

# Wireless 4 Channel Receiver with 2 Night Vision cameras

## Instruction Manual

English Version 3.0



**MODEL:**  
**SHS-4WLS**



[www.lorexcctv.com](http://www.lorexcctv.com)



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Thank you for purchasing the SHS-4WLS. Lorex is committed to providing our customers with a high quality, reliable security product.

The SHS-4WLS Video Surveillance System with 2 Indoor/Outdoor Night Vision Cameras is easy to set up (connects to any TV, VCR or Monitor) making this security system perfect for protecting your home, family and personal property. Weather Resistant Night Vision Cameras with built in Microphone allow two way communications with the Cameras, which can be placed up to 330ft from the receiver\* (330ft is in open space)

To learn more about this Video Surveillance Product, and to learn about our complete range of accessory products, please visit our website at:

<http://www.lorexcctv.com>

	<b>CAUTION</b> 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 A QUALIFIED SERVICE PERSONNEL		



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

**WARNING: TO PREVENT FIRE OR SHOCK HAZARD,  
DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.**

**CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE  
OF PLUG TO WIDE SLOT, FULLY INSERT.**

### Wireless Disclaimer

This product broadcasts over public airways and its video and audio signals may be intercepted without your consent.

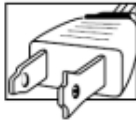
# Important Safeguards

In addition to the careful attention devoted to quality standards in the manufacture process of your video product, safety is a major factor in the design of every instrument. However, safety is your responsibility too. This sheet lists important information that will help to assure your enjoyment and proper use of the video product and accessory equipment. Please read them carefully before operating and using your video product.

## Installation

1. **Read and Follow Instructions** - All the safety and operating instructions should be read before the video product is operated. Follow all operating instructions.
2. **Retain Instructions** - The safety and operating instructions should be retained for future reference.
3. **Heed Warnings** - Comply with all warnings on the video product and in the operating instructions.
4. **Polarization** - Do not defeat the safety purpose of the polarized or grounding-type plug.

A polarized plug has two blades with one wider than the other.



A grounding type plug has two blades and a third grounding prong.

The wide blade or the third prong are provided for your safety.



If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet

5. **Power Sources** - This video product 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 supply to your location, consult your video dealer or local power company. For video products intended to operate from battery power, or other sources, refer to the operating instructions.
6. **Overloading** - Do not overload wall outlets of extension cords as this can result in the risk of fire or electric shock. Overloaded AC outlets, extension cords, frayed power cords, damaged or cracked wire insulation, and broken plugs are dangerous. They may result in a shock or fire hazard. Periodically examine the cord, and if its appearance indicates damage or deteriorated insulation, have it replaced by your service technician.
7. **Power-Cord Protection** - Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the video product.

8. **Ventilation** - Slots and openings in the case are provided for ventilation to ensure reliable operation of the video product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the video equipment on a bed, sofa, rug, or other similar surface. This video product should never be placed near or over a radiator or heat register. This video product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the video product manufacturer's instructions have been followed.

9. **Attachments** - Do not use attachments unless recommended by the video product manufacturer as they may cause a hazard.

10. **Water and Moisture** - Do not use this video product near water. For example, near a bath tub, wash bowl, kitchen sink or laundry tub, in a wet basement, near a swimming pool and the like.

Caution: Maintain electrical safety. Powerline operated equipment or accessories connected to this unit should bear the UL listing mark of CSA certification mark on the accessory itself and should not be modified so as to defeat the safety features. This will help avoid any potential hazard from electrical shock or fire. If in doubt, contact qualified service personnel.

11. **Accessories** - Do not place this video equipment on an unstable cart, stand, tripod, or table. The video equipment may fall, causing serious damage to the video product. Use this video product only with a cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with the video product. Any mounting of the product should follow the manufacturer's instructions and use a mounting accessory recommended by the manufacturer.



## Service

13. **Servicing** - Do not attempt to service this video equipment yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
14. **Conditions Requiring Service** - Unplug this video product from the wall outlet and refer servicing to qualified service personnel under the following conditions.
  - A. When the power supply cord or plug is 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. 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 has been damaged.
  - F. When the video product exhibits a distinct change in performance. This indicates a need for service.
15. **Replacement Parts** - When replacement parts are required, have the service technician verify that the replacements used have the same safety characteristics as the original parts. Use of replacements specified by the video product manufacturer can prevent fire, electric shock or other hazards.
16. **Safety Check** - Upon completion of any service or repairs to this video product, ask the service technician to perform safety checks recommended by the manufacturer to determine that the video product is in safe operating condition.
17. **Wall or Ceiling Mounting** - The cameras provided with this system should be mounted to a wall or ceiling only as instructed in this guide, using the provided mounting brackets.
18. **Heat** - The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

## Use

19. **Cleaning** - Unplug the video product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
20. **Product and Cart Combination** - Video and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the video product and cart combination to overturn.
21. **Object and Liquid Entry** - Never push objects for any kind into this video product through openings as they may touch dangerous voltage points or "short-out" parts that could result in a fire or electric shock. Never spill liquid of any kind on the video product.
22. **Lightning** - For added protection for this video product 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.

## NOTE

This equipment has been certified and found to comply with the limits regulated by FCC, EMC, and LVD. Therefore, it is designated to provide reasonable protection against interference and will not cause interference with other appliance usage.

However, it is imperative that the user follows this manual's guidelines to avoid improper usage which may result in damage to the unit, electrical shock and fire hazard injury.

In order to improve the feature functions and quality of this product, the specifications are subject to change without notice from time to time.

## 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 instruction, 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 on and off), 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 assistance

## General Precautions

1. All warnings and instructions of this manual should be followed
2. Remove the plug from the outlet before cleaning. Do not use liquid aerosol detergents. Use a water dampened cloth for cleaning
3. Do not use this unit in humid or wet places
4. Keep enough space around the unit for ventilation. Slots and openings in the storage cabinet should not be blocked
5. During lightning storms, or when the unit is not used for a long time, disconnect the power supply, antenna, and cables to protect the unit from electrical surge

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## SHS-4WLS Features

- Complete DIY Wireless Video Security System with 2 cameras
- Easily connects to any TV, VCR or Monitor
- Weather Resistant Night Vision Cameras with built in Microphone
- Cameras can be placed up to 330ft from the receiver\*

\* 330ft is the Maximum open space transmission range. Actual range dependent upon building materials and other obstructions in path of wireless signal.

# Getting Started

The SHS-4WLS comes with the following components:



**4-Channel Wireless Receiver**



**2 x Weatherproof Color Day/Night IR Cameras with Stands**



**Remote Control**



**AV Cable**



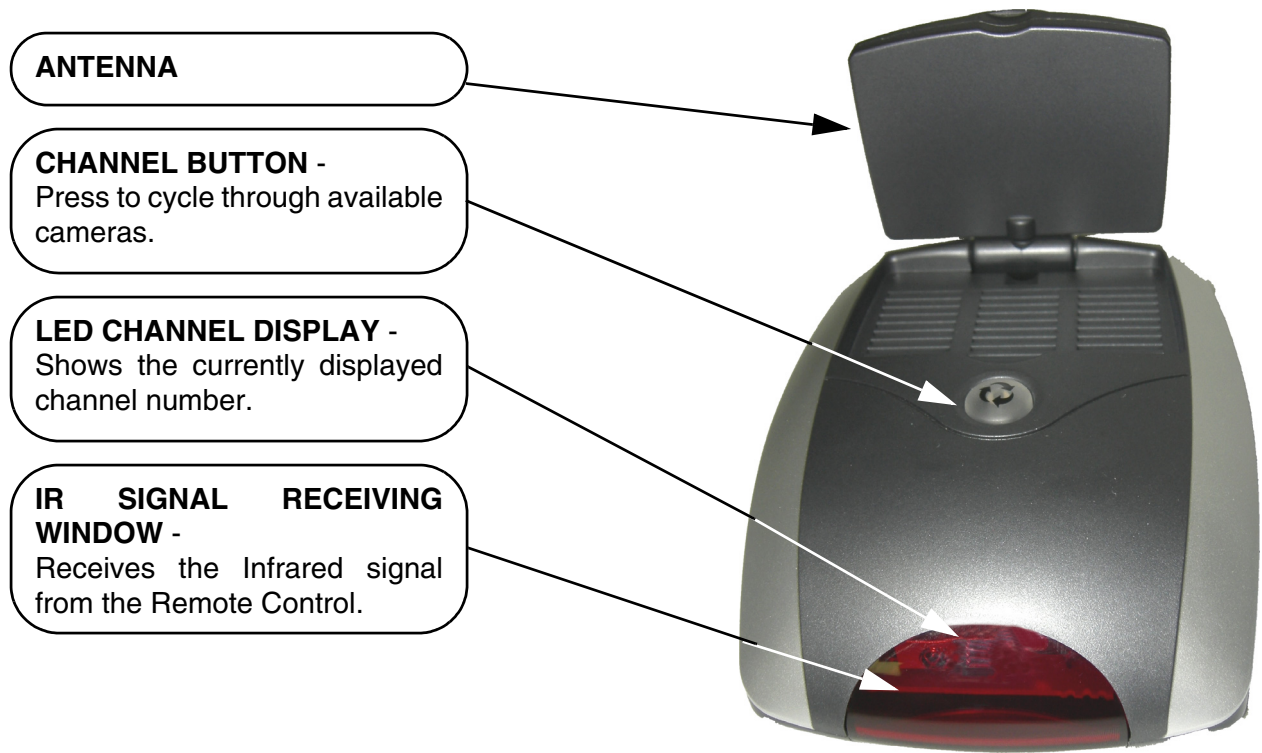
**Receiver Power Adapter**



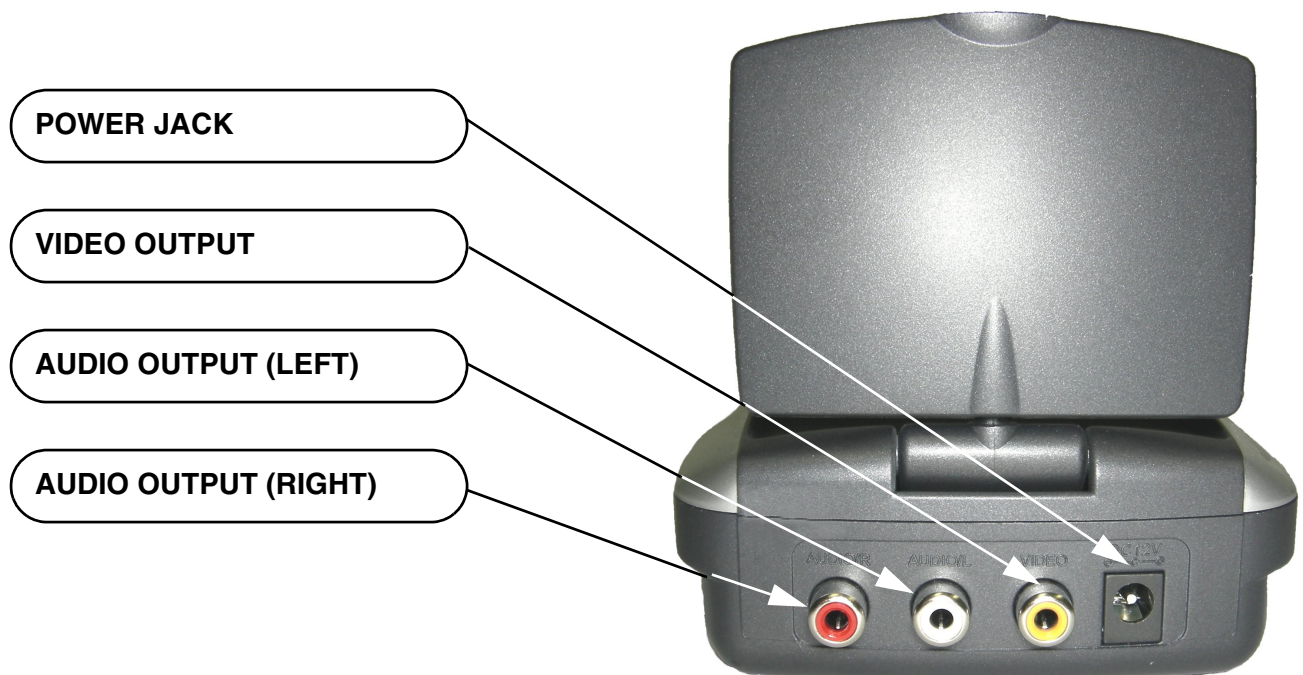
**2 x Camera Power Adapters**

**CHECK YOUR PACKAGE TO CONFIRM THAT YOU HAVE RECEIVED THE COMPLETE SYSTEM, INCLUDING ALL COMPONENTS SHOWN ABOVE.**

## SHS-4WLS - Front View



## SHS-4WLS - Rear View





# Remote Control

Listed below is a quick reference for the Remote Control.


## CHANNEL BUTTONS -

Press to choose a specific camera by number:

-  **CHANNEL 1**
-  **CHANNEL 2**
-  **CHANNEL 3**
-  **CHANNEL 4**


## LOCK / UNLOCK BUTTON -

Locks the SHS system against accidental button press on the Remote Control.

-  **Press the button once to LOCK or UNLOCK the SHS-4WLS system.**

## LOOPING BUTTON -

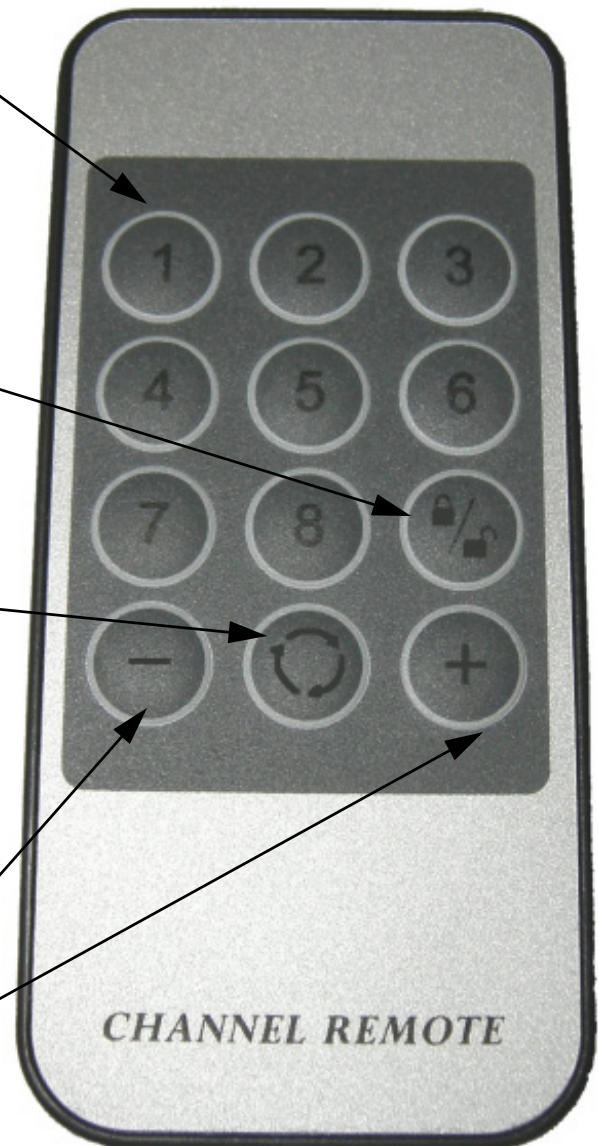
Sets LOOPING display:

-  **1. Press the button once to enable LOOPING.**
- 2. Press buttons 1~4 to input two or more channels to be looped**
- 3. Press the button once more to set the LOOPING Sequence.**

## CHANNEL UP / DOWN -

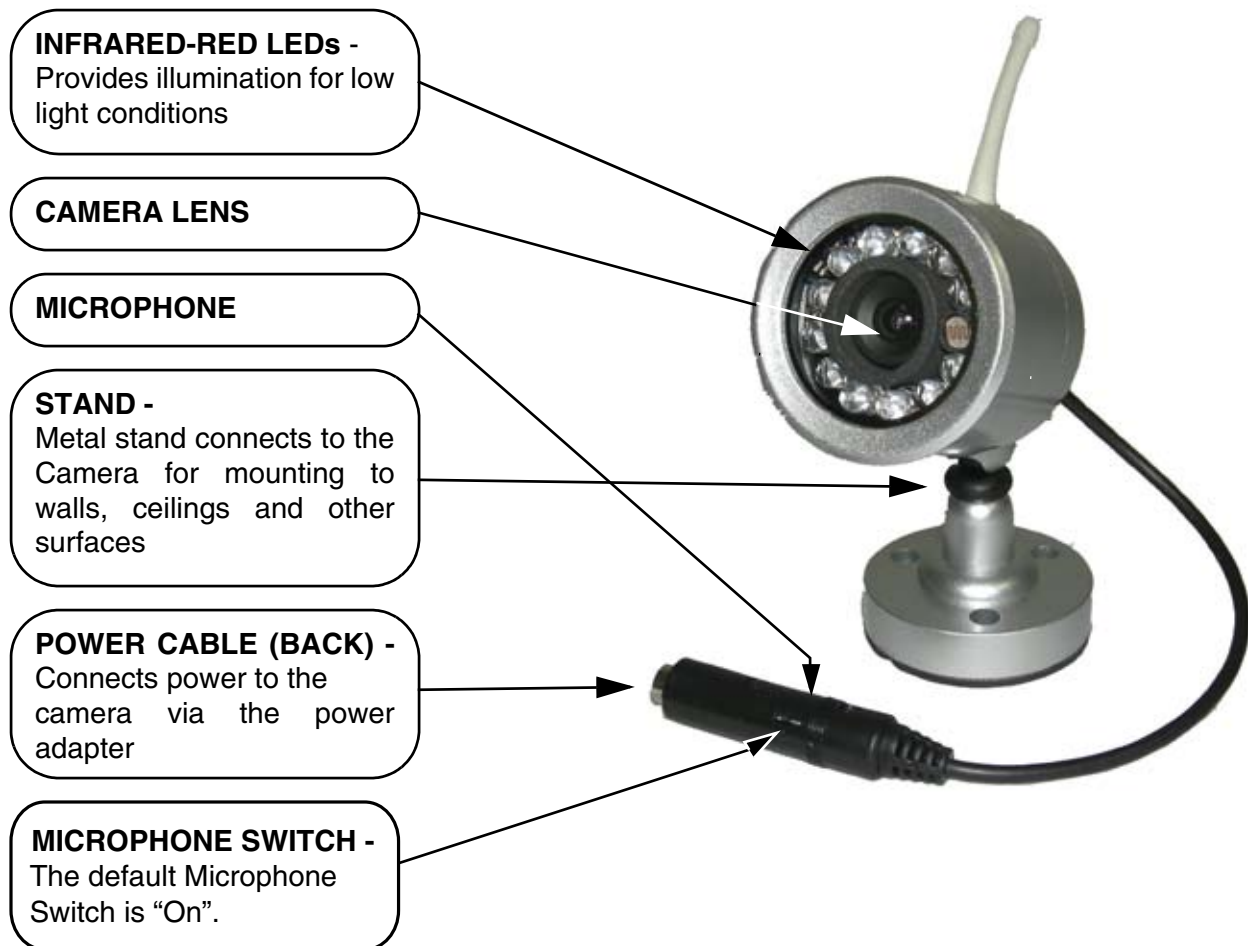
Increments the channel (1~4) or decrements the channel (4~1)

-  **Decrement**
-  **Increment**



## SHS-4WLS Cameras

The SHS-4WLS switcher includes 2 CMOS Color Indoor/Outdoor Wireless Cameras\*



\* Picture changes from Color to B&W under low light conditions on Night Vision Cameras Only.

### Installation Warnings:

- Before you install the camera, carefully plan where and how you will position the camera, and where you will route the cable that connects the camera to an electrical outlet.
- Select a location for the camera that provides a clear view of the area you want to monitor, which is free from dust, and is not in line-of-sight to a strong light source or direct sunlight.
- Plan the camera location so that it is not close to power or telephone lines, transformers, microwave ovens or other electrical equipment that could interfere with the system.
- Select a location for the camera that has an ambient temperature between 14°F~113°F (-10°C~45°C)
- Before starting permanent installation, have another person hold the camera for you while you verify its performance by observing the image on the monitor.
- This product broadcasts over public airways and its video and audio signals may be intercepted without your consent.

## Connecting the SHS-4WLS A/V Cable

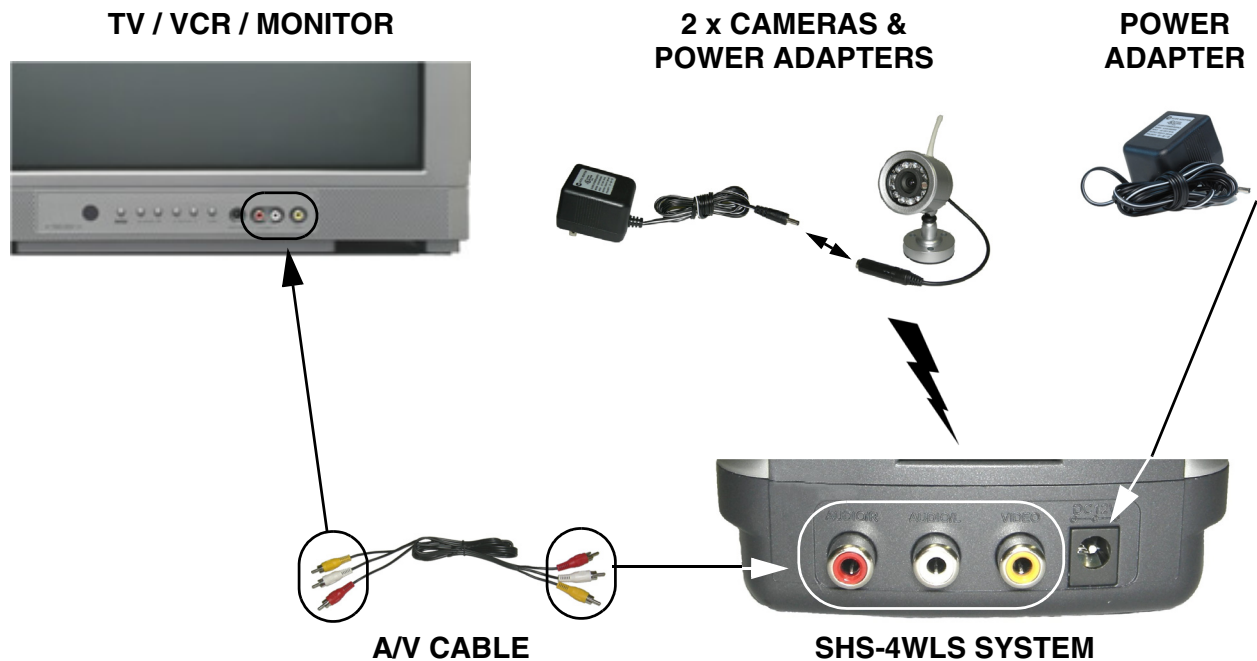
Connect the Video and Audio Cables to the matching color ports on the SHS-4WLS Switcher. Connect the cable to the TV, VCR or Monitor.

**TV / VCR / MONITOR**  
Connect the Video and Audio Cables to the matching color ports.

**SHS-4WLS**  
Connect the Video and Audio Cables to the matching color ports.



## Connectivity Diagram



# SHS-4WLS System Specifications - Appendix #1

## Receiver Specifications

Receiving Frequency	ISM 2,400 MHz ~ 2,483 MHz
Intermediate Frequency / Demodulation Type	480 MHz / FM
Antenna	Patch Antenna
Receiving Sensitivity	≤ -85 dBm
Video Output Signal Level	1.0 V @ 75ohm, S/N>38dB
Audio Output Signal Level	1.0 V @ 600ohm
Power Supply	12V DC / 300mA
Unobstructed Effective Range	300 ft. (100m) (Maximum)
Dimensions (W x D x H)	4" x 5.7" x 1.7" 106mm x 146mm x 43mm (excluding antenna)
Weight	7.8oz (222g)
Operating Temperature	14°F ~ 122°F (-10°C ~ 50°C)
Operating Humidity	85% RH

## Camera Specifications

Image Sensor	CMOS (510 x 492 NTSC)
Minimum Illumination	0 LUX
Transmission Frequency	ISM 2,400 MHz ~ 2,483 MHz
Transmission Power	2mW/FCC
Bandwidth	18 MHz
Modulation Type	FM
Power Supply	8V DC / 200mA
Unobstructed Effective Range	300 ft. (100m) (Maximum)
Night Vision Range	15 ft. (4.6m)
Dimensions (W x D x H)	1.8" x 3" x 3.3" 45mm x 78mm x 83mm (including stand)
Weight	7.6oz. (217g)
Operating Temperature	14°F ~ 122°F (-10°C ~ 50°C)
Operating Humidity	85% RH

# It's all on the web

 **Product Information**

 **Specification Sheets**

 **User Manuals**

 **Software Upgrades**

 **Quick Start Guides**

 **Firmware Upgrades**



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