

# Set VLP-16

VLP-16 3개 파싱하기.

VLP-16 3개는 이더넷 허브를 통해 pc와 연결.

## 1. LiDAR 1개씩 ip 설정필요.

허브에 LiDAR\_1만 연결 후 pc에서 고정 ip설정

[Ex]

ip : 192.168.1.100

subnetmask : 255.255.255.0

gateway : 192.168.1.1

## 2. velodyne web에서 센서 ip 및 센서 포트 설정

192.168.1.201 접속

The screenshot shows the Velodyne LiDAR web interface. At the top, it displays the 'Velodyne® LiDAR' logo. Below the logo, there are fields for 'Sensor Model: VLP-16', 'S/N: AG12515553', 'MAC: 60-76-88-10-3c-c1', and 'Factory MAC: 60-76-88-10-3c-c1'. A navigation bar contains tabs for 'Configuration', 'System', 'Info', and 'Diagnostics'. The 'Configuration' tab is active, showing a 'VLP-16 USER INTERFACE' section. This section includes a 'Phase Lock' toggle set to 'Off' with an 'Offset' of 0. Below this is the 'Host (Destination)' section with fields for 'IP Address: 192.168.1.100', 'Data Port: 2369', and 'Telemetry Port: 8309'. The 'Network (Sensor)' section has a 'DHCP' toggle set to 'Off' and fields for 'IP Address: 192.168.1.202', 'Mask: 255.255.255.0', 'Gateway: 192.168.1.1', and 'MAC Address: 60-76-88-10-3c-c1'. At the bottom of the configuration section are buttons for 'Download Snapshot' and 'Save Configuration'. A status section at the very bottom shows 'GPS Position' as 'Absent', 'Motor State' as 'On', 'RPM' as 599, 'Lock' as 'Off', 'Phase' as 238.99, and 'Laser State' as 'On'.

[Host(Destination)]

IP Address : 설정한 이더넷 ip(192.168.1.100)

Data Port : LiDAR 3개가 서로 달라야 함

Telemetry Port : LiDAR 3개가 서로 달라야 함

[Network (Sensor)]

IP Address : 센서 ip(192.168.1.x로 설정하며 x는 201 제외 2-250까지 설정 가능)

여기서는 192.168.1.202로 설정함

라이다 3개 각각 다르게 설정해야함

Mask : 255.255.255.0(앞서 pc에서 연결한 정보와 동일)

Gateway : 192.168.1.1(앞서 pc에서 연결한 정보와 동일)

!! 정보 바꾼 후에는 Set 버튼과 Save Configuration 버튼을 눌러서 반드시 저장 !!

나머지 LiDAR 2개도 위와 같이 설정.

# Velodyne® LiDAR

Sensor Model: VLP-16 S/N: AH01521198 MAC: 60-76-88-10-52-ce Factory MAC: 60-76-88-10-52-ce

VLP-16 USER INTERFACE

Configuration System Info Diagnostics

Require GPS receiver valid. ☐ On ☒ Off

Phase Lock ☐ On ☒ Off Offset: 0 + - Set

Host (Destination)

IP Address: 192.168.1.100 Data Port: 2370 Telemetry Port: 8310 Set

Network (Sensor)

DHCP: ☐ On ☒ Off

IP Address: 192.168.1.203 Mask: 255.255.255.0 Gateway: 192.168.1.1

MAC Address: 60-76-88-10-52-ce Set

Download Snapshot Save Configuration

GPS Position: ☐ PPS: Absent

Motor State: On RPM: 601 Lock: Off Phase: 230.71

Laser State: On

Velodyne® LiDAR

# Velodyne® LiDAR

Sensor Model: VLP-16 S/N: AG30020570 MAC: 60-76-88-10-50-5a

VLP-16 USER INTERFACE

Configuration System Info Diagnostics

Laser: ☒ On ☐ Off

Return Type: Strongest

Motor RPM: 600 + - Set

FOV Start: 0 + - End: 359 + - Set

Phase Lock ☐ On ☒ Off Offset: 0 + - Set

Host (Destination) IP: 192.168.1.100 Data Port: 2371 Telemetry Port: 8311 Set

Network (Sensor) IP: 192.168.1.204 Mask: 255.255.255.0 Gateway: 192.168.1.1 DHCP: ☐ On ☒ Off Set

Save Configuration

Download Snapshot

GPS Position: ☐ PPS: Absent

Motor State: On RPM: 600 Lock: Off Phase: 0

Laser State: On

Velodyne® LiDAR

!! 모두 설정한 후 다시 각 센서별로 velodyne web에 접속 시,

센서별로 설정한 ip로 접속해야함

(센서 ip를 192.168.1.200으로 설정했다면 192.168.1.200으로 접속해야 velodyne web 접속 가능)

## Reference

Velodyne 공식 문서(63-9243-Rev-E-VLP-16-User-Manual) 139p.

