

Installation and Configuration

Color Box Camera (Day/Night)

DF3000A-DN

DF3000AS-DN



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1 About this document

1.1 Validity

This document applies to the Day/Night Color Box Camera DF3000A-DN / DF3000AS-DN.

It has been produced on the basis of version 1.6.2 (software).

The descriptions in this document apply to both cameras. Distinctions are only made if necessary.

1.2 Documentation on the DF3000A-DN / DF3000AS-DN

Commissioning

The Quick Guide headed "Connection and Commissioning" lists the most important steps for the connection and commissioning of the camera.

Installation and Configuration (this document)

The document entitled "Installation and Commissioning" contains detailed descriptions of the mounting, connection, commissioning and configuration of the camera. General notes on the product and technical data are additionally provided.

Storage of documentation

Store the documents in an accessible location near the product. Keep the documents in readable condition. Pass on all documents to each successive owner or user of the camera.

1.3 Convention

This document contains various warning words and symbols that indicate potential sources of danger. Various symbols and formats are used to maintain the clarity of the document.



DANGER

The warning word DANGER denotes an **immediate** danger that may cause **death or serious injury** if it is not averted.



WARNING

The warning word WARNING denotes a **possible** danger that may cause **death or serious injury** if it is not averted.



CAUTION

The warning word CAUTION denotes a **possible** danger that may cause **minor injury** if it is not averted.



IMPORTANT

The word IMPORTANT denotes information for preventing damage, incorrect configurations or incorrect actions.



NOTE

A NOTE offers information on principles, special features and efficient procedure as well as general recommendations.

Expression

Expressions in **bold** and *italics* generally indicate a control element on the device (switches or labels) or on its user interface (buttons, menu entries).

2 For your safety

Only use this unit if it is technically in proper working order, to the intended purpose and while keeping safety and potential dangers in mind. Have malfunctions or damages eliminated immediately!

Appoint a professional

Installation, mounting, connection, start-up and configuration of the unit may only be carried out by trained and authorized professionals (installers).

Unless otherwise expressly specified, this also applies to the maintenance, testing and repair.

Read and pay attention to the documents

Carefully and completely read the documents included in delivery. Always pay attention to the provided instructions, notes and warnings.

Regulations surveillance systems

The use of video and audio surveillance systems is strictly regulated in most countries. Therefore, inform yourself on laws and regulations that govern individual applications before using the unit. Ensure compliance with these laws and regulations and also observe regulations regarding data, working and environmental protection.

Regulations data protection

This unit can store data that may be subject to data protection. The collecting, recording, processing or disclosure of such data may be forbidden and thus have legal consequences. Therefore, inform yourself on data protection laws and regulations that govern individual applications before using the unit. Ensure compliance with this laws and regulations.

Do not make modifications

Do not make any modifications to the unit (neither to the software nor the hardware) without consulting Dallmeier electronic. Improper modifications can cause malfunctions or damages. Dallmeier electronic accepts no liability for damages resulting from unauthorized or improper modifications to the unit.

Protection against condensation water

If the unit is brought from a cold to a warm environment, condensation water can form inside the unit. Short-circuits may then lead to damage to the system. Wait up to 8 hours for the unit to reach room temperature before starting it up.

Observe the rated voltage

The unit can be damaged or destroyed by the application of an incorrect voltage.

The mains voltage must always match the rated voltage of the unit. The rated voltage is specified on the rating plate of the unit.

Observe ratings

Unsuitable ambient conditions and improper installation (mainly too high ambient temperature and insufficient ventilation) may reduce the unit's life cycle. Ensure compliance with the stated operating conditions (see technical data), requirements at the installation site and, if applicable, maintenance regulations.

Expansion components/peripheral devices

Use only expansion components conforming with the technical data of the unit. Inappropriate peripheral devices may result in the violation of local laws and regulations and damages to the unit. In case of doubt, contact the sales partner responsible for your area.

Do not open the unit

Do not open the housing of the unit. There are no components inside the unit that require maintenance by the user. The inspection, maintenance and repair with an open housing must only be carried out by trained and authorized professionals (installer).

Penetration of foreign bodies and liquids

No objects or liquids may be allowed to get into the device. In this case, immediately disconnect the unit from the power supply (pull out the power plug). Please contact the sales partner responsible for your area.

Measures to be taken in the event of damage and burnt smell

If you notice burnt smell or formation of smoke from a unit, immediately disconnect it from the power supply (pull out the power plug). Please contact the sales partner responsible for your area.

Disposal

Disconnect the unit from the power supply. Remove all connected units and system components. Return the unit to your respective sales partner.

3 General instructions

3.1 Scope of delivery

- 1 x Camera DF3000A-DN / DF3000AS-DN
- 1 x Operating Instructions "Installation and Configuration"
- 1 x Quick Guide "Commissioning"
- 1 x Hexagonal wrench 6 mm

3.2 Transportation and packaging

Store the original packaging for transportation at a later date. Dallmeier electronic is not responsible for damage resulting from unprofessional/improper transportation. The goods should only be shipped in their original packaging.

If the original packaging is no longer available, ensure that the packaging used sufficiently protects the unit against damage, moisture, heat and cold.

3.3 Appropriate use

The DF3000A-DN / DF3000AS-DN is a video camera for color or b/w imaging. It is designed for indoor as well as for outdoor use (with corresponding weather proof housing only). The camera can be mounted on walls and ceilings.

3.4 Performance Features

Equipped with an aspheric varifocal CS lens, the camera offers a resolution of 540 TV lines and a dynamic range up to 120 dB. Its light sensitivity and the day/night function allow images with greater color neutrality and clarity of detail, even at low light levels. Designed to be free from glare, the camera permits detailed recognition even against extreme back lighting. In addition, the camera can be configured via a Dallmeier recorder, PView or the UTC Remote Box.



NOTE

For detailed information, please refer to the Technical Data sheet in the appendix.

3.5 Warranty

The warranty period is 36 months.

The terms and conditions valid at the signing of the contract apply.

4 Notes on operating the camera

- ❑ The DF3000A-DN can be operated at 12V DC or 24V AC.
The DF3000AS-DN is operated at 12V DC.
- ❑ The camera is designed for use with CS-mount lenses. An adapter ring is required for use with C-mount lenses. Note the lens type before using it. When using C-mount lenses without an adapter ring, the camera could be damaged. This applies especially for the sensor.
- ❑ Lenses with DC control can be used for automatic iris control. Video signal-controlled lenses are not supported.
- ❑ If the camera or the cables connected to the camera are located near sources of strong radiation, the video picture may be distorted.
- ❑ The camera is equipped with automatic gain control (AGC). In low light the picture may be altered (e.g. noise). This is not a camera malfunction.
- ❑ The quality of the video picture depends on the lighting and the monitor used to display the video picture.
- ❑ Automatic white balance depends on the lighting used and can cause color distortions in artificial light.
- ❑ Poor lighting can lead to faulty white balance.

5 Equipment and connection assignment



Fig. 5-1

- 1 Lens mount and back focus adjustment
- 2 Aspheric variofocal CS lens
- 3 Setting screw (2 mm Allen screw) for loosening/locking the threaded ring
- 4 1/4" thread insert (top and bottom side) for camera mounting

5.1 Connection assignment



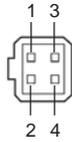
Fig. 5-2



Fig. 5-3

- 1 Selector
- 2 Enter button
- 3 Power supply: DF3000A-DN: 12V DC / 24V AC
DF3000AS-DN: 12V DC

- 4 COM interface (RS232) for controlling an external device (e.g. pan/tilt head)
- 5 Video OUT (BNC socket)
- 6 Power LED
- 7 Connection for iris control



Pin No.	DC Iris	
1	Damping	-
2	Damping	+
3	Drive	+
4	Drive	-

6 Installation and Commissioning

6.1 Requirements at the installation site

The camera is designed for indoor use. If used outdoors, the camera has to be mounted into a corresponding weather proof housing. Unfavorable local conditions may shorten the life of the product or lead to malfunctions.

Do **not** install/operate the camera in places:

- with large scale dust and dirt
- with steam or oil vapors (e.g. kitchen)
- with direct sunlight
- with an ambient temperature below 0° C or above 50° C
- near sources of strong radiation, i.e. X-rays, radio transmitters or magnetic fields
- with corrosive surroundings (e.g. gases or salt water).

6.2 Attaching the lens



IMPORTANT

Possible damage to the sensor caused by too long lens thread and protruding parts. Ensure that the length (a) of the lens thread (see following figure) plus any protruding parts does not exceed 5 mm.

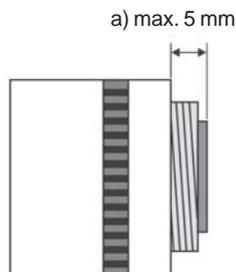


Fig. 6-1

**NOTE**

The camera is pre-configured for use with DC-controlled lenses. For lenses with manual iris setting, the configuration is to be changed according to section 8.1.

**IMPORTANT**

Possible damage to the sensor caused by improper cleaning. Ensure that dirt does not end up on the sensor. Use only clean compressed air if cleaning is necessary. Under no circumstances may liquids or cotton wool be used for cleaning.

Remove the protective cap from the lens mount.
Screw the lens onto the camera without using force.

6.3 Setting the back focus

The back focus is the distance between the lens support on the camera and the image sensor. Optimum focus is only possible when the correct distance is set.

It may be necessary to set the back focus in individual cases due to production tolerances of the lens. The iris of the lens must be open as wide as possible (smallest iris value) to set the back focus.

For lenses with automatic iris control, you will require a ND filter (gray filter) to prevent the iris from closing in bright light.

Setting for lenses with a fixed focal distance

If the focus cannot be set exactly by turning the focus ring (lens), please proceed as follows.

- 1 Point the camera at an object with sufficient contrast. The distance to the object should be greater than 1,000 x the focal distance.
- 2 Open the iris on the lens.
- 3 Set the distance at the lens to infinity (∞).
- 4 Loosen the setting screw (3) on the camera with the accompanying hexagonal wrench.

-
- 5 Rotate the lens rings (1) until the optimum focus is achieved.
 - 6 Tighten the setting screw again.

Setting for lenses with a variable focal distance (zoom)

If the focus changes as the focal distance changes, please proceed as follows:

- 1 Point the camera at an object with sufficient contrast at a distance of approx. 2 m.
- 2 Open the iris on the lens.
- 3 Set the maximum focal distance (Tele) at the lens.
- 4 Set the optimum focus with the focus ring.
- 5 Set the smallest focal distance (wide angle).
- 6 Loosen the setting screw (3) on the camera with the accompanying hexagonal wrench.
- 7 Rotate the lens rings (1) until the optimum focus is achieved.
You may need to repeat steps 3, 4, 5, and 7 several times to obtain the best results.
- 8 Tighten the setting screw (3) again.

6.4 Installation

The camera has a 1/4" thread insert on its top and bottom side for mounting the camera to a tripod or the wall or ceiling with a corresponding mount.



Fig. 6-2

	<p>IMPORTANT</p> <p>Possible damage to the camera caused by too long screws. Only use screws with a max. length of 7 mm for mounting.</p>
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	<p>IMPORTANT</p> <p>Possible damage to the camera caused by incorrect installation. The manufacturer's documentation must be paid attention to when installing the camera into a weather proof housing.</p>
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	<p>CAUTION</p> <p>Danger of injury from the camera falling down. Before initial startup, make sure that the camera is securely mounted.</p>
---	--

6.3 Commissioning

	<p>WARNING</p> <p>Danger of death from lightning strike! Do not connect the power supply cable during a thunderstorm.</p>
---	--

	<p>IMPORTANT</p> <p>Possible damage to the camera caused by an inadequate power supply unit. If used in North America, note the following: You must use a UL-certified, limited-power Class 2 power supply unit (12V DC/0.42A or 24V AC/0.20A) for the camera power supply.</p>
---	--

- Connect the power pack to the camera.

**IMPORTANT**

Possible damage to the camera caused by incorrect polarity. You must ensure correct polarity of the cables when using 12V DC.

- Connect the power pack to the power supply.

The Power LED will be lit.

The camera is ready for operation.

7 Preparing to configure

The camera is supplied with factory settings which enable it to be used for most scenarios without further configuration. However, if required certain camera properties can be configured using the camera menu.

The DF3000A-DN / DF3000AS-DN can be configured directly on the camera or by means of the UTC Remote Box, the recorder or PView.

	NOTE There must be no video distributor or signal amplifier between the camera and the UTC Remote Box (or recorder or PView).
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	NOTE Refer to the separate operator's manuals for the devices or software used.
---	---

7.1 UTC Remote Box

Direct

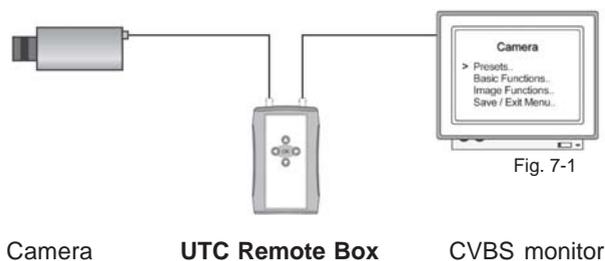


Fig. 7-1

Via recorder

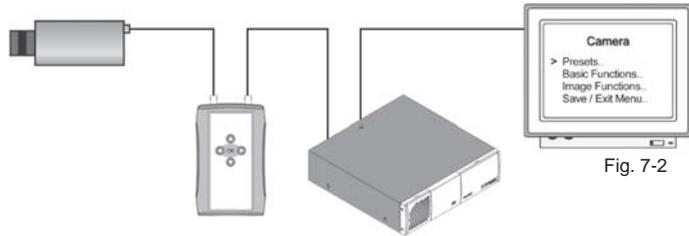


Fig. 7-2

Camera **UTC Remote Box** Recorder CVBS monitor

7.2 DMS Recorder

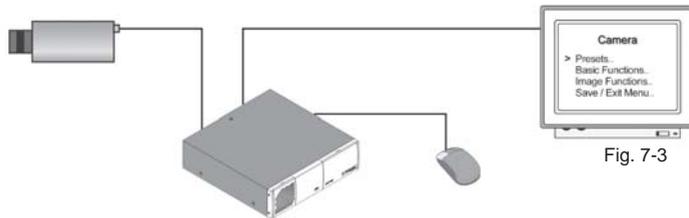


Fig. 7-3

Camera **Recorder** CVBS monitor



NOTE

This method requires recorder software version 5.3.1 or higher.

7.3 PView

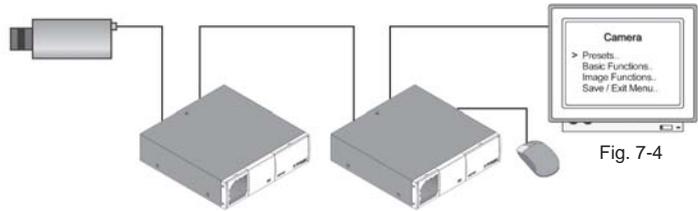


Fig. 7-4

Camera

Recorder

PView Station

CVBS monitor

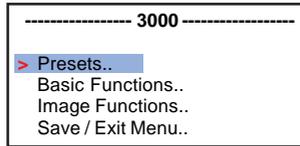


NOTE

This method requires recorder software version 5.3.1 or higher, using PView version 5.6.0 or higher.

8 Configuration

Press and hold the **Enter button** for about 2 seconds to call up the menu.



Two dots after a menu entry indicate that additional configuration options are available in a submenu.

One dot means that the selected entry (command) is executed by pressing the **Enter button**.

- Press the **Selector up** or **down** (▲ ▼) to select a menu item from the list.
- Press the **Set button** to call up the selected submenu or to execute the command.
- Press the **Selector** to the right or left (◀ ▶) to change the respective setting value.
- To return from a submenu to the higher-order menu, select **Previous Page** and press the **Set button**.



NOTE

Please pay attention to **8.4 Exit Menu** when saving/resetting settings already made or leaving the configuration.

8.1 Configuration for lenses with manual iris

If you use a lens with manual iris setting, the factory preset must be changed before any further configuration occurs.

- Choose **Basic Functions** in the main menu and set **Lens Select** to **Manual**.

Now you can make further settings or leave the configuration.

8.2 Presets

The presets allow you to very easily adapt the camera configuration to the on-site conditions to achieve the best possible video picture.

< **Universal** > is set as the preset at the factory.

The following presets are available:



Universal

- Scenes full of contrast with strong backlights. The relevant details are in the highlights.

The maximum dynamic scope of the camera is used.
Large differences in brightness are adjusted.



Details 1/2

- Scenes full of contrast with strong backlights.

Details are displayed in high resolution.
The maximum dynamic scope of the camera is used.



Indoor / Shadow

- Indoor scenes full of contrast with strong backlights.

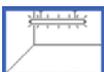
The relevant details are in the shadow.
Detail resolution in the shadowy area is optimized.
Bright areas of the picture are displayed brighter than normal.



Indoor

- Preset for indoor scenes with medium contrast.

Details are displayed in high resolution.
Detail resolution in the bright area is optimized.



Fluorescent

- Use for indoor scenes with fluorescent light and low contrasts.

Detail resolution in bright areas is optimized.
Typical flickering with neon lights is compensated.



Low Light

- Preset for low light scenes with slowly moving objects.

The closing and exposure time (shutter) can be adjusted manually between 2x and 16x.

8.3 Basic Functions

In the Basic Functions area you can make essential settings and specifications for picture display.

8.3.1 Camera ID

Camera ID allows you to assign a unique name to the camera.

The maximum length of the ID is 8 characters.

Select the appropriate character with the selector (right/left).

Press the **Enter button** to select the next character.

----- Basic Functions -----	
Previous Page.	
> Camera ID.	< PAL... >
CCTV System	Off
Horizontal Flip	DC
Lens Select..	On
Color	On
Day / Night Setup..	Off
Progressive Scan	Off
Backlight	On..
Digital Zoom	

ID Position allows you to position the ID in the video image.

ID Display allows you to activate/deactivate the display of the ID on the monitor.

----- Camera ID -----	
Previous Page	
> Camera ID:	12345678
ID Position	Up -Left
ID Display	Off

8.3.2 CCTV System

- Setting the video standard**

Choose between **PAL** and **NTSC** to define the video signal.

PAL is set by default at the factory.

----- Basic Functions -----	
Previous Page.	
Camera ID.	
> CCTV System	< PAL... >
Horizontal Flip	Off
Lens Select..	DC
Color	On
Day / Night Setup..	Off
Progressive Scan	Off
Backlight	On..
Digital Zoom	

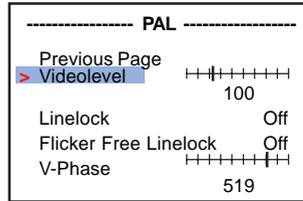
8.3.2.1 PAL

▣ Setting the video level

After selecting the video signal you can adjust the video level, if necessary.

▣ Setting the synchronization

Choose between **On** and **Off** for **Linelock** and **Flicker Free Linelock**.



Flicker Free Linelock is recommended if cameras without Linelock that are operated with a mains frequency of 50 Hz must be enhanced for scenarios with neon tubes.

The **V-Phase** can be corrected, if required.

	<p>NOTE</p> <p>The Linelock = On and V-Phase functions are not supported by the DF3000A-DN / DF3000AS-DN when used with 12V DC.</p>
---	---

	<p>NOTE</p> <p>The Linelock and Flicker Free Linelock functions are mutually exclusive. When Linelock is activated, Flicker Free Linelock is automatically deactivated.</p>
---	--

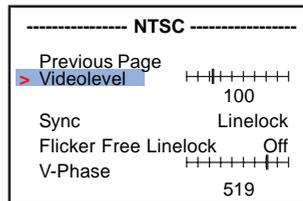
8.2.2.2 NTSC

▣ Setting the video level

After selecting the video signal you can adjust the video level, if necessary.

▣ Setting the synchronization

Choose between **Internal 1**, **Internal 2** and **Linelock** for **Sync**.



Flicker Free Linelock is recommended if cameras without Linelock that are operated with a mains frequency of 50 Hz must be enhanced for scenarios with neon tubes (e.g. in Japan).

The **V-Phase** can be corrected, if required.

	<p>NOTE</p> <p>The Sync = Linelock and V-Phase functions are not supported by the DF3000A-DN / DF3000AS-DN when used with 12V DC.</p>
---	---

	<p>NOTE</p> <p>The Sync = Linelock and Flicker Free Linelock functions are mutually exclusive. When Linelock is activated, Flicker Free Linelock is automatically deactivated.</p>
---	---

8.3.3 Horizontal Flip

Set **Horizontal Flip = On** to horizontally flip the image.

This setting is necessary to obtain an accurate-to-side presentation of the image if recording occurs via a mirror.

----- Basic Functions -----	
Previous Page.	
Camera ID.	
CCTV System	PAL..
> Horizontal Flip	< On >
Lens Select..	DC
Color	On
Day / Night Setup..	
Progressive Scan	Off
Backlight	Off
Digital Zoom	On..

8.3.4 Lens Select

Choose **Manual** for lenses with manual iris control or **DC** for auto iris lenses.

----- Basic Functions -----	
Previous Page.	
Camera ID.	
CCTV System	PAL..
Horizontal Flip	On
> Lens Select..	< DC >
Color	On
Day / Night Setup..	
Progressive Scan	Off
Backlight	Off
Digital Zoom	On..

8.3.5 Color

The **Color** menu item allows you to deactivate color playback and to go to the black-and-white mode (**Color = B/W**).

With **B/W w/Burst** the menu entries are displayed in color in the black-and-white mode and can thus be easier read.

-----Basic Functions -----	
Previous Page.	
Camera ID.	
CCTV System	PAL..
Horizontal Flip	On
Lens Select..	DC
> Color	< On >
Day / Night Setup..	
Progressive Scan	Off
Backlight	Off
Digital Zoom	On..

8.3.6 Day / Night Setup

The camera has a special setting that allows for detailed shots at night. Here, the camera can be manually or automatically set to day/night mode.

Choose between **Off**, **On** and **Auto** for **D / N Control**.

Day / Night Control = Off is set by default at the factory.

- **D / N Control = Off**

The camera is set to day mode. Night mode is deactivated.

- **D / N Control = On**

This setting immediately changes the camera to night mode, regardless of the prevailing light conditions.

- **D / N Control = Auto**

This setting automatically switches the camera to night mode at a certain point in time. Here, the time at which the switchover is made depends on the image enhancement value set in **D / N Threshold: In**.

- With **Night Mode**, you can select whether the camera will take color or black-and-white images at night.
- **Night: max. Gain** allows you to fix the limit for the maximum amplitude of the video signal in night mode.
- **Gain Boost** increases the amplitude of the video signal in night mode.

8.3.7 Progressive Scan

- **Progressive Scan = Off**

Two fields are recorded and sent in sequence at different times. If there are fast-moving objects, the so-called interlace effect may occur. In contrast to this, this setting sets a high picture rate.

- **Progressive Scan = On**

Two fields are recorded and sent in sequence at the same time. The so-called interlace effect is prevented, which means that the picture rate can be halved compared to that for the **Off** setting.



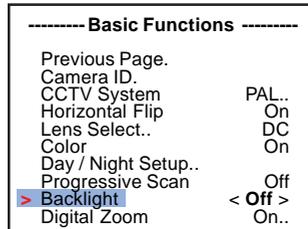
NOTE

To record camera images with maximum resolution the Dallmeier recorder should be operated in full picture mode and the camera should be set to **Progressive Scan = On**.

8.3.8 Backlight

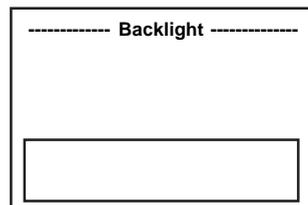
When recording against backlighting, e.g. from windows, glass doors or other sources of light, the Backlight function prevents blanking of the object to a great degree.

The camera analyzes the light conditions within the field of view and controls the lighting parameters accordingly.



□ Predefined fields of view

Choose between **Up** and **Down** to define the position of the field of view (in the example **Down** has been chosen).



□ Freely-defined field of view

Select **Set..** and press the **Enter button**.

The field of view is displayed in **white**. The position of the field of view can be changed with the selector.

Press the **Enter button**.

The field of view is displayed in **green**. The field of view can be enlarged with the selector.

Press the **Enter button**.

The field of view is displayed in **red**. The field of view can be reduced with the selector.

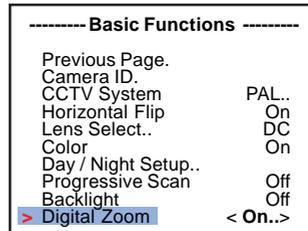
Once you have set the size and position, press the Enter button for approx. 2 seconds to save the settings and to leave the configuration menu.

8.3.9 Digital Zoom

Select Digital **Zoom = On..** and press the **Enter button**.

First set the zoom factor next to **Zoom** in the submenu.

Then change the values next to **Pan** and **Tilt** to change the position of the section enlargement.



	<p>NOTE</p> <p>Digital panning (Pan) and tilting (Tilt) are only possible when zoom factor > 1 has been selected.</p>
---	---

	<p>NOTE</p> <p>The Backlight and Digital Zoom functions are mutually exclusive. If Backlight is activated, Digital Zoom is automatically deactivated, and vice versa.</p>
---	--

8.4 Image Functions

The **Image Functions** area allows you to make settings concerning the image quality.

8.4.1 Brightness

Select **Brightness** to adjust the image brightness.

----- Image Functions -----		
Previous Page.		
> Brightness	< 0 >	28
Gain Limit		28
Metering	Highlights	
Range Bias		4
Gamma	Auto	
Sharpness		1
Saturation		1
White Balance	ATW..	

8.4.2 Gain Limit

Gain Limit allows you to set the max. gain with which the amplitude of the video signal is raised in poor light conditions.

----- Image Functions -----		
Previous Page.		
Brightness		0
> Gain Limit	< 28 >	28
Metering	Highlights	
Range Bias		4
Gamma	Auto	
Sharpness		1
Saturation		1
White Balance	ATW..	

8.4.3 Metering

With **Metering** you decide whether the balance point measurement is to be based on bright points (**Highlights**) or dark points (**Shadows**) in the picture.

----- Image Functions -----		
Previous Page.		
Brightness		0
Gain Limit		28
> Metering	< Highlights >	
Range Bias		4
Gamma	Auto	
Sharpness		1
Saturation		1
White Balance	ATW..	

8.4.4 Range Bias

Range Bias allows you to shade or brighten the different brightness areas.

----- Image Functions -----		
Previous Page.		
Brightness		0
Gain Limit		28
Metering	Highlights	
> Range Bias	< 4 >	
Gamma	Auto	
Sharpness		1
Saturation		1
White Balance	ATW..	

8.4.5 Gamma

Gamma defines the brightness range within the color space and thus the differentiation between lights and shadows.

Choose **Gamma = Auto** for scenarios with strongly varying light conditions.

Alternatively, the brightness range can also be set manually in 8 steps.

----- Image Functions -----	
Previous Page.	
Brightness	0
Gain Limit	28
Metering	Highlights
Range Bias	4
> Gamma	< Auto >
Sharpness	1
Saturation	1
White Balance	ATW..

8.4.6 Sharpness

Select **Sharpness** to adjust the image sharpness.

----- Image Functions -----	
Previous Page.	
Brightness	0
Gain Limit	28
Metering	Highlights
Range Bias	4
Gamma	Auto
> Sharpness	< 1 >
Saturation	1
White Balance	ATW..

8.4.7 Saturation

Select **Saturation** to adjust the color saturation.

----- Image Functions -----	
Previous Page.	
Brightness	0
Gain Limit	28
Metering	Highlights
Range Bias	4
Gamma	Auto
Sharpness	1
> Saturation	< 1 >
White Balance	ATW..

8.4.8 White Balance

White Balance allows you to influence the white balance of the camera.

AWB..

With **AWB..** automatic white balance is carried out for the situation current at the time of measurement.

----- Image Functions -----	
Previous Page.	
Brightness	0
Gain Limit	28
Metering	Highlights
Range Bias	4
Gamma	Auto
Sharpness	1
Saturation	1
> White Balance	< ATW.. >

**NOTE**

Hold a white sheet of paper in front of the camera and call up the **AWB.** function. The camera is then calibrated for the most realistic color reproduction possible, regardless of the actual scenario.

With light and therefore color temperature modifications, no new measurement for white balance is carried out.

The **WB Offset** function can be used when the automatic white balance produces an unsatisfactory color display with "monochrome" scenarios. This function modifies the metered color temperature.

ATW

With **ATW** (Auto Tracking White Balance) the white balance is continually recalculated. The white balance is readjusted accordingly in different recording conditions.

The **WB Offset** function can be used when the automatic white balance produces an unsatisfactory color display with "monochrome" scenarios. This function modifies the metered color temperature. The limits within which the automatic white balance can move are set using **Low Limit** and **High Limit**.

Manual

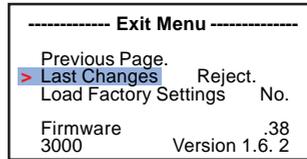
Select **Manual** and press the **Enter button** to manually adjust the white balance.

8.5 Exit Menu

3 options are available to exit the configuration menu.

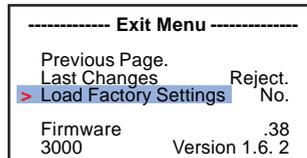
Last Changes

- If you wish to save the changes made to the configuration, select the **Save** option next to **Last Changes** and press the **Enter** button.
- If you wish to discard the changes, select the **Reject** option next to **Last Changes** and press the **Enter** button.



Load Factory Settings

- To return the configuration to its default settings, select the **Yes** option next to **Load Factory Settings** and press the **Enter** button.



A Appendix

A1 Menu Structure

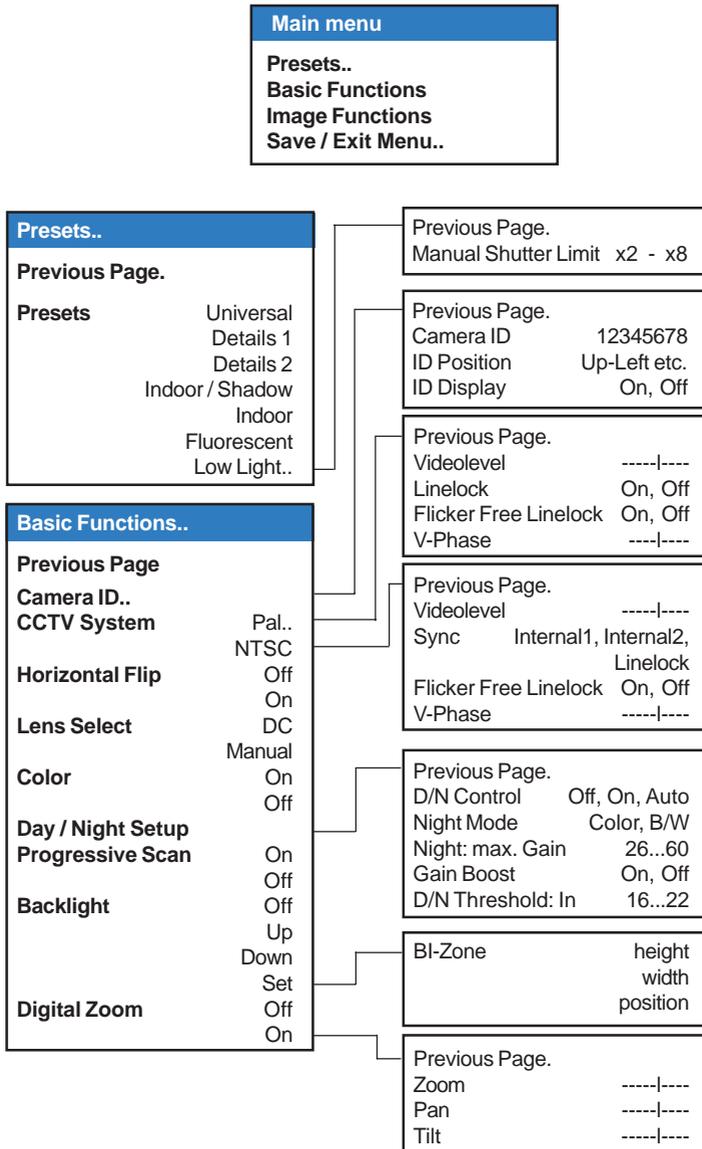


Image Functions..	
Brightness	-18 - +18
Gain Limit	5 - 60
Metering	Highlights Shadow
Range Bias	-18 - +24
Gamma	Auto Manual 1 Manual 2 Manual 3 Manual 4 Manual 5 Manual 6 Manual 7 Manual 8
Sharpness	0 - 6
Saturation	-8 - +8
White Balance	AWB.. ATW.. Manual..

Previous Page.
WB Offset -----|-----

Previous Page.
WB Offset -----|-----
Low Limit -----|-----
High Limit -----|-----

Previous Page.
Kelvin -----|-----

Save / Exit Menu..	
Previous Page.	
Last Changes	Reject. Save.
Load Factory Settings	No. Yes.

A3 Technical Data

Image sensor	1/3" Sensor CMOS
Pixel	720 H x 540 V
Video standard	525 lines / 60 Hz (NTSC) 625 lines / 50 Hz (PAL)
Synchronization	Internal Linelock (with 24V AC)
Resolution	> 504 TV lines (horizontal) > 460 TV lines (vertical NTSC) > 540 TV lines (vertical, PAL)
Dynamic range	120 dB maximal
Sensitivity	< 0.2 Lux at f=0.95; 50 IRE 0.04 Lux at f0.95 in LowLight mode
Signal-to-noise ratio	> 48 dB
Configuration	OSM via camera buttons or UTC (UTC-Box, PView, recorder)
White balance	ATW, AWB, manual (2,000 K to 11,000 K possible)
Video output	CVBS 1.0 V _{ss} at 75 Ohm
Lens	DC auto-iris lens day/night, CS-Mount 1:0.95 / 2.9 - 8 mm
Operating temperature	-10° to 50° C 0° to 35° C (32° to 95° F) recommended
Humidity	0 to 90% not condensing
Power supply	DF3000A-DN: 12V DC +/-5%, 24V AC +/-5% (50/60Hz) DF3000AS-DN: 12V DC +/-5%
Power consumption	< 3.6 W
Weight (without lens)	DF3000A-DN: approx. 270 g DF3000AS-DN: approx. 150 g
Dimensions (without lens)	DF3000A-DN: 95 (L) x 45 (H) x 45 (W) mm DF3000AS-DN: 60 (L) x 45 (H) x 45 (W) mm
Interface	RS232
Miscellaneous	Infrared sensitivity in NightMode Progressive Scan BacklightZone freely configurable 4 x digital zoom



Declaration of Conformity

Product: DF3000A-DN / DF3000AS-DN

Manufacturer: Dallmeier electronic GmbH & Co.KG
Cranachweg 1
D - 93051 Regensburg

As manufacturer we declare that the products named above are in accordance with the following EC-Directives:

- Electromagnetic compatibility 89/336/EWG

The following specifications were applied:

DIN EN 55022: 1998-04 class B

DIN EN 55024: 2002-11

(DIN EN 61000-4-2: 2001-12, DIN EN 61000-4-3: 2001-12,
DIN EN 61000-4-4: 2002-07, DIN EN 61000-4-5: 2001-12,
DIN EN 61000-4-6: 2001-12, DIN EN 61000-4-8: 2001-12)

DIN EN 61000-3-2: 2001-12

DIN EN 61000-3-3: 2002-05

Regensburg, 05.12.2005

Dieter Dallmeier
General Manager