

# KM-Router Quick Manual

## 1. INTRODUCTION

KM-Router is a WIFI and Ethernet router designed to be used onboard a boat, which has 1 WAN port, 4 LAN ports, 1 serial port and 1 WIFI port. Wide input supply voltage from 10.5VDC to 32VDC and can be suitable to use with any kind of vessel. Aside from providing all functions similar to your home router, KM-Router also converts serial signal to network signal.



## 2. VERIFYING THE CONTENTS

When you first open the box of your KM-router please confirm you have the following items inside the box:

- KM-router main unit
- WIFI antenna x 1
- Power cable (2 meters) x 1
- Ethernet cable with 2 ends RJ45 connector (1 meter) x 1
- Manual x 1

## 3. INSTRUCTION:

- Connect the KM Router to DC power (10.5VDC to 32VDC)
- Switch ON the KM-router.
- Once switched ON, the power indicator lights up.
- Wait until the WIFI indicator lights up
- You can now connect your device to the KM-Router Network. The default SSID and password can be found in the serial number label of the KM-Router:

**SSID:** KM-Router-(serial number)

**PASSWORD:** 12345678

### Changing the SSID and Password:

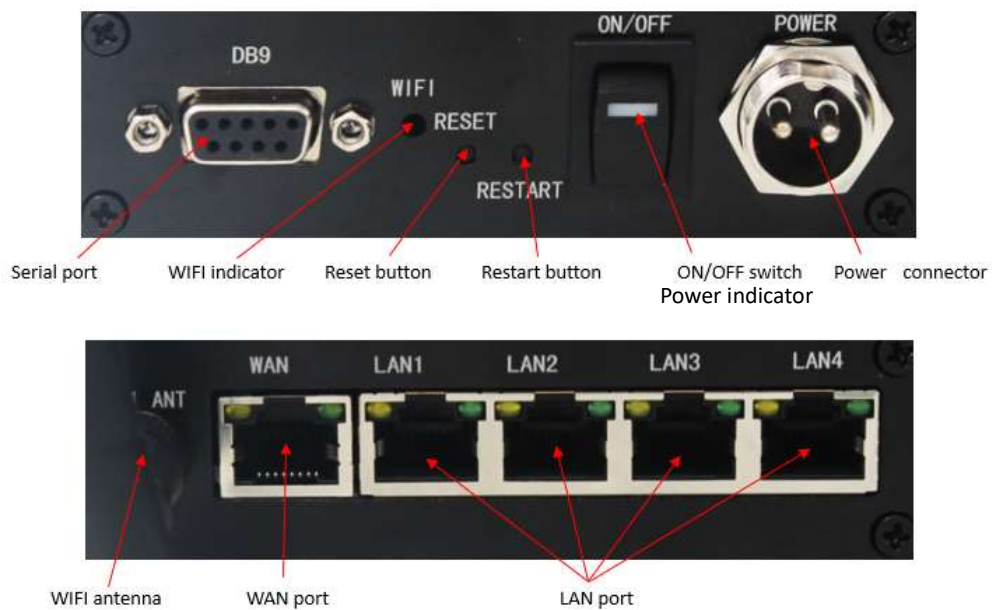
In case you want to change the SSID and password:

- Connect a PC to any LAN port of the KM-Router
- Open a web browser and access the management configuration page: **http:// 223.168.1.253**  
**Default login ID:** admin  
**Default login password:** admin

Settings		Network	Serial 0	Serial 1
	<b>Current</b>	<b>Updated</b>		
Network Mode	Default	Default ▾		
IP Type	DHCP	DHCP ▾		
AP Enable	Enable	Enable ▾		
AP SSID	KM-ROUTER-00001	KM-ROUTER-00001		
AP EncType	WPA2AES	WPA2AES ▾		
AP Passwd	12345678	12345678		
LAN IP Addr	223.168.1.253	223.168.1.253		
LAN Mask	255.255.255.0	255.255.255.0		
DHCP Server	Enable	Enable ▾		

c. Change the new SSID and new password and click on APPLY.

#### 4. PANEL DESCRIPTION



#### Note:

1. Once you press the Reset button, you need to connect KM-router to a PC to set the LAN IP Address again:

Default settings after reset: <http://192.168.16.254>,

Username : admin

Password : admin

2. For high level user, such as to configure serial port baudrate and working modes, please visit Onwa Marine website

<http://www.onwamarine.com>

## 5. PARAMETERS

Network standard	Wireless standard: IEEE 802.11n、IEEE 802.11g、IEEE 802.11b	
	Wired standard: IEEE 802.3、IEEE 802.3u	
Wireless transmission rate	11n: Max 150 Mbps	
	11g: Max 54 Mbps	
	11b: Max 11Mbps	
Channels	1-14	
Frequency range	2.4-2.4835G	
Transmit power	12-15dBm	
Receiver Sensitivity	-70dB	
Connector	1WAN\4LAN\UART	
Antenna type	External antenna (IPEX)	
<b>Function parameter</b>		
WIFI working mode	STA/AP/Wireless Router	
Repeater mode	Support wireless bridge	
Wireless security	Wireless MAC address filtering	
	Wireless switch security function	
	64/128/152bit WEP encryption	
	WPA-PSK/WPA2-PSK、WPA-TKIP/WPA2-TKIP security mechanism	
Network management	Web interface management	
	Configure file lead-in/out	
	WEB interface software upgrade	
<b>UART to network</b>		
TCP socket connection	Max connection number >20	
UDP socket connection	Max connection number >20	
Serial baud rate	1200—2500000bps (2500000/n 1<=n<=65535)	
<b>Power consumption</b>		
MODE	P C ( m W )	NOTE
UART TO WIFI	110mA x 5V	AP or STA (all the net ports closed)
UART TO ETH	70mA x 5V	works only in WAN
Gateway mode (default mode)	160mA x 5V	WIFI both WIFI and five NET ports work
Repeater mode (bridge mode)	160mA x 5V	WIFI both WIFI and five NET ports work

## 6. SPECIFICATIONS

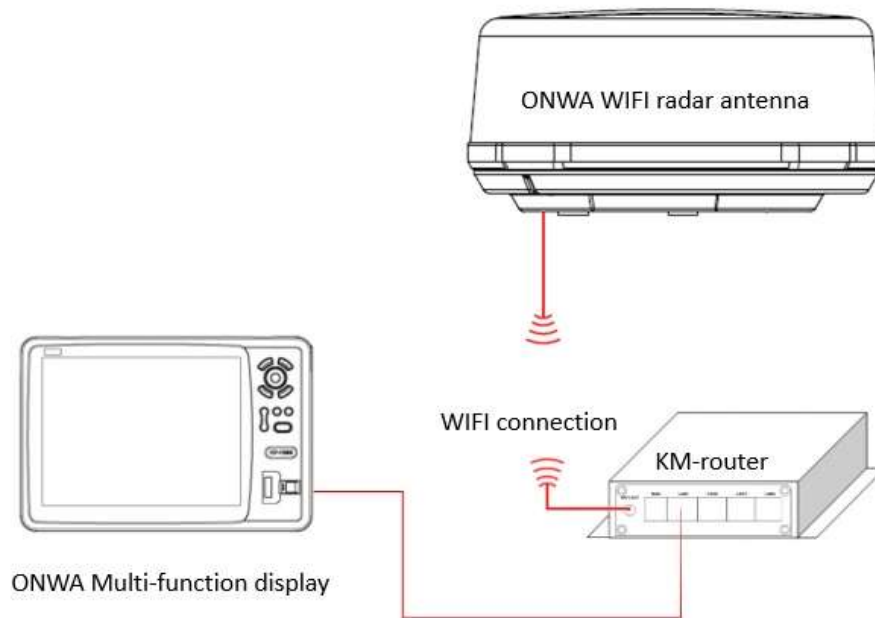
- High data processing ability, MCU frequency 580MHz
- 150M Mbps
- Support 802.11b/g/n mode
- 20/40 channel bandwidth
- Support 802.11v
- Support AP,STA and AP,STA mixed
- Fifth 10/100M adaptive com port
- Inbuilt powerful PMU
- Support 16 Multiple BSSID
- Support multiple encryption WEP64/128, TKIP, AES, WPA, WPA2, WAPI
- Support QoS, WMM, WMM-PS
- Power supply : 10.5 – 32VDC, max. 50ma at 12VDC

- Working temperature: -20°C - +65°C
- Humidity: 90% +/-3% at 40°C
- Waterproof: IPX2

## 7. SAMPLE CONNECTIONS:

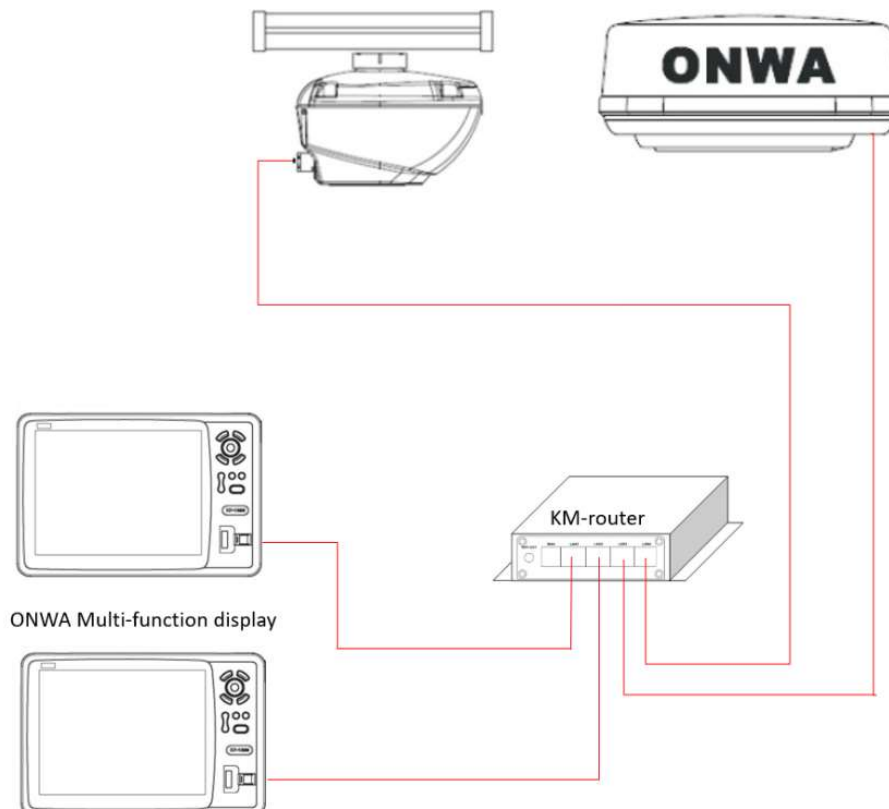
### Example 1

Connect Onwa Multi-function display with Onwa WIFI radar antenna



### Example 2

Connect Onwa Multi-function displays with ONWA Radar antennas



## 8. Dimensions

