

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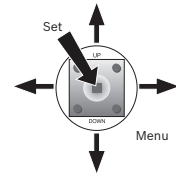
Trademarks
All hardware and software product names used in this document are likely to be registered trademarks and must be treated accordingly.

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

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
SHUTTER/AGC
WHITE BAL
BACKLIGHT
PICT ADJUST
ATR
MOTION DET
PRIVACY
DAY/NIGHT
NR
CAMERA ID
SYNC
LANGUAGE
CAMERA RESET

- Camera reset sets all parameters to their factory default values.

1.1.1 Lens menu

LENS	AUTO	TYPE	DC
		MODE	AUTO
		SPEED	0 - 255
		RETURN	

- For cameras with a fixed lens only manual mode is used.

1.1.2 Shutter/AGC (Automatic Gain Control) menu

SHUTTER/AGC	AUTO	HIGH LUMINANCE	
		MODE	SHUT
BRIGHTNESS		0 - 255	
RETURN			
LOW LUMINANCE			
MODE		AGC, OFF	
BRIGHTNESS	x0.25, x0.50, x0.75, x1.00		
RETURN			
MANUAL	MODE	SHUT+AGC	
	SHUTTER	1/60, 1/120, 1/250, 1/500, 1/1000, /2000, 1/4000, 1/10000 (NTSC) 1/50, 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000 (PAL)	
	AGC	6.00, 12.00, 18.00, 24.00, 30.00, 36.00, 42.00, 44.80	
	RETURN		

1.1.3 White balance menu

WHITE BAL	ATW	SPEED	0 - 255
		DELAY CNT	0 - 255
		ATW FRAME	x0.50, x1.00, x1.50, x2.00
		ENVIRONMENT	INDOOR, OUTDOOR
		RETURN	
	PUSH		
	USER1	B-GAIN	0 - 255
		R-GAIN	0 - 255
		RETURN	
	USER2	B-GAIN	0 - 255
	R-GAIN	0 - 255	
	RETURN		
ANTI CR			
MANUAL	LEVEL	0 - 90 (NTSC), 97 (PAL)	
	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.

1.1.4 Backlight menu

BACKLIGHT	OFF		
	BLC		
	HLC		

- 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).

1.1.5 Picture adjust menu

PICT ADJUST	MIRROR	ON, OFF
	BRIGHTNESS	0 - 255
	CONTRAST	0 - 255
	SHARPNESS	0 - 255
	HUE	0 - 255
	GAIN	0 - 255
	RETURN	

1.1.6 Adaptive Tone Reproduction menu

ATR	OFF		
	LUMINANCE	LOW, MID, HIGH	
	CONTRAST	LOW, MID, HIGH	
	RETURN		

- Use ATR (Adaptive Tone Reproduction) to improve dynamic range by highlight compression and contrast enhancement.

1.1.7 Motion detection menu

MOTION DET	OFF		
	DETECT SENSE	0 - 127	
	BLOCK DISP	OFF, ON, ENABLE	
	MONIOTR AREA	OFF, ON	
	AREA SEL	1 - 4	
	TOP	0 - 244 (NTSC), 288 (PAL)	
	BOTTOM	0 - 244 (NTSC), 288 (PAL)	
	LEFT	0 - 474 (NTSC), 468 (PAL)	
	RIGHT	0 - 474 (NTSC), 468 (PAL)	
	RETURN		

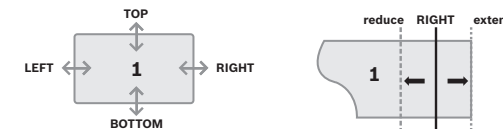
1.1.8 Privacy masking menu

PRIVACY	OFF		
	AREA SEL	1 - 4	
	TOP	0 - 244 (NTSC), 288 (PAL)	
	BOTTOM	0 - 244 (NTSC), 288 (PAL)	
	LEFT	0 - 474 (NTSC), 468 (PAL)	
	RIGHT	0 - 474 (NTSC), 468 (PAL)	
	COLOR	1 - 8	
	TRANSP	0.00, 0.50, 0.75, 1.00	
	MOSAIC	OFF, ON	
RETURN			

Area selection for motion or privacy masks

Select area 1, 2, 3 or 4.

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



1.1.9 Day/night menu

DAY/NIGHT	AUTO	BURST	OFF, ON
		DELAY CNT	0 - 255
		DAY->NIGHT	0 - 255
		NIGHT->DAY	0 - 255
		RETURN	
	COLOR		
	B/W	BURST	OFF, ON
	RETURN		

1.1.10 Noise reduction menu

NR	NR MODE	OFF, Y, C, Y/C
	Y LEVEL	0 - 15
	C LEVEL	0 - 15
	RETURN	

1.1.11 Camera identification menu

CAMERA ID	OFF		
	ON	ABCDEFHIJKLMNOPQRSTUVWXYZ 0123456789-!*%&' () _ , ; < > ? @ [\] ^ * + / ~ ` ~ ` ~ ` ~ ` ~ ` ~ ` ~ ` ~ ` ~` ← → CLR POS	
	RETURN		

When ON is selected, 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.

1.1.12 Synchronization menu

SYNC.	L/L	PHASE	0 - 524 (624)
		RETURN	

- Sync. is always internal for 12 VDC cameras.

1.1.13 Language menu

LANGUAGE	ENGLISH, JAPANESE, GERMAN, FRENCH, RUSSIAN, PORTUGUESE, SPANISH, SIMPLIFIED CHINESE
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