



## DUOEXSONO

Cell activation &
Channel open through
Micro-cavitation &
acoustic streaming
effect



ECM remodeling
(MMPs, HSPs, GAGs)
through dynamic multimassage and pressure
gradients

DUOEXSONO is a system that combines 4 multi-ultrasound waves according to skin type and delivers them to the skin layer.

1Mh,3Mhz,10Mhz, and 17Mhz create powerful micro vibration and cavitation in the skin that helps to remodel ECM and activate cells.

# Stronger multiwave SONO system DUOEXSONO

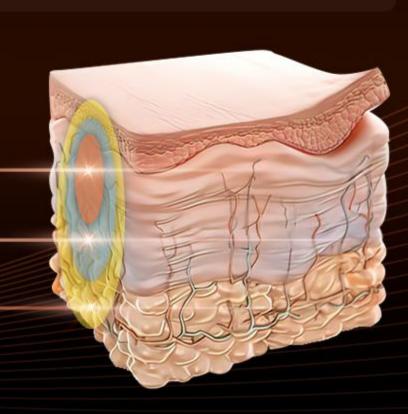
Equipped with Stronger 17Mhz

Multi program combinations enables more precise targeting Equipped with
4 wavelengths to target
more diverse layers

17Mhz + 10Mhz + 3Mhz

10Mhz + 3Mhz + 1Mhz

1Mhz + 3Mhz



## DUOEXSONO

1Mhz, 3Mhz, 10Mhz, 17Mhz multi-ultrasound activates skin fibroblasts and promotes collagen regeneration. In addition, it penetrates deep into the skin tissue with high-speed vibration, makes the flow of lymph fluid smooth, and stimulates the cells of the lymph fluid to harmonize the metabolic function of the cells. The speed of skin regeneration is accelerated due to the smooth metabolism of cells. As skin regeneration is active, skin texture is improved and skin elasticity is increased. It also soothes the inflammatory response caused by acne or severe dermatitis and reduces the concentration of inflammatory substances.





10MHz 3MHz 1MHz



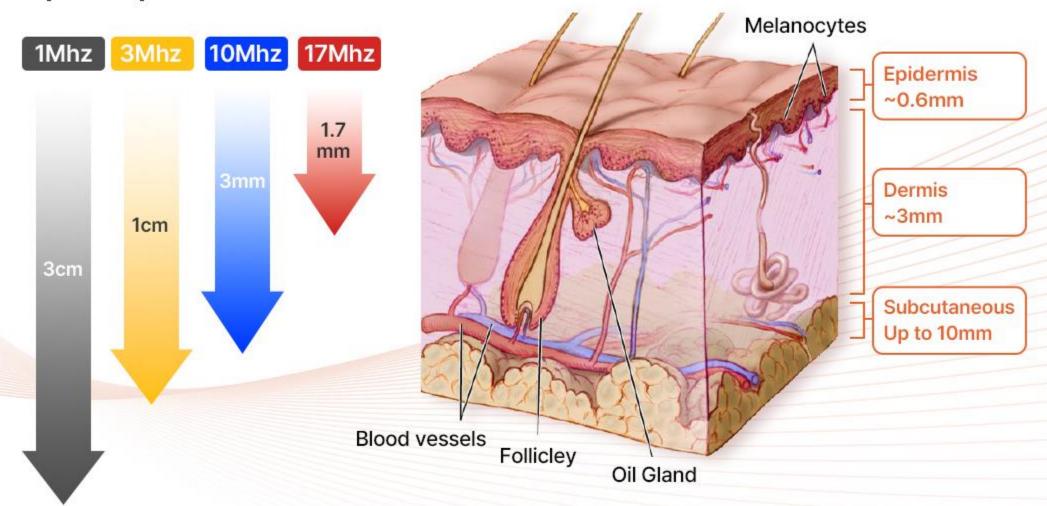
3Mhz, 10Mhz, and 17Mhz deliver energy more intensively to the epidermal layer, which is effective for sensitive skin with damaged skin barrier, atopy, and troubled skin.

1Mhz, 3Mhz, and 10Mhz deliver energy to the deeper layers and affect the muscle and fat layers to loosen muscles, provide lymphatic massage, or are effective for removing skin swelling and quick recovery after thread lifting.



## **Characteristics of Ultrasound**

## Depth of penetration



## **Ultrasound Therapeutic Mechanisms**

Cell activation &
Channel open through
Micro-cavitation &
acoustic streaming
effect

### Sonophoresis

Drug delivery

### Wound healing optimizing

- Shorter downtime
- Reduce edema & bruising

# Improvement of skin cells & fibroblast function

less pain for injection



## **Ultrasound Therapeutic Mechanisms**

ECM remodeling
(MMPs, HSPs, GAGs)
through dynamic multi
massage and pressure
gradients

#### Control MMPs

- Acne, Erythema& Eczema
- Excessive anti-inflammation
- Scar prevention
- Maximize rejuvenation

#### **Activation of HSPs**

- Increase of immunity and reproduction capabilities
- Skin tightening & fine wrinkles
- Skin rejuvenation.

#### **Content of GAGs increased**

- Moisture increase
- Metabolism acceleration



# ECM remodeling(MMPs, HSPs, GAGs) through dynamic multi massage and pressure changes.

ECM(Extracellular matrix)

Refers to a three-dimensional network structure made of macromolecules (collagen, elastin, glycoproteins, growth factors, etc.) that exist outside cells but are closely related to cells

#### ✓ Control MMPs(Matrix Metalloproteinases)

MMPs is a proteolytic material that breaks down dead cells and damaged tissues to secure space for new collagen and other materials to be created.

#### Activation of HSPs(Heat shock proteins)

HSPs is a collagen-producing enzyme that activates the skin's immune system to quickly repair any abnormalities in the skin.

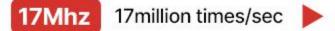
#### ✓ Content of GAGs increased(Glycosaminoglycan)

GAGs is a polysaccharide chain secreted by fibroblasts and is an important component of the extracellular matrix. It occupies a large space in the dermis and combines with a large amount of moisture to play an important role in skin moisturization and elasticity.



# ECM remodeling(MMPs, HSPs, GAGs) through dynamic multi massage and pressure changes.

### Micro vibration per second



10Mhz 10millon times/sec

3Mhz 3million times/sec

1Mhz 1million times/sec







# ECM remodeling(MMPs, HSPs, GAGs) through dynamic multi massage and pressure changes.

ECM changed for each wavelength

1Mhz, 3Mhz, 10Mhz regulation of MMPs is achieved.

3Mhz, 10Mhz Increase in various HSPs

10Hz HSP 72 Increased up to 1800%.

10Mhz~19Mhz

Increased levels of GAGs and rearranged



### How to use



DUOEXSONO + Gel or Any skin solution



Basic care

#### Recommend treatment time

Acute lesion: 10~15min with low power.

Chronic lesion: over 15min with high power.

#### Recommend treatment interval

Acute lesion: several hours ~ 3 days.

Chronic lesion: weekly.

#### Main effect

strengthen skin barrier

Stimulates collagen synthesis

**Activation of fibrocytes** 

Improvement of skin elasticity

skin tone improvement

**Excretion of skin waste** 

Damaged skin regeneration

Moisturizing

**Reduce skin inflammation** 



### Skin Booster for Hydration / Whitening / Skin Texture

17Mhz+10Mhz+3Mhz
DUOEXSONO



Skin booster (exosome, PDRN, Growth factor, Peptide, HA..)

- It boosts skin metabolism and reduces redness after treatment.
- DUOEXSONO makes hydration in the ECM and the functions of cell will be increased.
- Activated cells absorb the Solution better.
- The powerful micro-tremors and pressure changes of the wavelength loosen the tissue of the skin layer so that the solution can be well absorbed.

#### Duration

Acute lesion: 10~15min with low power.

Chronic lesion: over 20min with high power.

#### Interval

Acute lesion: several hours ~ 3 days.

Chronic lesion: weekly.

### Laser treatment for Pigmentation

Laser Toning(Nd:YAG, Pico) or IPL



17Mhz+10Mhz+3Mhz DUOEXSONO

- Very effective to treat pigmentation (Melasma) by Increasing melasma response to the laser with opening cannels of the cell.
- Block skin dryness side effect from the laser treatment, and prevent becoming sensitive skin.
- Disintegrate destroyed melasma by activating macrophage.
- Increase patient satisfaction by treating pigmentation & increasing resilience at the same time.
- DUOEXSONO management program can draw customers by after care for toning.



## RF needling & Fractional laser treatment for

Scar / Wrinkle / Pore / Stretch mark

RF needling & Fractional Laser







LED & Mask care

- By optimizing wound healing through micro cavitation and acoustic streaming, it helps damaged skin to regenerate faster.
- Remodeling of ECM can maximize RF needling & fractional laser effect.
- Block skin dryness side effect from the laser treatment, and prevent becoming sensitive skin.

## **Thread Lifting**





Threads Lifting





- If you perform DUOEXSONO before thread lifting, it loosens the skin tissue and helps the thread to enter more smoothly.
- If you want DUOEXSONO Care after thread lifting, it is recommended to do it after 3 days.
  It makes the down time to be short by wound healing effect.

## Lipolysis injection

Lipolysis injection









- Micro-cavitation & acoustic streaming effect helps the solution to spread well in the adipose tissue.
- It penetrates deep into the skin tissue with high-speed vibration, makes the flow of lymph fluid smooth, and stimulates the cells of the lymph fluid to harmonize the metabolic function of the cells.
- By activating the metabolism, waste products are eliminated and blood circulation is improved.
  This helps maximize the effectiveness of Lipolysis.

# Thank You

