DG711 and DG511 Pipe Laser
Quick Reference Card

Batteries

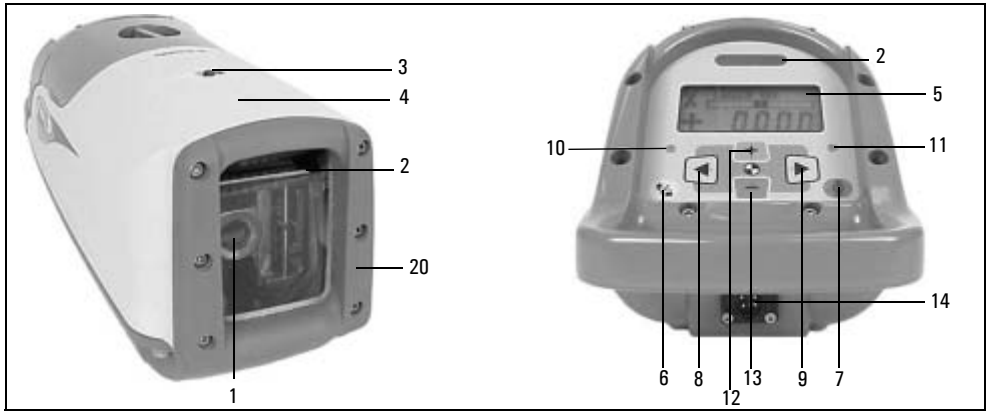
Installing / Removing the Batteries / Charging

1. Plug the battery charger's single-socket plug into the battery pack's recharging receptacle.
2. Plug the battery charger into an appropriate outlet.

   Note – An Optional removable battery pack is available on some models.
3. Turn the battery-pack knob counterclockwise. Lift the battery pack from the pipe laser.
4. Pull out on the top of the side clips then push down on them to release them from the side-clip catches.
5. Pull on the top housing to separate it from the bottom housing.
6. Install/remove the batteries.

   CAUTION – Do not charge alkaline batteries, explosion or fire may result.

ISO 9001 Made in U.S.A. ★★★★★ CE N324



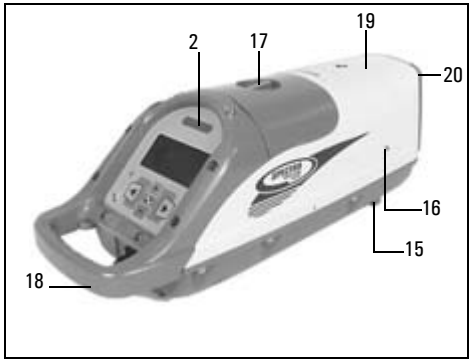
Features and Functions

1. **Beam-Exit Window –** provides a clear window for the laser beam to exit the pipe laser.
2. **Front and Rear Remote Receiver Window –** receives signals from models RC501 and RC502 Remote Control to perform various keypads functions.
3. **Line-Axis Pivot Marker and LED –** identifies the pivot point for the pipe laser's line system. The LED lights for 15 minutes after turning on the pipe laser or pressing a control-panel button. The LED also allows you to align a transit over the top of the pipe laser.
4. **Alignment Markers –** correspond with the line system of the pipe laser. Use them with the Line Center feature to align the laser with a distant control point.
5. **Liquid Crystal Display (LCD) –** shows the power, grade, battery, out-of-level, line position, and status of the pipe laser.
6. **Backlight/Lock Button –** activates the LCD's backlight and line-pivot LED. If you simultaneously press this button along with one of the line control or grade buttons, it locks/unlocks the control panel, so that the grade and line system are not unintentionally changed.
7. **Power Button –** turns the pipe laser on/off. Press and hold the switch for about 2 seconds to turn the unit off.
8. **Left Line-Control Button –** moves the laser beam to the left. To center the line, this button has to be pressed simultaneously with the right line.
9. **Right Line-Control Button –** moves the laser beam to the right. To center the line, this button has to be pressed simultaneously with the left line.
10. **Negative Grade LED –** lights red to show that you have entered a negative grade into the pipe laser.
11. **Positive Grade LED –** lights green to show that you have entered a positive grade into the pipe laser.
12. **Increase Button –** increases the grade. To zero the grade and change the grade in quick change mode, press and hold this button simultaneously with the decrease button.
13. **Decrease Button –** decreases the grade. To zero the grade and change the grade in quick change mode, press and hold this button simultaneously with the increase button.
14. **External Power Receptacle –** allows the pipe laser to be powered by an optional external 6–16 VDC power source.

Trimble

Features and Functions (continued)

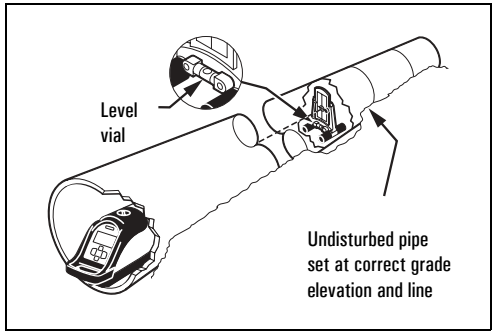
15. **5/8–11 Threaded Mount –** allows the pipe laser to be attached to various setup accessories.
16. **Grade-Axis Pivot Marker –** identifies the pivot point for the pipe laser's grade system.
17. **Battery Pack –** a sealed pack that contains rechargeable NiMH batteries, or a removable pack that can hold four D-Cell alkaline batteries power the pipe laser (depending on model).
18. **Handle –** allows you to carry the pipe laser easily and provides a safety-rope tie-off.
19. **Armor Plated Housing –** plated with a special, hardened military material for unsurpassed ruggedness and reliability.
20. **Protective Rubber Bumper –** protects the front end of the unit by safeguarding the exit window.



Setup

Small Pipe using 1238

1. Attach the laser on the 1238 mounting plate.
2. Insert the laser in the pipe. The laser automatically centers in 200 mm (8 inch) diameter pipe with the 1238 mounting plate.
3. Adjust the laser in the pipe until it is centered and aligned towards the next manhole.
4. Place the adjustable target (Model 956) in the last section of the pipe.
5. Verify that the setup is at correct grade, elevation and line.
6. Adjust the target until the built-in level vial indicates the target is level.



7. Align the laser to the target bull's-eye using the line buttons or remote control (see the above figure).
8. Lay pipe and set the target in each new section of the pipe and adjust the pipe until the laser beam intersects the target bull's-eye while the target is level.

For other setup and applications, refer to your owners operator manual.

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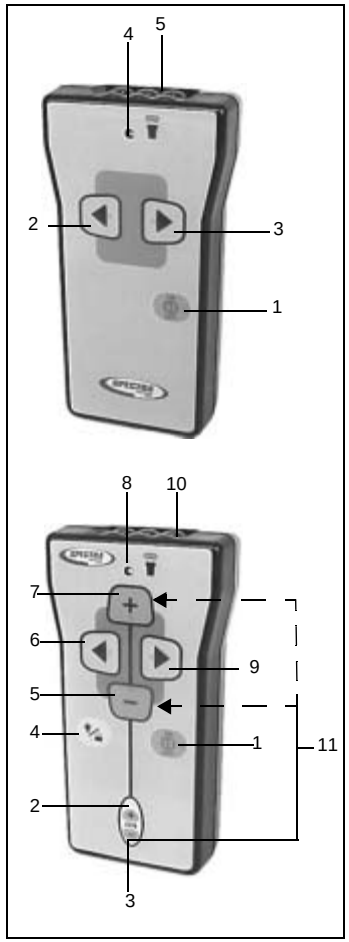
Remote Controls



Model RC501, 3-Button Remote Control

1. **Power –** turns the pipe laser on/off. Press and hold the button for about 2 seconds to turn the unit on or off.
2. **Left Line-Control Button –** allows you to move the laser beam to the left.
3. **Right Line-Control Button –** allows you to move the laser beam to the right.
4. **Status LED –** flashes four times per second when a button is pressed or once per second to indicate that the internal battery is low.
5. **Emission Window –** provides an opening for the infrared signals to exit from so that the remote control and pipe laser can communicate with each other.

Model RC502, 7-Button Remote Control

1. **Power –** turns the pipe laser on/off. Press and hold the button for about 2 seconds to turn the unit on or off.
2. **Grade-Enable LED –** flashes when the grade-enable function is activated.
3. **Grade-Enable Button –** activates/deactivates the increase and decrease button. Deactivating the grade-enable function prevents the pipe laser grade value from accidentally being changed.
4. **Backlight/Lock Button –** activates the pipe-laser LCD's backlight. If this button is pressed simultaneously with one of the line control or grade buttons, it locks/unlocks the control panel so that the line and grade system do not get accidentally changed.
5. **Decrease Button –** decreases the grade.
6. **Left Line-Control Button –** allows you to move the laser beam to the left.
7. **Increase Button –** allows you to increase the grade.
8. **Status LED –** flashes four times per second when a control button is pressed or once per second to indicate that the internal battery is low.
9. **Right Line-Control Button –** allows you to move the laser beam to the right.
10. **Emission Window –** provides an opening for the infrared signals to exit from so that the remote control and pipe laser can communicate with each other.
11. **Grade Bump –** If the Grade Enable button and either Grade button are pressed simultaneously, the grade changes by one increment. This function enables small grade changes for matching to existing grade.