1. User Safety

The RT-3620-2 is a 2-beam, level, plumb and square rotational laser tool. It is a Class IIIA laser product. Observe the following precautions when using the RT-3620-2:

- Always operate the laser tool according to the procedures in this user guide.
- Avoid direct eye exposure to the laser beam. Do not point the laser beam at your face or body, or another person's face or body; do not point the laser beam at reflective surfaces.
- To avoid accidental laser exposure, turn off power to the laser tool before removing the battery or fuse.
- Ensure the laser is turned off before moving the laser aperture.
- Do not disassemble or attempt to service the laser tool. Only qualified service personnel should repair or service the laser tool.

The RT-3620-2 laser tool contains a semiconductor laser device with a wavelength of 635 nanometers. The continuous output of the beam is less than 5.0 milliwatts. The RT-3620-2 laser tool complies with FDA performance standards, 21CFR, section 1040.10. Subparagraph j.

Warning Labels

The following labels are attached to every RT-3620-2. They should not be removed or defaced.

- This label is located on the side of the unit. It identifies the RT-3620-2 laser tool as a device that emits laser radiation and requires appropriate user safety precautions.
- This label is located on the dot/line dither/scan mode switch.

2. Overview

The RT-3620-2 is a 2-beam, level, plumb and square rotational laser tool. The laser detector (RT-A1655 - included with RT-3620-2K) allows for laser beam detection under lighting conditions where beam visibility is poor.

The following diagram illustrates battery installation into the RT-3620-2.

3. Features

The RT-3620-2 laser tool includes the following:

- Laser Tool:
  - Rotating and scanning beams for level or plumb applications
  - Leveling range ±1/4" @100' (30m)
  - Accuracy:
    - Level: ±1/16" (1.6mm) @ 100' (30m)
    - Plumb: ±1/16" (1.6mm) @ 100' (30m)

- Components:
  - Front:
    - On/Off switch
    - Dot/Line dither/scan mode selector
    - Leveling screw
    - Battery compartment

4. Batteries

The following diagram illustrates the main components of the RT-3620-2 laser tool.

5. On/Off Switch

The following diagram illustrates the main components of the RT-3620-2 laser tool.

6. Operation

This section describes the RT-3620-2 laser tool and its operating modes.

7. Calibration

Although the RT-3620-2 laser tool is calibrated to specification before leaving the factory, the tool contains many precision-anchored parts that may be affected if the tool is subject to abuse. Therefore, it is a good idea to ensure accurate laser beam positioning by checking tool calibration. It is also recommended that the tool be periodically calibrated, as a normal maintenance procedure.

To calibrate the RT-3620-2 laser tool:

1. Select a proper location where a target (light colored surface) can be set up, at a distance of 50 feet (15 meters). Lower light conditions (brightness) may be helpful in clearly marking the target.

2. Walk to the target and mark the height of the beam. Record as "A".

3. Position the unit so that the front of the instrument is perpendicular to the target.

4. Using the leveling wheels, center horizontal viewing, paying particular attention to the side perpendicular to your target.

5. Walk to the target and mark the height of the beam, record as "B".

6. Without deflecting the laser unit, point the beam at the target until the beam is at your target (vertical).

7. Rotate the unit and mark the height of the beam, record as "C".

8. Repeat Step #4.

9. Walk to the target and mark the height of the beam. Record as "D".

10. Rotate the unit and mark the height of the beam, record as "E".

11. Return to the unit and rotate ± 180 degrees on its platform.

12. Repeat Step #4.

13. Repeat Step #5.

14. Walk to the target and mark the height of the beam. Record as "F".

15. Return to the unit and rotate ± 90 degrees on its platform.

16. Repeat Step #4.

17. Repeat Step #5.

18. Walk to the target and mark the height of the beam. Record as "G".

Calibration error calculation =

\[ \text{Calibration error} = V_a \times (D - B) \times \left( \frac{D - B}{C - A} \right) \]

Note: Calibration error should not exceed ±1/16" (1.6mm) @ 100' (30m). If the tool exceeds ±1/16" at 100' (30m), please call Toolz Customer Service at 650-800-0001 or 888-800-0001 extension #2.
Guide

User
& Square Laser System 2-Beam, Rotating Laser System (Includes Detector)
MODEL RT-3620-2K
MODEL RT-3620-2

1. User Safety

The RT-3620-2 is a 2-beam, level, plumb and square rotational laser tool. It is a Class IIIA laser product. Observe the following procedures when using the RT-3620-2:

• Always operate the laser tool according to the procedures in this user guide.
• Avoid direct eye exposure to the beam.
• Do not point the laser beam at your own eye or any other person’s eye or body,
• Do not use the laser beam on reflective surfaces.
• Avoid accidental laser exposure. Turn off power to the laser tool before moving it.
• Ensure the laser is turned off before cleaning the laser aperture.
• Do not disassemble or attempt to service the laser tool. Only qualified service personnel should repair or service the laser tool.

The RT-3620-2 contains a combination of laser diodes with a wavelength of 635 nanometers. The continuous output of the beam is less than 5.0 milliwatts. The RT-3620-2 laser tool complies with US FDA performance standards, 21CFR, 1040.10, Subparagraph J.

2. Overview

The RT-3620-2 is a 2-beam, level, plumb and square rotational laser tool. The laser diode (RT-3620-2K) includes RT-3620-2K detector for laser beam detection (RT-A1655 - included with RT-3620-2K).

This guide describes the features and operation of the RT-3620-2 laser tool and optional Laser detector (RT-A1655) system. The RT-3620-2K laser tool is specifically designed for use in conjunction with the RT-A1655 detector.

The RT-3620-2 laser tool includes the following:

- Laser Tool: Rotating and scanning beams for level or plumb applications. Laser Radiation Class 3B (Class II laser)
- Accuracy: <± 0.001° (of target) at 100’ (30m)
- Range: 500’ (diameter), 1000’ (diameter) at 10’ (30m)

3. Functions

The RT-3620-2 laser tool includes the following:

- Laser Tool: Rotating and scanning beams for level or plumb applications.
- Accuracy: <± 0.001° (of target) at 100’ (30m)
- Range: 500’ (diameter), 1000’ (diameter) at 10’ (30m)

The following features include:

- Level-Square System - spins for all 2-beam, level, plumb and square applications.
- Accuracy:
  - Level - ± 0.001° (of target) @ 100’ (30m)
  - Plumb - ± 0.001° (of target) @ 30m (10°)

4. Components

The following diagram illustrates the main components of the RT-3620-2 laser tool.

- Battery Door Screw
- Battery
- Door
- Switch
- On/Off
- Other Spin
- Battery Door
- Battery
- Vial #1 = (Distance between “A” and “B”) / 2
- Vial #2 = (Distance between “C” and “D”) / 2
- Calibration error calculation:
  - Vial #1 = (Distance between “A” and “B”) / 2
  - Vial #2 = (Distance between “C” and “D”) / 2
  - Calibration error should not exceed ± 1/4” (6.4mm) @ 100’ (30m). If the unit does exceed ± 1/4” (6.4mm) @ 100’ (30m) please call Toolz Customer Service at 1-800-434-9989.

5. Batteries

The following diagram illustrates battery installation into the RT-3620-2.

- Installing/Replacing the Batteries
- Replacing the 2 “D” Batteries
- Batteries in Place
- Battery
- Battery Door Screw
- Screw

6. Operation

This section describes the RT-3620-2 laser tool and its operating modes.

- Spin mode (level or points)
- Variable rotation speeds - slow, medium and fast

7. Calibration

Although the RT-3620-2 laser tool is calibrated to specification before leaving the factory, the tool must undergo precision-etched parts that may be affected if the unit is subject to abuse. Therefore, if a unit is dropped or undergoes significant impact, check its calibration. It is also recommended that the unit be periodically calibrated, as a normal maintenance procedure.

To calibrate the RT-3620-2 laser tool:

1. Select a proper location where a target (light colored surface) can be set up, such as a distance of 30” (75cm) minimum. Lasers in close proximity (engines) may be helpful in clearly marking the target.
2. Secure the unit to a level and stable tripod.
3. Position the unit so that the front of the instrument is perpendicular to the target.
4. Using the leveling wheels, center the horizontal radius, paying particular attention to the zero perpendicular with the target.
5. Move “A” 5½” to the side before reading the bubble and repeat for “B”.
6. Wait until the target and mark the height of the beam, record as “A”.
7. Return to the unit and rotate it ± 90 degrees without disturbing its platform.
8. Repeat Step #4.
9. Repeat Step #5.
10. Walk to the target and mark the height of the beam, record as “C”.
11. Return to the unit and rotate it ± 90 degrees on its platform.
12. Repeat Step #4.
13. Repeat Step #5.
14. Walk to the target and mark the height of the beam. Record as “D”.
15. Return to the unit and rotate it ± 180 degrees on its platform.
16. Repeat Step #4.
17. Repeat Step #5.
18. Walk to the target and mark the height of the beam. Record as “E”.

Calibration error calculation:

Note: Calibration error should not exceed ±1/16” (1.6mm) @ 100’ (30m). If the tool exceeds ±1/16” (1.6mm) @ 100’ (30m) please call Toolz Customer Service at 630-394-9434 or 800-434-9989.

Verifying the Calibration:

1. Select a proper location where a target (light colored surface) can be set up, such as a distance of 30” (75cm) minimum. Lasers in close proximity (engines) may be helpful in clearly marking the target.
2. Secure the unit to a level and stable tripod.
3. Position the unit so that the front of the instrument is perpendicular to the target.
4. Using the leveling wheels, center the horizontal radius, paying particular attention to the zero perpendicular with the target.
5. Move “A” 5½” to the side before reading the bubble and repeat for “B”.
6. Wait until the target and mark the height of the beam, record as “A”.
7. Return to the unit and rotate it ± 90 degrees without disturbing its platform.
8. Repeat Step #4.
9. Repeat Step #5.
10. Walk to the target and mark the height of the beam, record as “C”.
11. Return to the unit and rotate it ± 90 degrees on its platform.
12. Repeat Step #4.
13. Repeat Step #5.
14. Walk to the target and mark the height of the beam. Record as “D”.
15. Return to the unit and rotate it ± 180 degrees on its platform.
16. Repeat Step #4.
17. Repeat Step #5.
18. Walk to the target and mark the height of the beam. Record as “E”.

Calibration error calculation:

Note: Calibration error should not exceed ±1/16” (1.6mm) @ 100’ (30m). If the tool exceeds ±1/16” (1.6mm) @ 100’ (30m) please call Toolz Customer Service at 630-394-9434 or 800-434-9989.

Verifying the Calibration:

1. Select a proper location where a target (light colored surface) can be set up, such as a distance of 30” (75cm) minimum. Lasers in close proximity (engines) may be helpful in clearly marking the target.
2. Secure the unit to a level and stable tripod.
3. Position the unit so that the front of the instrument is perpendicular to the target.
4. Using the leveling wheels, center the horizontal radius, paying particular attention to the zero perpendicular with the target.
5. Move “A” 5½” to the side before reading the bubble and repeat for “B”.
6. Wait until the target and mark the height of the beam, record as “A”.
7. Return to the unit and rotate it ± 90 degrees without disturbing its platform.
8. Repeat Step #4.
9. Repeat Step #5.
10. Walk to the target and mark the height of the beam, record as “C”.
11. Return to the unit and rotate it ± 90 degrees on its platform.
12. Repeat Step #4.
13. Repeat Step #5.
14. Walk to the target and mark the height of the beam. Record as “D”.
15. Return to the unit and rotate it ± 180 degrees on its platform.
16. Repeat Step #4.
17. Repeat Step #5.
18. Walk to the target and mark the height of the beam. Record as “E”.

Calibration error calculation:

Note: Calibration error should not exceed ±1/16” (1.6mm) @ 100’ (30m). If the tool exceeds ±1/16” (1.6mm) @ 100’ (30m) please call Toolz Customer Service at 630-394-9434 or 800-434-9989.

Verifying the Calibration:

1. Select a proper location where a target (light colored surface) can be set up, such as a distance of 30” (75cm) minimum. Lasers in close proximity (engines) may be helpful in clearly marking the target.
2. Secure the unit to a level and stable tripod.
3. Position the unit so that the front of the instrument is perpendicular to the target.
4. Using the leveling wheels, center the horizontal radius, paying particular attention to the zero perpendicular with the target.
5. Move “A” 5½” to the side before reading the bubble and repeat for “B”.
6. Wait until the target and mark the height of the beam, record as “A”.
7. Return to the unit and rotate it ± 90 degrees without disturbing its platform.
8. Repeat Step #4.
9. Repeat Step #5.
10. Walk to the target and mark the height of the beam, record as “C”.
11. Return to the unit and rotate it ± 90 degrees on its platform.
12. Repeat Step #4.
13. Repeat Step #5.
14. Walk to the target and mark the height of the beam. Record as “D”.
15. Return to the unit and rotate it ± 180 degrees on its platform.

Calibration error calculation:

Note: Calibration error should not exceed ±1/16” (1.6mm) @ 100’ (30m). If the tool exceeds ±1/16” (1.6mm) @ 100’ (30m) please call Toolz Customer Service at 630-394-9434 or 800-434-9989.
1. User Safety

The RT-3620-2 is a laser tool, plumb, square rotational laser tool with a Class IV laser product. Observe the following precautions when using the RT-3620-2:

- Always operate the laser tool according to the procedures in this user guide.
- Avoid direct eye exposure to the laser beam. Do not point the laser beam at your face or body, or another person's face or body.
- Be sure to return the laser beam at reflection surfaces.
- To avoid accidental laser exposure, turn off power to the laser tool before moving it.
- Ensure the laser is turned off before cleaning the laser aperture.
- Do not disassemble or attempt to service the laser tool. Only qualified service personnel should repair or service the laser tool.

2. Overview

The RT-3620-2 is a 2-beam, level, plumb and square rotational laser tool. The laser detector (RT-A1655) is included with the RT-3620-2K. The RT-3620-2 laser tool complies with the FDA’s performance standards, 21CFR, Subchapter J.

3. Features

The RT-3620-2 laser tool includes the following:

- Laser Tool
  - Rotating and scanning beam for level or plumb applications
  - Laser (green) - 515
  - Accuracy - Level: ± 1/16” (6.4mm)/100’ (30m)
  - Plumb: ± 1/16” (6.4mm)/100’ (30m)
- Battery
  - Rechargeable 2 x 4.8V 3/4Ah Battery Pack
- Bluetooth Switch
- On/Off Switch
- Battery Pack
- Tripod Mount
- Battery Pack Cover
- Roll-Up Pouch
- Paper Manual (616-903-4944 or 800-984-0404 extension #2).

4. Components

The following diagram illustrates the main components of the RT-3620-2 laser tool.

5. Batteries

The following diagram illustrates battery installation into the RT-3620-2.

6. Operation

This section describes the RT-3620-2 laser tool and its operating modes.

7. Calibration

Although the RT-3620-2 laser tool is calibrated to specification before leaving the factory, the tool contains many precision-machined parts that may be affected if the unit is subjected to abuse. Therefore, it is a good idea to re-calibrate the tool from time to time, as a routine maintenance procedure.

To calibrate the RT-3620-2 laser tool:

1. Select a proper location where a target (light colored surface) can be set up at a distance of 50 feet (15 meters). Lower light conditions (brightness) may be helpful in clearly marking the target.
2. To calibrate the RT-3620-2 laser tool:
3. Using the leveling wheels, center both horizontal vials, paying particular attention to the vial perpendicular with your target.
4. Windows - 5-10 seconds for the bubble to settle before reading the bubble vial and adjust as needed.
5. Calibration error should not exceed 1/4" (6.4mm) @ 100’ (30m). If the unit does exceed 1/4" (6.4mm) @ 100’ (30m) please call Toolz Customer Service at 650-493-9493 or 800-984-0404 extension #2.

Note: Calibration error should not exceed 1/4" (6.4mm) @ 100’ (30m); otherwise the centering indicator may not center the beam to the target.

8. Walk to the target and mark the height of the beam, record as "B".
9. Repeat Step #5.
10. Walk to the target and rotate it 180 degrees without disturbing its platform.
11. Return to the unit and rotate it 180 degrees on its platform.
12. Repeat Step #4.
13. Repeat Step #5.
14. Walk to the target and mark the height of the beam. Record as "C".
15. Return to the unit and rotate it 180 degrees on its platform.
16. Repeat Step #4.
17. Return Step #6.
18. Walk to the target and mark the height of the beam. Record as "D".

Calibration error calculation = |Vial #1 - Vial #2| / Distance between "C" and "D".

Note: Calibration error should not exceed 1/4" (6.4mm) @ 100’ (30m), otherwise the centering indicator may not center the beam to the target.

19. Walk to the target and rotate it 180 degrees on its platform.
20. Repeat Step #4.
21. Repeat Step #5.
22. Walk to the target and mark the height of the beam. Record as "E".
23. Return to the unit and rotate it 180 degrees on its platform.
1. User Safety

The RT-3620-2 2-beam, level, plumb and square rotational laser tool is a Class IIIA laser product. Observe the following precautions when using the RT-3620-2:

- Always operate the laser tool according to the procedures in this user guide.
- Avoid direct eye exposure to the laser beam; do not point the laser beam at your face or body, or another person's face or body, as this could result in eye injury.
- Do not place the laser tool at reflection surfaces.
- To avoid accidental laser exposure, turn off power to the laser tool before moving it.
- Ensure the laser is turned off before cleaning the laser aperture.
- Do not disassemble or attempt to service the laser tool. Only qualified service personnel should repair or service the laser tool.

2. Overview

The RT-3620-2 is a 2-beam, level, plumb and square rotational laser tool. The laser detector (RT-A1655) - included with RT-3620-2K - allows for laser beam detection under lighting conditions where beam visibility is poor.

This guide describes the features and operation of the RT-3620-2 laser tool and its accessories.

3. Features

The RT-3620-2 laser tool includes the following:

- Laser tool:
  - Rotating and squaring beams for level or plumb applications
  - Square (30˚ x 30˚) and dot (10˚) positioning
  - Accuracy:
    - Level - ± 1/4” (6.4mm) @ 100’ (30m)
    - Plumb - ± 1/4” (6.4mm) @ 100’ (30m)
- Accessories:
  - Reflective target
  - Laser Detector (RT-A1655)
  - Range - 1/52” (1.8mm)
  - Laser beam locator with 360˚ scanning and 360˚ sweep in dot/line dither/scan mode
- Operating modes:
  - Spin mode (level or plumb)
  - Dot/Line Dither/Scan mode (level or plumb)
  - Reflective Laser Target Mode (Level or Plumb)
- Batteries:
  - Requires 2 “D” batteries
- Installation:
  - On/Off switch
  - Dither switch
  - Drive mode switch
  - Battery door
- Rotating Laser Tool:
  - Rotate and lock with the rotating knob
- Battery:
  - Batteries included
  - Low battery indicator

4. Components

The following diagram illustrates the main components of the RT-3620-2 laser tool.

5. Batteries

The following diagram illustrates battery installation into the RT-3620-2.

6. Operation

This section describes the RT-3620-2 laser tool and its operating modes.

7. Calibration

Although the RT-3620-2 laser tool is calibrated to specification before leaving the factory, the tool contains some precision-machined parts that may be affected if the unit is subjected to abuse. Therefore, it is recommended that the unit be periodically calibrated, as a normal maintenance procedure.

To calibrate the RT-3620-2 laser tool:

1. Select a proper location; a target (light colored surface) can be set up in a distance of 50 ft (15m) minimum. Light conditions (e.g., snow) may be helpful in clearly marking the target.
2. Secure the unit in a level and stable position.
3. Position the tool so that the footprint of the instrument is perpendicular to the target.
4. Using the leveling wheels, set the unit horizontally. Pay particular attention to the side perpendicular to your target.

Note: If necessary, use a bubble level to correct for minor imperfections in the target surface.

5. Without disturbing the laser unit, point the beam to the target until the beam is in line with the target (vertical or horizontal).
6. Walk to the target and mark the height of the beam, record as “A”.
7. Return to the unit and mark 180 degrees without disturbing the platform.
8. Walk to the target and mark the height of the beam, record as “B”.
9. Walk to the target and mark the height of the beam, record as “C”.
10. Repeat Step #5.
11. Return to the unit and mark 180 degrees on its platform.
12. Repeat Step #4.
13. Walk to the target and mark the height of the beams. Record as “D”.
14. Return to the unit and mark 180 degrees on its platform.

Calibration error calculation = Note: Calibration error should not exceed 1/4” (6.4mm) @ 150 ft (45m). If the read shows ±1/4” to ±1/2” (0.6 to 1.3cm) uncorrected, consult Toolz Customer Service at 650-934-3404 or 800-984-0404 extension #2.

16. Repeat Step #4.
17. Repeat Step #5.
18. Walk to the target and mark the height of the beams. Record as “E”.

19. Return to the unit and mark 180 degrees without disturbing its platform.
20. Walk to the target and mark the height of the beams. Record as “F”.

21. Return to the unit and mark 180 degrees on its platform.
22. Repeat Step #4.
23. Repeat Step #5.
1. User Safety

The RT-3620-2 tool is a level, plumb and square rotational laser tool in a Class IIIA laser product. Observe the following procedure when using the RT-3620-2:

- Always operate the laser tool according to the procedures in this user guide.
- Avoid direct eye exposure to the beam.
- Do not point the laser beam at your face or body, or another person's face or body.
- Do not disassemble or attempt to service the laser tool. Only qualified service personnel should repair or service the laser tool.

Warning Labels

The following labels are attached to every RT-3620-2. They should not be removed or defaced:

- The label is located on the side of the unit. It identifies the RT-3620-2 laser tool as a device that emits laser radiation and requires appropriate user safety precautions.
- The label is located on the designated other protecting label. If indicates that label radiation is not from the aperture.

2. Overview

The RT-3620-2 is a 2-beam, level, plumb and square rotational laser tool. The laser detector (RT-A1655 - included with RT-3620-2K) allows for laser beam detection under lighting conditions where beam visibility is poor.

This guide describes the features and operation of the RT-3620-2 laser tool and optional Laser Detector (RT-A1655 - included with RT-3620-2K).

3. Features

The RT-3620-2 laser tool includes the following:

- Laser Tool:
  - Rotating Switch for beam for level or plumb applications
  - Levelling range ± 5.5°
  - Accuracy: ± 1/16" (4 mm) / 1 foot (30 cm)
  - Selectable horizontal or vertical mode

4. Components

The following diagram illustrates the main components of the RT-3620-2 laser tool:

- On/Off Switch
- Distance Between Beams
- Range - 600' (diameter)
- Dot/Line Dither/Scan mode (level or plumb), for higher beam visibility
- Spin mode (level or plumb)

5. Batteries

The following diagram illustrates battery installation into the RT-3620-2.

- Replace 2 D batteries

6. Operation

This section describes the RT-3620-2 laser tool and its operating modes:

- Select operation mode to suit your application.

7. Calibration

Although the RT-3620-2 laser tool is calibrated to specification before leaving the factory, the tools contain moving precision-machined parts that may be affected if a unit is subjected to abuse. Therefore, if a unit is drooped or subjected to significant impact, check its calibration. It is also recommended that the unit be periodically calibrated, as a normal maintenance procedure.

To calibrate the RT-3620-2 laser tool:

1. Select a proper location where a target (bright colored surface) can be set up, at a distance of 50 feet (15 meters).

2. Level the unit in a level and stable tripod.

3. Position the unit so that the center of the instrument is perpendicular to the target.

4. Using the leveling wheels, center the horizontal vials, paying particular attention to the side perpendicular with your target.

5. Walk to the unit and rotate it 180 degrees on its platform.

6. Without detracting the unit and point the beam to the target until the beam is in line with your target (vertical axis).

7. Walk to the target and mark the height of the beam, record as "A".

8. Repeat Step #4.

9. Repeat Step #5.

10. Walk to the target and mark the height of the beam, record as "B".

11. Return to the unit and rotate it 180 degrees on its platform.

12. Repeat Step #4.

13. Repeat Step #5.

14. Walk to the target and mark the height of the beams. Record as "C".

15. Return to the unit and rotate it 90 degrees on its platform.

16. Repeat Step #4.

17. Repeat Step #5.

18. Walk to the target and mark the height of the beams. Record as "D".

Calibration error calculation =

Velocity = Distance between "A" and "B" / Time in seconds

Note: Calibration error should not exceed ±1/4" (6.4 mm) at 100'. If the unit does exceed ±1/4" (6.4 mm) at 100', please call Toolz Customer Service at 650-903-4944 or 800-984-0404 extension #2.
1. User Safety

The RT-3620-2 2-beam, level, plumb and square rotational laser tool is a Class IIA laser product. Observe the following precautions when using the RT-3620-2:

- Always operate the laser tool according to the precautions in this user guide.
- Avoid direct eye exposure to the laser beam.
- Do not point the laser beam at your face or body, or another person's face or body.
- Do not use the laser tool at reflection surfaces.
- To avoid accidental laser exposure, turn off power to the laser tool before moving it.
- Ensure the laser is turned off before cleaning the laser aperture.
- Do not disassemble or attempt to service the laser tool. Only qualified service personnel should repair or service the laser tool.

The RT-3620-2 contains a laser beam that will emit a wavelength of 635 nanometers. The continuous output of the beam is less than 5.0 milliwatts. The laser beam is a Class IIIA laser device that emits laser radiation and requires appropriate user safety precautions.

2. Overview

The RT-3620-2 is a 2-beam, level, plumb and square rotational laser tool. The laser detector (RT-A1655) included with RT-3620-2K allows for laser beam detection under lighting conditions where beam visibility is poor. The RT-3620-2 laser tool complies with US FDA performance standards, 21CFR, Subparagraph J.

3. Features

The RT-3620-2 laser tool includes the following:

- Laser Tool:
  - Rotating and aiming beams for level or plumb applications
  - Laser aiming plumb (±1/4")
  - Laser aiming level (±1/4"")
  - Low battery indicator
  - Pinpoint level (±3mm/3m)
  - Variable rotation speeds - slow, medium and fast
  - Switch to deactivate the laser beam (on/off)
  - Digital drive/rotating mode (level or plumb mode selection
  - Higher beam visibility
  - User manual
  - Built-in tripod mount - 5/8" x 11 for standard surveyor's tripods, such as the Leica RTH-110 tripod

- Components:
  - Reflective laser target
  - Laser Detector (RT-A1655)
  - Range - 450 diameters
  - Laser beam locator with beeper/continuously audible sound or speaker
  - Laser level indicator
  - Battery indicator

- Accuracy:
  - Level - ± 5.5˚
  - Rotating and squaring beams for level or plumb applications

- Modeling:
  - Dot and two line lengths
  - Variable rotation speeds - slow, medium and fast

- Batteries:
  - Requires 2 "D" batteries

- Assembly:
  - Built-in tripod mount - 5/8" x 11 for standard surveyor's tripods, such as the Leica RTH-110 tripod

4. Components

The following diagram illustrates the main components of the RT-3620-2 laser tool.

5. Batteries

The following diagram illustrates battery installation into the RT-3620-2.

6. Operation

This section describes the RT-3620-2 laser tool and its operating modes.

4. Using the leveling beams, center both horizontals, using particular attention to the zero position perpendicular to your target.

5. Walk to the target and mark the height of the beam, record as "A".

6. Walk to the target and mark the height of the beam, record as "B".

11. Return to the unit and rotate it 180 degrees on its platform.

12. Repeat Step #4.

13. Walk to the target and mark the height of the beams. Record as "C".

14. Return to the unit and rotate it 180 degrees on its platform.

15. Return to the unit and rotate it 180 degrees on its platform.

16. Return to the unit and rotate it 180 degrees on its platform.

17. Calibration

Although the RT-3620-2 laser tool is calibrated to specification before leaving the factory, the tool contains many precision-machined parts that may be affected if a unit is subject to abuse. Therefore, if a unit is dropped or sustains significant impact, check its calibration. It is also recommended that the unit be periodically calibrated, as a normal maintenance procedure.

To calibrate the RT-3620-2 laser tool:

1. Select a proper location where a target (light colored surface) can be set up, at a distance of 50 feet (15 meters).

2. Level the unit as level and stable (tripod).

3. Position the unit so that the front of the instrument is perpendicular to the target.

4. Using the leveling beams, center both horizontals, using particular attention to the zero position perpendicular to your target.

5. Walk to the target and mark the height of the beam, record as "A".

6. Walk to the target and mark the height of the beam, record as "B".

7. Return to the unit and rotate it 180 degrees on its platform.

8. Repeat Step #6.

9. Repeat Step #9.

10. Walk to the target and mark the height of the beams. Record as "D".

11. Return to the unit and rotate it 180 degrees on its platform.

12. Repeat Step #4.

13. Walk to the target and mark the height of the beams. Record as "E".

14. Return to the unit and rotate it 180 degrees on its platform.

15. Return to the unit and rotate it 180 degrees on its platform.

16. Return to the unit and rotate it 180 degrees on its platform.

17. Calibration error calculation =

- Next 1° = Distance between "A" and "D"
- Next 1° = Distance between "B" and "C"

Note: Calibration error should not exceed 1/4"/600' or 1/8"/1200'. If the calibration exceeds 1/4"/600' (10.8mm/360m) the tool must be returned to Toolz Customer Service at 650-800-300 or 1-800-360-800 extension #2.
3. Locate the laser beams, using the red detector panel on the laser detector. As the laser tool is approached, a single, single line beam is visible in the laser detector. The laser tool used by the installer to sight or layout the beams.

4. Center the beam by moving the laser detector in the direction of the arrow.

5. Press the Detector Power On/Off button to turn off the detector.

6. Remove the 9V battery from the laser detector.

7. Replace the 9V battery, ensuring that the polarity is correct, as shown in the diagram.

8. Press the Detector Power On/Off button to turn on the detector.

5. Specifications (RT-3620-2, RT-3620-2K)

- **Laser Tool**
  - Accuracy:
    - Plumb: ± 1/8 in (6.35 mm) at 100 ft (30.5 m)
    - Level: ± 1/16 in (1.59 mm) at 100 ft (30.5 m)
  - Operating modes:
    - Three speeds — slow, medium, and fast
  - Beam off time:
    - Low battery indicator: LCD display icon (approximately four hours remaining)

- **Laser Detector RT-A1655** (Included with RT-3620-2K)
  - Laser detector range: 600 ft (183 m)
  - Power supply:
    - 4D battery (keychain or rechargeable)
  - Laser output:
    - 914 nm, 5 mW maximum
  - Laser output:
    - 635 nm, 5 mW maximum
  - Storage:
    - 635 nm, 5 mW maximum
  - Storage:
    - 914 nm, 5 mW maximum
  - Dimensions:
    - 914 nm, 5 mW maximum
    - 635 nm, 5 mW maximum

6. Laser Detector RT-A1655 (Included with RT-3620-2K)

- **Laser Tool**
  - Accuracy:
    - Plumb: ± 1/8 in (6.35 mm) at 100 ft (30.5 m)
    - Level: ± 1/16 in (1.59 mm) at 100 ft (30.5 m)
  - Operating modes:
    - Three speeds — slow, medium, and fast
  - Beam off time:
    - Low battery indicator: LCD display icon (approximately four hours remaining)

- **Laser Detector RT-A1655** (Included with RT-3620-2K)
  - Laser detector range: 600 ft (183 m)
  - Power supply:
    - 4D battery (keychain or rechargeable)
  - Laser output:
    - 914 nm, 5 mW maximum
  - Laser output:
    - 635 nm, 5 mW maximum
  - Storage:
    - 635 nm, 5 mW maximum
  - Storage:
    - 914 nm, 5 mW maximum
  - Dimensions:
    - 914 nm, 5 mW maximum
    - 635 nm, 5 mW maximum

7. Care and Maintenance

- **Laser Tool**
  - Keep the laser tool, including parts and accessories, out of the reach of children.

- **Laser Detector**
  - Keep dry. The laser tool and laser detector are water-resistant; however, do not store in hot areas above 158°F (70°C). High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.

- **Overall Calibrations**
  - Periodically calibrate the laser tool to ensure calibration accuracy. (Refer to the Calibration procedure for instructions.)
  - Keep the laser tool, including parts and accessories, out of the reach of children.

- **Warranty Information**
  - Toolz warrants for a period of one (1) calendar year from the date of purchase that its products are free of defect in material and workmanship, and conform to Toolz’s published technical specifications under normal operating conditions.
  - This warranty is void if lost or damaged by a product that has been damaged by accident, abuse, misuse, wear, or if the product has been modified, altered, or if the case is opened, is repaired by any other than Toolz or its authorized repair facility.

- **Toolz Expressly Disclaims All Warranties, Express or Implied**
  - Toolz shall not be liable for any losses or damages caused by or related to the use of its products. Some jurisdictions do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.
Laser Detector RT-A1655

The RT-A1655 laser tool is designed to be used in conjunction with any desired laser detector that responds best to the laser beam that it emits. The RT-A1655 provides simple, precise, and accurate laser detection capabilities. The laser tool is available in a variety of models to suit the needs of different applications. This manual provides instructions on how to use the RT-A1655 laser tool with your desired laser detector.

1. Applications

The RT-A1655 laser tool is compatible with a wide range of laser detectors, including those specifically designed for precision laser alignment. It is ideal for use in applications requiring high accuracy and reliability, such as:

- Construction and construction-related industries
- Surveying and land surveying
- Architectural and engineering firms
- Educational institutions
- Research and development laboratories

2. Assembly

To assemble the RT-A1655 laser tool, follow these steps:

- Remove the protective packaging from the laser tool.
- Check for any damage or defects.
- Ensure all parts are present and accounted for.
- Assemble the laser tool according to the instructions provided.

3. Specifications (RT-3625-2, RT-3625-2K)

- Laser Tool
  - Laser Class: Class IIIa
  - Laser Output: 635 nm, 5 mW maximum
  - Operating Mode: Continuous, Dot/Light Dither, Line/Light Dither, Scan Mode: Manual, 360°
  - Storage Temperature: -4°F (-20°C) to 158°F (70°C)
  - Relative Humidity: 0% to 95% (noncondensing)
- Laser Beam
  - Laser Beam: Infrared (IR), Visible (VIS)
  - Laser Protection: Class IIIa

4. Laser Detector Power

- Laser Detector Power
  - Laser Detector: 3.7V (6.3V - 10.5V), 150mA-300mA
  - Battery: 9V battery (alkaline or rechargeable)
  - Battery Life: Up to 100 hours (alkaline), 25 hours (rechargeable)

5. Laser Detector RT-A1655 (Included with RT-3625-2K)

- Laser Detector Range: 150 feet (45 meters)
- Laser Detector Power: 9V battery (alkaline or rechargeable)
- Laser Detector Battery: 6V (alkaline)
- Laser Detector Battery Life: Up to 100 hours (alkaline), 25 hours (rechargeable)

6. Laser Detector RT-A1655 (Included with RT-3625-2K)

- Laser Detector Range: 150 feet (45 meters)
- Laser Detector Power: 9V battery (alkaline or rechargeable)
- Laser Detector Battery: 6V (alkaline)
- Laser Detector Battery Life: Up to 100 hours (alkaline), 25 hours (rechargeable)

7. Care and Maintenance

- This laser tool is a product of superior design and manufacture, and should be treated
  with care. The following guidelines will help maintain the product and fulfill war-
  ranty obligations. Such liability is based on the actual causes of damage, the tools
  and equipment, and other circumstances. The sacrifice of one’s own equipment
  by the laser tool manufacturer and distributor of the laser tool.

- Keep the laser tool, including parts and accessories, out of the reach of small children.
- Do not operate the laser tool in dirty or dusty areas. Although the laser tool and laser
detector are designed to be dust-resistant, long-term exposure to these elements may damage
internal moving parts.
- Keep dry. The laser tool and laser detector are water-resistant, however, contact with water
may damage internal electronic circuits and may void the warranty. Do not attempt to dry the
unit by using air or steam. To dry the unit, use a clean cloth to wipe the unit dry.
- Do not store above 113°F (45°C). High temperatures can shorten the life of electronic
devices, damage batteries, and warp or crack plastic parts.
- Do not store in cold areas below 32°F (0°C). When the laser tool or laser detector are
subject to sudden temperature changes, moisture can enter the unit and damage the circuit
board.
- Do not use the laser tool or laser detector near metal containers, such as water coolers,
that can reflect the laser beam.
- Do not drop tools, storage containers, or any other objects to strike the tool.
- Do not strike tools, storage containers, or any other objects to strike the tool.
- Do not drop tools, storage containers, or any other objects to strike the tool.
- Do not subject the laser tool or laser detector to rough handling or dicing.
- Periodically calibrate the laser tool to ensure calibration accuracy. (Refer to the
manufacturer’s guide or the website for detailed calibration instructions.)

8. Warranty Information

- Toolz warrants for a period of one (1) calendar year from the date of purchase that its
products are free of defect in material and workmanship, and conform to Toolz’s pub-
lished technical specifications under normal operating conditions.

- Toolz makes no warranties, express or implied, with respect to the product, including
warranty of merchantability and fitness for a particular purpose. Toolz expressly disclaims
all warranties that are not expressly included herein. Some jurisdictions do not allow
the exclusion or limitation of implied warranties, so the above limitation or exclusion may
not apply to you.

- Toolz shall in no event be liable for any lost profits, lost business, cost of replacement
goods, or any consequential, incidental, indirect, special, or punitive damages arising out of
inability to use the product or use in a manner inconsistent with the warranty obligations:
- Toolz shall in no event be liable for any lost profits, lost business, cost of replacement
goods, or any consequential, incidental, indirect, special, or punitive damages arising out of
inability to use the product or use in a manner consistent with the warranty obligations:
- This warranty gives you specific legal rights, and you may also have other rights, which vary by jurisdiction.

- To register your laser, complete and mail the Warranty registration card or fax it to us at:

9. Applications

- Locate the laser beam using the red detector panel on the laser detector. As
the laser beam is approached, a single red dot is seen in the beam’s center.
- Move left — Indicates that the beam is pointed too far to the left.
- Move right — Indicates that the beam is pointed too far to the right.
- Continuous tone — Indicates that the laser detector beam is pointed directly at
the red detector panel.
- Slow beep — Indicates that the beam is pointed too low or high, or is
in the opposite direction of the arrow.

- The laser detector power is off, confirming that the laser detector is turned on. At
startup, the detector responds to the battery status.

- Replace the 9V battery, ensuring that the polarity is correct.

- The low battery indicator appears until the battery is replaced or fails. The icon continues to
appear until the battery is replaced or fails.

- Press the detector power on/off button to turn off the detector.

- Center the beam by moving the laser detector in the direction of the arrow. When
the beam is centered with the center of the detector panel, both beams remain on
the detector display, and the icon continues to be displayed.

- The red detector panel is lit to indicate that the laser beam is emitting a signal.

- The laser diode is lit when the laser beam is emitting a signal.

- Slow beep — Indicates that the laser detector beam is pointed too low, or
is properly centered.

- Continuous tone — Indicates that the laser detector beam is pointed directly at
the object.

- Rapid beep — Indicates that the laser detector is pointed too high or
far to the left or right.

- Do not store in dusty or dirty areas. Although the laser tool and laser
detector are designed to be dust-resistant, long-term exposure to these elements may damage
internal electronic circuits and may void the warranty. Do not attempt to dry the unit by using air
or steam. To dry the unit, use a clean cloth to wipe the unit dry.

- Do not store above 113°F (45°C). High temperatures can shorten the life of
electronic devices, damage batteries, and warp or crack plastic parts.
- Do not store in cold areas below 32°F (0°C). When the laser tool or laser
detector are subject to sudden temperature changes, moisture can enter the unit and damage the
circuit board.

- Do not touch the laser tool or laser detector with bare hands. The laser beam may be
emitted from any part of the unit.

- Do not drop tools, storage containers, or any other objects to strike the tool.
- Do not subject the laser tool or laser detector to rough handling or dicing.
- Periodically calibrate the laser tool to ensure calibration accuracy. (Refer to the
manufacturer’s guide or the website for detailed calibration instructions.)

- Toolz warrants for a period of one (1) calendar year from the date of purchase that its
products are free of defect in material and workmanship, and conform to Toolz’s pub-
lished technical specifications under normal operating conditions.

- Toolz makes no warranties, express or implied, with respect to the product, including
warranty of merchantability and fitness for a particular purpose. Toolz expressly disclaims
all warranties that are not expressly included herein. Some jurisdictions do not allow
the exclusion or limitation of implied warranties, so the above limitation or exclusion may
not apply to you.

- Toolz shall in no event be liable for any lost profits, lost business, cost of replacement
goods, or any consequential, incidental, indirect, special, or punitive damages arising out of
inability to use the product or use in a manner inconsistent with the warranty obligations:
- Toolz shall in no event be liable for any lost profits, lost business, cost of replacement
goods, or any consequential, incidental, indirect, special, or punitive damages arising out of
inability to use the product or use in a manner consistent with the warranty obligations:
- This warranty gives you specific legal rights, and you may also have other rights, which vary by jurisdiction.
The laser tool is a product of superior design and manufacture, and should be treated with care. The following guidelines will help maintain the product and fulfill warranty obligations.

1. ALWAYS turn off the laser detector before replacing the battery.

2. Battery Information
   - A battery pack is an integral part of the laser detector and should be replaced only by authorized personnel.

3. Note:
   - Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the laser tool and laser detector. Only qualified service personnel should replace the battery.

4. Care and Maintenance
   - This laser tool is a product of superior design and manufacture, and should be treated with care. The following guidelines will help maintain the product and fulfill warranty obligations.

5. Toolz Customer Service
   - To register your laser, complete and return the warranty registration card to us at 650-903-0080.

6. 12. Warranty Information
   - Toolz is not responsible for damage due to improper packing. Contact Toolz Customer Service via email at: customerservice@toolz-inc.com or via phone at 650-903-1613 or 650-903-4724.

7. This laser tool is a product of superior design and manufacture, and should be treated with care. The following guidelines will help maintain the product and fulfill warranty obligations.

8. Note:
   - Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the laser tool and laser detector. Only qualified service personnel should replace the battery.

9. Care and Maintenance
   - This laser tool is a product of superior design and manufacture, and should be treated with care. The following guidelines will help maintain the product and fulfill warranty obligations.

10. Toolz Customer Service
    - To register your laser, complete and return the warranty registration card to us at 650-903-0080.

11. This laser tool is a product of superior design and manufacture, and should be treated with care. The following guidelines will help maintain the product and fulfill warranty obligations.

12. Note:
    - Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the laser tool and laser detector. Only qualified service personnel should replace the battery.
1. Activate the laser detector by pressing its keypad Detector Power On/Off button.

2. Press the Detector Course/Fine Select button to cycle through the available settings:
   - Fine Resolution
   - Coarse Resolution
   - Low Battery

3. Locate the laser beam, using the red detector panel on the laser detector. As the laser beam is approached, a single visual indicator appears in the laser detector. The laser beam will continue to emit until the laser beam is lost.
   - Visual indicator — Indicates that the laser detector is pointed too far or too close to the laser detector.
   - Visual indicator — Indicates that the laser detector is pointed too far or too close to the laser detector.

4. Center the beam by moving the laser detector in the direction of the arrow. When the laser beam is aligned with the center of the detector panel, both arrows on the LCD display are lit and the beeper is continuous, indicating that the detector is properly centered.

5. Press the Detector Power-OFF button to turn off the detector.

6. Place the detector controls in a clean location.

7. Remove the 9V battery from the laser detector.

8. Laser Detector RT-A1655 (Included with RT-3620-2K)
   - Laser classification: Class IIIA
   - Laser output: 635 nm, 5 mW maximum
   - Power supply: Two “D” batteries (alkaline or non-alkaline)
   - Laser tool, detector and laser detector: Water-resistant, 635 nm, 5 mW maximum
   - Dimensions: 6 in. x 4 in. x 5.5 in. (15.25 cm x 10 cm x 14.0 cm)
   - Weight: 1 lb. 11 oz. (0.55 lb. x 1.0 lb. x 0.5 lb.)

9. Applications
   - Architectural layout
   - Construction layout
   - Landscaping
   - Brickwork
   - Concrete sawing
   - Brick masonry
   - Concrete sawing

10. Specifications (RT-3620-2, RT-3620-26)
    - Laser tool:
      - Grade: Line laser (4-mil alignment)
      - Three modes — slow, medium and fast, and too fast or too slow (32 in./s, 32 in./s, 32 in./s, 32 in./s)
    - Operating modes:
      - Continuous tone — Indicates that the laser detector is pointed directly at the laser detector.
      - Rapid beep — Indicates that the laser detector is pointed too high or too low.
    - Laser output:
      - Low LED: 2 mW maximum
      - High LED: 6 mW maximum
    - Laser classification:
      - Class 1A
    - Environmental:
      - Class: A
      - Low-Battery Indicator: LCD display icon (approximately 4 hours remaining)
    - Temperature range (RT-3620-2, RT-3620-26):
      - Operating: 4°F to 102°F (9°C to 39°C)
      - Storage: -4°F to 122°F (-20°C to 50°C)
    - Tripod mount:
      - 5/8” x 11 thread

11. Care and Maintenance
    - The laser tool is a product of superior design and manufacture, and should be treated with care. The following guidelines will help maintain the product and fulfill warranty obligations:
    - Keep the laser tool, including parts and accessories, out of the reach of small children.
    - Do not store in areas above 158°F (70°C). High temperatures can shorten the life of electronic devices, damage batteries, and warp or expand certain plastic parts.
    - Do not store in cold areas below -4°F (-20°C). When the laser tool and/or laser detector warms to normal operating temperature, moisture can form inside the units and damage the circuit boards.
    - Keep dry. The laser tool and laser detector are water-resistant; however, prolonged exposure to dampness may not apply to you.
    - If storage, do not store in cold areas below -4°F (-20°C). When the laser tool and/or laser detector warms to normal operating temperature, moisture can form inside the units and damage the circuit boards.
    - Keep the laser tool, including parts and accessories, out of the reach of small children.
    - Periodically recalibrate the laser tool to ensure calibration accuracy.
    - For storage, turn off the laser tool and laser detector and remove the batteries.
    - To avoid damaging the laser tool and laser detector, storage:
      - Do not expose to rapid temperature changes.
      - Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the laser tool and laser detector.
      - Do not use the laser tool or laser detector near water.
      - Do not store in areas above 158°F (70°C). High temperatures can shorten the life of electronic devices, damage batteries, and warp or expand certain plastic parts.
      - Do not use or store in areas above 158°F (70°C). High temperatures can shorten the life of electronic devices, damage batteries, and warp or expand certain plastic parts.
      - Do not store in areas above 158°F (70°C). High temperatures can shorten the life of electronic devices, damage batteries, and warp or expand certain plastic parts.
      - Do not use the laser tool or laser detector near water.
      - Do not store in areas above 158°F (70°C). High temperatures can shorten the life of electronic devices, damage batteries, and warp or expand certain plastic parts.

12. Warranty Information
    - This Warranty is void and does not apply if the product has been damaged by accident, misuse, tampering or unauthorized repair.
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    - This Warranty is void and does not apply if the product has been damaged by accident, misuse, tampering or unauthorized repair.
To use the RT-A1655 laser detector:

1. Activate the laser detector by pressing its keypad Detector Power On/Off button. The laser detector emits a single beep, and icons appear in the LCD display.

2. Press the Detector Course/Fine Select button to cycle through the available modes:
   - Coarse resolution, Beeper on (default)
   - Coarse resolution, Beeper off
   - Fine resolution, Beeper on
   - Fine resolution, Beeper off
   - Special alignment mode, Beeper on

3. Center the beam by moving the laser detector in the direction of the arrow. The laser tool emits sounds to aid in locating the laser beam:
   - Continuous tone — Indicates that the laser detector is pointed directly toward the laser beam.
   - Rapid beep — Indicates that the laser detector is pointed too high or off-center in the opposite direction.
   - Slow beep — Indicates that the laser detector is pointed too far or off-center in the opposite direction. This can help you to determine the direction of the arrow.

4. To avoid damage and personal harm, do not attempt to open the laser tool. The laser tool contains internal moving parts.

5. Press the Power On/Off button to turn off the detector.

6. To use the storage compartment, slide the latch to open it and store additional laser tools inside.

7. Use the low-battery indicator icon to monitor the battery level. The low-battery indicator icon appears on the laser detector LCD display when 25 percent of battery life remains (approximately four hours). The icon continues to appear until the battery is replaced or fails.

8. Battery Replacement:
   - A battery pack is supplied with the laser detector, which is compatible with two "D" batteries. The laser detector is not equipped with a non-rechargeable battery.
   - To replace the batteries, open the compartment and remove the old battery pack. Install the new battery pack, and replace the compartment. The laser detector will be ready for use within seconds.

9. Applications:
   - The following applications illustrate the RT-A1655 laser detector:
     - Laser Beam Detector bar
     - Laser Detector Power-Off button
     - Laser Level detection
     - Laser Beam
     - Coarse Resolution
     - Fine Resolution

10. Specifications (RT-3620-2, RT-3620-2K):
    - Laser Tool:
      - Laser Power: 655 nm, 5 mW maximum
      - Field of View: 15° ±5° at 100 ft.
      - Laser Beam: 2.5 mm ±1° at 100 ft.
      - Laser Beam Diameter: 5 mm ±1° at 35 ft.
    - Laser Detector RT-A1655 (Included with RT-3620-2K):
      - Laser Detector Power-Off button
      - Laser Detector Orientation: The laser detector controls the RT-A1655 laser tool orientation.

11. Care and Maintenance:
    - This laser tool is a product of superior design and manufacture, and should be treated with care. The following guidelines will help maintain the product and fulfill warranty obligations:
      - Keep the laser tool, including parts and accessories, out of the reach of small children.
      - Do not store in dusty or dirty areas. Although the laser tool and laser detector are dust- and dirt-resistant, prolonged exposure to these elements may damage internal moving parts.
      - Keep dry. The laser tool and laser detector are water-resistant, however, prolonged exposure to high humidity and wet conditions may cause corrosion to the circuitry and may damage the LCD display.
    - This laser tool is a product of superior design and manufacture, and should be treated with care. The following guidelines will help maintain the product and fulfill warranty obligations:
      - Keep the laser tool, including parts and accessories, out of the reach of small children.
      - Do not store in dusty or dirty areas. Although the laser tool and laser detector are dust- and dirt-resistant, prolonged exposure to these elements may damage internal moving parts.
      - Keep dry. The laser tool and laser detector are water-resistant, however, prolonged exposure to high humidity and wet conditions may cause corrosion to the circuitry and may damage the LCD display.

12. Warranty Information:
    - This warranty is valid only for products that are not damaged by accident, neglect, misuse, or if the product is repaired, altered, or tampered with in any way. This warranty is void if the product has been damaged by accident, neglect, misuse, or if the product is repaired, altered, or tampered with in any way. This warranty is void if the laser tool warms to normal operating temperature, moisture can form inside the units and damage the circuit boards. This warranty is void if the laser tool warms to normal operating temperature, moisture can form inside the units and damage the circuit boards.
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1. Activate the laser detector by pressing its keypad Detector Power On/Off.

2. Press the Detector Course/Fine Select button to cycle through the available options:
   - Coarse Resolution, Beeper off
   - Fine Resolution, Beeper on (default)

3. Locate the laser beam using the red detector panel on the laser detector. As the laser beam is approached, a single arrow points in the beam's direction.

4. Beepers and warning lights are off high or off-center in the opposite direction.

5. Press the Detector Power On/Off button to turn off the detector.

6. Replace the 9V battery, ensuring that the polarity is correct, as shown in the diagram.

7. The laser detector battery compartment is located at the back of the unit. Open the compartment and replace the battery.

8. To use the RT-A1655 laser detector:
   - Use the laser detector whenever the detector is pointed too high or too low.
   - Do not store in hot areas above 158°F (70°C). High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.

9. Laser classification: Class IIIA

10. Power supply: Two "D" batteries (alkaline or non-alkaline)

11. Operating modes:
   - Scan mode: Manual, 360°

   - Laser output: 655 nm ± 5 nm maximum
   - Laser classification: Class II
   - Environment: Dust- and dirt-resistant
   - Temperature range (RT-3620-2, RT-3620-2K): -22°F to 158°F (-30°C to 70°C)
   - Storage: -4°F to 113°F (-20°C to 45°C)
   - Tripod mount: 5/8" x 11 thread
   - Dimensions: 6 in. x 4 in. x 5.5 in. (15.25 cm x 10 cm x 13.75 cm)

13. Care and Maintenance

14. Warranty Information

Toolz warranty is void if the product has been damaged by accident, abuse, misuse, or if the product has been altered, modified, or if the product has been damaged by accident, abuse, misuse, or if the product has been modified, altered, or the case opened, or is repaired by anyone other than Toolz or its authorized repair center(s). This Warranty is void and does not apply if the product has been damaged by accident, abuse, misuse, or if the product has been altered, modified, or if the case opened, or is repaired by anyone other than Toolz or its authorized repair center(s). Toolz makes no warranties, express or implied, including but not limited to any implied warranties of merchantability or fitness for a particular purpose, and Toolz disclaims all warranties not stated herein. Some jurisdictions do not allow limitations on how long an implied warranty lasts, so the above limitation or exclusion may not apply to you.

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Toolz shall in no event be liable for any lost profits, lost business, cost of replacement goods, or any consequential, incidental, indirect, special or punitive damages arising out of or in connection with any way to the Product's use or lack of use by the Purchaser. Toolz shall not be responsible for any damages whether or not based on contract, tort (including negligence and strict liability), product liability or otherwise. In no event shall Toolz be liable for any lost profits, lost business, cost of replacement goods, or any consequential, incidental, indirect, special or punitive damages, arising out of or relating in any way to the Product's use or lack of use by the Purchaser. Toolz shall not be responsible for any damages whether or not based on contract, tort (including negligence and strict liability), product liability or otherwise.

This laser tool is a product of superior design and manufacture, and should be treated with care. The following guidelines will help maintain the product and fulfill warranty obligations:

- Keep the laser tool, including parts and accessories, out of the reach of small children.
- Do not store in direct or dry areas. Although the laser tool and laser detector are dust- and dirt-resistant, long-term exposure to these elements may damage internal moving parts.
- Keep dry. The laser tool and laser detector are water-resistant, however, rapid beeps and lights that indicate moisture may enter the circuits may occur due to the unit. Do not attempt to dry the unit by means of fire or with an electrical dryer.
- Do not expose to above areas above 122°F (50°C). High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.
- Do not store in cold areas below -4°F (-20°C). When the laser tool and/or detector are cold, moisture may enter the unit. When the laser tool or detector warms to normal operating temperature, moisture can form inside the unit and damage the circuit boards.
- Do not use in the container while water is inside the container. Use a container to protect the laser tool or detector from water while in use.
- Do not drop, throw, or shake the laser tool and/or detector. Rough handling affects calibration accuracy.
- Periodically calibrate the laser tool to ensure calibration accuracy. (Refer to the user guide for calibration instructions.)
- To change the laser beam position from level to plumb, turn the laser tool until you have achieved the desired position.
- Do not store in hot areas above 158°F (70°C). High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.
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