RL Quick Installation Guide

1   Turn on the RL.
The unit is turned on and is initializing for about 10 seconds, during which the display remains blank.

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2   The version screen appears:
Model Type RL
FW Ver: Firmware version
HW Ver: Hardware version

```
Init. Please wait...
RL2000
FW Ver: 04.00.160
HW Ver: 020
```

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3   Main Menu appears automatically otherwise press E to enter the Main Menu.
Scroll to Basic Settings using the ⊟ key and press E.

```
Main Menu
→Basic Settings
 Output Settings
 Display setting
```

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4   Set the Distance Units.
Use the ⊞ and ⊟ keys to select the type.
Press E to select and move to next parameter.

```
Distance Unit
→m
 cm
 mm
```

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5   Set the Vessel Type.
Use the ⊞ and ⊟ keys to select the type.
Press E to move to the next parameter.
Go to Step **16** to configure Rectangular vessel.

```
Vessel Type
→Cylindrical
 Rectangular
```

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6   Set the Vessel Diameter.
Use the ⊟ key to switch between the digits. Use the ⊞ key to modify each digit.
Press E to move to next parameter.

```
Vessel Diameter
 10.000m
```

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7   Set the Scanner Height from vessel bottom
Use the ⊟ key to switch between the digits. Use the ⊞ key to modify each digit.
Press E to move to next parameter.

```
Scanner Height
20.000m
```

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8   Set the distance of the scanner from the vessel center.
Use the ⊟ key to switch between the digits. Use the ⊞ key to modify each digit.
Press E to move to next parameter.

```
Scanner Center Dist.
 00.000m
```

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9   Set the Full Calibration distance measured from the scanner position and defines the 100% (20mA output).
Use the ⊟ key to switch between the digits. Use the ⊞ key to modify each digit.
Press E to move to next parameter.

```
Full Calibration
 00.500m
```

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10   Set the Empty Calibration distance measured from the scanner position and defines the 0% (4mA output).
Use the ⊟ key to switch between the digits. Use the ⊞ key to modify each digit.
Press E to move to next parameter.

```
Empty Calibration
 20.000m
```

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11   Set the Process Condition
Use the ⊞ and ⊟ keys to select the type.
Press E to return to the main menu.
NOTE: *Always work with Standard Process Condition. For other conditions select accordingly*

```
Process Condition
 Slow
→Standard
 Fast
 Very Fast
```

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12   From the Main Menu screen scroll down to False Echoes Map using the ⊟ key and press E.

```
Main Menu
 Output Settings
 Display Setting
→False Echoes Map
```

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13   To perform false echoes mapping use the ⊞ and ⊟ keys to select the option Add to Map.
Press E to move to the next parameter.

```
False Echoes Map
 Reset
→Add To Map
```

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14   Set the False Echoes Mapping distance from scanner position up to 1m above material or silo bottom.
Use the ⊟ key to switch between the digits. Use the ⊞ key to modify each digit.
Press E to move to next parameter.

```
False Echoes Range
 00.000m
```

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15   To confirm false echoes mapping operation select the Yes option and press E
Press E to move to next parameter.

```
Approve Mapping
→Yes
 No
```

Step	Instruction	Display
16	Set the Vessel Type. Use the ⊞ and ⊟ keys to select the type. Press Ⓔ to move to the next parameter.	```Vessel Type Cylindrical →Rectangular```
17	Set the Vessel Width (X). Use the ⊟ key to switch between the digits. Use the ⊞ key to modify each digit. Press Ⓔ to move to next parameter.	```Vessel X Size 10.000m```
18	Set the Vessel Length (Y). Use the ⊟ key to switch between the digits. Use the ⊞ key to modify each digit. Press Ⓔ to move to next parameter.	```Vessel Y Size 10.000m```
19	Set the Scanner Height from vessel bottom. Use the ⊟ key to switch between the digits. Use the ⊞ key to modify each digit. Press Ⓔ to move to next parameter.	```Scanner Height 20.000m```
20	Set the distance of the scanner from the vessel center on the Width axis. Use the ⊟ key to switch between the digits. Use the ⊞ key to modify each digit. Press Ⓔ to move to next parameter. *Note: Scanner X Position cannot be bigger than Half the Vessel X Size*	```Scanner X Position +00.000m```
21	Set the distance of the scanner from the vessel center on the Length axis. Use the ⊟ key to switch between the digits. Use the ⊞ key to modify each digit. Press Ⓔ to move to next parameter. Go back to step ⑨ *Note: Scanner Y Position cannot be bigger than Half the Vessel Y Size*	```Scanner Y Position +00.000m```

Cylinder

Rectangular