

**1 Safety**

**1.1 Safety precautions**

**DANGER!**  
High risk: This symbol indicates an imminently hazardous situation such as "Dangerous Voltage" inside the product. If not avoided, this will result in an electrical shock, serious bodily injury, or death.

**WARNING!**  
Medium risk: Indicates a potentially hazardous situation. If not avoided, this could result in minor or moderate bodily injury.

**CAUTION!**  
Low risk: Indicates a potentially hazardous situation. If not avoided, this could result in property damage or risk of damage to the unit.

**CAUTION!**  
The Low Voltage power supply unit must comply with EN60950 / UL60065. The power supply must be a SELV-LPS unit or a SELV - Class 2 unit (Safety Extra Low Voltage - Limited Power Source).

**CAUTION!**  
Installation should only be performed by qualified service personnel in accordance with the National Electrical Code or applicable local codes.

**1.2 Important safety instructions**

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Install in accordance with the manufacturer's instructions.
8. Do not install unit near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
10. Only use attachments/accessories specified by the manufacturer.
11. Unplug this apparatus during lightning storms or when unused for long periods of time.
12. Refer all servicing to service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

**1.3 FCC & ICES compliance**

**FCC & ICES Information**  
This equipment has been tested and found to comply with the limits for a **Class A** digital device, pursuant to *part 15* of the *FCC Rules*. These limits are designed to provide reasonable protection against harmful interference in a **residential environment**. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- reorient or relocate the receiving antenna;
- increase the separation between the equipment and receiver;
- connect the equipment into an outlet on a circuit different from that to which the receiver is connected;
- consult the dealer or an experienced radio/TV technician for help.

Intentional or unintentional modifications, not expressly approved by the party responsible for compliance, shall not be made. Any such modifications could void the user's authority to operate the equipment. If necessary, the user should consult the dealer or an experienced radio/television technician for corrective action.

**1.4 Bosch notices**

**Disposal** - Your Bosch product was developed and manufactured with high-quality material and components that can be recycled and reused. This symbol means that electronic and electrical appliances, which have reached the end of their working life, must be collected and disposed of separately from household waste material. Separate collecting systems are usually in place for disused electronic and electrical products. Please dispose of these units at an environmentally compatible recycling facility, per *European Directive 2002/96/EC*

**Optical elements**  
Optical elements are sensitive and should be protected at all times. Do not allow objects to come into contact with glass surfaces and do not touch optical elements with your fingers.

**Copyright**  
This manual is the intellectual property of Bosch Security Systems and is protected by copyright. All rights reserved.

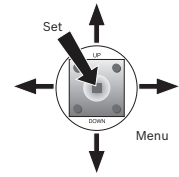
**Trademarks**  
All hardware and software product names used in this document are likely to be registered trademarks and must be treated accordingly.

**Note**  
Bosch Security Systems accepts no liability for damage resulting directly or indirectly from faults, incompleteness or discrepancies between the user guide and the product described.

**More information**  
For more information please contact the nearest Bosch Security Systems location or visit [www.boschsecurity.com](http://www.boschsecurity.com)

## 1 Setup menu

Press straight down on the button of the control pad to access the **SETUP** menu.



- Move the button up or down to move the cursor through the menus.
- Move the button to the right or left to change values.
- When the symbol is shown, press straight down on the button to select an item or open a submenu.

Navigation items at the bottom of the screen

- To move to the continuation of a menu, select **NEXT**.
- To return to the previous menu, select **BACK** or **RETURN**.
- To save changes, select **SAVE ALL**.
- To close the **SETUP** menu, select **EXIT**.

### 1.1 Main menu

LENS
WHITE BAL
WDR
DNR
DAY/NIGHT
IMAGE ADJUST
GENERAL

### 1.1.1 Lens menu

LENS	DC	BRIGHTNESS	0-255
		AGC	0-20
		FLICKERLESS	ON, OFF
		DSS	OFF, X2, X4, X6, X32, X64, 128X, X256, X512,
		SHUTTER	1/60, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000 (NTSC) 1/50, 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000 (PAL)
	RETURN		
	ESC	BRIGHTNESS	0-255
		AGC	0-20
		FLICKERLESS	ON, OFF
		DSS	OFF, X2, X4, X6, X32, X64, 128X, X256, X512,
RETURN			

- DSS (Digital Slow Shutter) increases the amount of light captured by the factor selected. Use only in scenes with little movement.

### 1.1.2 White balance menu

WHITE BAL	ATW	ENVIRONMENT	INDOOR, OUTDOOR
		RETURN	
		PUSH	
	USER1, USER2	R-GAIN	0-255
		B-GAIN	0-255
		RETURN	
	ANTI CR	ENVIRONMENT	INDOOR, OUTDOOR
	MANUAL	B-GAIN UP	
		B-GAIN DOWN	
		PRESET	
		RETURN	
	PUSH LOCK		

- ATW (Auto Tracking White balance: 2,500 K to 8,500 K) and PUSH (Full pull-in: 1,800 K to 10,500 K) continuously analyze color temperature.
- Use ANTI CR (Anti Color Rolling) when certain types of fluorescent light cause the picture to periodically change color.
- Use PUSH LOCK with a reference white object filling the screen.

### 1.1.3 Wide dynamic range menu

WDR	WDR	MODE	WDR, DWDR
		BRIGHTNESS	0-255
		CONTRAST	LOW, MID-LOW, MID, MID-HIGH, HIGH
		RETURN	
		BLC	AREA
	HLC	RETURN	
		CLIP LEVEL	0-255
		SCALE	0-15
		RETURN	

- WDR (Wide Dynamic Range) is a dual shutter exposure correction function for high contrast scenes to obtain images with fewer blown-out highlights and hidden shadows.
- Use BLC (Back Light Compensation) to see a dark object in front of a bright background.
- Use HLC (High Light Compensation) to darken highlights and avoid image wash-out (for example, car headlights).

### 1.1.4 Digital noise reduction menu

DNR	2DNR	LEVEL	LOW, MID, HIGH
		RETURN	
	3DNR	LEVEL	AUTO, LOW, MID, HIGH
		RETURN	
	OFF		

- DNR (Digital Noise Reduction): In low ambient lighting conditions use 2DNR to reduce noise in still images; use 3DNR to reduce noise in scenes with movement.

### 1.1.5 Day/night menu

DAY/NIGHT	AUTO	DELAY CNT	0-15 SEC
		D/N LEVEL	LOW, MID, HIGH
		RETURN	
	COLOR		
	B/W	BURST	ON, OFF
		RETURN	

### 1.1.6 Image adjust menu

IMAGE ADJUST	IMAGE	SHARPNESS	0-15	
		GAMMA	0.38, 0.42, 0.45, 0.50, 0.55, 0.63, 0.71, 0.83	
		HR MODE	OFF, X1, X2, X3, X4, X5, X6, X7	
		CONTRAST	0-63	
		RETURN		
		D-EFFECT	DIS	ON, OFF
			D-ZOOM	OFF, X2, X3, X4, X6, X8, X16
	MIRROR		V-FLIP, H-FLIP, HV-FLIP	
	FREEZE		ON/OFF	
	COLOR-GAIN	NEGA/POSI	NEGA/POSI	
		RETURN		
		R-GAIN	0-63	
		B-GAIN	0-63	
		RETURN		

- DIS (Digital Image Stabilizer) electronically suppresses camera shake.

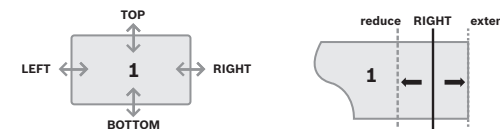
### Image adjust menu - continued

	MOTION	AREA	1/4, 2/4, 3/4, 4/4
		DISPLAY	ON, OFF
		DETECT AREA	
		SENSITIVITY	0-15
		TOP	0-15
		BOTTOM	1-16
		LEFT	0-23
		RIGHT	1-24
		RETURN	
		PRIVACY	AREA
	DISPLAY		ON, OFF
	POSITION		
	COLOR		GREEN, BLUE, YELLOW, CYAN, MAGENTA, WHITE, BLACK, RED
	TRANSP		0.00, 0.50, 0.75, 1.00
	MOSAIC		ON, OFF
	RETURN		
	RETURN		

#### Area selection for motion or privacy masks

Select area 1, 2, 3 or 4.

- **Top:** extend or reduce upper limit of detection area.
- **Bottom:** extend or reduce bottom limit of detection area.
- **Left:** extend or reduce left limit of detection area.
- **Right:** extend or reduce right limit of detection area.



### 1.1.7 General menu

GENERAL	CAM TITLE	OFF	
		ON	ABCDEF GHIJKL MNOPQRSTU VWXYZ () - /0123456789 ← → DEL EXIT
		RETURN	
		LANGUAGE	ENGLISH, JAPANESE, GERMAN, FRENCH, RUSSIAN, PORTUGUESE, SPANISH, SIMPLIFIED CHINESE
		SYNC	INT
		L/L	SHIFT UP
			SHIFT DOWN
			PRESET
			RETURN
	VERSION		
FACTORY RESET			
RETURN			

When the camera title is ON, a virtual keyboard appears on the screen. Use the control pad to move to the character you want and select it. Repeat this to enter the camera ID you desire. You can enter up to 52 characters.