

# Device Overview & Parameters

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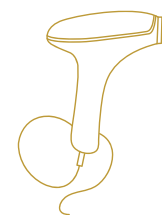
# What Are Laser Parameters?

**Understanding how laser settings control treatment outcomes and safety**

## **What Are Laser Parameters?**

- Settings that control how energy is delivered
- Determine treatment effectiveness and safety
- Must be adjusted for each client

**Laser parameters are the key variables that control how energy interacts with the skin. Proper understanding of these settings allows providers to safely customize treatments for each individual client.**



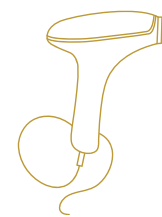
**Tip: Settings control results — not just the device**

# The 3 Core Parameters

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- Fluence (energy delivered)
- Pulse Duration (time energy is applied)
- Spot Size (treatment area size)

**These three parameters work together to determine how deeply and effectively laser energy penetrates the skin. Adjusting them correctly is essential for achieving safe and effective outcomes.**



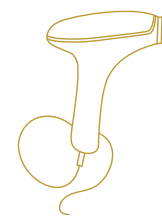
**Tip: These three settings are your foundation for every treatment**

# Fluence

## Fluence (Energy Level)

- Measured in  $J/cm^2$
- Determines strength of treatment
- Higher fluence = more energy delivered

**Fluence controls how much energy is delivered to the target tissue. Too low may result in ineffective treatment, while too high increases the risk of burns or complications.**



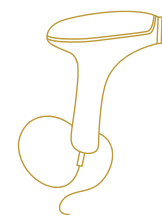
**Tip: Start conservative and build when needed**

# Pulse Duration

## Pulse Duration

- Measured in milliseconds (ms)
- Controls how long energy is applied
- Should match target's thermal relaxation time

**Pulse duration determines how long the laser energy is delivered to the skin. Matching pulse duration to the target helps ensure effective treatment while minimizing damage to surrounding tissue.**



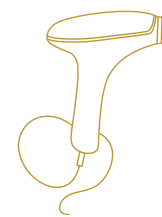
**Tip: Match the pulse to the target**

# Spot Size

## Spot Size

- Size of the treatment area
- Larger spot = deeper penetration
- Smaller spot = more precision

**Spot size affects both the depth and coverage of treatment. Larger spot sizes allow for deeper penetration, while smaller spot sizes provide more targeted precision.**



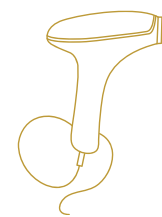
**Tip: Bigger spot = deeper reach**

# How Parameters Work Together

## How Parameters Work Together

- All settings must be balanced
- Changing one affects the others
- No single “perfect” setting

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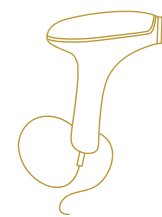
**Tip: Think in combinations, not single settings**

# Treatment Adjustments

## Adjusting for the Client

- Skin type (Fitzpatrick)
- Treatment area
- Target chromophore
- Client tolerance

**Every client requires individualized settings based on their skin type, condition, and treatment goals. Customization is essential for both safety and results.**



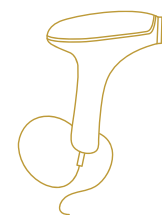
**Tip: No two clients = no two settings**

# Common Mistakes

## Common Parameter Mistakes

- Starting too aggressive
- Ignoring skin type
- Not performing test spots
- Using same settings for every client

**Many complications occur when providers fail to adjust settings appropriately. Understanding and respecting laser parameters helps prevent avoidable**

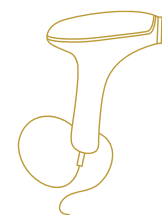


**Tip: Most mistakes come from rushing, not lack of knowledge**

# Summary

## Key Takeaways

- Parameters control treatment outcomes
- Fluence, pulse duration, and spot size are foundational
- Settings must be customized
- Safety comes from understanding adjustments



**Tip: Master the settings, master the treatment**