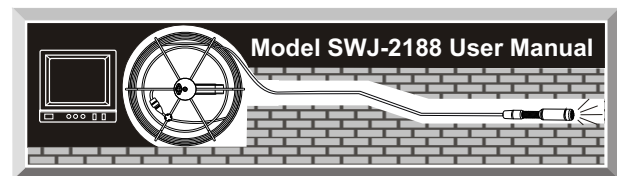


# *MINICAM INSPECTION SYSTEMS*

## *User Manual*

Model SWJ-2188

### ASSEMBLY AND OPERATING INSTRUCTION



# Specifications

Battery	Sealed , Lead Acid(with fuse)
Maximum Camera Depth	65 & 100 Feet (Length of Cable)
Camera Light Source	Built-in IR LED Bulbs
Input Voltage	12 Volts DC
Camera Operating Temperature	-20° to 120° F
Camera Angle-of-View	60° (horizontal),60° (vertical)
Camera Depth-of-View	400mm(approximate)
Monitor Image	B/W
Camera Image	B/W
Monitor Picture Resolution	420(TV Lines)
Monitor Input Voltage	12 Volts DC
Monitor Operating Temperature	-20° to 120° F

## ***Save This Manual***

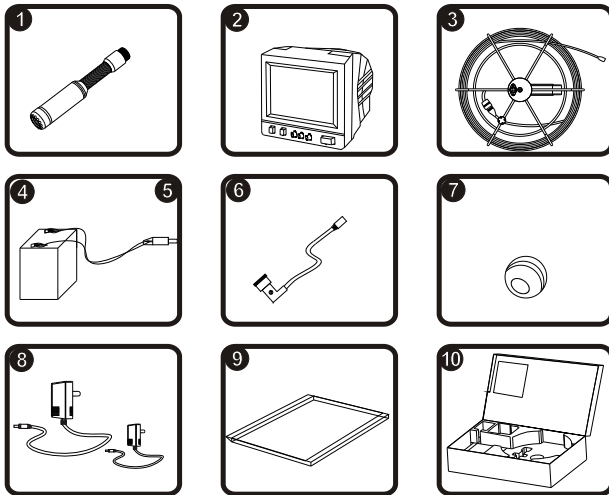
You will need the manual for the safety warnings and precautions, assembly instructions.

## Troubleshooting

If the system is not operating properly, by displaying a rolling, shrunk, or unstable picture, Check all of the connections. Next, make sure the Battery (13) is fully charged. Also, check to Make sure the fuse on the Battery (13) is good. If the system still does not work properly, take The system to an authorized service technician.

### Assembly Drawing and Parts List

Part no.	Description
1	camera
2	monitor
3	65 & 100 feet cable with wheel (long)
4	battery
5	battery cord
6	soft cable (short)
7	ball protection
8	adapter (two) recharge adapter and power supply
9	sunshade
10	case



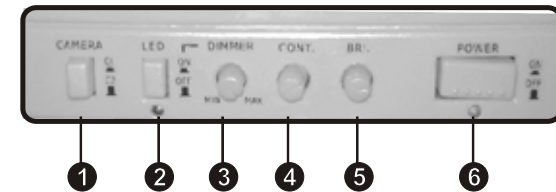
## Operating and maintenance procedures, parts list and diagram

### Connecting the system

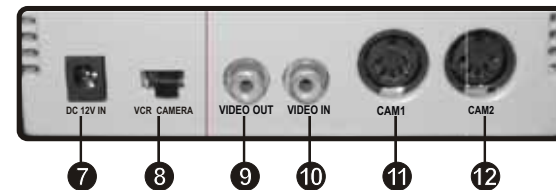
Note: This is a 12 Volt DC system and will not work on 24 Volt DC systems; hooking The monitor up to a 24V system can damage or ruin this product.  
 DC 12 Volt In--- Plug in 12 VDC power system here.(7)  
 Video Out-----to be used to record to a VCR.. (9)

### LOCATION OF CONTROL

#### MONITOR FRONT VIEW



#### MONITOR BACK VIEW



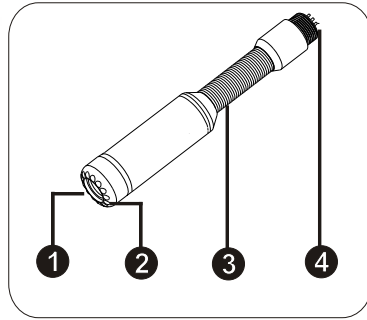
- |                         |                              |
|-------------------------|------------------------------|
| 1. Camera select switch | 2. Led compensation switch   |
| 3. Led dimmer           | 4. Contrast                  |
| 5. Brightness           | 6. Power switch              |
| 7. Dc 12 in             | 8. External video in switch. |
| 9. Video out            | 10. External video in        |
| 11. Camera 1 input      | 12. Camera 2 input           |

**DC 12 Volt In** ---- Plug in 12 VDC power system here.(7)

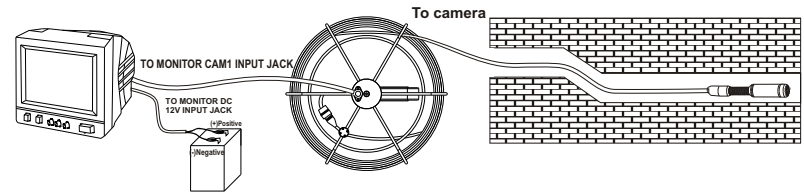
**Video Out** ----- to be used to record to a VCR.. (9)

## CAMERA

1. IR led
2. Lens
3. Spring
4. Spring connector

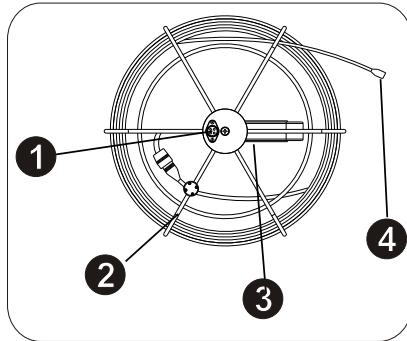


## CONNECTION

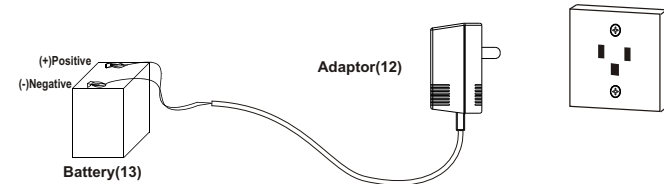


## FIBERGLASS ROLLER

1. Male plug ( to monitor )
2. Metal wheel
3. Handle
4. Connector (to camera )



Monitor location back view



## APPLICATION:

With mini-camera for pipe diamter from 25mm to 120mm ID

1. Water supply
2. Waste water
3. Electrical airconditonal
4. Cable ducting
5. Ducted vaccum systems
6. Plumbin
7. In building

**Never reverse the polarity when connecting the Battery (13) for charging it or running The system.** The Red (+) terminal must be attached to the Red (+) clip on the Battery Cord, and the Black (-) terminal must be attached to the Black (-)clip.

### Battery Charging

Connect the two clips of the Charger (12) to the corresponding positive and negative terminals On the Battery (13). Plug the Charger (12) plug into the power outlet. The indicator on the Charger (12) will stay red until the charger is complete. Once the charge is complete, the Indicator will turn green. **Promptly** unplug the unit from the power outlet and remove the clips from the terminals. **Do not overcharge the battery; overcharging can result in damage to or acid leaking from the battery.**