

# ***Klas-P6***

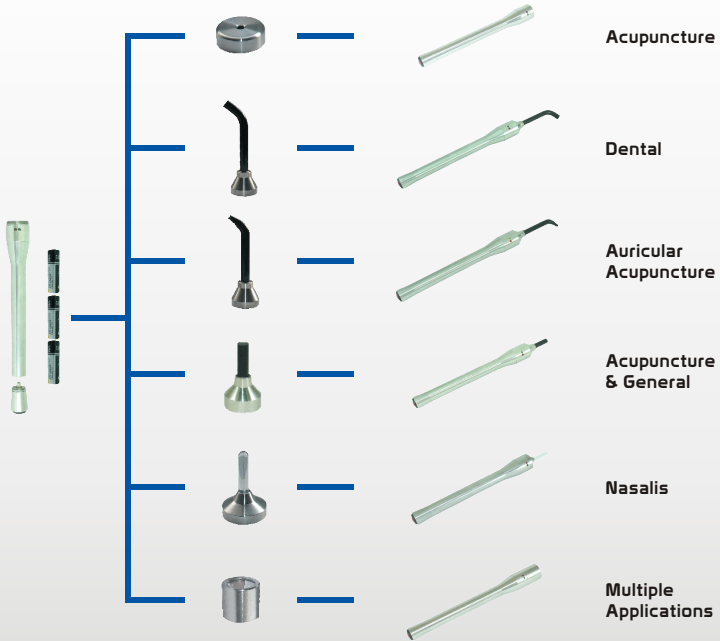
**6-in-1 LLLT Unit**



# **User's Guide**



### 6-in-1 LLLT Unit



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# Getting started

Install your Klas with the included batteries and begins to get started low level laser therapy (LLLT).

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## Using Klas

Klas can be used for treatment of diseases and conditions, follow the recommended dosage and treatment time to get the best efficacy. You can also find new information about using Klas on the web [www.konftec.com](http://www.konftec.com).

## Using the battery

- ☑ Use the battery that came with your Klas or any qualified standard battery or rechargeable battery.
- ☑ If you do not use your Klas for a period of time, be sure to take battery out from your Klas.

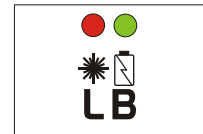
## Klas-P6 LEDs' indication

Klas-P6 emits the infrared laser, which is invisible. For safety operation, two LED indicators are equipped:

**Red** LED (L) – Laser output

**Green** LED (B) – Battery power

If **Red** LED (L) is OFF and **Green** LED (B) is ON, please replace the batteries.



# Specifications and Treatment Time

| Treatment Time Calculation Table |                            |                          |                                       |                      |          |
|----------------------------------|----------------------------|--------------------------|---------------------------------------|----------------------|----------|
| Optic Cap-A                      |                            | Laser beam spot size:    |                                       | 0.13 cm <sup>2</sup> |          |
| Dose<br>(J/cm <sup>3</sup> )     | Depth of<br>Tissue<br>(cm) | Energy<br>Loss<br>Factor | Treatment Time (second)               |                      |          |
|                                  |                            |                          | Wavelength                            | 808nm                |          |
|                                  |                            |                          | Model No.                             | Klas - P62           | Klas-P64 |
|                                  |                            |                          | LD Power (mW)                         | 260                  | 460      |
|                                  |                            |                          | End Power (mW)                        | 208                  | 368      |
|                                  |                            |                          | Power Density<br>(W/cm <sup>2</sup> ) | 1.60                 | 2.83     |
| 3 J/cm <sup>2</sup>              | Surface                    | 1                        |                                       | 1.9                  | 1.1      |
| 3 J/cm <sup>3</sup>              | 0.5                        | 0.6772                   |                                       | 3                    | 2        |
|                                  | 1                          | 0.4586                   |                                       | 4                    | 2        |
|                                  | 1.5                        | 0.3105                   |                                       | 6                    | 3        |
|                                  | 2                          | 0.2103                   |                                       | 9                    | 5        |
|                                  | 2.5                        | 0.1424                   |                                       | 13                   | 7        |
|                                  | 3                          | 0.0964                   |                                       | 19                   | 11       |
|                                  | 3.5                        | 0.0653                   |                                       | 29                   | 16       |
|                                  | 4                          | 0.0442                   |                                       | 42                   | 24       |
|                                  | 4.5                        | 0.0299                   |                                       | 63                   | 35       |
|                                  | 5                          | 0.0203                   |                                       | 92                   | 52       |



# Specifications and Treatment Time

| Treatment Time Calculation Table                      |                            |                          |                         |          |          |
|---|----------------------------|--------------------------|-------------------------|----------|----------|
| Optic Cap-C Laser beam spot size: 0.5 cm <sup>2</sup> |                            |                          |                         |          |          |
| Dose<br>(J/cm <sup>3</sup> )                          | Depth of<br>Tissue<br>(cm) | Energy<br>Loss<br>Factor | Treatment Time (second) |          |          |
|   |                            |                          | Wavelength              | 808nm    |          |
|   |                            |                          | Model No.               | Klas P62 | Klas P64 |
|   |                            |                          | LD Power (mW)           | 260      | 460      |
|   |                            |                          | End Power (mW)          | 200      | 370      |
| Power Density<br>(W/cm <sup>2</sup> )                 | 0.40                       | 0.74                     |                         |          |          |
| 1 J/cm <sup>2</sup>                                   | Surface                    | 1                        |                         | 2.5      | 1.4      |
| 1 J/cm <sup>3</sup>                                   | 0.5                        | 0.6772                   |                         | 4        | 2        |
|   | 1                          | 0.4586                   |                         | 5        | 3        |
|   | 1.5                        | 0.3105                   |                         | 8        | 4        |
|   | 2                          | 0.2103                   |                         | 12       | 6        |
|   | 2.5                        | 0.1424                   |                         | 18       | 9        |
|   | 3                          | 0.0964                   |                         | 26       | 14       |
|   | 3.5                        | 0.0653                   |                         | 38       | 21       |
|   | 4                          | 0.0442                   |                         | 57       | 31       |
|   | 4.5                        | 0.0299                   |                         | 84       | 45       |
|   | 5                          | 0.0203                   |                         | 123      | 67       |



# Specifications and Treatment Time

| Treatment Time Calculation Table                      |                            |                          |                         |          |          |
|---|----------------------------|--------------------------|-------------------------|----------|----------|
| Optic Cap-D Laser beam spot size: 0.5 cm <sup>2</sup> |                            |                          |                         |          |          |
| Dose<br>(J/cm <sup>3</sup> )                          | Depth of<br>Tissue<br>(cm) | Energy<br>Loss<br>Factor | Treatment Time (second) |          |          |
|   |                            |                          | Wavelength              | 808nm    |          |
|   |                            |                          | Model No.               | Klas P62 | Klas P64 |
|   |                            |                          | LD Power (mW)           | 260      | 460      |
|   |                            |                          | End Power (mW)          | 200      | 370      |
| Power Density<br>(W/cm <sup>2</sup> )                 | 0.40                       | 0.74                     |                         |          |          |
| 1 J/cm <sup>2</sup>                                   | Surface                    | 1                        |                         | 2.5      | 1.4      |
| 1 J/cm <sup>3</sup>                                   | 0.5                        | 0.6772                   |                         | 4        | 2        |
|   | 1                          | 0.4586                   |                         | 5        | 3        |
|   | 1.5                        | 0.3105                   |                         | 8        | 4        |
|   | 2                          | 0.2103                   |                         | 12       | 6        |
|   | 2.5                        | 0.1424                   |                         | 18       | 9        |
|   | 3                          | 0.0964                   |                         | 26       | 14       |
|   | 3.5                        | 0.0653                   |                         | 38       | 21       |
|   | 4                          | 0.0442                   |                         | 57       | 31       |
|   | 4.5                        | 0.0299                   |                         | 84       | 45       |
|   | 5                          | 0.0203                   |                         | 123      | 67       |



# Specifications and Treatment Time

| Treatment Time Calculation Table                       |                            |                          |                         |          |          |
|--|----------------------------|--------------------------|-------------------------|----------|----------|
| Optic Cap-E Laser beam spot size: 0.07 cm <sup>2</sup> |                            |                          |                         |          |          |
| Dose<br>(J/cm <sup>3</sup> )                           | Depth of<br>Tissue<br>(cm) | Energy<br>Loss<br>Factor | Treatment Time (second) |          |          |
|  |                            |                          | Wavelength              | 808nm    |          |
|  |                            |                          | Model No.               | Klas P62 | Klas P64 |
|  |                            |                          | LD Power (mW)           | 260      | 460      |
|  |                            |                          | End Power (mW)          | 180      | 320      |
| Power Density<br>(W/cm <sup>2</sup> )                  | 2.57                       | 4.57                     |                         |          |          |
| 3 J/cm <sup>2</sup>                                    | Surface                    | 1                        |                         | 1.2      | 0.7      |
| 3 J/cm <sup>3</sup>                                    | 0.5                        | 0.6772                   |                         | 2        | 1        |
|  | 1                          | 0.4586                   |                         | 3        | 1        |
|  | 1.5                        | 0.3105                   |                         | 4        | 2        |
|  | 2                          | 0.2103                   |                         | 6        | 3        |
|  | 2.5                        | 0.1424                   |                         | 8        | 5        |
|  | 3                          | 0.0964                   |                         | 12       | 7        |
|  | 3.5                        | 0.0653                   |                         | 18       | 10       |
|  | 4                          | 0.0442                   |                         | 26       | 15       |
|  | 4.5                        | 0.0299                   |                         | 39       | 22       |
| 5  | 0.0203                     |                          | 57                      | 32       |          |



# Specifications and Treatment Time

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| Optic Cap-N Laser beam: End Dispersion |                 |                 |
|--|-----------------|-----------------|
| Wavelength                             | 808nm           |                 |
| <i>Model No.</i>                       | <i>Klas-P62</i> | <i>Klas-P64</i> |
| LD Power (mW)                          | 260             | 460             |
| End Power (mW): Dispersion             | 208             | 368             |





# Specifications and Treatment Time

| Treatment Time Calculation Table                    |                      |                    |                         |          |          |
|---|----------------------|--------------------|-------------------------|----------|----------|
| Optic Cap-S Laser beam spot size: 3 cm <sup>2</sup> |                      |                    |                         |          |          |
| Dose (J/cm <sup>3</sup> )                           | Depth of Tissue (cm) | Energy Loss Factor | Treatment Time (minute) |          |          |
|   |                      |                    | Wavelength              | 808nm    |          |
|   |                      |                    | Model No.               | Klas P62 | Klas P64 |
|   |                      |                    | LD Power (mW)           | 260      | 460      |
|   |                      |                    | End Power (mW)          | 104      | 184      |
| Power Density (W/cm <sup>2</sup> )                  | 0.035                | 0.061              |                         |          |          |
| 3 J/cm <sup>2</sup>                                 | Surface              | 1                  |                         | 87 sec.  | 49 sec.  |
| 3 J/cm <sup>3</sup>                                 | 0.5                  | 0.6772             |                         | 2        | 1        |
|   | 1                    | 0.4586             |                         | 3        | 2        |
|   | 1.5                  | 0.3105             |                         | 5        | 3        |
|   | 2                    | 0.2103             |                         | 7        | 4        |
|   | 2.5                  | 0.1424             |                         | 10       | 6        |
|   | 3                    | 0.0964             |                         | 15       | 8        |



## About operating and storage temperatures

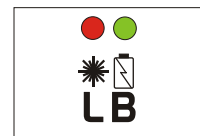
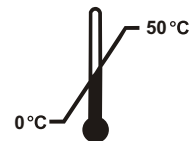
- ☑ Operate your Klas in a place where the temperature is always between 0 and 50° C (32 to 122° F).
- ☑ Store your Klas in a place where the temperature is always between -20 and 85° C (-4 to 185° F).

## Troubleshooting

### My Klas won't turn on

- ☑ Make sure Klas's power switch is on.
- ☑ If that doesn't work, check the position of battery in Klas.
- ☑ If that doesn't work, loosen the bottom cap and fasten again.
- ☑ If both LEDs' do not light, replace the new batteries.

**If that doesn't work, contact your local sales office.**



## Learning more, service and support

There is a wealth of information about using Klas on the Web. For the latest information on Klas service and support information go to [www.konftec.com](http://www.konftec.com)

## Obtaining warranty service

If the product appears to be damaged or does not function properly, please follow the advice in this booklet, and the online resources. If the unit still does not function, go to [www.konftec.com](http://www.konftec.com) for instructions on how to obtain warranty service.

# Safety

## Important safety instructions

Follow all instructions and warnings dealing with your Klas.



### Warning

- Avoid direct eye exposure to the laser beam.
- Operation of this device, must always be supervised by an adult.



### Cleaning

Follow these general rules when cleaning the outside of your Klas and its components:

- Use a damp, soft, lint-free cloth.
- Use alcohol to clean the optic glass.
- Don't use aerosol sprays, solvents or abrasives.



### Avoid direct sunlight

Protect your Klas from long time direct sunlight.



### Do not make repairs yourself

No user-serviceable parts are inside.

### About handling

Your Klas may be damaged by improper storage or handling. Be careful not to drop your Klas when treating or transporting the device.



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