

2D LiDAR Bank Setting Software

# OForge User Manual

This manual is applicable to LR-1B、LR-1BS

Please read this user manual for best product performance before using the product. Be sure to keep this manual properly for future reference.

OFOMEN-1B/1BS-202012

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## **1. Software Installation**

Software operating environment:

- Windows 7, Windows 8 or Windows 10
- No less than 2G memory capacity
- At least 100M free hard disk space

Points for attention:

1. The Windows OS firewall must authorize the UDP communication of Oforge

2. Ensure that the installation path is in English characters, Avoid software adaptation failures caused by non ASCII characters

#### 2. Network Configuration

The communication between LiDAR and computer adopts Ethernet medium; Using UDP protocol; The factory default is static IP and port.

Basic communication parameters:

LiDAR IP	192.168.1.100(default)	Allow editing
Host IP	192.168.1.10(default)	Allow editing
Host Port	2368(default)	Allow editing
Netmask	255.255.255.0	Allow editing
Gateway	192.168.1.1	Allow editing



## 3. Software interface



## 3.1. Menu composition and menu options

File					
OpenMaskFile	Open the "Bank Mask File" of the LiDAR				
SaveMaskFile	Save the "Bank Mask File" of local disk				
Device Select LiDAR device model					
Add	Add new LiDAR device model				
Remove	Remove LiDAR device model				
LiDAR-1, LiDAR-2, LiDAR-3, Preinstall LiDAR model					
Tools					
Editing Table	Show the data table currently being editing				
BankInfo	Show the Bank info				
LiDARInfo	LiDAR basic information				
LiDARParameter	LiDAR Parameter , After modifying the IP, you need to restart				
	the LiDAR to take effect				
LiDARIPdiscover	Get the IP address of the initialization LiDAR. Firmware suppor				
	is required.				
Help					
About	About software version				
Language	Switch language				

## 4. Software usage

### 4.1. Connect the LiDAR

- 1. Select the local network adapter connected to the LiDAR
- 2. Click "connect"

Tree						
Mask	Message ^					
Bank_0						
>  Field_0	Warn					
>	Alert					
Laser transmitter						
Bank_2						
Bank_3						
Bank_4						
Bank_5						
Bank 7						
Bank 8						
Bank_9	~					
Lidar Info	2 ອ່ງ					
Pad 1						
4						
Interface	Connect					
Realtek PCIe G	BE Family Controller 🛛 🗸 🗸 🗸 🗸 🗸 🗸					

#### 4.2. Define Bank collision avoidance area

LiDAR can define 16 Bank records. Using one of 16 default field sets, each with 3 predefined field. Which can be actived by checking.

1. How to create a Bank records

Select a Bank, Right-click on field will shown below; In the right-click menu, select the new Bank field graphic style.

r reactime a graphie styles.			
Polygonfix	A polygon fixed starting point is the LiDAR origin		
Circolar Sector	A Circolar Sector fixed starting point is the LiDAR origin		
Rectangular	A Rectangula fixed starting point is the LiDAR origin		
Polygon	Freeform polygon with unlimited start point		

Predefined area graphic styles:





#### 2. Edit Bank field graphic style

Any Bank field graphic style has several field points and connected lines. Drag and drop field points to change the size, shape and location of the graph.

1) Double click on the line to add an field point

2) Right click "Remove handle" on the field point -- delete the point

3) In the "**DataView**" view on the right, the specific values of all current anchor points are displayed. Double click the record to fine tune the values

ata\	√iew				8	×			
Ма	ask								
	AddPoint			RemovePoint			14000		
	ZonelD	X(mm)	Y(mm)	R(mm)	A(°)		14000	1	
1	B0F0Z0	2000.0	0.0	2000.0	0.0				
2	B0F0Z0	2000.0	2000.0	2828.427	45.0		12000		
3	B0F0Z0	-2000.0	2000.0	2828.427	135.0				
4	B0F0Z0	-2000.0	0.0	2000.0	180.0				
							10000		
	Poygon Point Editor						? X		
Edit Point Coordinates									
	Cartesian V (mm)						Y(mm)		
2000.00				•	2000.00	•			
	Calculated			2000.00 ≑		-	2000.00	<b></b>	-
				Apply			Can	cel	
_									

## 4.3. Introduction of LiDAR Info interface

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Pad						
🗌 Manual 🛛		~	Ren	nove		
	192.168.1.1	0	2368	-		
Realtek USB F	E Family Co	ontroller v	Con	nect		
Selected Bank		0		•		
StatusNow		✓ Warn				
		Alert				
		🗹 Alarm				
		Error				
				0%		
Downl	oad	BuildBing	ding			
LiveGraph		Scatter		$\sim$		
Clea	ar	Up	load			

1. Selected Bank

Displays the Bank field area number currently in effect.

2. StatusNow

Displays the status of the security level area in effect

3. Download

Download the currently set Bank area graphic style to the LiDAR internal memory

4. BuildBinding

When downloading, build the basic data of the Bank area

5. LiveGraph

Display of point cloud style in real time (scatter, curve, curve fill, curve surround)



#### 6. Upload

Upload the graphic data of Bank area in the internal memory of LiDAR to the Oforge interface for display.



Official WeChat

#### Regarding changes in specifications, etc., without notice! Hangzhou Ole-systems Co., Ltd.



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