

NEXT GENERATION

Apollo

LASER SYSTEMS FOR PATIENT ALIGNMENT IN RT





PERFECT INTEGRATION

The characteristic features of LAP laser systems are sophisticated technology, quality and design for more than 30 years. This level of excellence has made us the global market leader for patient alignment in radiotherapy.

In radiotherapy precise, reproducible and fast positioning of patients are required for successful treatments and high patient throughput.

After the initial patient marking process at CT or MRI the patient will be repositioned on the LINAC using cross hair and sagittal line lasers. The fixed lasers are aligned to the isocenter of the LINAC and enable isocentric positioning of the patient.

Integrated in a superior aluminium housing our APOLLO room laser combines advanced optics, high precision mechanics and state of the art electronics to ensure the highest level of stability and reliability.

Offering various configurations the APOLLO lasers are perfectly suited to meet all room requirements.

LAP – WE KNOW PATIENT ALIGNMENT

- Since 1984
- Global market leader
- In-house hardware and software development
- Scientific collaborations
- Worldwide service network
- Certified in accordance to ISO 9001 and ISO 13485
- Made in Germany

HIGH END DESIGN

ULTRA-FINE PRECISE LINES

DISTORTION-FREE WINDOWS

SUPER PRISM

SINGLE FOCUS

[real size]



3
PROJECTION COLORS
AVAILABLE:
RED, GREEN, BLUE

APOLLO – UNIQUE TECHNOLOGY

CHOOSE YOUR LASER COLOR

All APOLLO room lasers come equipped with long-life laser diodes. Depending on your personal preferences, ambient room light or room design you can choose your laser color.



APOLLO red

- Line
- Tilted line 90°
- Cross-hair



APOLLO green

- Line
- Tilted line 90°
- Cross-hair



APOLLO blue

- Line
- Tilted line 90°
- Cross-hair

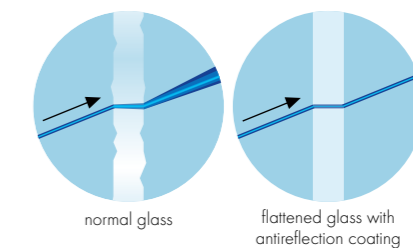
PRECISE

LAP ULTRALINE is the result of advanced mechanical components and unique optoelectronics used to generate and align laser lines for medical applications. The ultra-fine and long lines meet the highest quality requirements for linearity and brightness distribution.



DISTORTION-FREE

LAP APOLLO lasers are fitted with unbreakable, specially flattened glass windows. This minimizes scattering and guarantees ultra-fine lines at all transition angles.



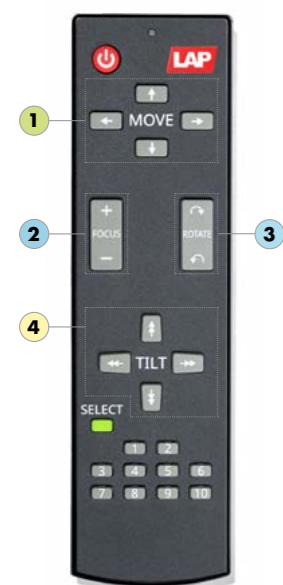
REMOTE CONTROL

Laser adjustment with full 6 degrees of freedom. No additional tools required.

APOLLO – HIGH PRECISION TOOLS FOR PATIENT POSITIONING

EASE OF ADJUSTMENT

APOLLO lasers are initially adjusted to the isocenter of the LINAC during installation. For adjustments over time the easy to use remote control offers 6 degrees of freedom. The remote control performs all laser positioning for the ultrafine lines including focus.



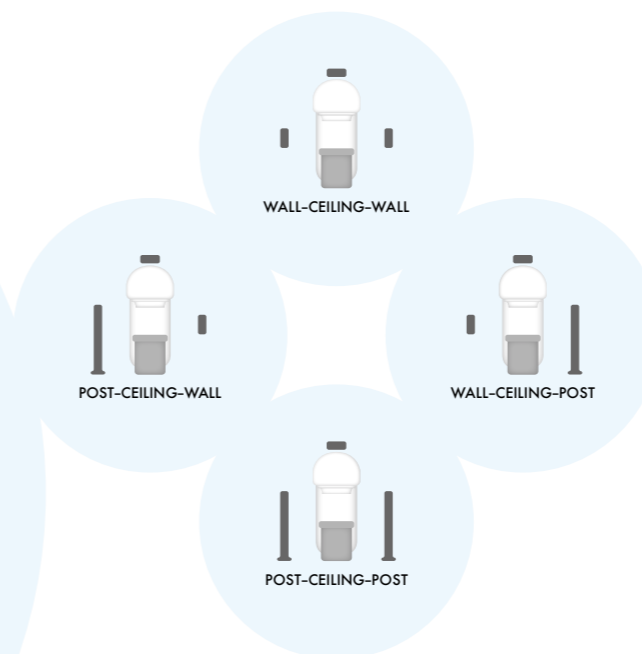
FULL FUNCTION REMOTE CONTROL

- 1 Parallel line moving right/left and up/down
- 2 Focus control
- 3 Line rotation clockwise and counterclockwise
- 4 Plane tilt horizontally and vertically



MOUNTING VERSIONS

For patient alignment each LINAC room is equipped with at least three room lasers. One laser projects a sagittal line and two cross hair lasers project the transverse and horizontal lines. You are free to select from four mounting versions to perfectly match your existing room situation.



DID YOU KNOW?

To avoid shadowing effects from the LINAC gantry a fourth APOLLO cross hair can be installed overhead.



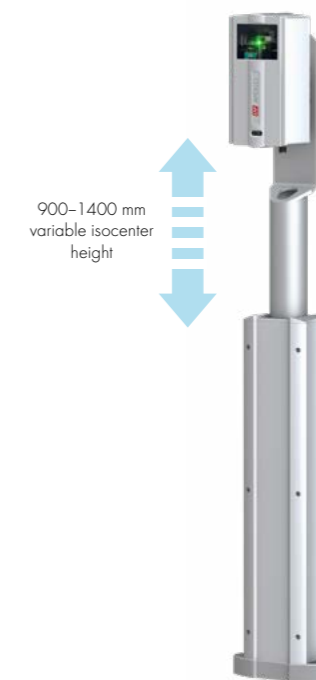
BRACKET FOR FALSE CEILINGS

Custom mounting brackets are available for large distances between the mounting plates and the false ceiling or wall recess.



TILT BRACKET

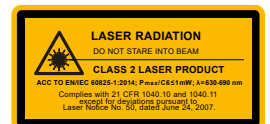
LAP APOLLO lasers are equipped with adjustable tilting brackets allowing for rotation up to 45°. The APOLLO's compact design makes it an ideal solution for tight mounting locations.



FREE STANDING COLUMN

For locations where wall mounts are not possible the LAP APOLLO laser can be equipped with an optional free standing column.

TECHNICAL DATA	
Laser color (wave length)	red (638 nm), green (520 nm), blue (450 nm)
Laser class	2
Line width up to 4 m distance	0.5 mm
Line length at 3 m distance	>3 m
Power supply	100 ... 240 V AC
Internal voltage	24 V DC
Operating Temperature	5 ... 30 °C
Dimensions (H × W × D)	221 × 110 × 100 mm (8.7 × 4.3 × 3.9")
Weight	2.6 kg



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