



Active Cure™

Enabling Pain Free Living

UHV Combination Therapy Device

USER MANUAL

BEFORE USING THE DEVICE, PLEASE READ OPERATING INSTRUCTIONS CAREFULLY

Email: info@activecure.in

Web: www.activecure.in

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UHV Combination Therapy Device



INTENDED USE

ActiveCure™ UHV device generates deep thermal ultrasonic vibration waves within body tissues for the treatment of selected medical conditions such as relief of pain, muscle spasms, and joint contractures, but not for the treatment of malignancies. Keep out of reach of children.

WHAT IS UHV STIMULATOR ?

ActiveCure™ UHV is a Therapeutic Ultrasound, Heat and Vibration Combination device that generates continuous and pulses high frequency acoustic (1MHz) waves, coupled with thermal energy and vibration; that are transferred to a specific body area via an applicator. These acoustic waves travel deep into the tissue and generate vasodilatation, which helps increase blood flow to the treated area.

Our unique patented UHV therapy - ultrasound combination with heat and vibration allows maximum absorption of acoustic energy into the tissue as compared to only plain ultrasound.

UHV increases blood flow significantly due to its multi-modal effect of three different energies acting on the same pain area.

UNIQUE MULTI-MODAL EFFECT

Ultrasound (U) - Ultrasonic or acoustic energy generates pressure waves through the tissues resulting in vasodilatation. Ultrasound also creates microbubbles that internally have very high pressure and temperature, resulting in cavitation.

Heat (H) - Thermal energy induces temperature gradient across the tissue, causing them to relax. Also, thermal energy creates temperature gradient within the blood enabling thermophoresis.

Vibration (V) - Mechanical energy due to vibration causes muscle relaxation by non-voluntary contraction. It also causes activation of the proprioceptive sensory system. It is very effective for pain control, improvement of muscle force and flexibility, reduction of fatigue onset and accelerates rehabilitation and increases bone density.

UHV - Combined UHV therapy has a unique capability to fasten pain relief by efficiently absorbing acoustic energy. It also enhances vasodilatation by improving temperature gradient across the tissue; thereby causing increase in blood flow and enables flushing out toxins and pain receptors. Figure 1 qualitatively demonstrates the temperature rise across tissue depth for all therapies.

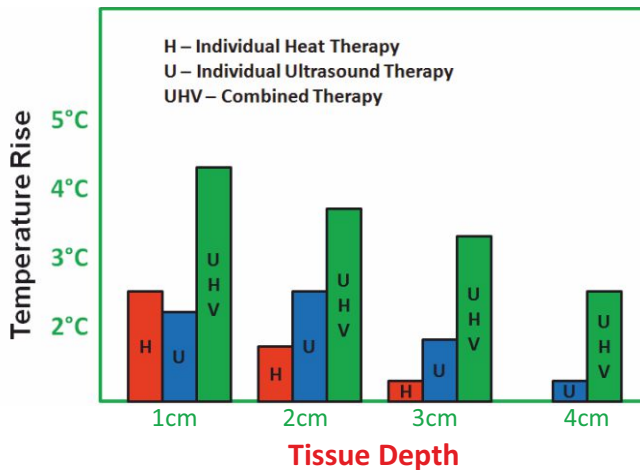


Figure 1: Temperature rise across tissue depth

SPECIAL FEATURES

1. The parts are manufactured, assembled and tested under strict QMS standards. Most of the vendors are ISO9001:2018 certifies.
2. Electro-coloured biocompatible aluminium based applicator head creates a smooth touching surface that comes in contact with the patient's skin.
3. Ergonomic and attractive exterior design of the hand-held applicator fits to most parts of the patient's body and is very convenient to use.
4. Three individual therapies can be used independently or in any desired combination.
5. Inbuilt switching mode power supply with short circuit protection and high voltage protection.

PRECAUTIONS

1. Do not use over or near bone growth centres until bone growth is complete.
2. Do not use over a healing fracture.
3. Do not use over the eyes.
4. Do not use for patients with implanted neurostimulation systems because tissue damage can occur at the location of the implanted electrodes resulting in severe injury or death. This can also damage the system components.
5. Do not use to treat malignancies nor in the region with malignant tumors.
6. Do not use for patients with demand type cardiac pacemakers.
7. Do not use on someone who is pregnant.
8. Do not use over ischemic tissues in patients with vascular disease where the blood supply would be unable to follow the increase in metabolic demand and might result in tissue necrosis.
9. Do not use over the carotid sinus nerves or arteries, laryngeal or pharyngeal muscles.
10. Do not use on patients with hemorrhagic diathesis.
11. Do not use over an area of the spinal cord following a laminectomy, i.e., when major covering tissues have been removed.
12. Do not use over anesthetic areas.
13. Avoid bony prominences.
14. Do not immerse the applicator in water or any other solvent.
15. Do not use over metallic implants, especially prostheses with a cement matrix.
16. When using ultrasound, keep the sound head moving while maintaining contact with skin.
17. Stop use of any therapy if the patient is feeling discomfort.

PARTS OF THE DEVICE



APPLICATOR - It consists of a biocompatible aluminium surface that comes in contact with skin. It also has a connecting cable to connect it to the controller.



CONTROLLER - It is used to set the therapy parameters. It also has an applicator holding ring attached to it.



POWER INPUT CABLE - It is used to supply power from the main source to the device

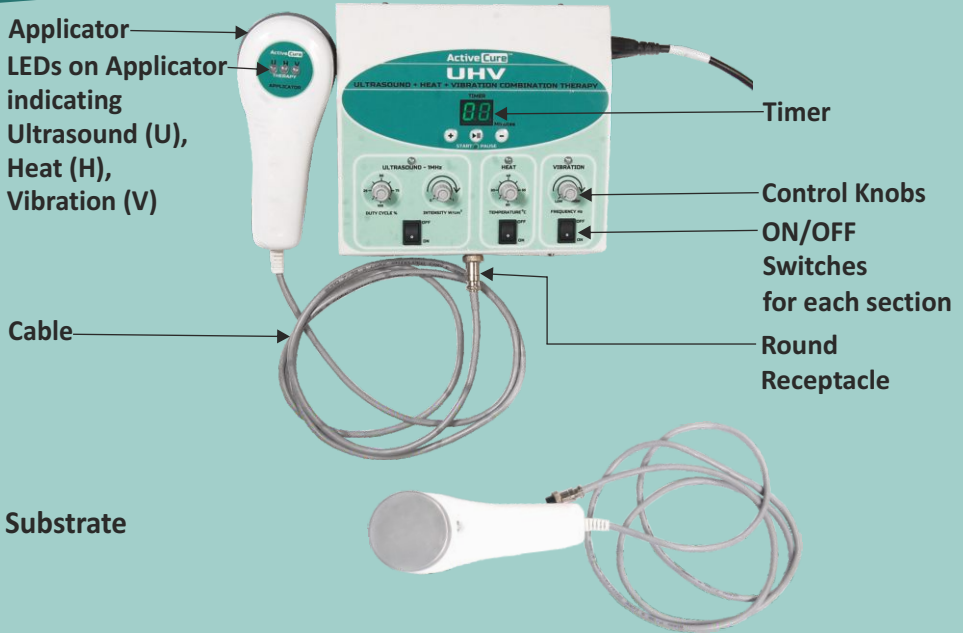


UGel - Proprietary formulation of ultrasound gel for pain therapy.



BAG - Good rexine bag for carrying the device.

KNOW ActiveCure^{TV} UHV



FUNCTIONAL TESTING (Before actual usage on Patient)

Ultrasound (U) - Individual Therapy Testing

1. Insert the power cable into the controller power inlet socket.
2. Connect the applicator to the controller receptacle.
3. Insert the power cable into the controller power inlet socket.
4. Place the applicator horizontally with the substrate facing upwards. Put several drops of water on the surface of the substrate.
5. Turn the device ON and switch ON the ultrasound section. Set ultrasound intensity to high. You can observe the ultrasonic action (sonication and microbubbling). The water drops on the substrate start to perform one million vibrations per second with slight atomization phenomenon.

Heat (H) - Individual Therapy Testing

1. Insert the power cable into the controller power inlet socket.
2. Place the applicator horizontally with the substrate facing upwards. Place your palm on the substrate.
3. Turn the device ON and switch on the heat section, you will feel the heat.
4. Heat sensation on the palm will increase from warm to hot as the set temperature increases.

Vibration (V)- Individual Therapy Testing

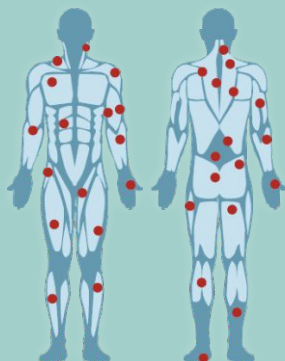
1. Insert the power cable into the controller power inlet socket.
2. Place the applicator horizontally with the substrate facing upwards. Place your palm on the substrate.
3. Turn the device ON and switch ON the vibration section, you will feel the vibrating effect.
4. Vibrating sensation on the palm will increase from slight to very strong as the intensity increases.

UHV Combination - Individual Therapy Testing

1. Insert the power cable into the controller power inlet socket.
2. Place the applicator horizontally with the substrate facing upwards. Place your palm on the substrate.
3. When all the three sections are switched ON, you will feel tingling sensation combined with heat and vibrating sensation.
4. Please note vibrating sensation may mask the tingling sensation produced by ultrasound due to which it may be hard to realize.

COMMON TRIGGER POINTS

Trigger points are discrete, focal, hyperirritable spots located in a taut band of skeletal muscle. They produce pain locally and in a referred pattern and often accompany chronic musculoskeletal disorders.



HOW TO USE?



1 Connect the applicator to the controller receptant



2 Insert the power cable into the controller power inlet socket.



3 Switch ON the main power. Press the switch on the power intel socket to power ON The controller.



4 Timer will display "10".

HOW TO USE?



5 Clean the applicator substrate with a tissue paper and apply appropriate amount of **UGel** on it.

6 Also apply **UGel** on treatment area of the patient's body.

7 Place the applicator on the patient's treatment area such that the substrate is in good contact with the skin.

8 Switch on any of the sections - Ultrasound, Heat, Vibration in any combination you need. Accordingly, corresponding LED (Ultrasound - Green, Heat-Red, and Vibration-Blue) will glow.

HOW TO USE?



9 Adjust the therapy parameters - duty cycle and power intensity for ultrasound; temperature intensity for heat and frequency for vibration based on the patient's requirement

10 Set the time by using “+” sign to increase and “-” to decrease the time value.

11 Once all the parameters are fixed press the stop/start button below the timer display to start the therapy. As the therapy progresses the set time will go on reducing from the set value, indicating the treatment progress. The device will stop after the set therapy time is complete and you will hear a beep sound. If you want to pause the therapy in between the press the stop/start button below the time display. Therapy will stop. You can start the therapy from that instance again by pressing the same button.

HOW TO USE?



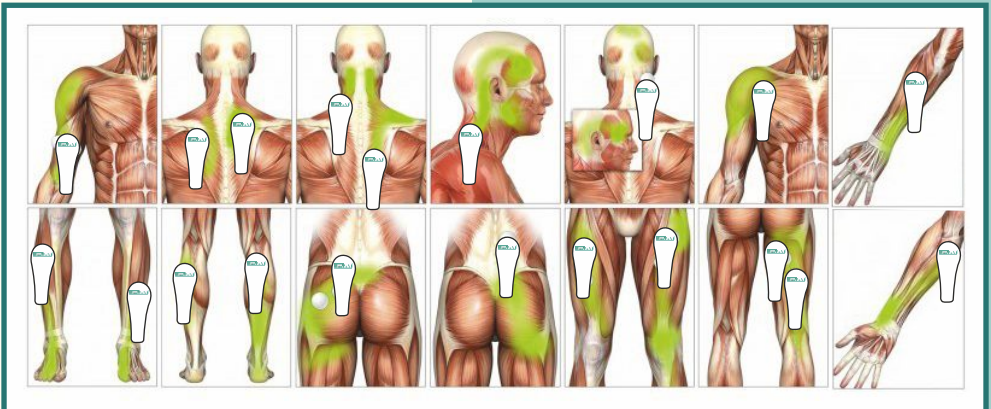
12 Keep the applicator gliding over the skin; do not stop the motion at the same place too long. Applicator should always be in constant motion during therapy.



13 After therapy is complete, switch off the device (A). Remove the applicator (B), disconnect power cable ©.Clean the applicator surface with a tissue paper (D).



Schematic representation of using UHV applicator on body



MAINTENANCE

1. Do not put into water, neither it should fall down or be thrown on to the ground from a height.
2. Do not use volatile solution such as alcohol or turpentine or gasoline to rub or clean the device.
3. Please clean the device using tissue paper.
4. Do not use coarse or used fabric to rub the substrate surface of applicator.
5. Store at room temperature in a dry place.

OPERATING & STORAGE/ TRANSPORTATION CONDITIONS

Operating Conditions: 25°C to 50°C, 40% to 90% RH

Storage/ Transportation Conditions: 25°C to 50°C, 40% to 90% RH

PRESCRIPTION STATEMENT

This device should be only sold to a registered practitioner - doctors and physiotherapists.



UNIT SPECIFICATIONS

Technical Specifications	
General	
Power Input	240 VAC, 50 - 60Hz
Maximum Power Consumption	48 W
Dimension (LxBxH)	200 X 290 X 70 mm
Weight	1100 grams
Ultrasound	
Output Mode	Pulsed / Continuous
Output Frequency	1.0 MHZ ± 10%
Effective Average Intensity	0 to 1 W/cm ² maximum
Duty Cycle	25 to 100% maximum
Maximum Power Output	3.0 W ± 20% (Duty Cycle: 100%)
Treatment Time	0 to 99 minutes
Heat	
Temperature	25° C to 80° C ± 5° C
Treatment Time	0 to 99 minutes
Vibration	
Frequency of Vibration	0 to 50 Hz ± 5%
Treatment Time	0 to 99 minutes

LIMITED WARRANTY

We warranty each new ActiveCure™ UHV Unit (excluding gel) for one year from defects in materials and workmanship from the original date of purchase. This warranty applies only to the original purchaser. The original invoice or receipt must accompany all returns.

This warranty does not cover abuse, accident, or damage resulting from failure to follow operating instructions. The warranty is deemed void if the unit has any alterations or has been disassembled.

Note: We shall not be liable for any direct or indirect consequential damages resulting from the use of this unit.

Product: ActiveCure™ UHV

Model:

Serial Number:

Date of Purchase:

Signature / Stamp

T&C : This card has to be preserved for warranty claims.

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Future Offerings

ActiveCure™ Multimode

ActiveCure™ TENS

ActiveCure™ IFT

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BRANCH OFFICE

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