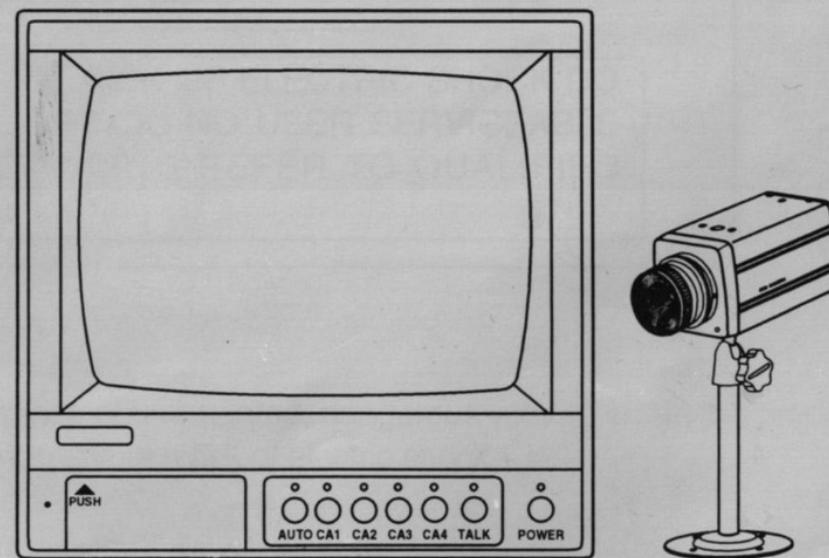


OBSERVATION SYSTEM

(10" B/W METAL MONITOR & CAMERA WITH ALARM SYSTEM)



Before operating the unit, please read this manual thoroughly and retain it for future reference

WARNING

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

DO NOT INSERT ANY METALLIC OBJECT THROUGH VENTILATION GRILLS.

CAUTION



CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN.



CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK) NO USER SERVICEABLE PARTS INSIDE FOR SERVICING REFER TO QUALIFIED SERVICE PROFESSIONAL

Explanation of Graphical Symbols



This symbol is intended to alert the user the presence of uninsulated, dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.



This symbol is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the appliance.

IMPORTANT SAFEGUARDS

1. **READ INSTRUCTIONS**-All the safety and operating instructions should be read before the appliance is operated.
2. **RETAIN INSTRUCTIONS**-The safety and operating instructions should be retained for future reference.
3. **CLEANING**-Unplug this television from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
4. **ATTACHMENTS**-Do not use attachments not recommended by the television equipment manufacturer as they may result in the risk of fire, electric shock or injury to persons.
5. **WATER AND MOISTURE**-Do not use this television equipment near water-for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, near a swimming poll, or the like.
6. **ACCESSORIES**-Do not place this television equipment on an unstable cart, stand or table. The television equipment may fall, causing serious injury to a child or adult, and serious damage to the equipment. Wall or shell mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturer.
- 6A. Television equipment and cart combinations should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the equipment and cart combination to overturn.
7. **VENTILATION**-Slots and openings in the cabinet and the back or bottom are provided for ventilation, and to ensure reliable operation of the television equipment and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the television equipment on a bed, sofa, rug, or other similar surface. This television equipment should never be placed near or over a radiator or heat register. This television equipment receiver should not be placed in a built-in installation such as a bookcase unless proper ventilation is provided.
8. **POWER SOURCES**-This television equipment should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your television dealer or local power company. For television equipment designed to operate from battery power refer to the operating instructions.
9. **GROUNDING OR POLARIZATION**-This television equipment is provided with a polarized alternating-current line plug (a plug having one blade wider than the other). The plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.



IMPORTANT SAFEGUARDS

10. POWER CORDS-Do not allow anything to rest on the power cord. Do not locate this television equipment where the cord will be abused by persons walking on it.
11. HEED WARNINGS-Follow all instructions marked on the television equipment.
12. LIGHTNING-For added protection for this television equipment during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the video product due to lightning and power-line surges.
13. OVERLOADING-Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.
14. OBJECT AND LIQUID ENTRY-Never push objects of any kind into television equipment through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill any kind of liquid on the product.
15. SERVICING-Do not attempt to service this television equipment yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
16. DAMAGE REQUIRING SERVICE-Unplug this television equipment from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - A. When the power supply cord or the plug has been damaged.
 - B. If liquid has been spilled, or objects have fallen into the video product.
 - C. If the video product has been exposed to rain or water.
 - D. If the video product does not operate normally by following the operating instructions, adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls. May result in damage and will often require extensive work by a qualified technician to restore the video product to its normal operation.
 - E. If the video product has been dropped, or the cabinet damaged.
 - F. When the video product exhibits a distinct change in performance - this indicates a need for service.
17. REPLACEMENT PARTS-When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.
18. SAFETY CHECK-Upon completion of any service or repairs to this video product, ask the service technician to perform safety checks to determine that the video product is in proper operating condition.

SAVE THESE INSTRUCTIONS.

FCC CLASS B NOTICE

The users manual or instruction manual for an intentional or unintentional radiator shall caution the used that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CERTIFICATION:

This unit complies with DHHS rules 2 cfr subchapter J and FCC rules 47 cfr part 15 is applicable at date of manufacture.

**CAUTION**

RISK OF ELECTRIC SHOCK
DO NOT OPEN.



WARNING: TO PREVENT DAMAGE WHICH MAY RESULT IN FIRE OR SHOCK HAZARD DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

FCC CLASS B NOTICE

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. 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 communication. 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 or television technician for help.

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INTRODUCTION

This OBSERVATION SYSTEM will give you added security and comfort for many years. It is easy to install in almost anywhere you need audio/video surveillance. To safe use all the high technical functions of the unit, please read the installation and operating instruction in manual, and keep it for future reference.

FEATURES

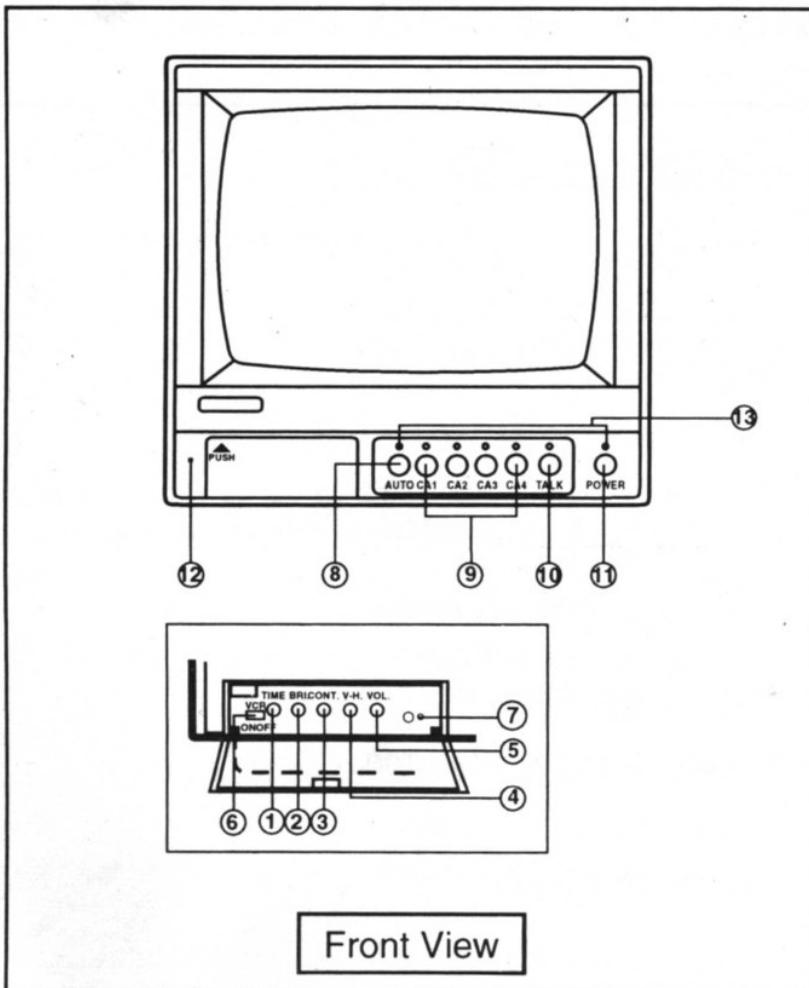
- Highly reliable stable circuit to assure best quality picture.
- Availability of up to 4 camera connections.
- Easy to install and operate.
- Compact, lightweight, and versatile.
- High resolution monitor
- Low, minimum lighting requirement.
- Manual or auto selector switch.
- 3 to 60 seconds auto switching speed adjustable.
- 2 way audio monitoring
- VCR Recordable

Read the following precautions before installing or using the system

1. Choose an ideal location for the camera so that the lens won't be exposed to any direct light source.
The camera unit must also be protected against moisture and vibration.
2. The monitor should only be operated with the correct power source indicated on the adapter.
3. Check the system for operation prior to installing the unit.
4. Be extra careful not to scratch the camera lens.

DESCRIPTION OF CONTROLS & OPERATION

A. Monitor unit



● FRONT VIEW

Vorderseite

1. TIME CONTROL KNOB

Zeit Kontroll - Knopf

To vary the display switching speed from 3 to 60 seconds. When the system is in the auto mode with more than one camera, this knob enables you to vary the time of stay from one location to another from 3 to 60 seconds. Turning this knob in clockwise direction will increase the time of stay up to 60 seconds. Turning this knob all the way in counter clockwise direction will quickly show the locations.

2. BRIGHTNESS CONTROL KNOB

Brillianz - Kontroll - Knopf

To adjust the BRIGHTNESS of the screen.

3. CONTRAST CONTROL KNOB

Kontrast - Kontroll - Knopf

To adjust the CONTRAST of the screen.

4. VERTICAL HOLD CONTROL KNOB

Vertikal haltungs - Kontroll - Knopf
Um die Vertikal - Synchro
auszupassen

5. VOLUME CONTROL KNOB

Volumen - Kontrolle

Turn on the volume control up or down to reach volume desired.

6. VCR ON/OFF SELECTOR

VCR AN/AUS - Schalter

Press it to review the video signal from VCR. Press it again to stop the video signal. VCR Recording Reviewing Method

1) Connect the monitor to the VCR and press the RECORD button on the VCR to start recording the pictures.

2) To review the recorded pictures, press the VCR button on the monitor and then the PLAY button on the VCR.

DESCRIPTION OF CONTROLS & OPERATION

7. ALARM ON/OFF SELECTOR *Alarm EIN/AUS - Sicher*

Switches alarm function on/off. NB alarm function is set to on position upon activation of the monitor via power switch

7A. DESCRIPTION OF THE ALARM FUNCTION *Beschreibung der Alarmfunktion*

The alarm function is designed to automatically control picture selection upon receipt of signals from alarm devices such as PIRs, contacts or panic buttons, alert the operator and even trigger additional equipment such as a time lapse VCR. Each camera channel has an associated alarm trigger input. Irrespective of the camera switching mode (ie Manual or Auto) the system will instantly switch to the channel on which an alarm trigger has been received and emit a warning sound for 15 secs. After this period allowing that no further alarm triggers are received the system will automatically revert to the mode in which it was originally set. Should additional triggers be received during the 15 second period the system will automatically switch to the relevant cameras and continue the warning sound. At the time of trigger the system can also send an output to external equipment such as a time lapse VCR in event record mode or through an additional relay to lighting or alarm sound etc. The alarm trigger device should be normally open. The alarm output can be either normally open or normally closed.

ALARM OUT	COM ≡ common <i>gewöhnlich</i>
	NO ≡ normally open <i>normal offen</i>
NC	NC ≡ normally closed <i>normal geschlossen</i>

8. PROGRAMMABLE AUTO SEQUENCE

Turns on/off the Auto Sequence Mode. In auto mode the system will switch between preset channels at a time sequence set by the dwell time adjuster. The sequencer is also programmable. Press and hold the auto button for 3 seconds, this will enable sequence memory

mode and cause the auto LED to flash. With the auto led flashing press the channel of each camera required to be included in the display sequence (in the order that you wish them to be displayed). When your selections are finished press the auto button in order to lock the memory.

IMPORTANT-This operation must be carried out when using less than 4 cameras in order to avoid switching to a blank screen.

NB: The memory will be lost if the power to the monitor is lost.

9. CAMERA-1,2,3,4 BUTTONS

Press each button to monitor the desired channel.

Drücke jeden Knopf um den gewünschten Kanal zu monitor

10. TALK

Press and hold this button to communicate through selected camera channel. Release to hear sound from selected camera channel.

11. POWER ON/OFF SWITCH (STAND BY)

By pushing the stand-by button the image and sound on the monitor can be switched ON and OFF. The alarm functions also remain active.

12. MICROPHONE

Pick up sound around the monitor.

Pick up Ton um den Monitor

13. LED INDICATORS

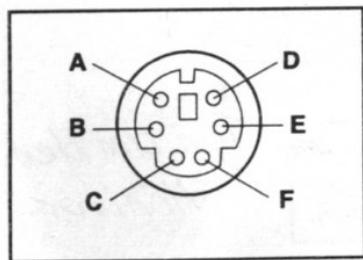
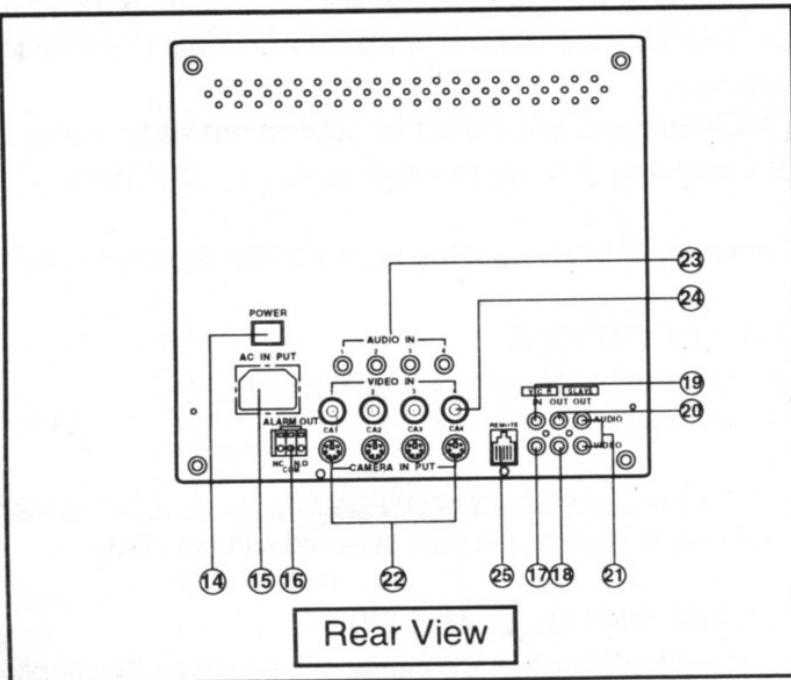
LED, POWER, AUTO, camera 1~4, TALK function indicators.

Rede-Funktionen Anzeigen

DESCRIPTION OF CONTROLS & OPERATION

Seite 2

● REAR VIEW



- A) B+
- B) Audio in
- C) Camera audio AMP:B+
- D) Video in
- E) Audio out
- F) N.C

14. MAIN POWER SWITCH

This switch is used to turn ON or OFF all power to the monitor.

EIN/AUS für Strom zum Monitor

15. AC POWER CORD

Ac - Strom - Kabel

Plug the AC power supply cord. *Stecke das AC - Stromkabel ein.*

16. ALARM FUNCTION INPUT / OUTPUTS

Switch alarm function on/off NB alarm function is set to on position upon activation of the monitor via power switch. *Alarm - Funktionen sind eingeschaltet wenn der Monitor unter Strom ist.*

17. VIDEO INPUT

VIDEO Eingang

Receives video signal from VCR or another video unit. *Empfängt Video signale vom VCR oder anderen Videoeinheit*

18. VIDEO OUTPUT

VIDEO AUSGANG

Transmits video signal from a camera to another monitor. *Übermittelt Video*

Also used in recording on VCR. *Signale von einer Kamera oder einem anderen Monitor. Auch benutzt zum Aufzeichnen am VCR.*

19. AUDIO INPUT

Receives audio signal from VCR or audio amplifier. *Empfängt Audio - Signale von VCR oder Audio - Verstärker*

20. AUDIO OUTPUT

Transmits audio signal to audio amplifier. Also used in recording on VCR. *Übermittelt Audio - Signal zu Audio - Verstärker*

Auch benutzt für Aufzeichnung am VCR

DESCRIPTION OF CONTROLS & OPERATION

21. SLAVE MONITOR OUTPUT

Neben-Monitor-Ausgang
Audio and video output for slave monitor. Connect via double male to double male phone leads of required length. NB: Maximum recommended distance between master and slave monitor is 20m.

Audio u. Video Ausgang für Neben-Monitor.
Verbinde über Doppelmaul. zu Doppelmaul. Höherer Max. empfohlene Distanz zwischen Haupt- und Nebenmonitor ist 20 Meter.

22. CAMERA INPUT JACKS.

Kameraeingang Buchse
Connect to 4 cameras.

Verbinde zu 4 Kameras

23. AUDIO INPUT

Audio-Eingang

These inputs are looping used for Audio.

Diese Eingänge sind (Schlange/Loch/Antenne) für Audio

24. BNC CAMERA INPUTS 1~4

These inputs are used for standard cameras with BNC type connectors.

Diese Eingänge sind für Standard-Kameras mit BNC Typ Anschlüsse.

25. REMOCON

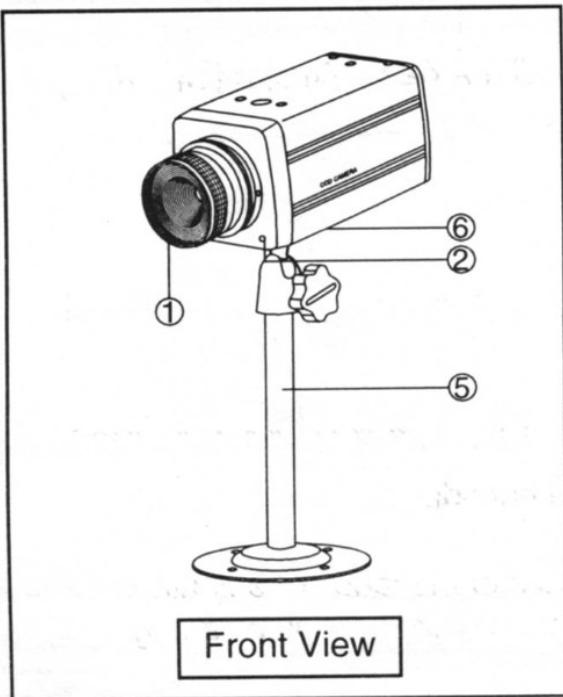
Connect to wire remote control (optional). The controls all of the switcher functions on the front panel of the monitor.

Verbinde mit Fernsteuerung anzu schliessen.
die Kontrollen aller Funktionsschalter-Funktionen auf der Front (Vorder- Anzeige) des Monitors

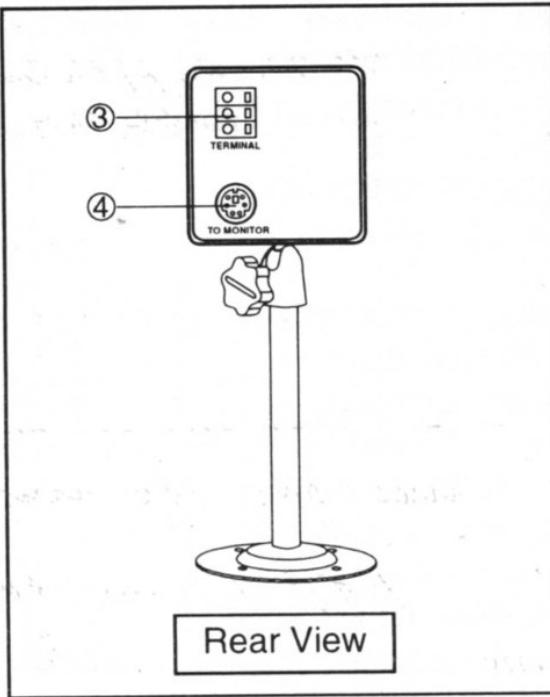


DESCRIPTION OF CONTROLS & OPERATION

B. Camera Unit



Vorderseite



Hinterseite

1. CCD CAMERA LENS

Turn the front ring of the lens to obtain the focus desired. *Drehen den vordersten Ring der Lense um den gewünschten Focus zu erhalten.*

2. MICROPHONE

Pick up sound around the camera. *Nimmt Ton rund um die Kamera auf.*

3. ALARM TERMINAL

Connect an optional alarm device to this terminal. *Verbindung zu diesem Terminal/Verriegelung zu diesem Terminal*

IN	<input type="radio"/>	<input type="checkbox"/>
GND	<input type="radio"/>	<input type="checkbox"/>
B+	<input type="radio"/>	<input type="checkbox"/>
TERMINAL		

Eingang (normalerweise offen)
IN = Alarm input (normally open)
GND = Ground *Grund*
B+ = Power output +12V DC 100mA
Stromausgang +12V

4. MONITOR INPUT JACK

Connect to cable the monitor. *Verbinde um den Monitor an zu Kabeln*

5. BRACKET KONSOLE

6. SPEAKER LAUTSPRECHER

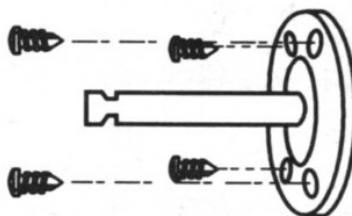
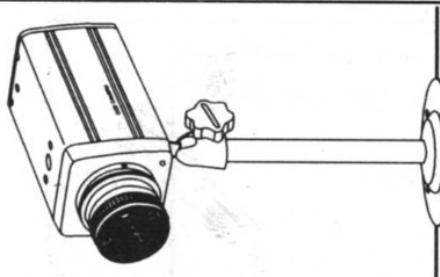
Deliver the sound from the monitor.

Liefert den Ton vom Monitor

INSTALLATION

A. Camera Unit

- Permanent installation using pedestal stand.

1. Attach the Pedestal using 4 screws.	2. Attach the Camera onto the Pedestal and tighten the thumb screw.
	

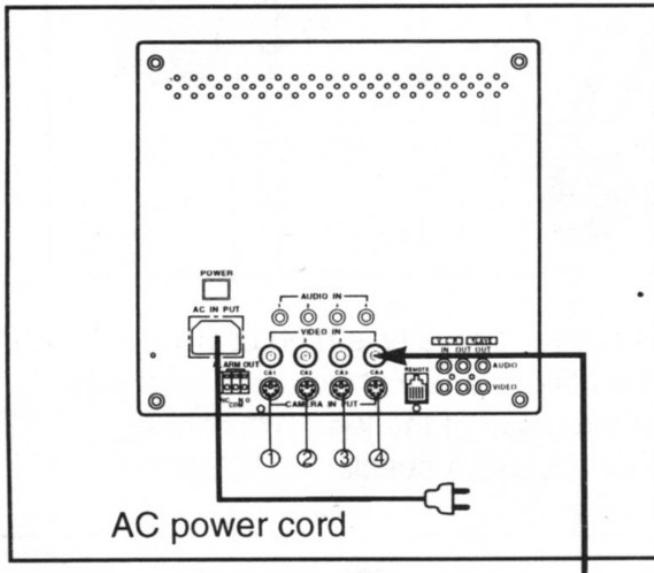
- CAUTION : Keep camera installed away from direct sunlight. Also avoid places where humidity is high or where the camera is not protected from rain. The mounting bracket must be attached to a structural object such as a wall stud or ceiling rafter using suitable fastener. Do not touch the glass of the lens. This could damage the delicate coating on its surface. If the lens has to be cleaned, use a special lens cleaning tissue available at any good camera store.

INSTALLATION

B. Monitor unit

● 1-4 Camera connections

Using the provided cables, connect the camera to the monitor as shown in the diagram below.



● Monitor with BNC cameras

The observation monitor may be installed with a standard BNC output security camera. Connect one end of the BNC video cable to the output of the camera and the other end of the BNC video cable to the BNC camera input on the rear of the observation monitor.

NOTE : Do not plug an observation camera and a BNC camera into a same camera port on the rear of the observation monitor.

Example) Observation camera 1 (CA 1) - CA 1 port DIN terminal
BNC camera 1 (CA 1) - CA 1 port BNC input (jack)

1. Camera 1 Terminal

Connect camera 1 cable to this terminal.

2. Camera 2 Terminal

Connect camera 2 cable to this terminal.

3. Camera 3 Terminal

Connect camera 3 cable to this terminal.

4. Camera 4 Terminal

Connect camera 4 cable to this terminal.

INSTALLATION



- **AUDIO/ VIDEO JACK CONNECTIONS.**



Refer to the following connection method, when connecting to the VCR

Monitor VCR Terminal

```

  graph LR
    A[Video OUT] <--> B[Video IN]
    C[Audio OUT] <--> D[Audio IN]
    E[Video IN] <--> F[Video OUT]
    G[Audio IN] <--> H[Audio OUT]
  
```

• INSTALLATION WITH A TIME- LAPSE RECORDER.

Monitor Back view TIME lapse recorder

```

graph LR
    A[Video 1 OUT] <--> B[Video IN]
    C[Audio 1 OUT] <--> D[Audio IN]
    E[Video IN] <--> F[Video OUT]
    G[Audio IN] <--> H[Audio OUT]
  
```

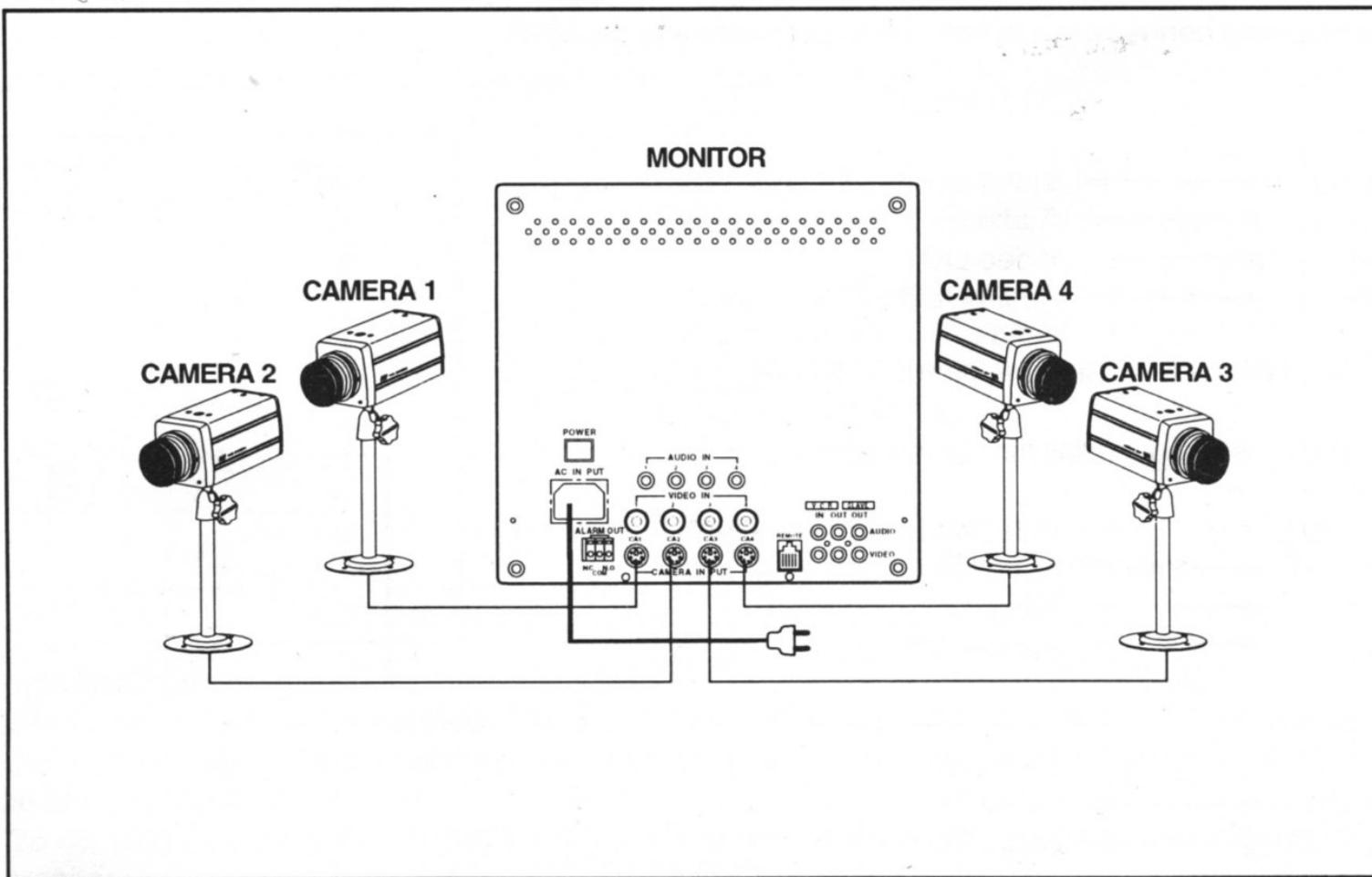
SLAVE Monitor

Video 2 OUT \longleftrightarrow Video IN
Audio 2 OUT \longleftrightarrow Audio IN

NOTE: The cable for this connection is not supplied with the unit.

WIRING DIAGRAMS

● WIRING Connections



TROUBLE SHOOTING GUIDE

Before calling service, check the following points for possible misuse.

	Problem	Check Point
Monitor	Multiple image in picture	Readjust the VERTICAL Hold control knob.
	Picture rolls up or down	Readjust the VERTICAL Hold control knob.
	Too dark or bright picture.	Readjust the CONTRAST or BRIGHTNESS controls.
	NO POWER	Check for AC connection.
	Poor picture quality	Clean the camera lens. Readjust the CONTRAST or BRIGHTNESS controls.
	Picture but no sound	Adjust the VOLUME control knob.
	Sound but no picture	Readjust the CONTRAST or BRIGHTNESS controls.
	Shrinking picture	Check the condition of the POWER source.

If you can't correct the problem after going through this chart, contact service man for further assistance.

TECHNICAL SPECIFICATIONS

● Monitor Unit

Picture tube	10" B/W
Video input level	1.0V p-p
Video input impedance	75 ohm
Video output level	1V p-p
Resolution	800 lines at center
Video inputs	1V p-p, 75Ω, 4 BNC connector, 4 DIN Connector
Audio input	1V p-p, 75Ω, 4 RCA connector
Speaker	0.5W
Alarm output	3 PIN push terminals (NO, NC, COM)
Alarm time	Off / 15 Seconds
VCR Video input	BNC connector
Audio input	RCA connector
Video output	BNC connector
Audio output	RCA connector
Slave A/V monitor output	RCA/BNC connector
Main supply voltage	AC 90-250V (free voltage)
Power consumption	40W
Operating temperature	-10°C ~ +50°C
Dimensions	225(W) X 265(D) X 235(H)mm
Cabinet	Metal with plastic front
Weight	6.0 Kg

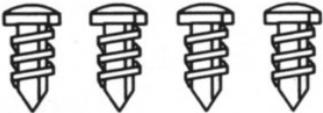
TECHNICAL SPECIFICATIONS

● Camera

Image sensor	1/3" CCD B/W
Effective picture elements	(V)492 X (H)512 ≈ 251.000Pixels (EIA) (V)582 X (H)512 ≈ 297.000Pixels (CCIR)
Camera power input	DC 12V (from monitor)
Video output	1.0V p-p 75Ω
Built-in microphone	Electric
Speaker	0.5W
Microphone	64dB
System connection	6 Pin Mini Din jack
Resolution	More than 380TV lines
Lens mount	C/CS mount
IRIS control	1/100.000 sec. (auto)
S/N ratio	More than 45dB
Min. light illumination	0.1 Lux
Alarm output	3 Pin terminals
Assurance temperature	-10°C ~ +50°C (14°F ~ 122°F)
Power consumption	2W
Dimensions	50(W) X 120(D) X 50(H) mm
Weight	230g
Cabinet	Metal case

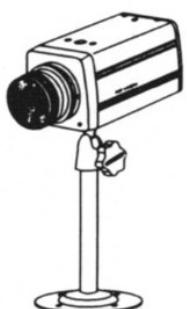
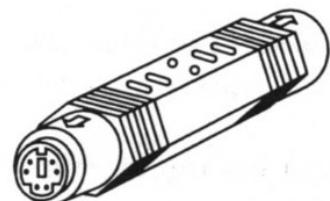
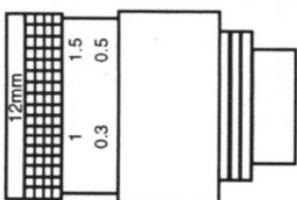
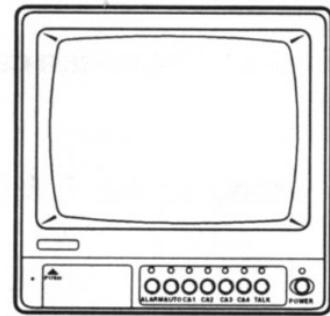
ACCESSORIES

- Standard Accessories

Screws	6P Cable (20m)	Pedestal stand
		

ACCESSORIES

● Optional Accessories

Additional camera available	Extension cable	Extension connector jack
		
Wide angle lens (4mm/8mm/12mm)	Slave monitor	
		

CARE AND MAINTENANCE

Your video observation system is an example of superior craftsmanship. Following these precautions will give you many years of solid performance and enjoyment.

Keep your monitor & camera dry. If it does wet, wipe it dry immediately.



Use and store your unit in normal temperature environment. Extreme temperatures can shorten the life of electronic devices.



Handle the monitor carefully. Dropping it can cause serious damage to the unit.



Occasionally, clean the unit with a damp cloth to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the unit.



Keep the unit away from excessive dirt and dust. These can cause premature wear of parts.

Note : All specifications subject to change without notice. E & OE.

SERVICING YOU BETTER