



# BT-400

Phototherapy

# Contents

1	Introduction
2	Functions
3	Specifications
4	Advantages
5	Competitor Comparison



# BT-400

## PHOTOTHERAPY

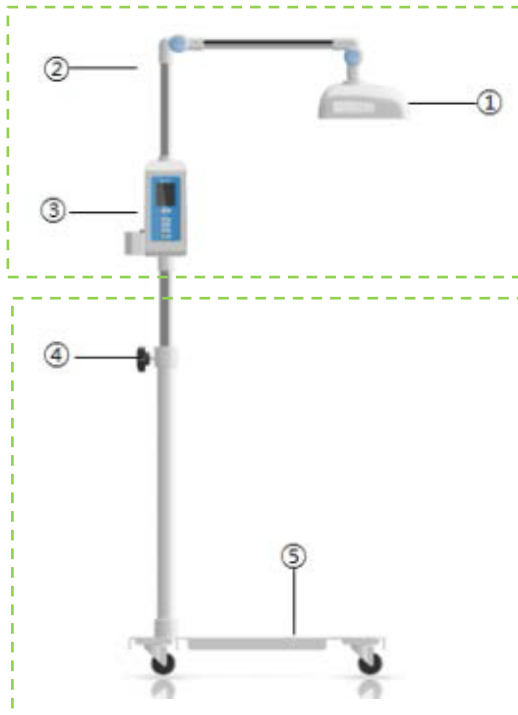
## Intended Use

BT-400 Phototherapy light is intended for the treatment of neonatal hyperbilirubinemia. The light can be used for infants in a bassinet, incubator, open bed, or radiant warmer.

- **To treat Jaundice of the newborn**
- **To decrease Bilirubin concentration**
- **To prevent from developing complications ->kernicterus, liver failure**
- **To use blue led harmless to humans**

## Appearance

Main unit



Cart (option)



① **Light Source** The light can be adjusted both horizontally and vertically on the roll stand assembly to desiring angle. To remove the light from the roll stand, loosen the knob and lift the light source assembly up and away from the roll stand.

② **Adjustable Neck**

③ **Control Box (Power Assembly)** It contains power switch, key button and LCD displays. Especially, LCD window shows operating hours, status and information.

④ **Height Adjustment Knob** The knob allows you to adjust the height of the light source. First loosen the knob, then adjust the height of the light, and finally tighten the knob to lock the height.

⑤ **Roll Stand** (Optional)

① **LCD Display** the status information.

② **Power button** Power ON/OFF.

③ **Operating button** Time Setting and intensity of LED lights Control

## Main Window

**Mode**      **Timer mode** If set the operating time, LED is stopped automatically after setting time.  
**Continuous mode** Continuously operated

**Intensity**      Three control mode : High, Low, Off.



No.	Item
①	Phototherapy Baby Icon
②	Mode Information
③	Operating Information
④	Setting Time
⑤	Remaining Time
⑥	Operating Time
⑦	Operating Status
⑧	LED Driving Time




## Specifications

<b>Light Source</b>	Blue LEDs
Wavelength	Peak between 450 – 475 nm
Intensity	45 ~ 85 $\mu\text{W}/\text{cm}^2/\text{nm}$ at 40 cm(16 inches) distance)
Variation in intensity over 6 hours	$\pm 10 \%$ (within illumination area)
Effective surface area	40 x 20 cm
Heat output (at 40 cm over 6 hours)	< 10 °C warmer than ambient
Electrical Mains	100 – 240 Vac, 50/60 Hz, 70VA
<b>Safety</b>	
Leakage current	< 100 $\mu\text{A}$
Audible Noise	< 60 dB
<b>Dimension</b>	
Maximum height	200 cm
Header	340 x 210 x 75 mm
<b>Weight</b>	
Light Assembly	About 3.6 kg
Roll Stand	About 8.4 kg
<b>Environmental</b>	
Operating Temperature / Humidity	10 ~ 40 °C / 30 ~ 75 %
Storage Temperature / Humidity	-40 ~ 70 °C / 10 ~ 100 %
Atmospheric Pressure	70 kPa ~ 106 kPa
<b>Regulatory Standards</b>	EN60601-1, EN60601-1-2
	EN60601-2-50

- **Blue LED**
- **Timer**
- **Intensity control**
- **Ergonomic design**
- **360° swivel head**
- **Flexible arm neck**
- **Economic service by only defective LED replacement**
- **CE & FDA approved**





Supplier Model	Bistos <KOREA> BT-400	Natus <USA> Neo-Blue mini	Mekics <KOREA> BlueBeam
Product			
Price	\$700 with Cart	Approx. \$1500	\$900
Light Source	Blue LED only	Blue & Yellow	Blue LED only
Source	Blue LED only	Blue & Yellow	Blue LED only
Wave Length	Peak between 450~475nm	450~470 nm	460nm ± 5nm
Effective area	> 40 X 20cm	> 20.3 X 12.7cm	> 50 X 25cm
Light source Life time	20,000 hours	?	20,000 hours
Power consumption	100~240 VAC 50~60 Hz, 50 VA	Over 70W (Fuse 2A@220Vac)	Under 35W (Fuse 0.5A@220Vac)
Automatic time limit	No	No	Yes
Intensity	42μW/cm2/nm ± 20% at 40 cm (16 inches) Distance	Peak central intensity at 30.5cm > 30μW/cm2/nm	43cm Distance 8~25μW/cm2/nm 8 lever select
Physical Characteristics			
Leakage current	<100μA	<100μA	?
Noise	N/A	<60dB	No
Physical Characteristics			
Weight	3.8Kgs	3.6kgs	1.8kgs
Size	34 X 21 X 7.5cm	19 X 14 X 15 cm	30 X 15 X 5cm
Options			
Thermal damage	Safe	Safe	Safe
Freely Installation	Cart or any pole	Cart	Cart
LED Light Assembly	Normally other products should change the whole LED ass'y even though 1 light is broken However, BT-400 can change 1 light by 1 light		



# Thank you

Tel : 82-31-750-0340

Fax : 82-31-750-0344

E-mail : [bistos@bistos.co.kr](mailto:bistos@bistos.co.kr)

[Http://www.bistos.co.kr](http://www.bistos.co.kr)

© Copyright 2001 Bistos Co., Ltd. All Rights Reserved. This material is protected by Korea and other copyrights and may not be copied, sold or redistributed in any form without the written permission of Bistos Co., Ltd.