

Potenza™

RF MICRONEEDLING

March 18, 2024

Setting Parameters and Considerations



CYNOSURE® BEAUTIFUL
ENERGY



Customizing Settings

The screenshot shows the POTENZA device settings interface. The interface is divided into several sections: a top bar with 'BACK', 'POTENZA', and icons; a left sidebar with frequency (1MHz, 2MHz), pulse type (BI, MONO), time (1 x 100 ms), pulses (0000 0000), impedance (546), Auto ON (2.0), Needle Depth (3.75), and impact (7); a central display showing a pulse waveform with a value of 100; a right sidebar with HP status, a 'TIP ATTACH TIP' reminder, a power (W) gauge with a value of 8, energy (mJ/Pulse) of 800, and a standby/treat toggle; and a bottom status bar showing 'STANDBY'. Red arrows point from text labels to specific UI elements: 'Choose 1 or 2 MHz' points to the frequency buttons; 'Choose Bi or Mono' points to the pulse type buttons; 'Shows PW in ms' points to the time display; 'Number of TX pulses' points to the pulse count; 'Impedance -Must remain at or below 600' points to the impedance display; 'Set Hz-can change by tenths' points to the Auto ON value; 'Set Needle Depth (mm) by area' points to the Needle Depth value; 'Set Impact by area' points to the impact slider; 'Change number of pulses/pulse width' points to the central pulse waveform; 'Indicates active HP' points to the HP status icon; 'Reminder' points to the 'TIP ATTACH TIP' button; 'Increase or decrease wattage' points to the power gauge; 'Energy in mJ/ pulse' points to the energy display; and 'Slide to engage energy' points to the standby/treat toggle.

Choose 1 or 2 MHz

Choose Bi or Mono

Shows PW in ms

Number of TX pulses

Impedance -Must remain at or below 600

Set Hz-can change by tenths

Set Needle Depth (mm) by area

Set Impact by area

Change number of pulses/pulse width

Indicates active HP

Reminder

Increase or decrease pulse width (PW)
Or set interval between more than 1 pulse

Increase or decrease wattage

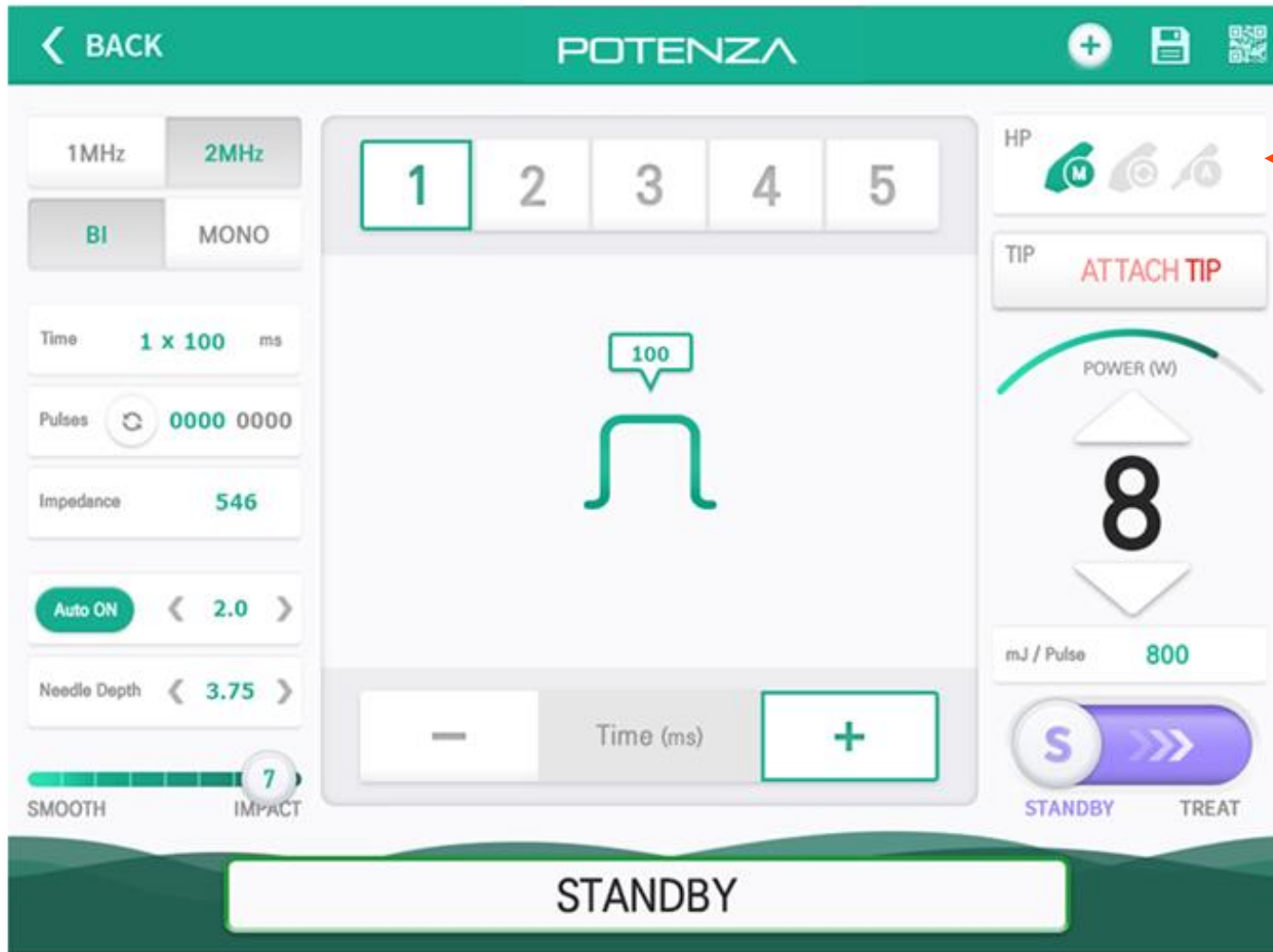
Energy in mJ/ pulse

Slide to engage energy

Pulse Width(time in ms) X Watts (energy/power)=mJ/Pulse
Goal is to stay at or under 1000mJ/Pulse*

**NOTE: This does not include the CP-21 Tip. The CP-21 Tip is designed to be used at a higher energy. See CRG for full treatment parameter recommendations.*

Step 1: Select Handpiece



M or A:

- Choose M when using the Motorized Handpiece: S-Tips, I-Tip, Fusion Tip.
- Choose A when using the Single Needle Handpiece.

NOTE: Handpiece must be selected prior to setting needle depth or recognizing Tip Attachment.

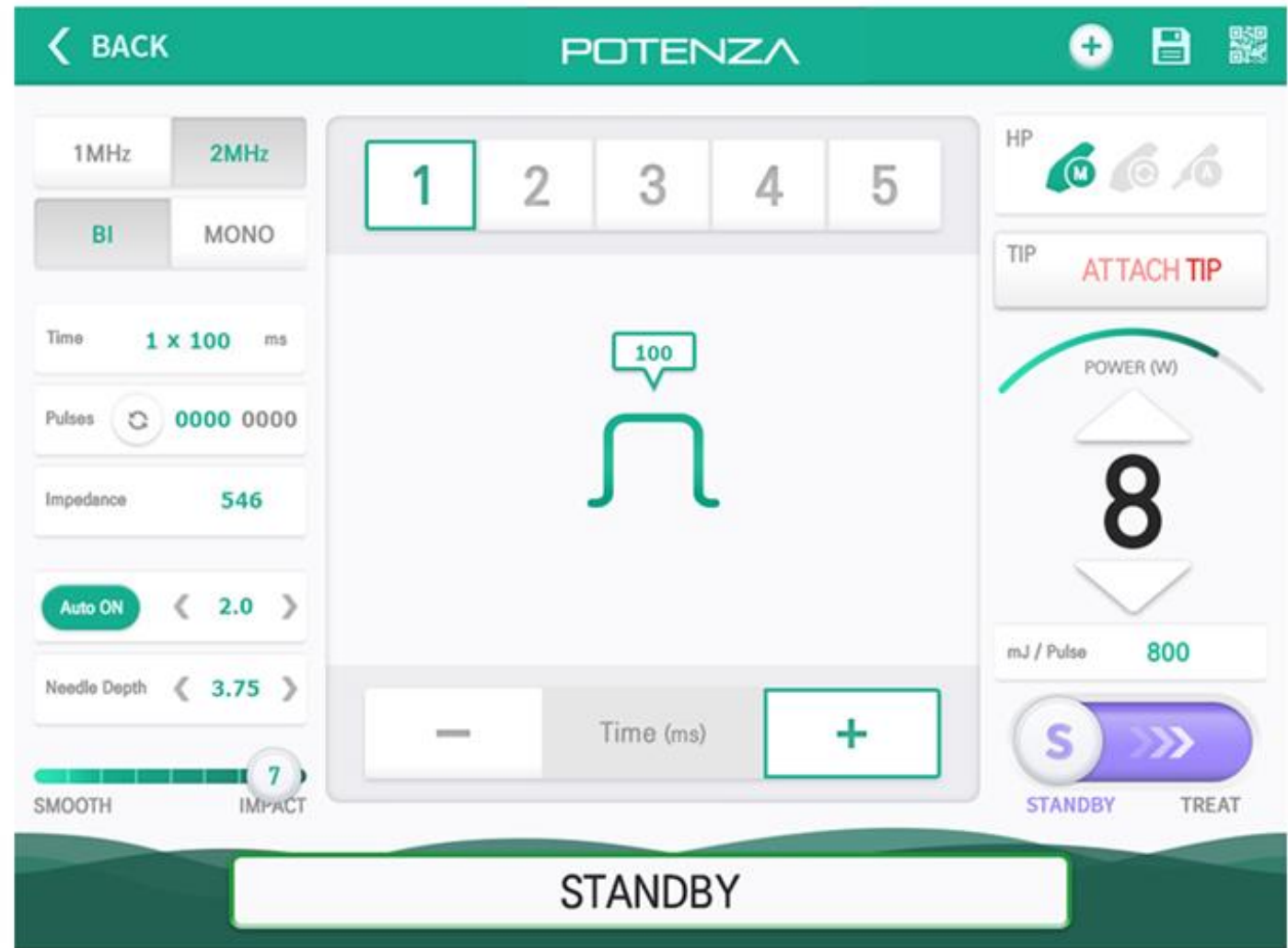
Step 2: Choose 1 or 2 MHz

1 MHz:

- One million cycles per second
- Deeper, wider treatment
- More comfortable
- Consider using 1MHz for darker skin
- More comfortable in thinner skin and at shallow depths

2 MHz:

- Two million cycles per second
- Energy is absorbed more quickly
- More focused
- More aggressive treatment



NOTE: CP-21 Tip and Single Needle Tips must be performed using 1 MHz only.

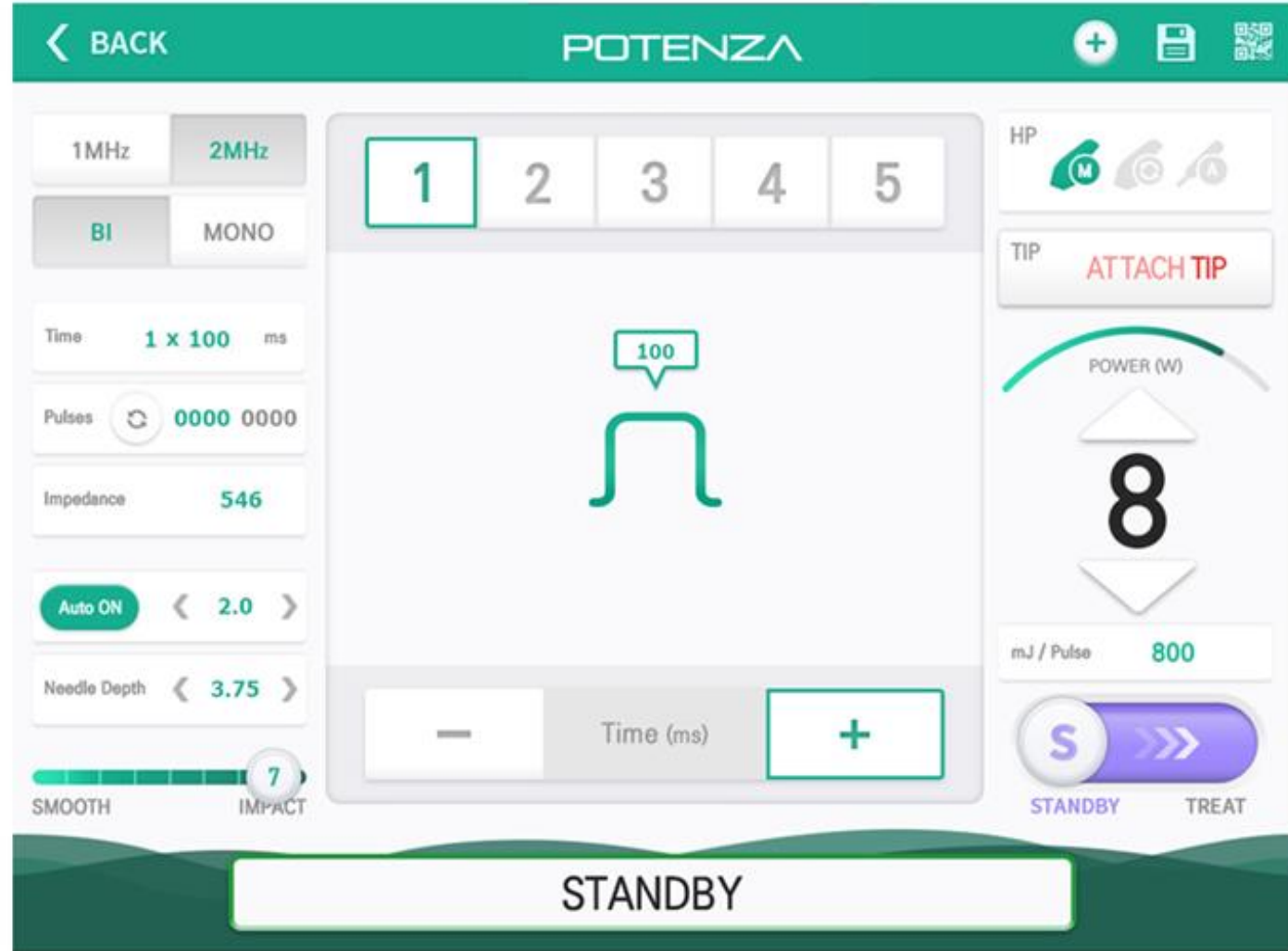
Step 3: Bipolar or Monopolar

Bipolar:

- More focused delivery of RF
- More aggressive
- More comfortable at deeper depths

Monopolar:

- Deep and wide treatment area
- More comfortable
- RF is flowing away from DEJ and the surface of the skin
- Safer mode for darker skin types



NOTE: If performing two passes with the I or S tip, one pass may be performed in Bipolar and another in Monopolar if appropriate for the patient.
CP-21 Tip and Single Needle Tips must be performed in Monopolar only.
See CRG for full treatment setting recommendations.

Step 4: Determine Pulse Width (Time)

Pulse Width(time in ms) X Watts (energy/power)=mJ/Pulse

Long Pulse Width:

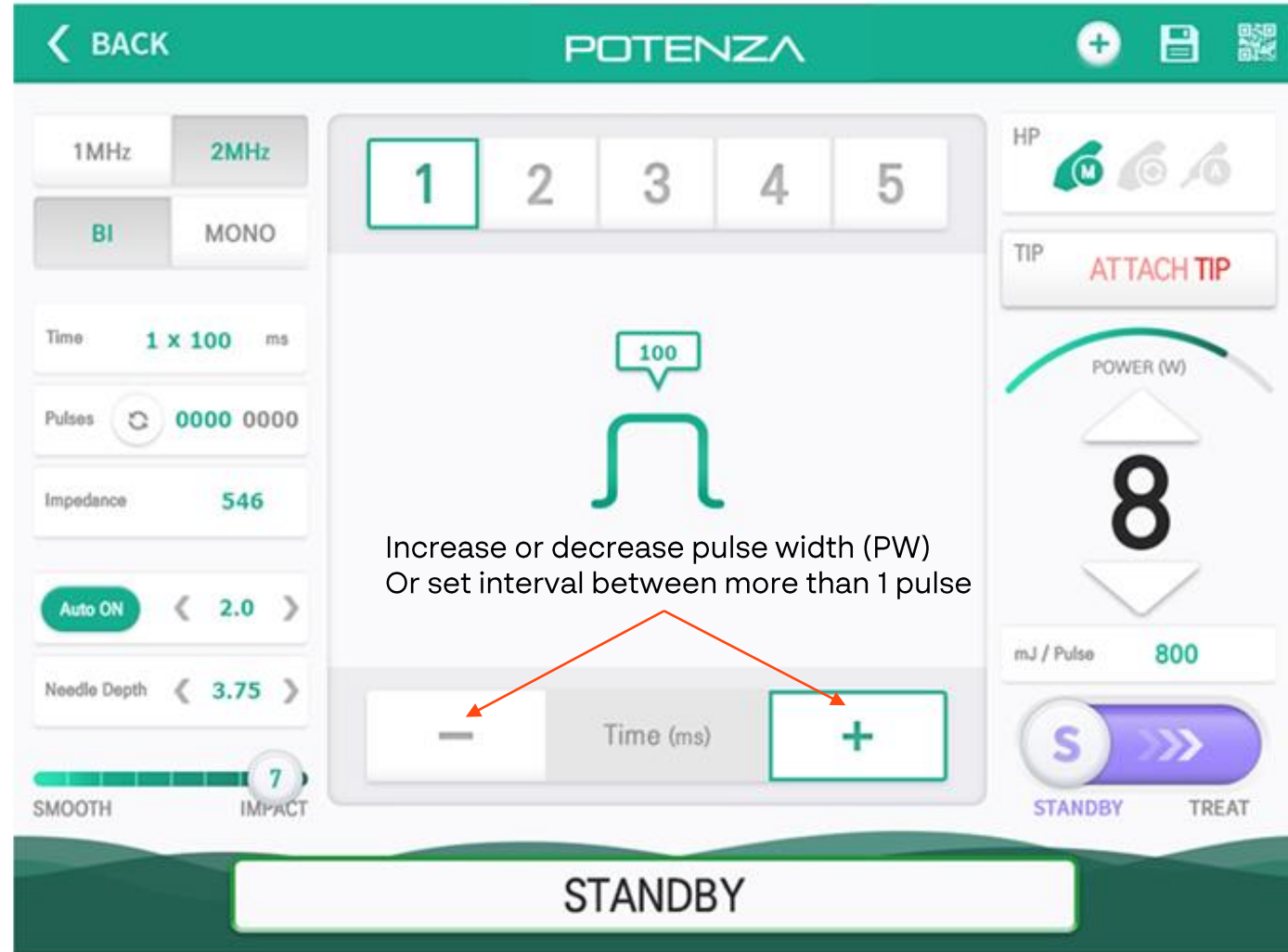
i.e.: 100ms, 150ms

- For darker Fitzpatrick skin types and delicate tissue, treating with **lower W** and a **longer PW** results in *diffused* areas of RF energy.
- Long pulse widths result in using lower wattage to achieve recommended mJ/pulse

Short Pulse Width:

i.e.: 40ms, 50ms

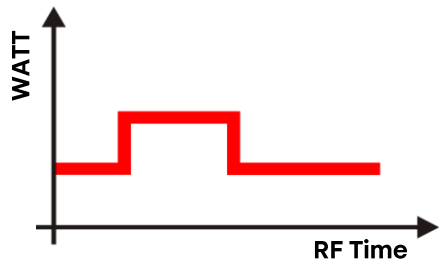
- Higher W and shorter PW provide a **more aggressive** treatment because energy has less time to disperse, resulting in a *more intense* tissue reaction.
- Short pulse widths result in using higher wattage to achieve recommended mJ/Pulse



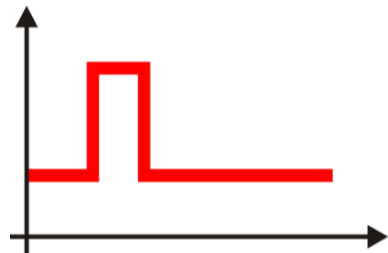
NOTE: The same total energy (mJ/pulse) can be achieved using a long PW and low W as a short PW and high W.

1x100 ms indicates 1 pulse per 100 ms

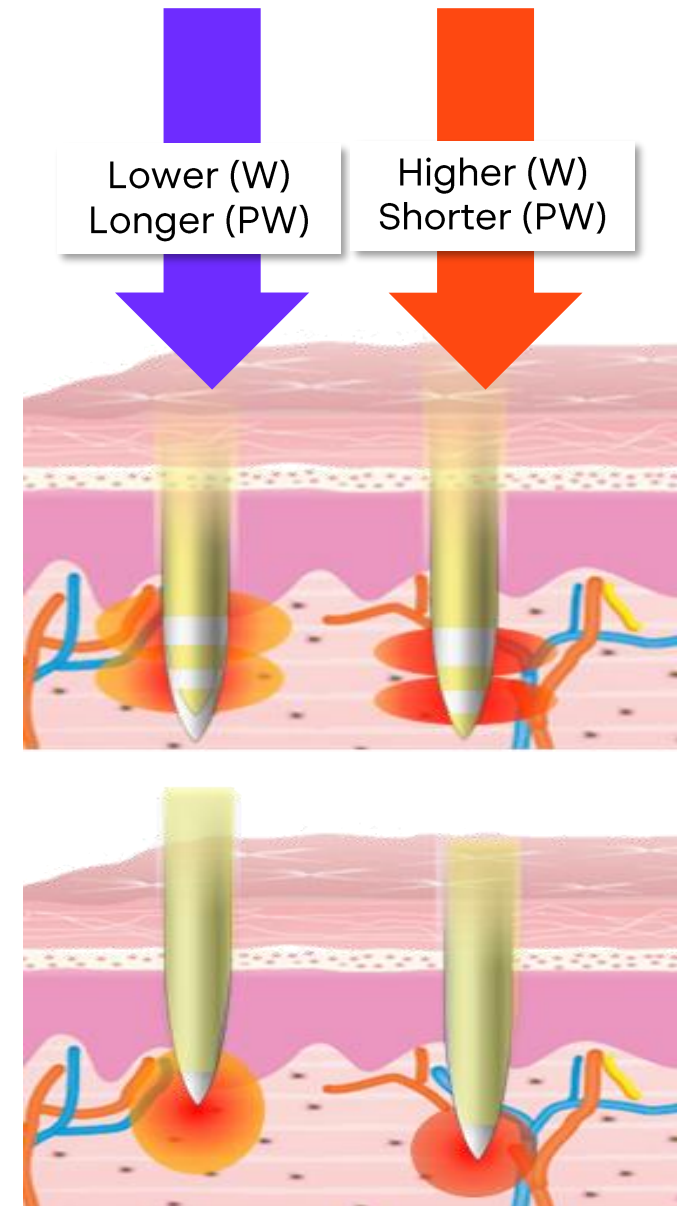
Determine Pulse Width (Time) | Visual



- Treating with lower (W) and a longer (PW) creates larger areas of energy diffusion at lower temperatures



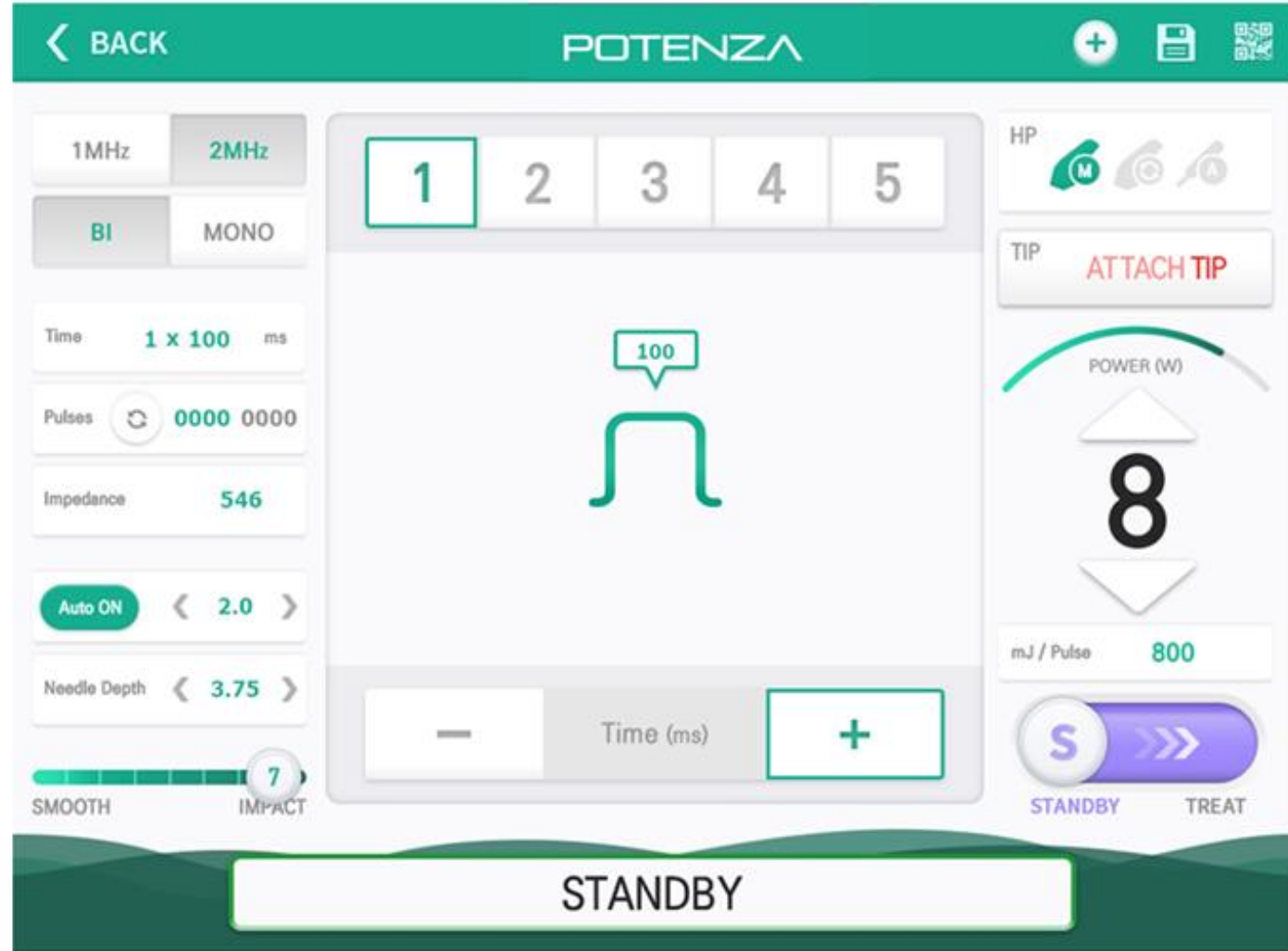
- Treating with higher watts (W) and a shorter pulse width (PW) provides focused delivery of heat with focused areas of heat diffusion with higher temperatures



Step 5: Set Needle Depth

Adjust Needle Depth

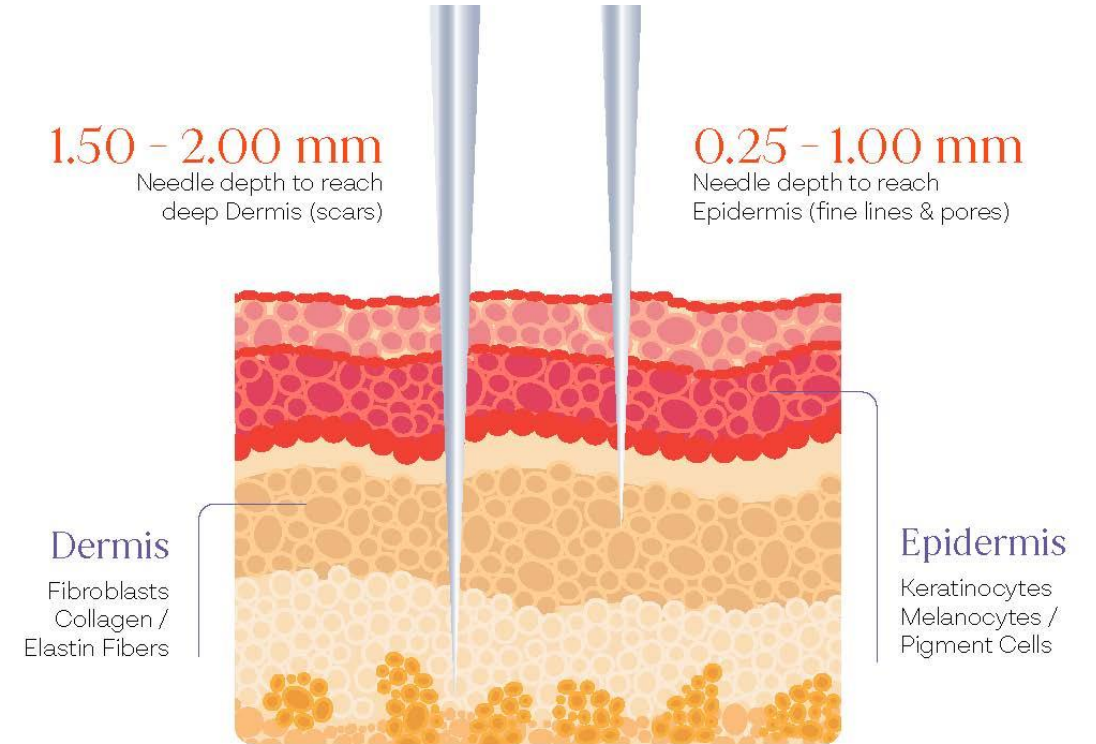
- Needle depths differ by the area being treated and can differ on a patient-by-patient basis.
- When the Tip is attached, needle depth will default to 0.5mm and should be adjusted depending on area being treated.



NOTE: When using the S-Tip, the depth must be set at 1.5mm and deeper to avoid heating the Epidermis and DEJ.

Needle Depth Selection | Visual Targets

Skin Depth Table		
Area	Average Thickness (mm)	Max Thickness (mm)
Forehead	1.27	2.19
Crow's Feet	1.29	2.95
Lateral Brow	1.20	2.53
Lower Eyelid Tear Trough	1.27	2.21
Nose	1.55	2.60
Chin	1.21	2.05
Upper Cheek/Cheek Bone	1.09	1.93
Mid/Lower Cheek	1.34	2.21
Upper Lip	1.50	2.75
Jowl Area/ Jawline	1.03	2.24
Lateral Neck	1.47	2.74
Medial Neck	1.28	2.42
Décolletage	2.00	2.00
Abdomen	2.24	3.20



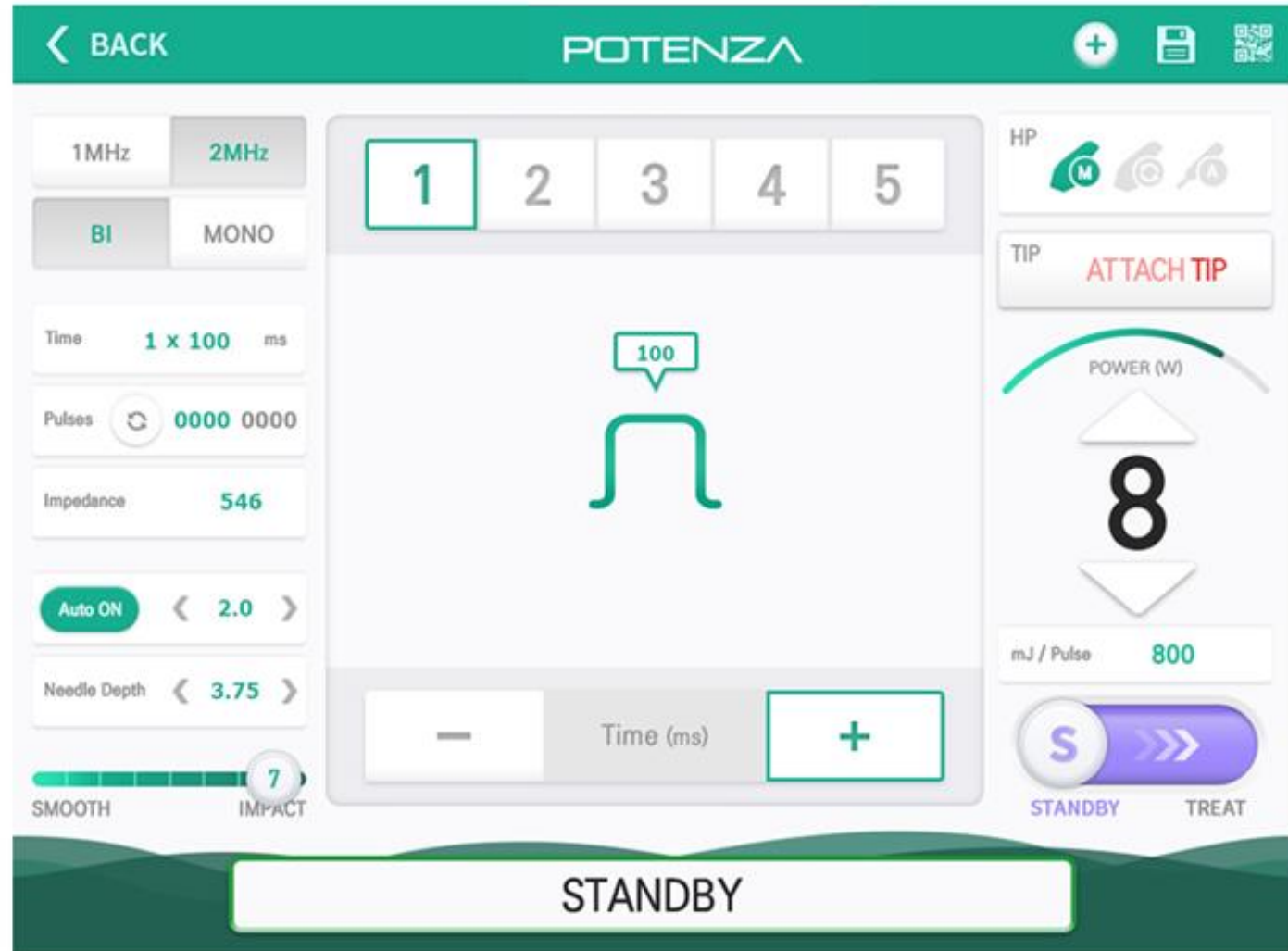
NOTE:

Always assess each patient's age, health, tissue thickness, and area(s) being treated prior to setting the needle depth.
Consider starting near the "Average Thickness". Use caution when setting needle depth at "Max Thickness".

Step 6: Select Speed/Impact

Handpiece speed selection from slow (SMOOTH) to quick (IMPACT); seven settings are available

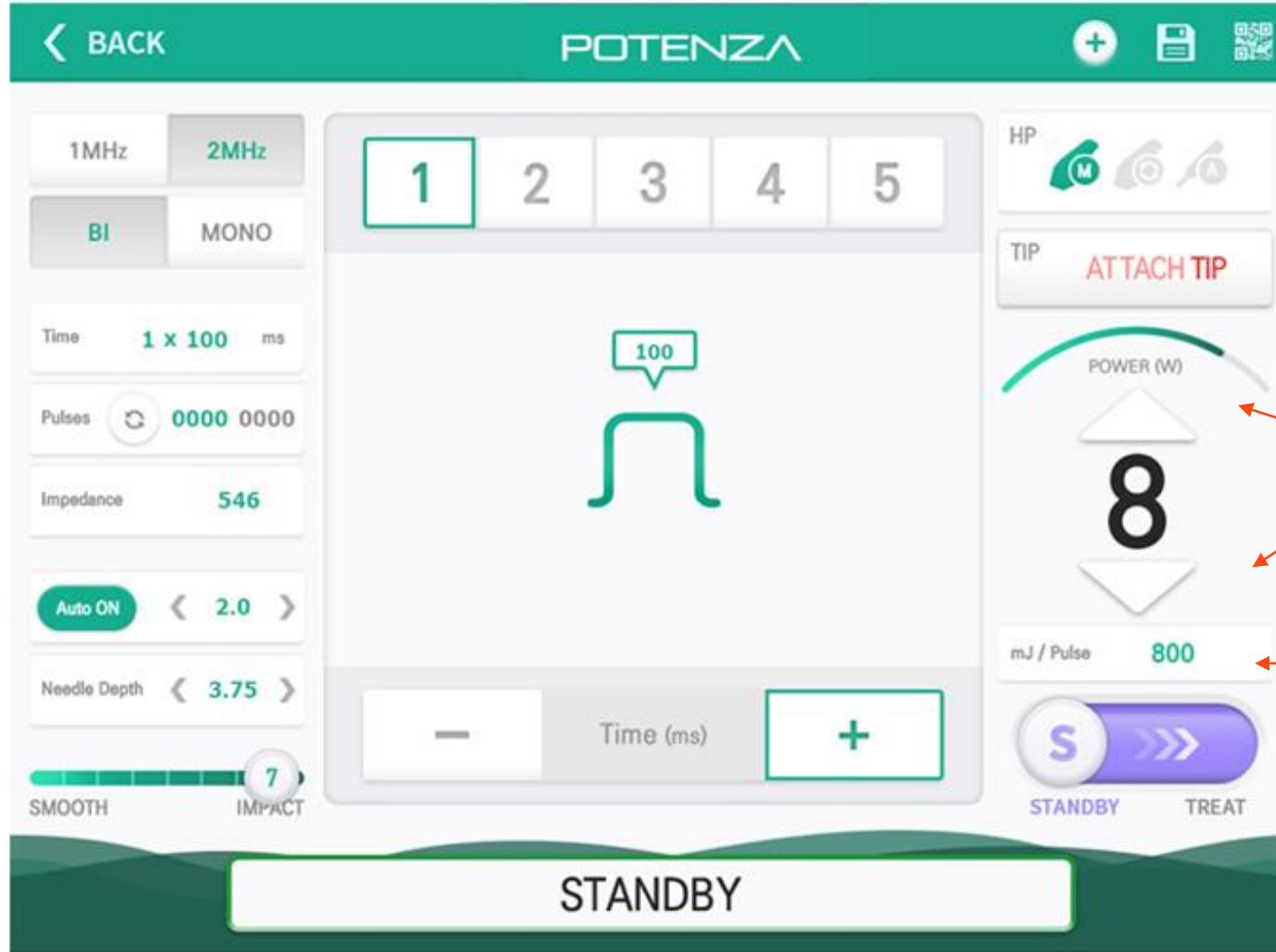
- Impact 3-4 drives needles in gently and slower. More comfortable for thinner areas of tissue such as around the eyes or forehead.
- Impact 6-7 drives needles in quicker and with more force. More comfortable for thicker areas of tissue such as the lower face, neck, and abdomen.



NOTE: CP-21 Tip is recommended to be used at a higher impact.

Step 7: Set Wattage/Energy

Pulse Width(time in ms) X Watts (energy/power)=mJ/Pulse



- Increase or decrease wattage.
- If a **longer pulse width** is chosen, a lower wattage will be needed to achieve recommended mJ/Pulse.
- If a **short pulse width** is chosen, a higher wattage will be needed to achieve recommended mJ/Pulse.
- Higher wattage at a shorter pulse width= more aggressive
- Lower wattage at longer pulse width= more conservative.
 - *Consider this option when treating darker skin types.*
- Goal is to stay at or under 1000mJ/Pulse when using the I or S-Tips.
- Stay at or under 2530mJ/Pulse when using the CP-21 Tip.

NOTE: CP-21 Tip is designed to be used at a higher energy.

Questions?

