



User & Installation Guide

By Total Cart Solutions & Integration

Your device Information

Cart Serial #:

Patient Cam Make and Serial #:

TV Make and Serial #:

Ent Scope Make and Serial #:

Codec Make and Serial #:

Computer Make and Serial #:

ISO or UPS Serial #:

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Before Getting Started

- **Indications for use**
 - Contraindications
- **Safety precautions**
 - Warnings
 - Environmental considerations
 - Waste handling
- **Warnings**
- **Operator Safety Summary**
- **Important Safeguards**
- **Equipment markings**



Indications for use

The MedVu-Av and MedVu-R1 enables secure and effective audio/video communication between multiple healthcare providers and between providers and patients. The system transmits real-time audio and video captured by a high-definition camera and integrated microphone. It also receives real-time audio and video from a similar system in a remote location. Finally, the MedVu-Av and MedVu-R1 supports transmission of real-time audio and video from peripheral audio/visual medical devices, which may be connected to standard audio and video inputs provided on the system. The MedVu-Av and MedVu-R1 is intended to facilitate remote provider/patient and provider/provider consultations. These consultations should always be conducted with a licensed medical professional physically in the room with the patient.

Contraindications

The MedVu-Av and MedVu-R1 is not intended to substitute for the in-person physical examination of a patient or as a substitute for direct medical intervention. It is also not intended for real-time, active, or online patient monitoring, nor is it intended to provide time sensitive data or alarms. The MedVu-Av and MedVu-R1 do not support transmission of numerical telemetric/serial data and is not intended for use with non-audio/visual medical devices.

Safety Precautions

Warning

Do not modify this equipment without authorization from the manufacturer!

Precaution should be taken during transportation of the system. It is recommended that the operator use caution when wheeling the unit over doorstops and/or into elevators to ensure their safety and prevent damage to the unit.

Environmental considerations

Thank you for buying a product which contributes to a reduction in pollution, and thereby helps save the environment. Our products reduce the need for travel and transport and thereby reduce pollution. Our products have either none or few consumable parts (chemicals, toner, gas, paper). Our products are low energy consuming products.

Battery handling

Batteries for the remote control are long life Alkaline batteries; please follow guidelines on the packing material for handling and disposal of the batteries.

The system enclosed battery (rechargeable battery for use in temporary relocation) in this product is non-user replaceable and should be removed by a qualified service technician only.

CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO MANUFACTURER INSTRUCTIONS.

Production of products: Our factories employ efficient environmental methods for reducing waste and pollution and ensuring the products are recycled.

Waste handling

EU Battery and WEEE Directives For product safety and data integrity reasons the permanently affixed battery should only be removed or replaced professionally by a repair technician or waste management professional. Please contact Total Cart Solutions or an authorized service agent if the product fails to perform due to malfunction of the permanently affixed battery. It is your responsibility to dispose of your waste equipment and batteries separately from your household waste and in accordance with local laws and regulations. The correct disposal of your old equipment and batteries will help prevent potential negative consequences for the environment and human health. Please use the nearest waste collection facility as directed by your municipality or your retailer.

Warnings

Not Intended For Dialing Emergency Medical Services

The MedVu-Av and MedVu-R1 are not intended to make emergency calls. In the event of an emergency, the user should use a telephone or device other than this product to call local emergency services. Use medically approved devices. Ensure that any device connected to the power outlets conforms to IEC 60601-1 standards in order to maintain compliance.

Connecting electrical equipment to the MedVu-Av or MedVu-R1 effectively creates a new system, which can result in a reduced level of safety. **Loss of Connectivity:** During the use of the, MedVu-Av and MedVu-R1 a healthcare professional may lose connectivity with the system. Loss of connectivity can result from power outages, network outages. Loss of connectivity can prevent a health care professional from completing a patient session in a timely manner. In cases where time is critical, the user should not use the MedVu-Av or MedVuR1 and seek an in-person examination from a licensed health care professional.

Delay or Choppiness of Audio or Video Transmission

The MedVu-Av and MedVu-R1 may operate at a delay, depending on network condition. This means that the provider may experience the audio and video transmissions later than they are really occurring. In cases where the remote health care provider needs to make time sensitive assessments or give instructions,

this delay may result in misalignment of audio and visual transmissions to the real-time procedure and/or inappropriate treatment or diagnosis.

Proper Training Is Required

Healthcare professionals using the Medvu-Av or Medvu-R1 should be sufficiently trained and familiar with the Installation, User Guide and the instructions for use. Please refer to this guide under “Troubleshooting”, “Safety Precautions” and “Operator Safety.”

Audio and Video Distortions

The Medvu-Av and MedVu-R1 can experience audio and video distortions due to network latency, hardware malfunction, insufficient bandwidth, or for other reasons.

Operator Safety Summary

For your protection, please read these safety instructions completely before operating the equipment and keep this manual for future reference. The information in this summary is intended for persons who operate the equipment as well as repair (servicing) personnel. Carefully adhere to all warnings, precautions and instructions on the apparatus, and the ones described in the operating instructions. Also, adhere to safety guidelines found in manuals for any peripheral equipment.

Water and moisture - Do not operate the equipment under or near water - for example near a bathtub, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool or in areas with high humidity.

Cleaning - Unplug the apparatus from the wall outlet before cleaning or polishing. Please adhere to the general cleaning guidelines found in this document's section: "Cleaning the System."

Power-Cord Protection - Route the power cord so as to avoid it being walked on or pinched by items placed upon or against it, paying particular attention to the plugs, receptacles, and the point where the cord exits from the apparatus.

Mobility – Before transporting the system unplug the power cord and wrap it around the cable hook. Use the system handle to maneuver the system. Pull the system over thresholds, cords, cables, and other obstacles on the ground. Fully lower the work surface before transporting the system.

Ventilation - Do not block any of the ventilation openings of the apparatus. Install in accordance with the installation instructions. Never cover the slots and openings with a cloth or other material. Never install the apparatus near heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

Lower before transporting: For your safety and to protect the Medulla, fully lower the work surface before transporting the system. Pushing or pulling the system with any part of the system other than its handle may result in damage to the system.

Attachments - Only use attachments as recommended by the manufacturer.

Servicing - Do not attempt to service the apparatus yourself as opening or removing covers may expose you to dangerous voltages or other hazards, and will void the warranty. Refer all servicing to qualified service personnel.

Opening the System - Do not open system service panels while system is in use.

Storage - If you need to store the system, ensure that it is stored in a controlled environment to avoid damage. Refer to the codec documentation for further guidelines.

Damaged Equipment - Unplug the apparatus from the outlet and refer servicing to qualified personnel under the following conditions:

- When the power cord or plug is damaged or frayed
- If liquid has been spilled or objects have fallen into the apparatus
- If the apparatus has been exposed to rain or moisture
- If the apparatus has been subjected to excessive shock by being dropped, or the unit has been damaged
- If the apparatus fails to operate in accordance with the operating instructions.

Important safeguards

Using System in a Medical Environment

No currently available technology can completely substitute the in-person physical examination of an individual patient. Products provide high quality audio and video experiences;

when used properly, these products provide a valuable tool for medical professionals. The use and value of the system will vary depending on the specific circumstances of the patient condition, data transmission speeds, and the capabilities of the local environment. Ultimately, the local medical professional supervising the patient's care should judge how this system is to be utilized. The leakage current could increase when connected to other equipment.

Warning on Power Connection

Use only with the supplied power cords or cords that meet local hospital-grade requirements. Users in the United States and Canada should use hospital-grade cords that meet the following requirements:

	United States	Canada
Plug Type	Hospital Grade	Hospital Grade
Cord Type	SJT3 x 16 AWG	SJT3 x 16 AWG
Minimum Cordset Rating	2.3A/125V	2.3A/125V
Safety Approval	UL	UL

NEVER USE AN EXTENSION CABLE TO POWER THE SYSTEM.

ElectroStatic Discharge (ESD)

When subjected to an electrostatic discharge the PrecisionHD camera image may suffer momentary interruption - this will self-recover in a few seconds after the discharge. To avoid excess electrostatic discharge, floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.

Equipment markings

Exclamation Mark

The “exclamation mark” within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions within literature accompanying the equipment.



Follow instructions for use. Use the handle to pull the system safely across thresholds, cords, cables, and other potential obstacles on the ground. Always fully lower the work surface before transporting the system.





Pushing or pulling the system with any part of the system other than the handle may result in damage to the system. Always fully lower the work surface before transport and use the system handle to maneuver.

CAUTION! This device contains a battery.
ATTENTION! Ce dispositif contient une batterie.

- DO NOT expose battery to high temperatures.
NE PAS exposer la batterie à des températures élevées.
- DO NOT expose this battery to moisture.
NE PAS exposer cette batterie à l'humidité.
- DO NOT subject the battery to mechanical shock or vibration.
NE PAS soumettre la batterie à des chocs mécaniques ou des vibrations.
- DO NOT disassemble this battery.
Ne démonter pas la batterie.
- Turn OFF while not in use.
Coupez lorsqu'il n'est pas utilisé.
- If the battery will not be used for long periods of time, store in a shaded and dry area. Fully charge the battery every 60 days.
Si la batterie ne sera pas utilisée pendant de longues périodes de temps, magasin dans une zone ombragée sec. Charger complètement la batterie tous les 60 jours.
- Use only dedicated charger.
Utilisez uniquement le chargeur dédié.


PRODUCT NAME: Li-Ion Battery
 Nom du produit Batterie Li-Ion
 BATTERY MANUFACTURER / ADDRESS:
 Fabricant de la batterie / Adresse
 ITM Semiconductor Co., Ltd.
 52-7 Gwahakaneop 1-ro, Oksan-myeon
 Cheongwon-gun Ochang, Chungcheongbukdo,
 Korea 363-911
 MADE IN KOREA / Fabriqué en Corée

This module contains no user-serviceable parts.
 Ce module ne contient aucune pièce réparable par l'utilisateur.

NOTICE

No currently available technology can completely substitute the in-person physical examination of an individual patient. MedVu-Av products provide high quality audio and video experiences; when used properly, these products provide a valuable tool for medical professionals. The use and value of the system will vary depending on the specific circumstances of the patient condition, data transmission speeds, and the capabilities of the local environment. Ultimately, the local medical professional supervising the patient's care should judge how the system is to be utilized.




**FOR WARRANTY OR QUESTIONS CONTACT:
 TOTAL CART SOLUTIONS
 & INTEGRATION
 194 Earl Stewart Dr. Aurora On L4G6V7
 289-301-3392**

Turning the system on and off

1. Connect the power cord.
2. Connect the plug to the AC power outlet.
3. Ensure that the System breaker switch is in the ON position at the bottom of the unit. This supplies power to the entire system. If the display does not turn on when the system is powered up, ensure that the display is powered on by pressing the display's power button.
4. To turn the system OFF, press the System power button.



Adjusting the system height

The MedVu-Av can be height adjusted using the HEIGHT ADJUST Foot Pedal located between the front 2 casters at the base of the cart.

Lowering the work surface

Step on height adjustment foot pedal and adjust to the desired height.

Lower before transporting

For your safety and to protect the MedVu-Av fully lower the work surface before transporting the system. Pushing or pulling the system with any part of the system other than its handle may result in damage to the system.

Traversing thresholds and obstacles on the ground

Use the handle to PULL the system safely across thresholds, cords, cables, and other potential obstacles on the ground. Always fully lower the work surface before transporting the system.



Step on height adjustment foot pedal.

Maintaining the system

- Cleaning and maintenance guidelines
- Battery guidelines
- Installing updates
- Storing the system
- Trouble shooting



Cleaning and maintenance guidelines

Cleaning the system

The surface materials of the MedVu-Av and MedVu-R1 are durable and easy to maintain. Follow the general cleaning guidelines, found to the right.

Maintaining the system

The MedVu-Av and MedVu-R1 is designed with minimal maintenance requirements. However, a yearly check on system fasteners and cables (screws, nuts, bolts, cables) will ensure that the MedVu-Av and MedVu-R1 is in good operating order.

LCD monitor and Camera

- Always disconnect your monitor's power from the system before cleaning. Clean the camera and LCD monitor surface with a lint-free, non-abrasive cloth. Avoid using any liquid, aerosol or glass cleaners.
- Slots and openings on the back or top of the cabinet are for ventilation. They must not be blocked or covered. Your monitor should never be placed near or over a radiator or heat source.
- Never push objects or spill liquid of any kind into this product.

System

- All surfaces — painted and plastic cart components — will withstand cleaning by commonly available multipurpose surface cleaners.
- To avoid risk of electric shock, do not expose electrical components to water, cleaning solutions or other potentially corrosive liquids or substances.
- Do not immerse system or system components in liquid or allow liquids to flow into the cart. Wipe all cleaners off surface immediately using a damp cloth. Thoroughly dry surface after cleaning.
- Do not use flammable cleaners on cart surfaces due to close proximity of electrical power and equipment.
- Never use steel wool or other abrasive materials that will damage the surface finish.
- Do not use strong solvents such as trichloroethylene and acetone. These solvents will damage the surface finish.
- It is recommended that any cleaning solution be tested on a small, inconspicuous area to ensure surface is not harmed.

Battery guidelines



This system contains no user-serviceable parts.

Battery Handling

Batteries for the Remote Control are Long Life Alkaline batteries; please follow guidelines on the packing material for handling and disposal of the batteries.

The system enclosed battery (rechargeable battery for use in temporary relocation) in this product is non-user replaceable and should be removed by a qualified service technician only.

CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN IN CORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO APPROPRIATE LOCAL REGULATIONS.

Storing the system

Short-term storage

If the system is to be stored for a relatively short period of time, we recommend that the system be plugged in to an electrical outlet during storage.

Long-term storage

If the system is to be stored for an extended period of time:

1. Flip the System breaker switch OFF
2. Unplug from electrical outlet
3. Wrap power cord on the cord wrap
4. Secure or appropriately store peripheral devices and cables
5. Store the system in a cool, dry environment

Troubleshooting

I can't turn my system on.

- Make sure the system switch is in the ON position.
- Ensure the power cord is properly connected to the AC outlet. You should see the LED power indicator on the front.

Why is the screen black?

- Ensure the system is powered on and the display's power cord and video source cable are properly inserted. Press the display's power button to turn on.
- The display setting may have been changed or set incorrectly.
 1. Ensure the display's HDMI cable is properly inserted.
 2. Press and hold the system power button on the side of the console until the blue LED turns off.
 3. Wait a few seconds and turn the system back on. The HDMI setting on the display should be automatically reset and no longer show a black screen.
- Pressing the PC or AUX source buttons when there are no

devices connected to the corresponding connections will result in a black screen. The PC and AUX sources will time out after 10 seconds and return to the Main camera (default) view.

I can't make a video call.

- Ensure the system has network connectivity: - Check Ethernet connection
- Make sure the system codec's network configurations are properly set and registered. Contact your network administrator.

When I try to show my laptop or other device I get a black screen.

- Check that the video cable from the laptop or device is in the appropriate connection on the console.
- Make sure the laptop display setting is appropriately configured to mirror or extend to another display.

The Extron Box

The Extron box enables you to select a specific video input. For peripheral devices, please ensure that number 1 is selected. For computers or laptops, confirm that number 4 is selected. At this point, you can use the presentation button on the remote to switch between the main camera and your presentation.



Kramer Video Switcher

The Kramer video switcher enables you to select different medical peripheral devices. Always confirm that the number 1 is selected on the Extron box before using. Use the presentation button on the remote to switch between the main camera and the selected peripheral video source.



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