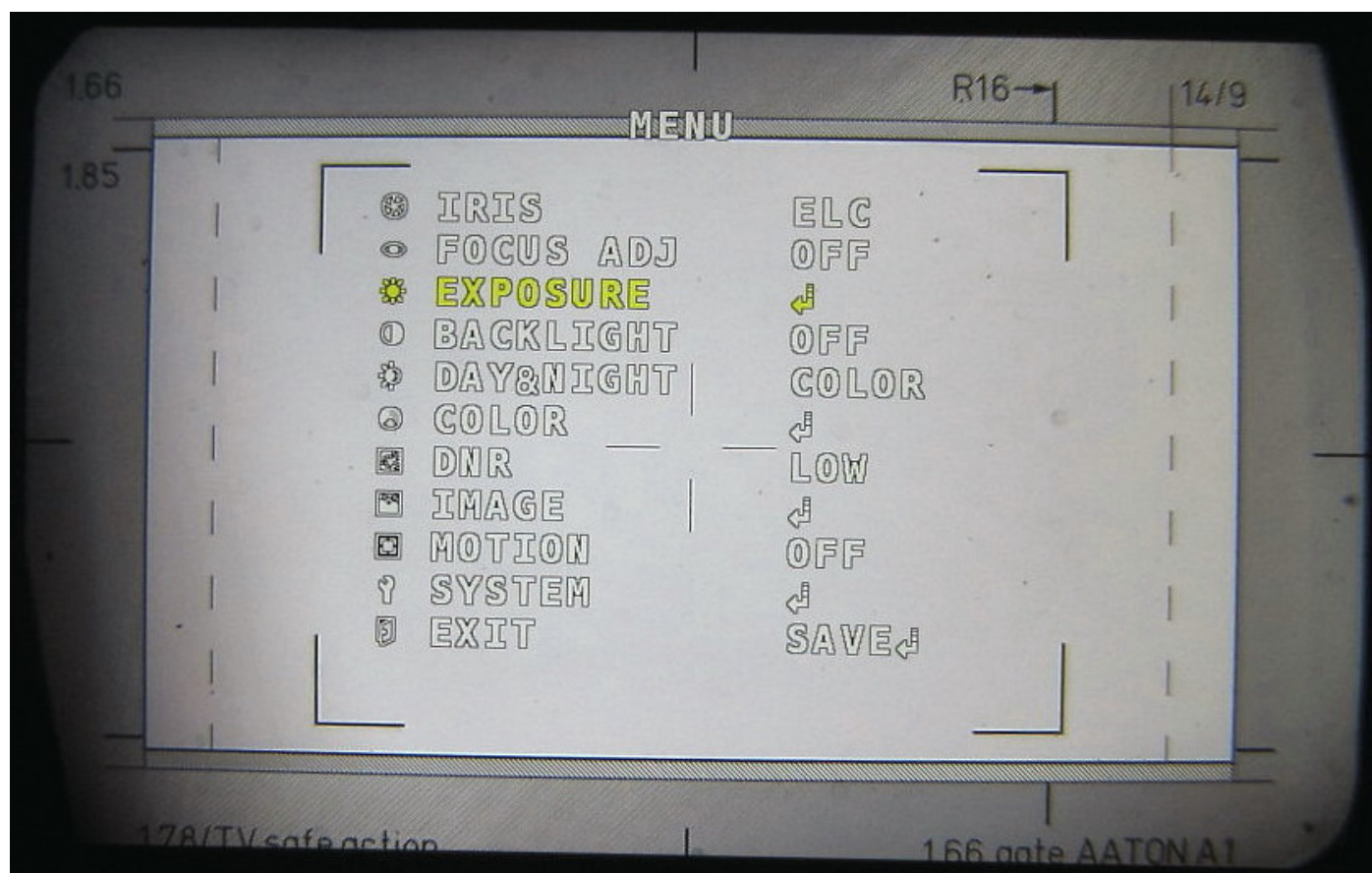
DNR function - dynamic noise reduction for good lighting can be set LOW or turned OFF.

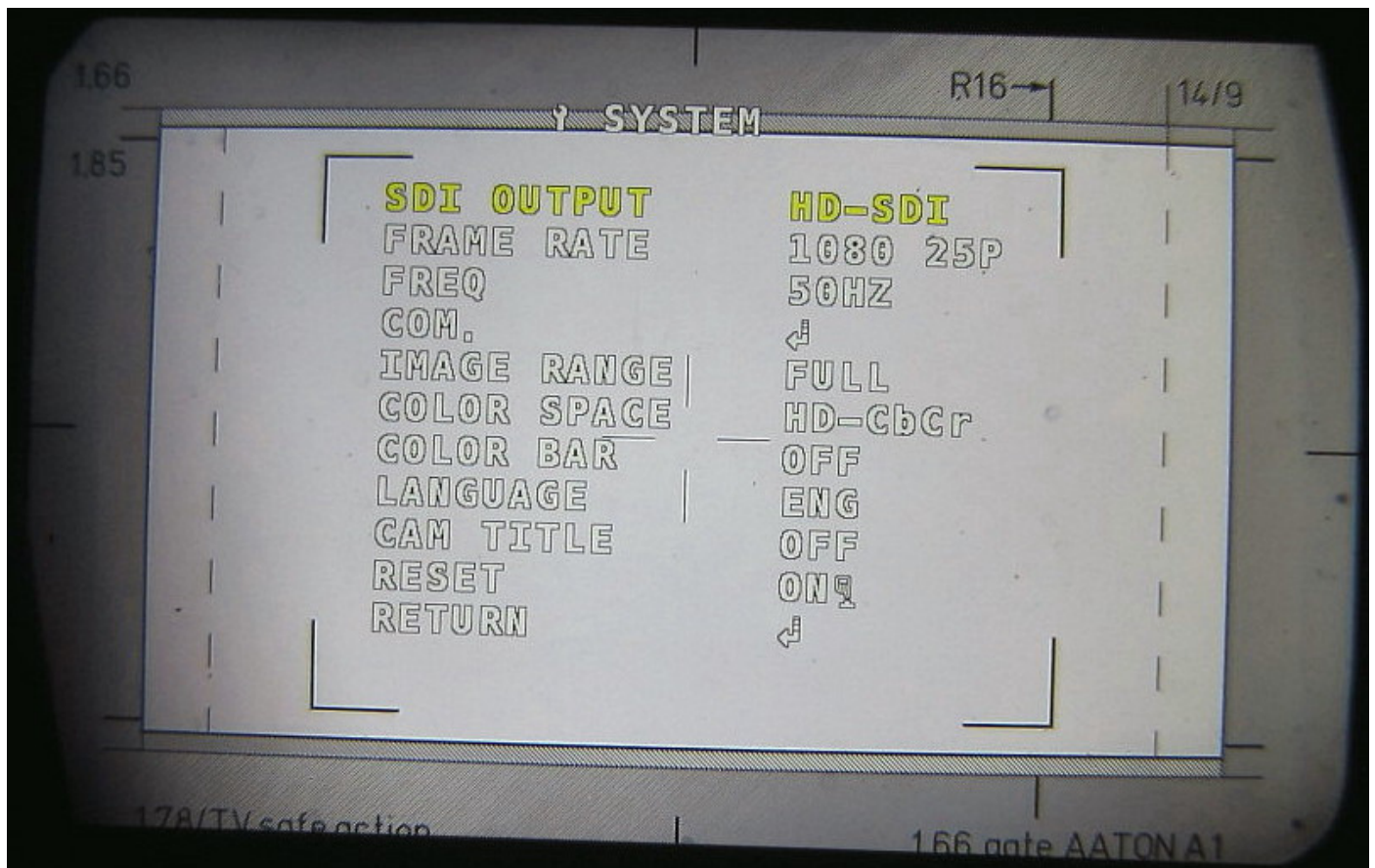
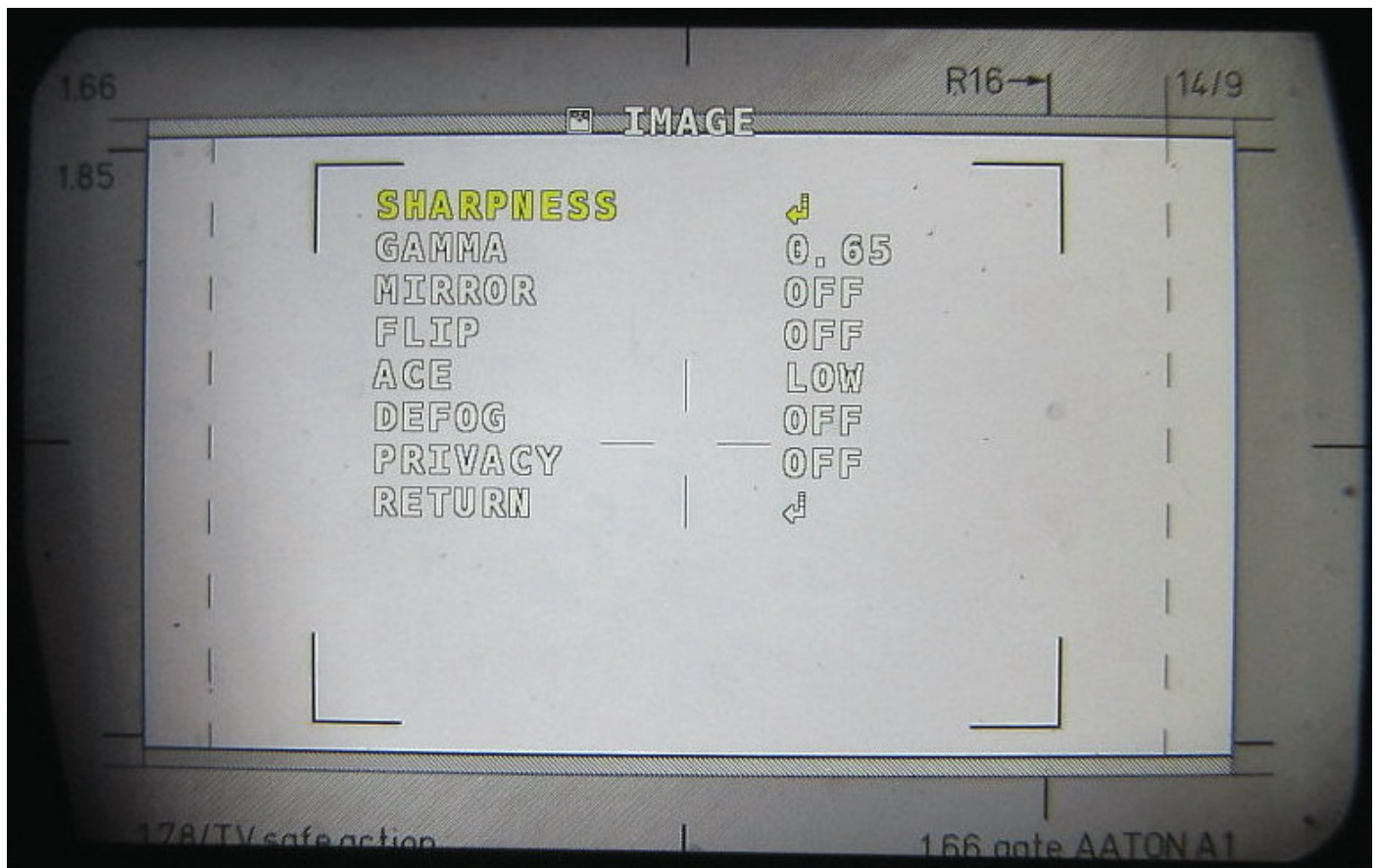
In very low light, you can switch SHUTTER to AUTO and set the X2 - double exposure image.

1. HD conversion for the VP SD unit.

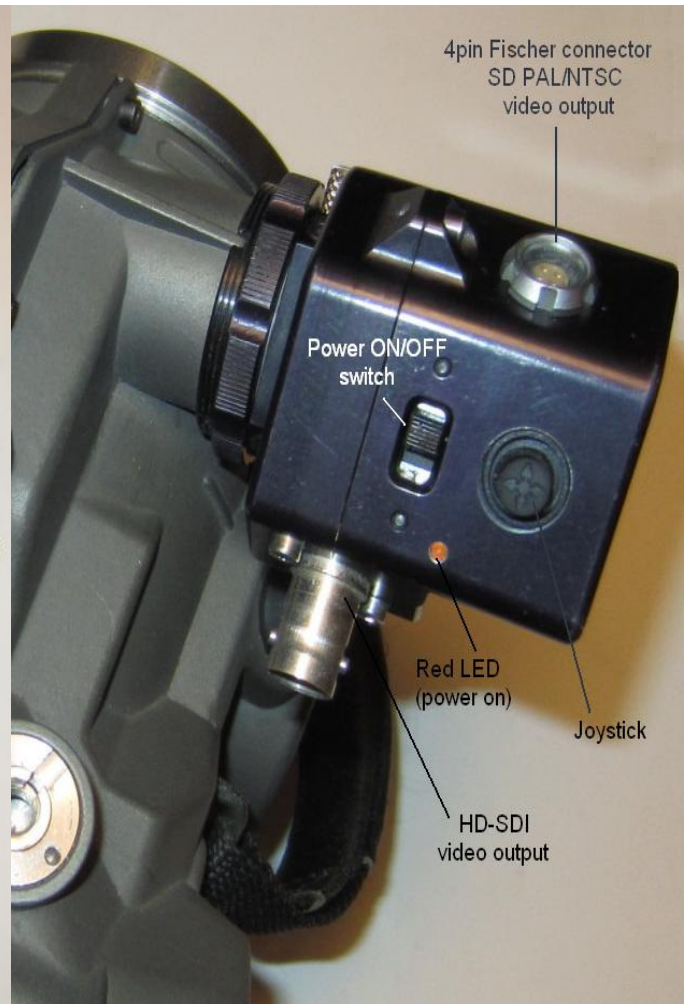


On-Screen Display (OSD)

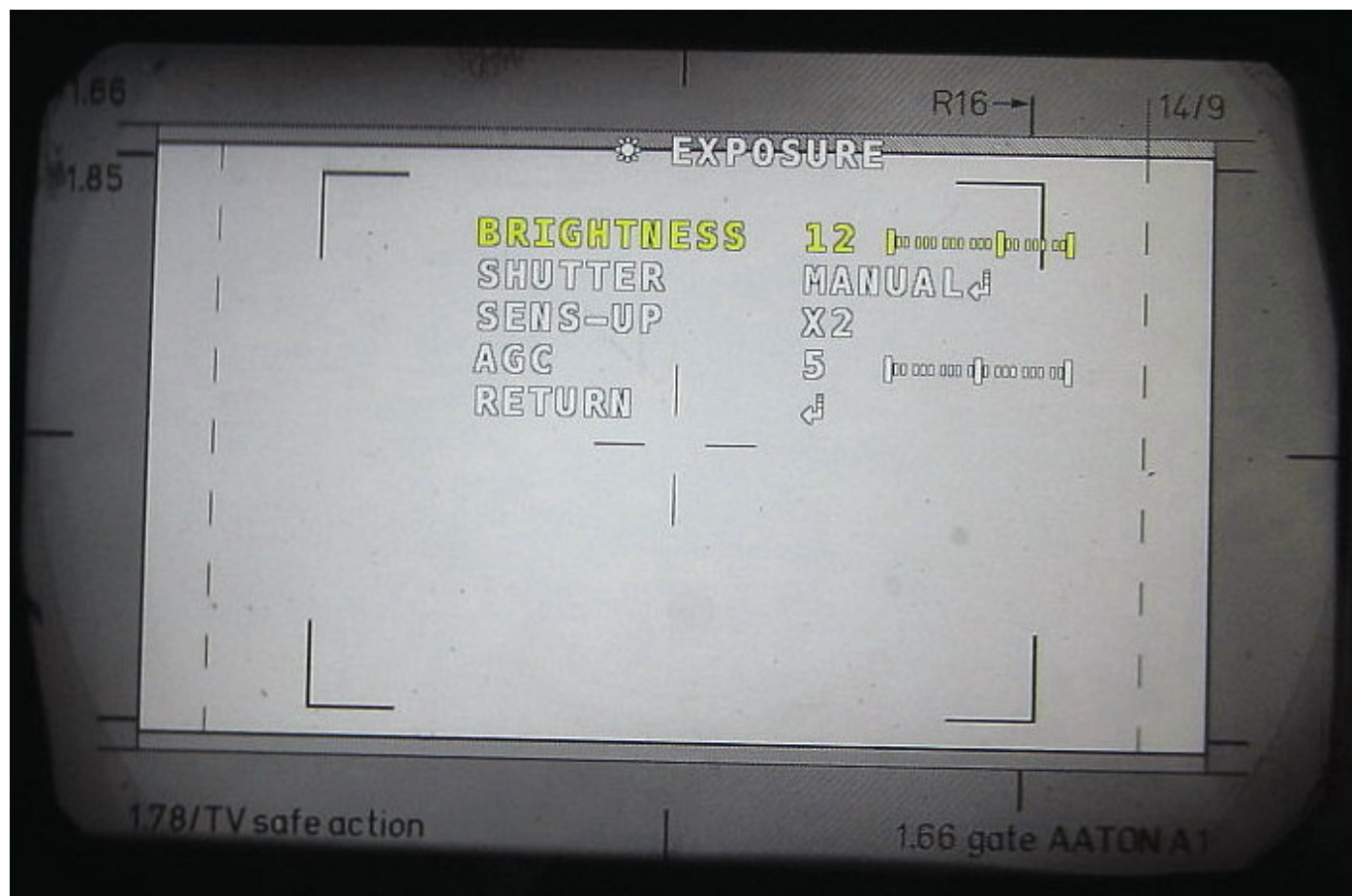
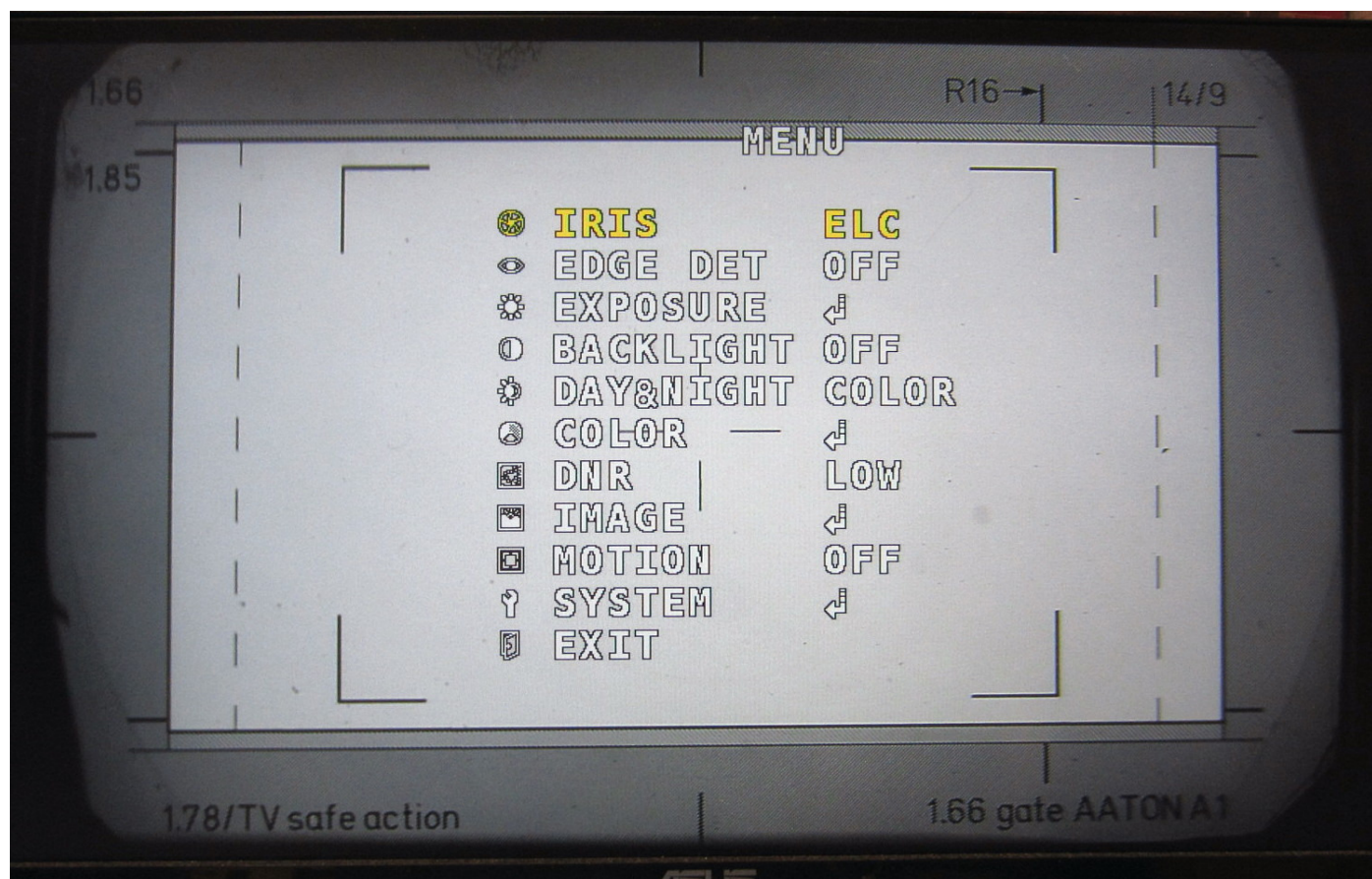


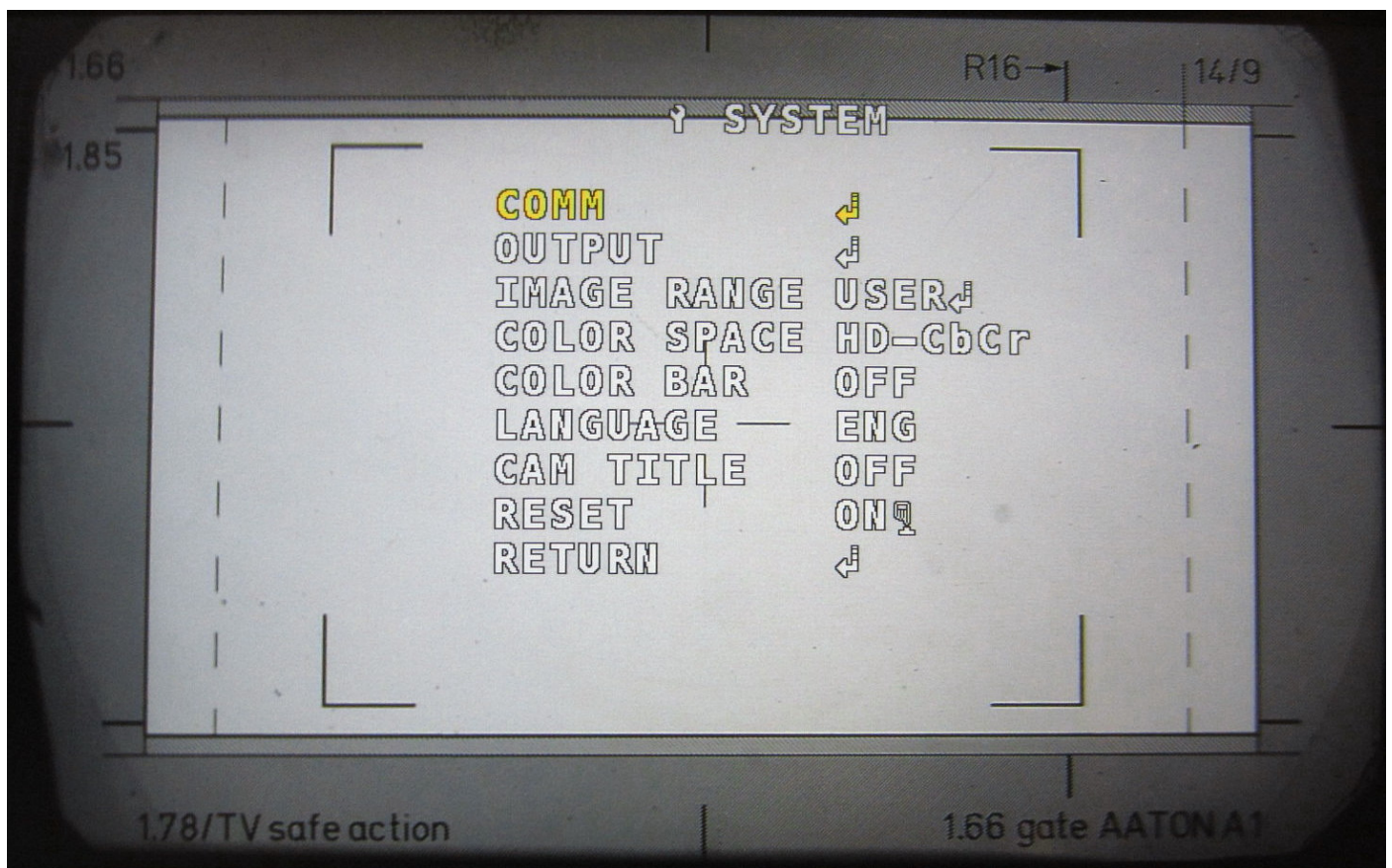
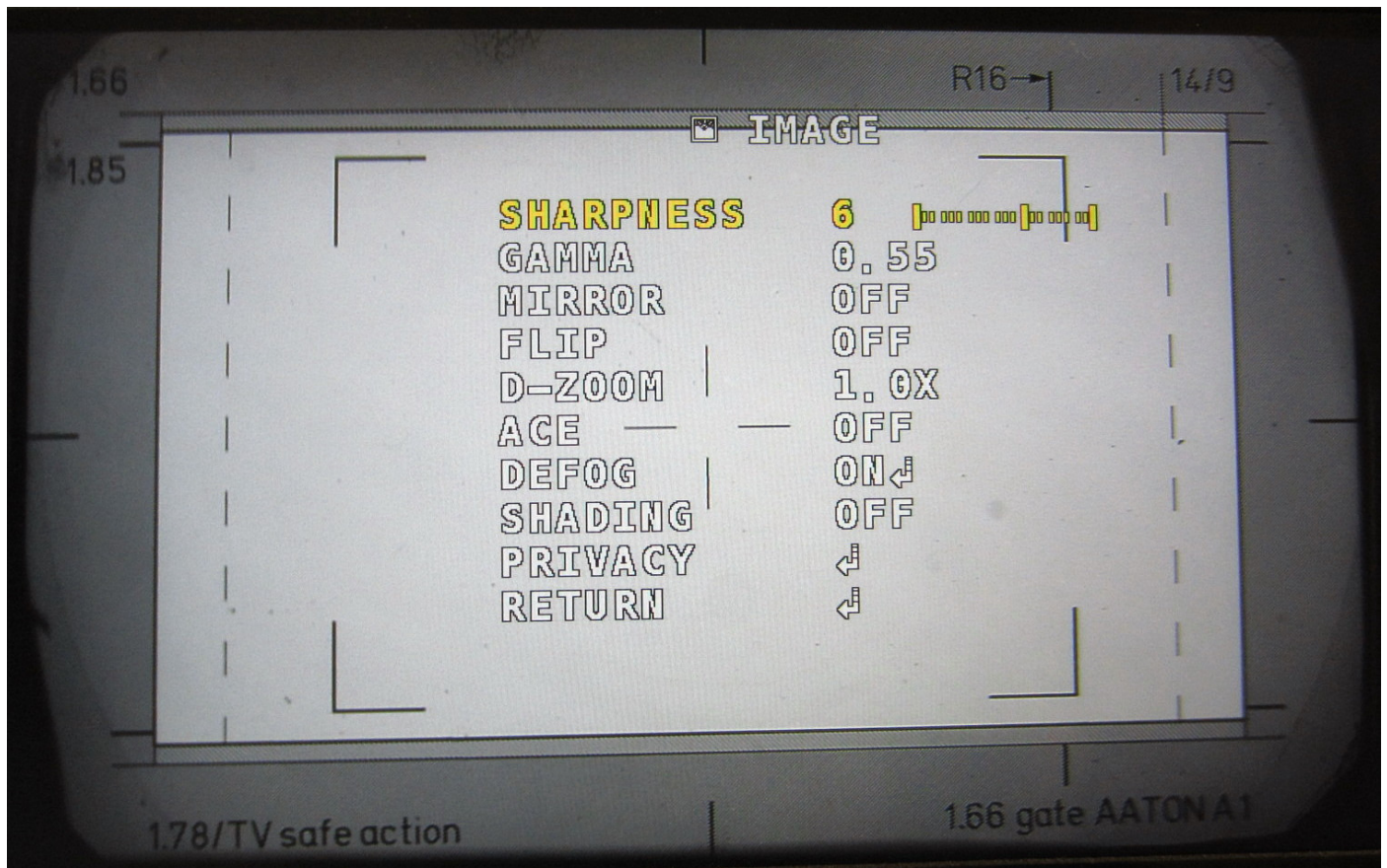


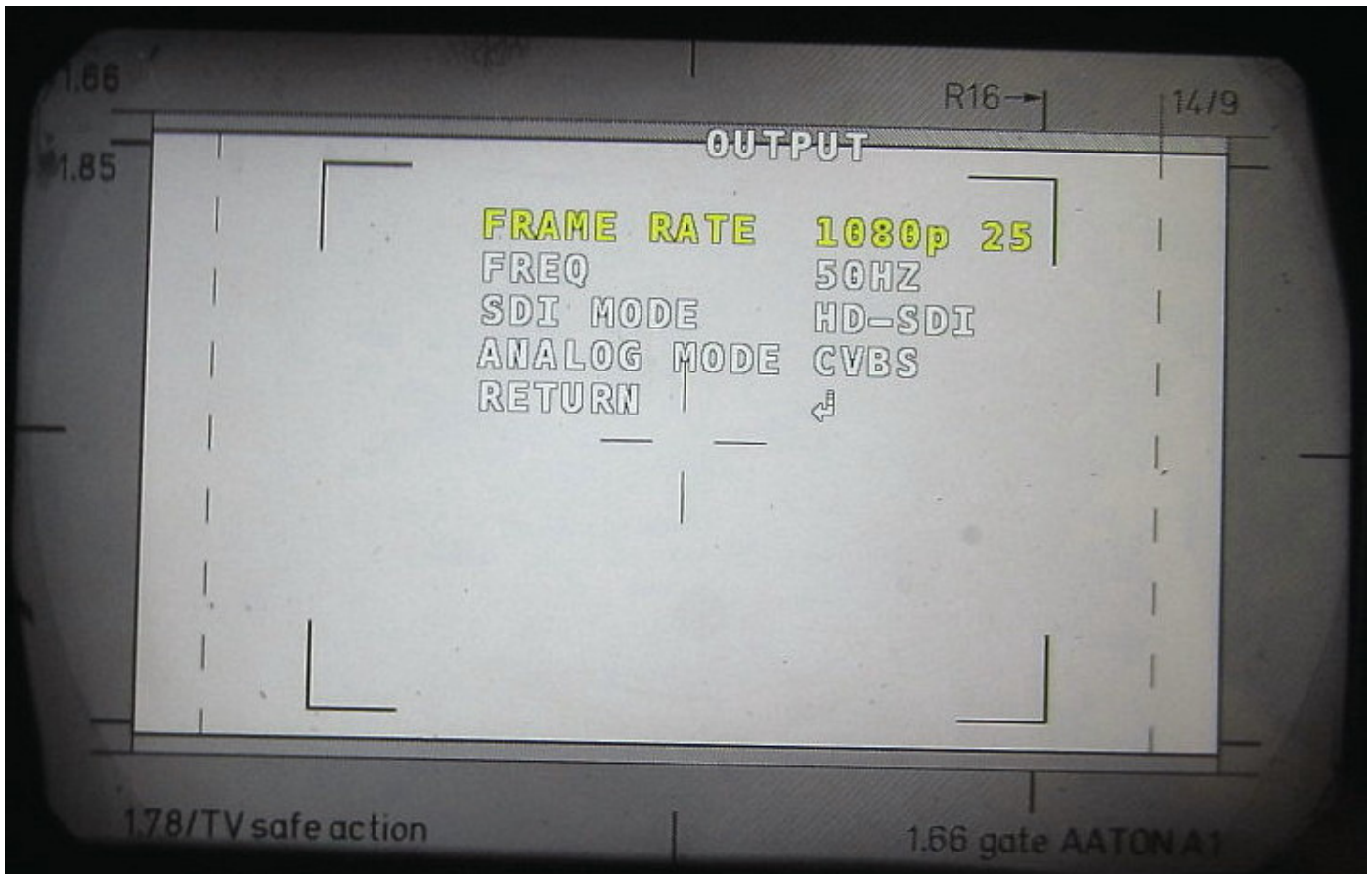
1. HD conversion for the Aaton SD unit.



On-Screen Display (OSD)







Troubleshooting

1. No video image.
 - a. Check the video cable and connections.
 - b. Check if camera's battery is charged.
2. No video image from HD-SDI output.
 - a. Turn the video assist power switch to off and then to on. Press the joystick <right> 3 times, then press the joystick <enter>.
 - b. Check the video cable and connections. Not every coaxial cable that is good for PAL/NTSC analog signal is good for SDI digital signal. It is the nature of digital signals to work perfectly for various lengths of coaxial cable, until a certain length of cable is reached, and then to fail to transmit the SDI signal at any greater loss in the cable. Connect only SDI cables to the SDI output.
3. The SDI image on the monitor is only partially displayed.

Turn the video assist power switch to off and then to on.
4. No NTSC/PAL video image from 4pin Fischer connectors.

Check if MENU/SYSTEM/CVBS is set.