

Sub-Dermal Adipose Tissue Fractional Remodeling

Morpheus8 is a fractional device with programmable penetration depth and energy delivery. The coated needles penetrate into the sub-dermal tissue, coagulating the fat and contracting connective tissue. Simultaneously, directional RF energy generates bulk sub-necrotic heat in the dermis.

Typical Treatment Parameters

Treatment depth setting should correlate with the indication and treatment area to ensure proper tissue remodeling. For example, in the periorbital or forehead area in which skin is very thin and bony, treat with 24 pins tip and 1 or 2mm depth settings.

Treatment Parameters

- **Depth -**
 - Morpheus8 - 24 - 1mm, 2mm, 3mm, 4mm.
 - Morpheus8 - 12 (Prime) - 1mm, 2mm, 3mm, 4mm.
 - Resurfacing - 0.5 mm fixed depth.
- **Cycle Mode** - needles penetrate and retract from the tissue with every pulse
- **Fixed Mode** - needles are continuously deployed at programable depth while footswitch is activated. The needles retract back and energy delivery terminates once the footswitch is released. It can be used for stacking of pulses when required.
- **Repetition** – can be set to single pulse mode or autorepeat mode when pulses are delivered automatically with predetermined pulse repetition rate:
 - In Cycle Mode – Single, 0.5 and 1pps.
 - In Fixed Mode – 0.5, 1.0 and 1.5pps. No Single pulse.

Tip Name	Pins number	Depths mm	Treatment areas	Energy Levels	Mode
Morpheus8 - 24	24	1 - 2	Bony Areas, Periorbital, Forehead, Chin	8 - 15	Cycle
Morpheus8 - 24	24	2 - 3	Soft Tissue, Neck	12-20	Cycle/Fixed
Morpheus8 - 24	24	3 - 4	Body Areas	15 - 30	Cycle/Fixed
Morpheus8 - 12 (Prime)	12	1 - 4	Small areas, perioral, nose	15 - 25	Cycle/Fixed
Morpheus8 - 12 (Prime)	12	1 - 2	Periorbital	15 - 25	Cycle/Fixed
Morpheus8 - Resurfacing	24	0.5 Fixed	Face, Body Areas	up to 30	Fixed

- Treatment may be applied to all skin types. When treating dark skin restrict energy, starting at energy level 8 or lower, and avoid treating or treat with over caution over bone and curved areas, preferably following bleaching regimen.
- The deeper the treatment the higher RF energy can be applied.
- Reduce ~20% energy when working on thin skin/tissue like neck, or on bony area like forehead or jawline.
- Further ~20% reduction on thin skin over bone, like upper chest and back of hands.
- Higher settings may be used if the treatment area is infiltrated with tumescent anesthesia, if user is experienced and is determined and ordered by the physician.
- Safety - Use lower energy for thin skin, darker skin, labia minora/majora and bony areas. Start with lower settings for patient's first treatment.
- Method of Anesthesia:
 - Topical anesthetic for 45-60 min – limited to energy as tolerated by the patient, depending on the percent of numbing ingredients and patient sensitivity.
 - Some patients require nerve block or local anesthesia for higher energy.
 - Tumescent or IV sedation is usually applied when doing higher energy levels.

Pre-Treatment

- Prior to the treatment inspect the tips for any damage.
- First connect tip and then enter the treatment screen. This will ensure the correct calibration of the tip and handpiece.
- Start with several low-energy test pulses; if skin response and patient's tolerance allows – gradually increase treatment parameters.
- Anti HSV viral prophylaxis is recommended for patients with history of Herpes Simplex.
- Remove numbing cream from treatment area – clean and degrease skin with cleanser and 70% rubbing alcohol.
- Always exercise caution applying and removing numbing cream around the eyes so as not to accidentally expose anesthesia to eyes.
- Using complete contact and firm pressure, apply a few test spots and wait 10-15min for light skin and longer for dark skin. If the spot pattern is uneven, remove the tip and apply a new tip.

Treatment Procedure

- Apply the hand piece perpendicular to the treated area, with complete contact and firm pressure. To improve coupling between the skin and the tip stretch skin on very soft tissue or pinch on bony areas.
- Ensure that the patient is steady and still during the procedure. Provide additional support with towels or pillows if needed.
- Bony areas use with extra caution: reduce the energy levels, use 1-2mm Depth settings. Exclude zones with extremely thin skin and high curvature such as upper part of the forehead or temple.
- When performing treatment, move the hand piece to the adjacent area with overlap of approximately 30-50%.
- 1-2 additional pulses may be triggered at the same site (Stacking) in Fixed Mode. However, DO NOT stack pulses on bony areas such as Forehead, Periorbital, Jawline, etc.
- If gaps are visible after the full area treatment, they may be re-treated immediately.
- Occasionally, an additional 1-3 passes are necessary to optimize results. Wait until the full area is treated before attempting a second/third pass, allowing for a delayed response. An additional pass may be applied in a different direction to the first pass, to ensure complete area coverage.
- The endpoints are minimal to substantial erythema and edema often accompanied by tingling heat sensation. Minor pin-point bleeding can be observed.
- Clean the tip as well as patient's skin with clean dry gauze frequently to remove skin and blood debris. Cleaning the tip will improve coupling and reduce the risk of arcing of RF energy.
- **Note: For the best performance, the applicator will automatically calibrate every 10th pulse. The sound of the Calibration Pulse will slightly differ from other pulses. This is normal and does not require any special attention.**

Post-treatment

- Cooling the skin can reduce discomfort and excessive skin response.
- Apply healing ointment or antibiotic ointment, immediately post treatment for 1-3 days.
- As soon as the needle holes close (1-3 days), apply moisturizer, sun-screen, and make-up.

Treatment schedule

- The number of treatment sessions is individual and depends on treatment parameters. Typically, high energies treatments require 1-3 sessions every 3-6 weeks. Lower energies treatments require 2-4 sessions every 3-6 weeks.
- Maintenance session is recommended every ~6 months

Tips

- Use firm pressure to ensure good contact and coupling of the tip.
- Do not slide tip over the treatment area to avoid skin scratching. Make sure to lift and place the tip for complete placement and apply pressure before pulsing.
- Cooling the treated skin is recommended after the treatment to relieve discomfort.
- During treatment, air cooling can be used to increase comfort. If other means of cooling are used, use clean technique and make sure skin remains completely dry to prevent arcing and to facilitate maximum coupling.
- Avoid treating over superficial injected areas with natural fillers or very recent Botox injection.