

AGL

SLB110

Tunnel Control Lasers



Setup using the
AGL mounting plate



Tripod setup
using the
AGL Tilting
Base and
Alignment
Scope

**Ideal for
Tunneling, Mining,
or anywhere you
need accurate,
economical
alignment
control**



SLB110

FEATURES

- New Compact Size.
- Rugged and Reliable.
- Wide Variety of Mounting Options
- Accurate Control for All Mining Applications.
- Aligns Cables, Conveyors and Rails.
- Perfect for Tunnel Boring Machines (TBM).
- Attachment Lens for Specialized Functions.
Penta Prism
Fan Lens
- Simple to Use.
- Very Versatile.
- Low Cost.
- Professional Service by the Dealer.

The SLB110 is a compact, reliable, rugged, uniquely designed alignment control system that utilizes laser diode technology. The SLB110 internal mechanisms use the highest quality aluminum, brass and stainless steel materials that are precisely machined. Circuit boards utilize top-of-the-line electronic components. The "Jobsite Tough" SLB110 enables accuracy and productivity in all alignment control situations.

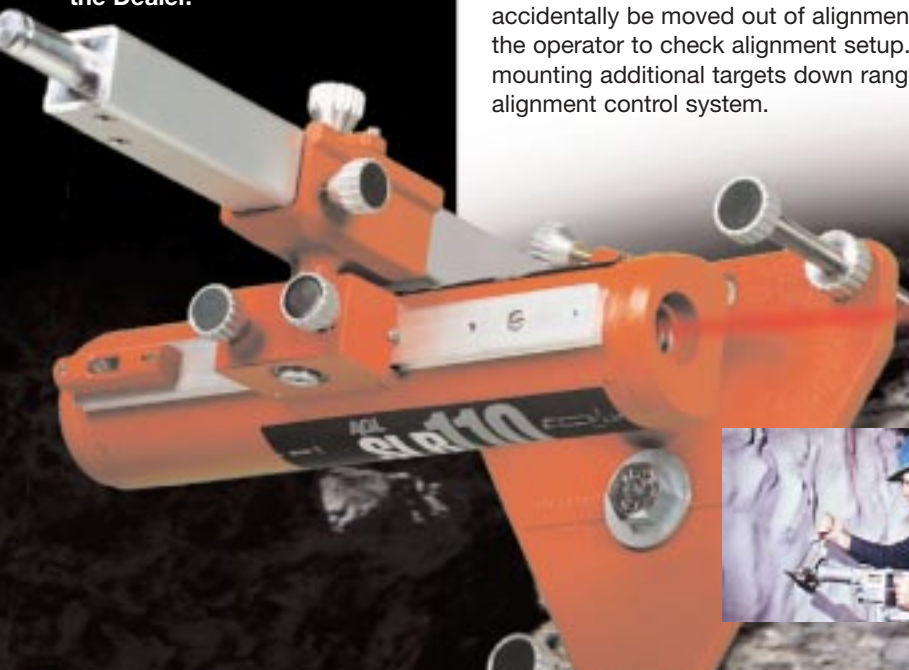
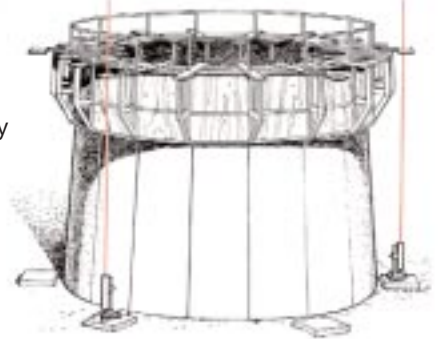
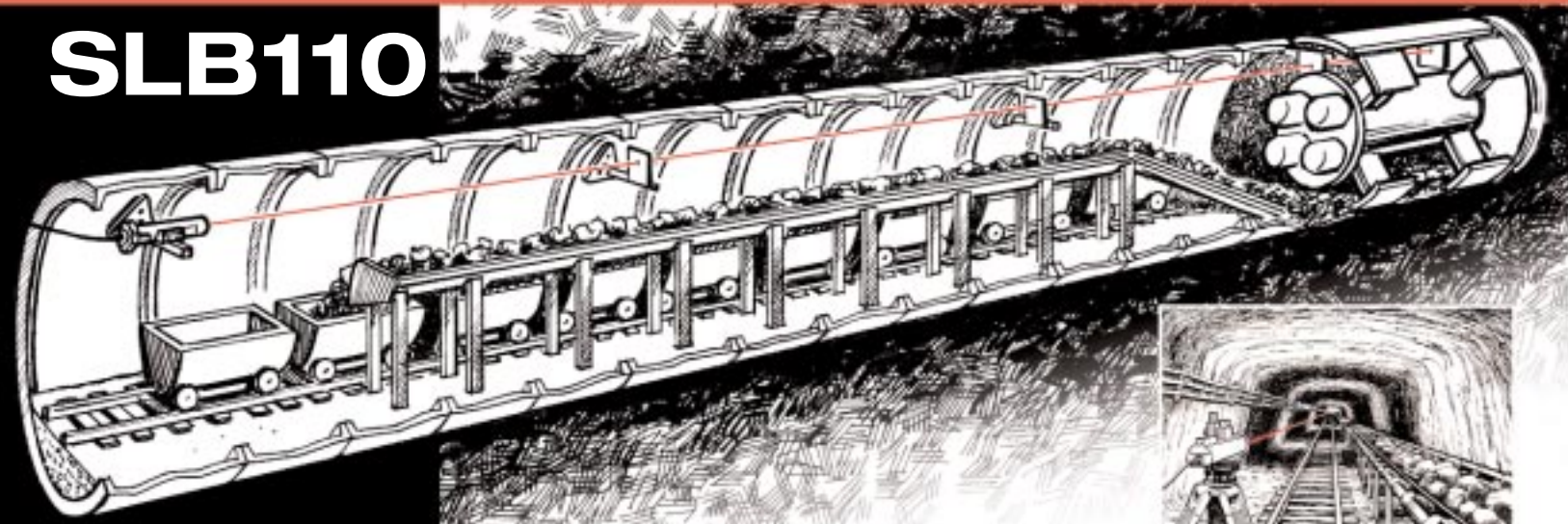
Setup & Failsafe Alignment Control

The primary mounting system for the SLB110 is the Mounting Plate (P/N 9-09030). Made of heavy aluminum castings and extrusions, it is easily secured to any surface and positioned with three leveling screws.

For applications that require frequent relocation of the laser, the SLB110 can be mounted on a tripod using one of four different mounting systems.

1. Mounting Bracket (P/N 8-07360)
2. Mounting Kit (P/N 9-09301)
3. Tilting Base (P/N 1-08907)
4. Leveling Base (P/N 1-08906)

A failsafe alignment control system is obtained by positioning three mounting plates (P/N 9-09030) in a row. The SLB110 is mounted on the first mounting plate and in-line targets are positioned on the other two. The in-line targets are positioned at the desired line of control and the SLB110 is adjusted so the beam passes through the holes in the targets. Should the SLB110 accidentally be moved out of alignment, the beam is blocked by one of the in-line targets, alerting the operator to check alignment setup. As the job progresses, the beam is used as a guide for mounting additional targets down range. Only the SLB110 can offer such a simple and fast alignment control system.





Penta Prism

To refract the laser beam in a 90° angle. When the laser beam passes through the prism it exits at a 90° regardless of the prism's orientation. By turning the prism head, the beam may be pointed anywhere in a 360° circle.

Alignment Scope

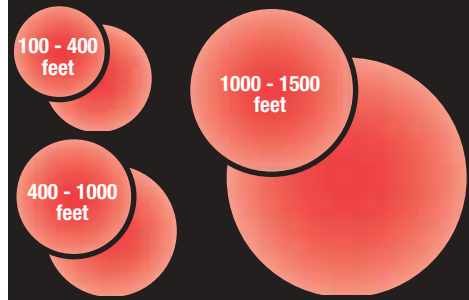
To allow you to easily spot the beam on a forward object while adjusting the SLB110. The alignment scope mounts directly to the SLB110 and provides quick one-man positioning of the beam on the target, especially when the target is far away and under conditions of poor lighting.



Fan Lens

To spread the laser beam to form a thin plane of light that will strike a surface as a line of laser light. The fan lens attaches to the front of the SLB110 and spreads the exiting beam into a wide fan shape instead of the usual pencil thin beam. The "fan" can be rotated to provide a vertical or horizontal line.

Variable Beam Sizes in Respect to Distance



SPECIFICATIONS

Beam Type

Visible Laser Diode / 635 Nm

Beam Output

2.2mW

Beam Size

1/2" - 9/16" @ 100'
 1/2" - 9/16" @ 200'
 1/2" - 9/16" @ 300'
 1/2" - 9/16" @ 400'
 5/8" - 11/16" @ 500'
 7/8" - 15/16" @ 1000'
 7/8" - 1 1/4" @ 1500'

Operating Range

1500' (feet)

Power Source

12 VDC

Level Vial

50 sec

Waterproof

Yes, purged w/ dry nitrogen

Length

15" (inches)

Weight

4.25 lbs.

Operating Temperature

0° F (-18°C) to 120° F (50°C)

ACCESSORIES

| | |
|---|---------|
| Mounting Bracket | 8-07360 |
| Leveling Base | 1-08906 |
| Alignment Scope w/ Mounting Kit | 9-09208 |
| Tilting Base | 1-08907 |
| Mounting Plate | 9-09030 |
| w/ 6" Adjustable Legs & Fine Adjust Block | |
| In-Line Target w/ Mounting Bracket | 9-09061 |
| Double Male Plug | 4-00313 |
| 15" Rod Section | 9-09028 |
| Height Adjustable Rod | 9-09136 |

Alignment

| | |
|-------------------------------------|---------|
| Penta Prism Assem. w/mount. bracket | Special |
| Fan Lens (mounts on instrument) | Special |

Miscellaneous

| | |
|-----------------------------|---------|
| 110V AC to 12V DC Converter | 9-09413 |
| 220V AC to 12V DC Converter | 9-09414 |



STEP 4

STEP 5

STEP 6

TWO POWER SOURCES

The SLB110 can be powered by either the 12 VDC Power converter or the 12 volt power cord.

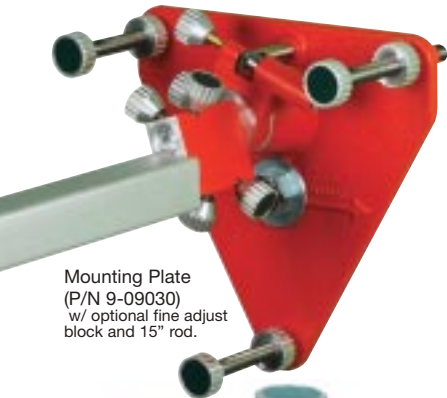
The 12 VDC power converter connects to the AC power source and converts the AC power to a usable 12 volt DC power.

The 12 VDC power cord can be hooked to any 12 volt battery.

The converter is perfect for long term placement while the 12 VDC power cord allows easy movement of the SLB110.



Mounting & Alignment Accessories



Mounting Plate
(P/N 9-09030)
w/ optional fine adjust
block and 15" rod.



Tilting Base
(P/N 1-08907)



Leveling Base
(P/N 1-08906)



Mounting Bracket
(P/N 8-07360)

Alignment Scopes

To allow you to easily spot the beam on a forward object while adjusting the SLB110. The alignment scope mounts directly to the SLB110 and provides quick one-man positioning of the beam on the target, especially when the target is far away and under conditions of poor lighting.



Your Local Dealer

LDT50 Digital Laser Theodolite

Two Mode Laser
Versatility in One
Instrument

Long-life Diode

Choose Round Spot or
Sharp Beam

One-touch Switching:
Focused Beam or
Parallel Beam

Two-stage Output
Power

Beam Range:
>1300' (feet)

Dual-axia Compensation
for Maximum Angle
Precision

Out-of-level
Warning Alarm

Versatile Keypad
Arrangement

Splash Protection

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