



## OSD programming menu AHD cameras with Nextchip chip RE-... .HDU / FDU / FD4 / M / N.

AHD cameras have several programmable functions that are configured through an on-screen menu (OSD). The control keypad for the menu is located along the camera connection cable where there is a mini joystick that allows you to move between the options and confirm your choices.



In addition, all cameras with OSD have a UTC chip that allows you to control the programming menu from the opposite end of the video cable through a DVR that supports UTC control.

This manual applies to all our cameras that use the Nextchip AHD chip, such as models ending with HDU, FDU, FD4, M, N.

### ACCESS TO OSD MENU

Press the joystick on the camera cable to bring up the on-screen menu.



To move in the menu use the joystick and press it for the ENTER function

The main configuration menu is divided into 9 items which are described below.

### TARGET

In this section you determine which type of lens (manual or autoiris) you are using so that the camera can control it correctly. The factory setting is MANUAL, i.e. a lens with manually adjustable aperture in which the compensation of light variations is entrusted to the electronic aperture of the camera.

As all cameras in this series use manual or fixed iris lenses and not auto iris, this setting cannot be changed.

### EXPOSURE

In this section you set the operation of the camera's electronic iris (shutter). The options are contained in the following submenu:



- **SHUTTER:** Here you set the operating mode of the electronic iris. It is generally recommended to leave this option set to AUTO for most shots. In this way, the electronic shutter of the camera will automatically adapt to various lighting situations.

It is also possible to set a fixed aperture time of 1/50 sec. up to 1/50000 sec. In this case, the camera iris will not change during operation. You can use this option in special situations, such as shooting fast moving objects. The FLK option is recommended for shooting fast moving objects. Images that contain light fluctuations invisible to the human eye, such as neon lights, PC screens, TVs. , or it is possible to manually adjust the SHUTTER values as desired (aperture speed - values from 1/50 to 1/100000). It is also possible to set very long fixed apertures, higher than the 1/50 of a second required by the video standard . (x2... x30). This option can be used for still objects in conditions of minimal ambient light, but if the subjects move, the shot will be less fluid than natural and slightly jerky as there are not all the 25 f / sec expected from a real shot. time.

- **AGC -** The automatic gain control increases the gain of the image in the case of general low brightness. The amplification level is adjustable. This control is not effective in the presence of IR illuminators turned on.
- **SENS-UP -** This function is used to increase the shooting capacity with minimum lighting. Not useful in the presence of infrared illuminators turned on.
- **BRIGHTNESS:** adjusts the overall brightness of the image (from 0 to 100).
- **DWDR:** Wide Dynamic Range Digital - is used for shooting where there are areas with different levels of brightness. A classic example is the recovery of an interior with the presence of a window / showcase to the outside. This function allows you to make the dark area more visible without overexposing the brighter area. DWDR is not useful if the brightness in the shooting area is uniform. If the difference in brightness in the shot is created only at certain times of the day (for example due to the different position of the sun) it is possible, in addition to the ON option, to choose the AUTO option for which the DWDR will be activated only when necessary. The intervention level of the DWDR can be adjusted (from 1 to 8)
- **ANTI FOG / ANTI CONDENSATION -** Digital function useful for improving visibility in the event of fog or condensation on the camera glass. Logically there is no continuous activation (ON) but only the AUTO option with which the fog lamp will be activated only in case of need. It is possible to define the surveillance area and the intervention level.

### BACKLIGHT BLC

If the subject has a difference in brightness from the background, it is possible to intervene digitally.

The camera has 2 functions of this type, one that compensates for the presence of a dark subject on a light background (BLC) and one that intervenes on a subject with very bright details (HSBLC).

It is advisable to select the BACKLIGHT item on BLC when shooting a dark subject on a light background, typically the customer entering a shop. By clicking AREA it is possible to adjust the position in which the dark subject is expected to be and its size. Then press VOL to confirm.

Clicking LEVEL adjusts the compensation power.



### HSBLC BACKLIGHT

The HSBLC (Highlight Suppression Back Light Compensation) function is used if the subject has very bright areas that would make it impossible to see the whole shot as they would cause the camera shutter to close making everything else invisible. The typical example is the headlights of an approaching car.

The HSBLC function allows you to mask the brighter areas, allowing a good view of the rest.



It is possible to define 4 areas on which to operate the function.

- SELECT - Choose which of the 4 areas to program
- DISPLAY - Defines first the position and then the size of the HSBLC area. Press VOL to confirm. If you select OFF the area will not be active.
- BLACK MASK - Selecting ON activates the HSBLC function and the brighter areas of the image will be masked in black.
- LEVEL - Defines the degree of effectiveness of the compensation
- MODE - It is possible to enable the HSBLC function always (ALL DAY) or are in night mode (NIGHT).
- DEFAULT - Restores the factory values

### WHITE BALANCE

In this section there are options for white balance, an important function to make the image always white in any type of lighting. Several options are available: ATW, AWC, AWC→SET, INTERIOR, EXTERIOR. It is advisable to use the mode that makes the white more correct in real shooting. If desired, the MANUAL option is also available where it is possible to adjust the white tone manually for shooting in particular lighting conditions.

### DAY / NIGHT

In this section it is possible to adjust the brightness threshold at which the switching from color to B / W for night vision takes place. It is possible to set the camera to always provide color images, always in B / W or to switch automatically from color to B / W based on the light.

The AUTO setting is always recommended for cameras with built-in IR



By choosing the AUTO option it is possible to set the thresholds (AGC) for day / night (DN) and night / day (ND) passage and a possible delay (DELAY). The delay is used to avoid unwanted passages due to rapid changes in brightness.

### NOISE REDUCTION (NR)

NR stands for Noise Reduction. If the image has video noise it is possible to intervene digitally with a noise reduction.

There are 2 modes: 2D and 3D with three selectable intervention levels. Select the type that brings the best benefits to the real image.



### SPECIAL

Here are some special features available to deal with particular shooting situations.

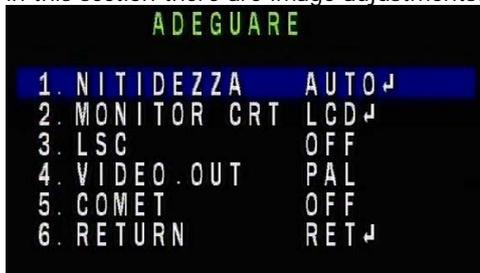


- CAM TITLE: allows you to give the camera a name that will appear superimposed on the top right.
- DIGITAL EFFECT: This section allows some image processing: BLOCK (freeze the image on the screen), INVERT (mirror function for horizontal or vertical image flipping), NEGATIVE (negative image)
- MOVEMENT: the camera allows you to detect any changes in the image resulting from an intrusion and highlight the moving area with a graphic. Since there are no alarm outputs on the camera, this function has no practical use and it is therefore advisable to entrust it to the DVR.
- PRIVACY: this function allows you to set masking areas to make areas that you want to exclude from surveillance not visible for privacy protection needs. Once this function is activated, you can press the joystick to bring up a menu on the screen that is used to set the size and appearance of the privacy masks. Up to 4 privacy masks of different color and transparency can be set.
- LANGUAGE: It is possible to change the language of the OSD which is factory set to Italian.
- DEFECT: Not used

- RS485: In this section the communication parameters (speed and address) of the cameras equipped with RS485 port are set (models with autofocus zoom)

### ADAPT

in this section there are image adjustments.



- SHARPNESS: It is the contrast adjustment. Usually set towards the maximum values to improve the perception of detail

- MONITOR: You can choose the type of monitor you use (LCD or CRT) and adjust the color rendering
- LSC: Not used
- VIDEO OUT: Allows you to choose the PAL or NTSC video standard (in Italy choose PAL)

**ATTENTION:** do not modify this parameter, it is factory set on PAL to allow viewing with all devices on the market in Europe. If by mistake it is changed to NTSC (American standard) you must also change the video standard of the video capture device (DVR, monitor ...), then go back to PAL (European standard)

- COMET: Not used

### EXIT

In the menu item EXIT we can choose whether to exit the menu by saving the modified settings (END), whether to reset the factory parameters (RESET) or whether to exit the menu without saving the changes made (NOT SAVE).