

LTC 2910/90



Security Systems

EN | Instruction Manual
Color Video Monitor

BOSCH

Important Safeguards

1. **Read, Follow, and Retain Instructions** - All safety and operating instructions should be read and followed before operating the unit. Retain instructions for future reference.
2. **Heed Warnings** - Adhere to all warnings on the unit and in the operating instructions.
3. **Attachments** - Attachments not recommended by the product manufacturer should not be used, as they may cause hazards.
4. **Installation Cautions** - Do not place this unit on an unstable stand, tripod, bracket, or mount. The unit may fall, causing serious injury to a person and serious damage to the unit. Use only manufacturer-recommended accessories, or those sold with the product. Mount the unit per the manufacturer's instructions. Appliance and cart combination should be moved with care. Quick stops, excessive force, or uneven surfaces may cause the appliance and cart combination to overturn.
5. **Cleaning** - Unplug the unit from the outlet before cleaning. Follow any instructions provided with the unit. Generally, using a damp cloth for cleaning is sufficient. Do not use liquid cleaners or aerosol cleaners.
6. **Servicing** - Do not attempt to service this unit yourself. Opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
7. **Damage Requiring Service** - Unplug the unit from the main AC power source and refer servicing to qualified service personnel under the following conditions:
 - When the power supply cord or plug is damaged.
 - If liquid has been spilled or an object has fallen into the unit.
 - If the unit has been exposed to water and/or inclement weather (rain, snow, etc.).
 - If the unit does not operate normally, when following the operating instructions. Adjust only those controls specified in the operating instructions. Improper adjustment of other controls may result in damage, and require extensive work by a qualified technician to restore the unit to normal operation.
 - If the unit has been dropped or the cabinet damaged.
 - If the unit exhibits a distinct change in performance, this indicates that service is needed.
8. **Replacement Parts** - When replacement parts are required, the service technician should use replacement parts specified by the manufacturer or that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electrical shock or other hazards.
9. **Safety Check** - Upon completion of servicing or repairs to the unit, ask the service technician to perform safety checks to ensure proper operating condition.
10. **Power Sources** - Operate the unit only from the type of power source indicated on the label. If unsure of the type of power supply to use, contact your dealer or local power company.
 - For units intended to operate from battery power, refer to the operating instructions.
 - For units intended to operate **with External Power Supplies**, use only the recommended approved power supplies.
 - For units intended to operate with a limited power source, this power source must comply with EN60950. Substitutions may damage the unit or cause fire or shock.
 - For units intended to operate at 24VAC, normal input voltage is 24 VAC. Voltage applied to the unit's power input should not exceed 30VAC. User-supplied wiring, from the 24VAC supply to unit, must be in compliance with electrical codes (Class 2 power levels). Do not ground the 24VAC supply at the terminals or at the unit's power supply terminals.
11. **Coax Grounding** - If an outside cable system is connected to the unit, ensure that the cable system is grounded. U.S.A. models only - Section 810 of the National Electrical Code, ANSI/NFPA No.70, provides information regarding proper grounding of the mount and supporting structure, grounding of the coax to a discharge unit, size of grounding conductors, location of discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.
12. **Grounding** - This unit may be equipped with a 3-wire grounding plug (a plug with a third pin, for grounding). This safety feature allows the plug to fit into a grounding power outlet only. If unable to insert the plug into the outlet, contact an electrician to arrange replacement of the obsolete outlet. Do not defeat the safety purpose of the grounding plug.
 - Outdoor equipment should only be connected to the unit's inputs after this unit has had its grounding plug connected to a grounded outlet or its ground terminal properly connected to a ground source.
 - The unit's input connectors must be disconnected from outdoor equipment before disconnecting the grounding plug or grounding terminal.
 - Proper safety precautions such as grounding should be followed for any outdoor device connected to this unit.
13. **Lightning** - For added protection during a lightning storm, or when this unit is left unattended and unused for long periods of time, unplug the unit from the wall outlet and disconnect the cable system. This will prevent damage to the unit due to lightning and power line surges.

FCC & ICES INFORMATION

(U.S.A. and Canadian Models Only)

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

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 and ICES-003 of Industry Canada. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated 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 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 changes or modifications, not expressly approved by the party responsible for compliance, shall not be made. Any such changes or modifications could void the user's authority to operate the equipment. The user may find the following booklet, prepared by the Federal Communications Commission, helpful: [How to Identify and Resolve Radio-TV Interference Problems](#). This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No. 004-000-00345-4.

For Indoor Product

1. **Water and Moisture** - Do not use this unit near water - for example, in a wet basement, in an unprotected outdoor installation or in any area classified as a wet location.
2. **Object and Liquid Entry** - Never push objects of any kind into this unit through openings, as they might touch dangerous voltage points or create short circuits, resulting in a fire or electrical shock. Never spill liquid of any kind on the unit.
3. **Power Cord and Power Cord Protection** - For units intended to operate with 230VAC, 50Hz, the input and output power cord must comply with the latest versions of IEC Publication 227 or IEC Publication 245.
Power supply cords should be routed so they are not likely to be walked on or pinched. Pay particular attention to location of cords and plugs, convenience receptacles, and the point of exit from the appliance.
4. **Overloading** - Do not overload outlets and extension cords; this can result in a risk of fire or electrical shock.

For Outdoor Product

Power Lines - An outdoor system should not be located in the vicinity of overhead power lines, electric lights or power circuits, or where it may contact such power lines or circuits. When installing an outdoor system, extreme care should be taken to keep from touching power lines or circuits, as this contact might be fatal. U.S.A. models only - refer to the National Electrical Code Article 820 regarding installation of CATV systems.

For Rack-mount Product

1. **Ventilation** - Do not place this equipment in a built-in installation or rack, unless proper ventilation is provided, or the manufacturer's instructions were followed. The equipment must not exceed its maximum operating temperature requirements.
2. **Mechanical Loading** - When rack-mounting the equipment, ensure that a hazardous condition is not created by uneven mechanical loading.

Safety Precautions



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. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol indicates the presence of uninsulated **dangerous voltage** within the product's enclosure that can cause an electric shock.



This symbol indicates the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.



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



Power Disconnect. Units with or without ON-OFF switches have power supplied to the unit whenever the power cord is inserted into the power source; however, the unit is operational only when the ON-OFF switch is in the ON position. The power cord is the main power disconnect for all units.

Sécurité



ATTENTION

RISQUE D'ÉLECTROCUTION. NE PAS OUVRIR!



ATTENTION : POUR ÉVITER TOUT RISQUE D'ÉLECTROCUTION, N'ESSAYEZ PAS DE RETIRER LE CAPOT (OU LE PANNEAU ARRIÈRE). CET APPAREIL NE CONTIENT AUCUN COMPOSANT SUSCEPTIBLE D'ÊTRE RÉPARÉ PAR L'UTILISATEUR. CONFIEZ LA RÉPARATION DE L'APPAREIL À DU PERSONNEL QUALIFIÉ.



Ce symbole signale que le produit renferme une « tension potentiellement dangereuse » non isolée susceptible de provoquer une électrocution.



Ce symbole invite l'utilisateur à consulter les instructions d'utilisation et d'entretien (dépannage) reprises dans la documentation qui accompagne l'appareil.



Attention : l'installation doit exclusivement être réalisée par du personnel qualifié, conformément au code national d'électricité américain (NEC) ou au code d'électricité local en vigueur.



Coupure de l'alimentation. Qu'ils soient pourvus ou non d'un commutateur ON/OFF, tous les appareils reçoivent de l'énergie une fois le cordon branché sur la source d'alimentation. Toutefois, l'appareil ne fonctionne réellement que lorsque le commutateur est réglé sur ON. Le débranchement du cordon d'alimentation permet de couper l'alimentation des appareils.

Sicherheitshinweise



VORSICHT

ELEKTRISCHE SPANNUNG.
NICHT ÖFFNEN!



VORSICHT: UM EINEN ELEKTRISCHEN SCHLAG ZU VERMEIDEN, IST DIE ABDECKUNG (ODER RÜCKSEITE) NICHT ZU ENTFERNEN. ES BEFINDEN SICH KEINE TEILE IN DIESEM BEREICH, DIE VOM BENUTZER GEWARTET WERDEN KÖNNEN. LASSEN SIE WARTUNGSARBEITEN NUR VON QUALIFIZIERTEM WARTUNGSPERSONAL AUSFÜHREN.



Das Symbol macht auf nicht isolierte „gefährliche Spannung“ im Gehäuse aufmerksam. Dies kann zu einem elektrischen Schlag führen.



Der Benutzer sollte sich ausführlich über Anweisungen für die Bedienung und Instandhaltung (Wartung) in den begleitenden Unterlagen informieren.



Achtung! Die Installation sollte nur von qualifiziertem Kundendienstpersonal gemäß jeweils zutreffender Elektrovorschriften ausgeführt werden.



Unterbrechung des Netzanschlusses. Geräte mit oder ohne Netzschalter haben Spannung am Gerät anliegen, sobald der Netzstecker in die Steckdose gesteckt wird. Das Gerät ist jedoch nur betriebsbereit, wenn der Netzschalter (EIN/AUS) auf EIN steht. Wenn das Netzkabel aus der Steckdose gezogen wird, ist die Spannungszuführung zum Gerät vollkommen unterbrochen.

Precauciones de Seguridad



ATTENZIONE

PERICOLO DI SCOSSA ELETTRICA.
NON APRIRE.



PRECAUCIÓN: PARA DISMINUIR EL RIESGO DE DESCARGA ELÉCTRICA, NO RETIRE LA CUBIERTA (NI LA PARTE POSTERIOR). NO EXISTEN PIEZAS DE RECAMBIO EN EL INTERIOR DEL EQUIPO. EL PERSONAL DE SERVICIO CUALIFICADO SE ENCARGA DE REALIZAR LAS REPARACIONES.



Este símbolo indica que existen puntos de tensión peligrosos sin aislamiento dentro de la cubierta de la unidad. Estos puntos pueden constituir un riesgo de descarga eléctrica.



El usuario debe consultar las instrucciones de funcionamiento y mantenimiento (reparación) en la documentación que se suministra con el aparato.



Atención: la instalación la debe realizar únicamente personal cualificado de conformidad con el National Electric Code o las normas aplicables en su país.



Desconexión de la alimentación. Las unidades con o sin interruptores de encendido/apagado reciben alimentación eléctrica siempre que el cable de alimentación esté conectado a la fuente de alimentación. Sin embargo, la unidad sólo funciona cuando el interruptor está en la posición de encendido. El cable de alimentación es la principal fuente de desconexión de todas las unidades.

Veiligheidsmaatregelen



VOORZICHTIG

GEVAAR VOOR ELEKTRISCHE SCHOK.
NIET OPENEN!



VOORZICHTIG: OPEN DE BEHUIZING OF DE ACHTERKANT VAN HET APPARAAT NIET. ZO VERMINDERT U HET RISICO OP ELEKTRISCHE SCHOKKEN. IN HET APPARAAT BEVINDEN ZICH GEEN ONDERDELEN DIE U ZELF KUNT REPAREREN. LAAT SERVICE EN ONDERHOUD UITVOEREN DOOR GEKWALIFICEERD PERSONEEL.



Dit symbool geeft aan dat er binnen in het apparaat ongeïsoleerde, gevaarlijke spanning aanwezig is die mogelijk elektrische schokken kan veroorzaken.



De gebruiker dient de bedienings- en onderhoudsvoorschriften te raadplegen in de documentatie die werd meegeleverd met het apparaat.



Attentie: het apparaat mag alleen door gekwalificeerd personeel worden geïnstalleerd. De installatie dient in overeenstemming met de nationale elektrische richtlijnen of de van toepassing zijnde lokale richtlijnen te worden uitgevoerd.



Spanning uitschakelen. Apparatuur met of zonder aan-uitschakelaar staat onder spanning zolang de stekker is aangesloten op de wandcontactdoos. De apparatuur is uitsluitend in werking als de aan-uitschakelaar aan staat. Het netsnoer is de "hoofdschakelaar" voor alle apparatuur.

Sicurezza



ATTENZIONE

PERICOLO DI SCOSSA ELETTRICA.
NON APRIRE.



ATTENZIONE: PER RIDURRE IL RISCHIO DI SCOSSE ELETTRICHE NON RIMUOVERE LA COPERTURA (O IL PANNELLO POSTERIORE). L'UNITÀ NON CONTIENE COMPONENTI INTERNI RIPARABILI DALL'UTENTE. PER QUALSIASI INTERVENTO, RIVOLGERSI A PERSONALE TECNICO QUALIFICATO.



Questo simbolo indica la presenza di "tensione pericolosa" non isolata all'interno del contenitore del prodotto. Ciò comporta un potenziale rischio di scosse elettriche.



Si consiglia di consultare le istruzioni operative e di manutenzione (interventi tecnici) contenute nella documentazione fornita con il dispositivo.






Attenzione: l'installazione deve essere effettuata esclusivamente da personale tecnico qualificato in conformità con il National Electrical Code o con le normative locali vigenti.





Scollegamento dell'alimentazione. Le unità dotate o sprovviste di interruttori ON-OFF vengono alimentate quando si inserisce il cavo nella presa dell'alimentazione. L'unità è tuttavia in funzione solo quando l'interruttore ON-OFF si trova nella posizione ON. Il cavo di alimentazione costituisce il dispositivo di scollegamento dell'alimentazione principale per tutte le unità.


Medidas de Segurança

| | | |
|--|--|---|
|  | UWAGA NIEBEZPIECZEŃSTWO PORAŻENIA PRĄDEM ELEKTRYCZNYM NIE OTWIERAĆ! |  |
| <p>CUIDADO: PARA REDUZIR O RISCO DE CHOQUE ELÉCTRICO, NÃO RETIRE A TAMPA (OU A PARTE POSTERIOR). NO INTERIOR, NÃO EXISTEM PEÇAS QUE POSSAM SER REPARADAS PELO UTILIZADOR. REMETA A ASSISTÊNCIA PARA OS TÉCNICOS QUALIFICADOS.</p> | | |



| | |
|---|---|
|  | <p>Este símbolo indica a presença de "tensão perigosa" não isolada dentro da estrutura do produto, o que pode constituir risco de choque eléctrico.</p> |
|---|---|


| | |
|---|--|
|  | <p>O utilizador deve consultar as instruções de funcionamento e manutenção (assistência) nos documentos que acompanham o aparelho.</p> |
|---|--|


| | |
|---|---|
|  | <p>Atenção: a instalação deve ser executada apenas por técnicos qualificados da assistência, de acordo com o código eléctrico nacional ou os códigos locais aplicáveis.</p> |
|---|---|


| | |
|---|--|
|  | <p>Corte de corrente. As unidades com ou sem interruptores ON-OFF (ligar/desligar) recebem corrente sempre que o fio de alimentação está introduzido na fonte de alimentação; contudo, a unidade apenas está operacional quando o interruptor ON-OFF está na posição ON. O fio de alimentação destina-se a desligar a corrente em todas as unidades.</p> |
|---|--|

Zasady Bezpieczeństwa

| | | |
|--|--|---|
|  | CUIDADO RISCO DE CHOQUE ELÉCTRICO. NÃO ABRIR! |  |
| <p>PRZESTROGA: ABY ZMNIJSZYĆ RYZYKO PORAŻENIA ELEKTRYCZNEGO, NIE NALEŻY ZDEJMOWAĆ POKRYWY GÓRNEJ (ani tylnej). WEWNĄTRZ URZĄDZENIA NIE MA ŻADNYCH ELEMENTÓW, KTÓRE MOGĄ BYĆ NAPRAWIANE SAMODZIELNIE PRZEZ UŻYTKOWNIKA. SERWIS NALEŻY ZLECAĆ WYKWALIFIKOWANYM PRACOWNIKOM OBSŁUGI.</p> | | |

| | |
|---|--|
|  | <p>Ten symbol wskazuje na obecność nieizolowanego „niebezpiecznego napięcia” we wnętrzu urządzenia. Napięcie to grozi porażeniem elektrycznym.</p> |
|---|--|

| | |
|---|---|
|  | <p>Użytkownik powinien zapoznać się z instrukcjami obsługi i konserwacji (serwisu), zamieszczonymi w dokumentacji towarzyszącej urządzeniu.</p> |
|---|---|

| | |
|---|---|
|  | <p>Uwaga: Instalacja może być wykonywana wyłącznie przez wykwalifikowanych pracowników obsługi, zgodnie z zasadami kodeksu National Electrical Code lub innych obowiązujących norm.</p> |
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| | |
|---|---|
|  | <p>Odlączenie zasilania. Niezależnie od wyposażenia w wyłącznik zasilania, prąd do urządzenia jest doprowadzany zawsze, gdy przewód zasilania jest podłączony do źródła zasilania; jednak urządzenie działa tylko wtedy, gdy wyłącznik zasilania jest włączony. Przewód zasilania jest głównym wyłącznikiem zasilania we wszystkich urządzeniach.</p> |
|---|---|

Table of Contents

| | |
|--|----|
| Important Safeguards | 2 |
| FCC Information | 3 |
| 1 INTRODUCTION | 9 |
| 1.1 Monitors | 9 |
| 2 UNPACKING | 9 |
| 2.1 Accessories (Not Included) | 9 |
| 3 SERVICE | 9 |
| 4 INSTALLATION | 10 |
| 4.1 Ventilation | 12 |
| 4.2 Power | 12 |
| 4.3 Connecting Composite Video Signal to the Monitor | 12 |
| 4.4 Connecting Audio to the Monitor | 12 |
| 5 OPERATION | 13 |
| 5.1 Front Panel Controls | 13 |
| 6 TROUBLESHOOTING GUIDE | 14 |
| 7 SPECIFICATIONS | 15 |

1 INTRODUCTION

1.1 Monitors

The LTC 2910/90 (23 cm/9-inch) monitor is intended for the display of PAL or NTSC standard color pictures in CCTV systems, and has a power input range of 90 VAC to 264 VAC. The monitor accepts two (2) Composite Video inputs with loop-through BNC connectors, located on the rear of the monitor.

For applications that require audio, two (2) audio phono jack connectors (In & Out) are provided on the rear panel.

2 UNPACKING

This electronic equipment should be unpacked and handled carefully. Ensure that the following items are included:

- LTC 2910/90 Color Video Monitor
- Two (2) Power Cords: One (1) for 120 VAC, 60 Hz mains power; one (1) for 230 VAC, 50 Hz mains power.
- Installation Instructions (this manual)

2.1 Accessories (Not Included)

TC210AMK Rack Kit: For mounting one or two LTC 2910/90 monitor(s) in an EIA 19-inch rack. A blanking panel is provided to cover the unused opening when only one unit is rack mounted.

3 SERVICE

If the unit requires service, contact the nearest Bosch Security Systems Service Center for authorization to return the unit and for shipping instructions.

Service Centers

USA

Phone: 800-366-2283 / 585-340-4162
fax: 800-366-1329
e-mail: cctv.repair@us.bosch.com

CCTV Spare Parts

Phone: 800-894-5215 / 408-957-3065
fax: 408-935-5938
e-mail: BoschCCTVparts@ca.slr.com

Canada

Phone: 514-738-2434
fax: 514-738-8480

Europe, Middle East & Asia Pacific Region

Phone: 44 (0) 1495 274558
fax: 44 (0) 1495 274280
email: rmahelpdesk@solectron.com

For additional information, see

www.boschsecurity.com.

4 INSTALLATION

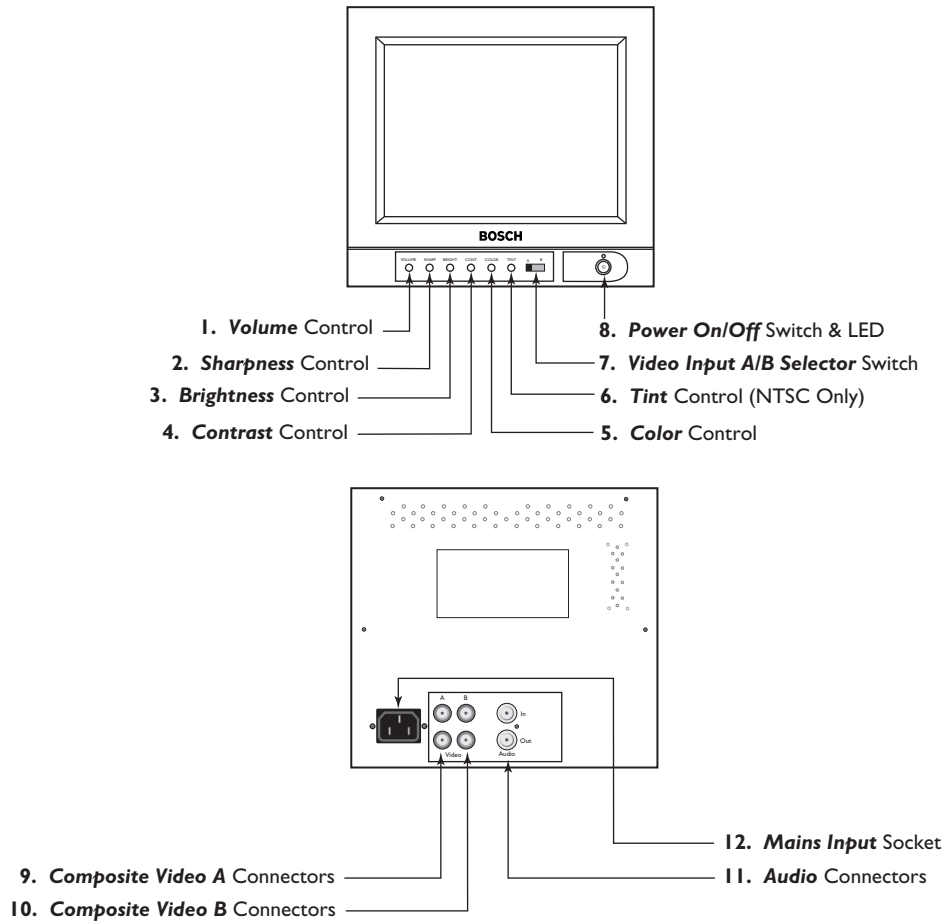


Figure 1: Monitor Model LTC 2910/90 – Front and Rear View

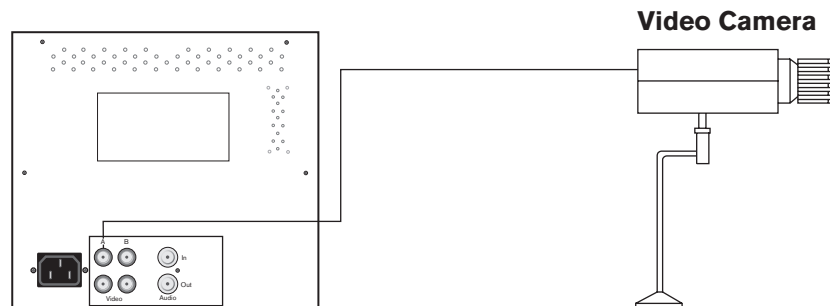


Figure 2: Connecting a Single Monitor

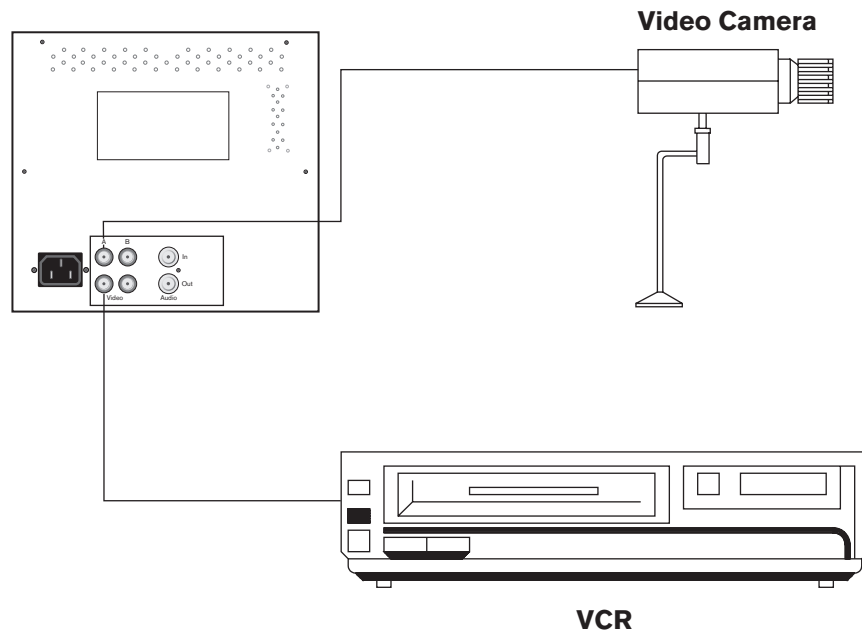


Figure 3A: Video Signal Output to External Device

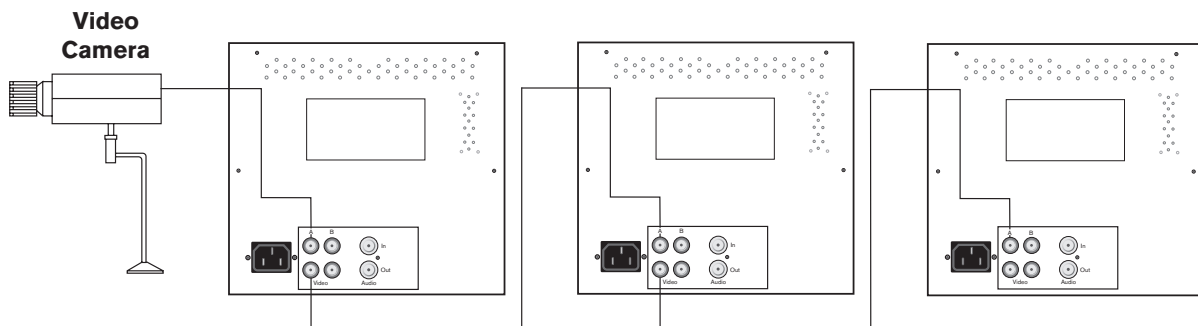


Figure 3B: Connecting Multiple Monitors

4.1 Ventilation

To prevent overheating, ensure that the ventilation openings on the monitor are not covered.

4.2 Power

The LTC 2910/90 monitor is delivered with a 3-pole 120 VAC, 60 Hz US style power cord and a 3-pole 230 VAC, 50 Hz European style power cord. The monitor end of the power cord plugs into mains input socket (FIGURE 1, Item 12) on the rear panel. The monitor automatically adjusts to the power input voltage set. A power on/off switch is located on the front of the unit (FIGURE 1, Item 8).

4.3 Connecting Composite Video Signal to the Monitor

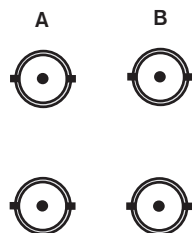


Figure 4: Video Connectors

The four (4) BNC connectors (FIGURE 1, Items 9 & 10) located on the rear of the monitor, are for composite video inputs and outputs.

NOTE: All video inputs are auto-terminating. The impedance is automatically set to 75 Ω by the input connection's signal while operating in single connection mode. However, if a cable is connected to the output connector, the connection is placed into the open status by the multiple connection, and high impedance is automatically selected.

CAUTION: Do not leave an unused cable connected to the monitor. If a single cable is used, it must be connected to the input connector for the 75 Ω auto-termination selector to function properly.

4.4 Connecting Audio to the Monitor

There is one set of monaural audio connectors (FIGURE 1, Item 11); one for audio input, the other for a loop-through output to another device.

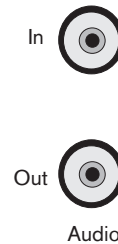


Figure 5: Audio Connectors

5 OPERATION

5.1 Front Panel Controls (FIGURE 1, Top)

- **Power On/Off Switch & LED** (FIGURE 1, Item 8): This switch is located on the front panel, at the bottom right. Press the switch to turn the monitor on. The green LED will illuminate. Press the switch again to turn the monitor off.

The following controls are located on the front panel, behind the drop-down access door.

- **Volume Control** (FIGURE 1, Item 1): Adjusts volume for the appropriate audio level.
- **Sharpness Control** (FIGURE 1, Item 2): Adjusts sharpness for the desired overall picture quality. Turn clockwise to increase picture sharpness, and counterclockwise to decrease picture sharpness.
- **Brightness Control** (FIGURE 1, Item 3): Adjusts brightness for the desired overall picture or display quality. Turn clockwise to increase brightness level, and counterclockwise to decrease brightness level.

- **Contrast Control** (FIGURE 1, Item 4): Adjusts contrast for the desired overall picture quality. Turn clockwise to increase picture contrast, and counterclockwise to decrease picture contrast.
- **Color Control** (FIGURE 1, Item 5): Adjusts the overall color intensity of the screen display. Turn clockwise to increase color intensity, and counterclockwise to decrease color intensity.
- **Tint Control** (FIGURE 1, Item 6): Adjusts the color level. For best results, adjust until skin color appears natural. Turn clockwise to adjust the skin tone towards green, and counterclockwise to adjust towards red.

NOTE: Tint is only applicable to NTSC; not available in PAL format.

- **Video Input A/B Selector Switch** (FIGURE 1, Item 7): Set the switch to A (video input A) for the monitor to display the composite video A signal. Set the switch to B (video input B) for the monitor to display composite video B signal.

6 TROUBLESHOOTING GUIDE

| Problem | Solution |
|--|---|
| <p>No Power Indicated: The power plug may be loose or disconnected.</p> | Insert the power plug firmly into the socket. |
| <p>Power On, No Display: (1) No video signal connected; (2) Video cable is disconnected.</p> | (1) Verify that the Video Input A/B Selector switch (FIGURE 1, Item 7) is in the correct position; (2) Check video cable for proper connection and correct accordingly. |
| <p>Power On, No Sound: (1) Incorrect cable connection configuration; (2) Audio cable is disconnected; (3) Volume output is set too low.</p> | (1) Ensure that the cable connection configuration is correct (see SECTION 4.4); (2) Connect the audio cable firmly; (3) Adjust the speaker volume via the Volume control on the front panel (FIGURE 1, Item 1). |
| <p>Display Jitter: The monitor may be close to a device generating a strong magnetic field.</p> | Move the device away from the monitor until the picture stabilizes. |
| <p>No Color, Incorrect Color, or Dark Color: The picture control setting (e.g. Tint, Color, Brightness, or Contrast) may be set improperly.</p> | Reset each picture control setting to the mid-range level. |
| <p>Unnatural Color, Irregular Color, or Distorted Picture: The monitor may be close to a speaker, magnet, or any other device generating a strong magnetic field.</p> | Move the device away from the monitor and discontinue power to the monitor. Wait at least 3 minutes, then restore power to the monitor. |

7 SPECIFICATIONS

| Electrical | | Mechanical | |
|---------------------------------|--|---|--|
| Rated Voltage | 120/230 VAC, 50/60 Hz | Cabinet | |
| Voltage Range | 90 to 264 | Material: | Steel with plastic front |
| Power at Rated Voltage | 45 W | Finish: | Charcoal |
| Sync Format | PAL/NTSC | Dimensions | 222 W x 303 D x 227.5 H mm (8.75 x 11.9 x 8.9 in) |
| Display Tube | 23 cm (9-in) measured diagonally, 90° deflection stripe pitch 0.50 mm, in-line guns, integral implosion protection | Weight | 6.8 kg (14.9 lb) |
| Viewable Picture Area | 22.3 cm (8.8-in) measured diagonally | Temperature | Operating: 0°C to 40°C (32°F to 104°F) Storage: -10°C to 50°C (14°F to 122°F) |
| Linearity | 2 to 3% typical 7% maximum | Humidity | 10%–90%, noncondensing |
| Horizontal Resolution | 300 TV lines (minimum); | Product Regulatory Compliance | |
| Video Input | | Electromagnetic Compatibility (EMC) | |
| Composite Video: | 0.3 to 1.5 Vp-p, sync negative Automatic switching from 75 Ω unbalanced termination to Hi-Z with loop-through operation | Complies with FCC Part 15, ICES-003, and CE regulations | |
| Audio Input | 1 V line level | Product Safety | |
| Audio Output | Loop-through line level, 1 W speaker | Complies with CE regulations, UL, CSA, EN, and IEC Standards | |
| Controls | | Complies with DHHS Rules 21 CFR | |
| Front Panel: | Volume, Sharpness, Brightness, Contrast, Color, Tint (NTSC only), Video input A/B selector switch, Power (On/Off switch) | Accessories | |
| Indicators (Front Panel) | Power On LED | TC210AMK Rack Kit | |
| Connectors | | For mounting one or two LTC 2910/90 monitors in a 19-inch standard EIA rack 1 rack unit wide by 6 rack units high | |
| Video A: | Composite Video: Two BNC (1 in, 1 out), auto-terminating | | |
| Video B: | Composite Video: Two BNC (1 in, 1 out), auto-terminating | | |
| Audio: | Two RCA phono jacks (1 in, 1 out) | | |
| Power Cord: | Two detachable 3-wire IEC connectors with grounded plug, 1.5m (5 ft) long; One European Continental and One US plug | | |

Americas

Bosch Security Systems
130 Perinton Parkway
Fairport, New York, 14450, USA
Phone: +1 (585) 223 4060
+1 800 289 0096
security.sales@us.bosch.com
<http://www.boschsecurity.us>

Europe, Middle East, Africa

Bosch Security Systems B.V.
P.O. Box 80002
5600 JB Eindhoven, The Netherlands
Phone: +31 (0) 40 27 83955
Fax: +31 (0) 40 27 86668
emea.securitysystems@bosch.com
<http://www.boschsecurity.com>

Asia-Pacific

Bosch Security Systems Pte Ltd
38C Jalan Pemimpin
Singapore 577180
Phone: +65 6319 3450
Fax: +65 6319 3499
apr.securitysystems@bosch.com
<http://www.boschsecurity.com>

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