

Kvaser Blackbird 黑鸟



Quick Network Setup Guide (AdHoc Mode)

快速网络安装指南

(点对点模式)

Things you should know before you start:

- This document is only prepared and suitable for Kvaser Blackbird HS/HS 00453-5 and Kvaser Blackbird HS 00441-2
- Please make sure you have the latest driver installed and firmware upgrade into the interface
- For downloading the latest driver, firmware, software...etc., Please visit <u>http://www.kvaser.com/en/downloads.html</u>

使用前须知:

- 本指南只适用于 Kvaser Blackbird HS/HS 00453-5 与 Kvaser Blackbird HS 00441-2
- 使用前,请确保您已经安装最新的驱动以及更新产品固件
- 获取最新的产品驱动以及固件…等.,
 请浏览 <u>http://www.kvaser.com/en/downloads.html</u>



Step 1 第一步



Figure 1.1

- 安装 Kvaser 产品驱动, 用户可以使用安装 盘里面的驱动或者从网站下载最新版本 <u>http://www.kvaser.com/en/downloads.html</u>

- 驱动安装完毕后, 重启电脑, 然后从电脑的 USB 接口里插入 Kvaser Blackbird.

- 驱动安装完成后, Kvaser 硬件专用配置软 件"Kvaser Hardware Configuration"会安装在视 窗开始功能键的文件夹里面

打开"Kvaser Hardware Configuration"

- Install the Kvaser Device Driver either from the CD of the package or download the latest from <u>http://www.kvaser.com/en/downloads</u> .html
- After installation of the driver, restart the computer and then plug in your Kvaser Blackbird to the available USB port from your PC.

🕵 Kvaser Hardware		_ D _ X
Devices Channel Info Synchronization	Diagnostics Global Settings Tools About	
Hardware Hardware Kwaser Bladdird SemiPro 3 Kwaser Bladdird SemiPro 3 Kwaser Virtual CAN Driver 1	Ch. Card Ch. Device Name 0 1 Kvaser BladdBird SemiPro 1 2 Kvaser BladdBird SemiPro	Transceiver 82C251 82C251
Press F5 to refresh. ESC to exit. Press F1 f	or Help.	

Figure 1.2

- The "Kvaser Hardware Configuration" Tool should be available in Windows Start Menu
- Open "Kvaser Hardware Configuration" Tool



Step 2 第二步

Kvaser Hardware	Cohina a Kuranan Plank Bind
Devices Channel Info Synchronization Diagnostics Global Settings Tools About	Setup a Kvaser BlackBird
Setup a Kvaser BlackBird	Setup Setup y encryp
Select Kvaser BladBird From the Network Select Search for Kvaser BladBird on the network and select devices to use.	
Network Enumeration Service The service is running. The service starts automatically. Start Stop Auto Manual	
Customer Data Data Handle customer data in devices that support it.	
WASER Dress 55 to refer h est the est F1 for Melo	
Press F5 to refresh. ESC to exit. Press F1 for Help.	

Figure 2.1

- 确认 Kvaser Blackbird 成功安装并显示在"Kvaser Hardware Configuration"后,点击"Tools"
 标签.在第一个选项"Setup a Kvaser Blackbird"内按下功能按钮"Setup..."
- 新窗口会打开并且选择您需要配置的 Kvaser Blackbird, 然后开始进行网络参数配置.



Figure 2.2

- Make sure Kvaser Blackbird is successfully installed, detected and displayed by the "Kvaser Hardware Configuration" Tool. Click the "Tools" tab page. In the first options of "Setup a Kvaser Blackbird", click the "Setup" button
- A new configuration windows will pop up, user has to choose the Kvaser Blackbird to be configured.



Step 3 第三步

	😸 Kvaser Wireless Configuration	
	Status Configuration Security Network Accessibility Settings Info	
<u>alackoiro</u>	Configuration Settings	
🕼 Kvaser Hardware	1 SSID Kvaser_BB	X
Devices Channel I	2 Operational Mode AdHoc 🕶	
Setup a Kvaser	3 Channel Search All Channels	
Setup	1	
– Select Kvaser E	4 Geographical Region* China (MII) ▼	
Select	Browse Networks	
Network Enume	Reset all Settings	
The service is The service s	WARNING: Resetting will remove all Reset device settings permanently.	
Customer Data	* It might not be legal to select a different region than the region of operation. If your country isn't listed in the combobox, plase check with your local government.	
KVASER		
Press F5 to refresh.	V OK Cancel Apply	11
	Not connected	

Figure 3.1

- 在无线配置视窗内,选择 "Configuration" 标签,并配置/输入一下几项参数
- 1. SSID KvaserBlackbird 在无线广播时候所用的网名(图例为:Kvaser_BB)
- 2. Operation Mode 连接方式(图例为: AdHoc)
- 3. Channel 无线频道(图例为: 1)
- 4. Geographical Region (图例为:中国)
- In wireless configuration window, select "Configuration" tab page then input the followings parameters
- 1. SSID The wireless network name to be used(Example: Kvaser_BB)
- 2. Operation Mode connection type(Example: AdHoc)
- 3. Channel (Example: 1)
- 4. Geographical Region (Example: China)

Reenter the passphrase:

Generate keys for ...

WEP

SSID:

The WPA and WPA2 keys are based on the SSID.

The passphrase is used to generate keys for these encryption modes:

🗸 ок

VPA

WPA2

X Cancel

Step 4 第四步

Nackbird	Status Configuration Security Network Accessibility Settings Info Encryption Encryption Mode Open	Encryption Mode	Open Open WEP (64-bit)
Devices Channel I Setup a Kvaser Setup	NEP (64b) WEP (124b) WEP (234b) WEP Xeys WEP Xeys	WEP Keys	WEP (128-bit) WPA-PSK WPA2-PSK
Select Kvaser E Select Network Enume The service is The service s Start	Expanded WPA1Key Expanded WPA2Key		Passobrase
Customer Data	Easphrase Authentication Authentication Open system •		
Press F5 to refresh.	Not connected	ure4.1	Generate keys
	Fig	ure4.1	Enter a passphrase to generate the keys:

- 选择 "Secutiry" 标签, 配置所需要的无线信号加密方式.
- 用户选择"Open"的时候,则代表这是一个开放式的无线网络.
- 当配置 WEP 或者 WPA 密码的时候,用户可以选择直接输入"
 钥匙(Key)",或者通过"Passphrase"按钮直接输入口令,它将
 会自动生成用户所需要的"钥匙".
 - Select "Security" tab page in order to configure security encryption for the wireless radio.
- When you select ""Open", which mean this is an open network for the radio link.
- If you configure WEP or WPA encryption, you can enter the encryption key directly or using the "Passphrase" to generate a key.

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Step 5 第五步

	😹 Kvaser Wireless C	onfiguration				- 0 ×	
N.	Status Configura	ation Security	Network	Accessib	ility Setting	gs <mark>Inf</mark> o	
lackbird	Network Settir	ngs					
Kvaser Hardware	O Use DHCP						1 X
Devices Channel I	Use Static	: IP					
Setup a Kvaser	Blackbird IP	19	92 · 168	• 1	· 20		
Setup	Mask	25	55 · 255	· 255	• 0		
Select Kvaser E	PC Gatew	ay 19	92 · 168	• 1	· 21		
Select							
Network Enume	Device Name						
The service is	Device Name	Kvaser Wir	eless #1006	5			
The service s							
Start							
Customer Data							
Data							
KVASER							
Press F5 to refresh.			✓ c	ж	× Cancel	Apply	
	Connecting						

Figure 5.1

- 选择"Network"标签, 配置所需要的 IP 地址.
- 当点对点配置的时候,建议用户输入固定 IP 地址(Static IP)
- IP 地址为 Blackbird 自身所用的地址(图例: 192.168.1.20)
- 输入子网(图例为: 255.255.255.0)
- Gateway 地址为您需要连接的电脑的 IP 地址(图例 192.168.1.21)
- IP 地址配置完成以后, 点击网络配置视窗右下方的"Apply"按钮, 把配置参数写入 Blackbird.
- 写入完成以后,可以点击"OK"把网络配置视窗关闭.
- Select "Network" tab page. Configure the IP address.
- We suggest you use a static IP for AdHoc Mode configuration
- IP address for Blackbird e.g. 192.168.1.20
- Subnet Mask for the network e.g. 255.255.255.0
- Gateway's IP address will be used by the PC that connect with Blackbird e.g. 192.168.1.21
- Click "Apply" Button to complete the configuration then "OK" Button to close the windows.
- Configuration on the Kvaser Blackbird is completed.

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Step 6 第六步

	male	
	CAN_GND CAN_L (CAN_	SHLD)
	(GND) CAN_ CAN_H	V+
Pin	Signal	Description
1	-	Reserved
2	CAN_L	CAN_L bus line (dominant low)
3	CAN_GND	CAN Ground
4	-	Reserved
5	(CAN_SHLD)	Optional CAN Shield
6	(GND)	Optional Ground

7	CAN_H	CAN_H bus line (dominant high)
8	-	Reserved
9	(CAN_V+)	Optional CAN external positive supply (dedicated for supply of transceiver and opto-couplers, if galvanic isolation of the bus node applies)

Figure 6.1

- Blackbird 的网络配置设定已经完成, 您可以把 Blackbird 从电脑拿走, 进行下一步的配置.
- 注意 Blackbird 是需要通过外部供电才能独立工作的. -

- 7-40V 之间的直流电源必须连接在通道 1(Channel 1) 的 DSUB-9 接头内. 详细的针脚安排 _ 请参考图例 6.1
- Once the configuration for Kvaser Blackbird is completed, you may now unplug the interface from the PC for the next step of wireless pairing.
- Please note that Kvaser Blackbird requires external power supply.
- A 7-40V DC power supply has to be connected to the DSUB-9 connector on Channel 1. _ Please look at the figure 6.1 for the pin out of the connector



Step 7 第七步



- 当 Kvaser Blackbird 上电以后, Blackbird 的无 线功能马上能够工作.

- 这个时候您可以在电脑上搜寻 Blackbird 无线网 络, 并且直接连接

- Once the Kvaser Blackbird has been powered on. Wireless network is available.

- You may now use your PC to search for the Blackbird wireless network and connect straight away.

- 连接以后,马上在无线网络上点击鼠标右键打开无线网络的状态(Status),进行下一步电脑 端的 IP 地址配置
- Once the wireless network has been connected, right click on the Blackbird wireless network and open the 'Status" of it.



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Step 8 第八步

- 在无线网卡的状态表里面,点击"properties"打开无线网卡属性,并且双击 IPv4 选项,修改 IP 地址
- 电脑的 IP 地址为(图例: 192.168.1.21)
- 输入子网(图例为: 255.255.255.0)
- Gateway 为之前给 Blackbird 配置的 IP 地址(图例 192.168.1.20)
- Open the properties of the wireless network connection, and then choose IPv4 for configuration.
- The IP address for PC e.g. 192168.1.21
- Subnet mask e.g. 255.255.255.0
- The gateway is the IP address which previously set for Blackbird e.g. 192.168.1.20

aff] Wireless Network Connectio	n Status	Wireless Network Connection Properties
General		Networking Sharing
Constant		Connect using:
IPv4 Connectivity:	No Internet access	Atheros AB9285 Wireless Network Adapter
IPv6 Connectivity:	No Internet access	
Media State:	Enabled	Configure
SSID:	Kvaser_BB	This connection uses the following items:
Duration:	01:21:05	Client for Microsoft Networks
Speed:	11.0 Mbps	🗹 📮 Eset Personal Firewall
Signal Quality:	lite	QoS Packet Scheduler
Details		He and Printer Sharing for Microsoft Networks
		✓ Internet Protocol Version 4 (TCP/IPv4)
Activity		🗹 🔺 Link-Layer Topology Discovery Mapper I/O Driver
Sent —	- Received	🗹 🛥 Link-Later Topology Discovery Responder
		Install Uninstall Properties
Bytes: 19,09	98 27,048	Description
		Allows you computer to access resources on a Microsoft
😗 Properties 🛛 😗 Disable	Diagnose	network.
	Close	
		OK Cancel
ſ	General) Properties
	You can get IP settings assigned aut this capability. Otherwise, you need for the appropriate IP settings.	omatically if your network supports to ask your network administrator
	Obtain an IP address automatic	ally
	Output Use the following IP address: —	
	IP address:	192 . 168 . 1 . 21
	Subnet mask:	255 . 255 . 255 . 0
	Default gateway:	192 . 168 . 1 . 20
	Obtain DNS server address aut	omatically
	Output the following DNS server ad	ldresses:
	Preferred DNS server:	
	Alternate DNS server:	
	Validate settings upon exit	Advanced
		OK Cancel

Figure 8.1



Step 9 第九步

- 电脑的 IP 地址成功配置以后, 重新打开"Kvaser Hardware Configuration"软件(参考第一步) 并点击"Tools"标签(参考第二步)
- 在第二个选项"Select Kvaser Blackbird from the network" 内按下功能按钮"Select..."
- Once the IP address is successfully configured for the PC. Reopen the "Kvaser Hardware Configuration" Tool(See step 1 above) and select the "Tools" tab page(See step 2 above)
- On the second options "Select Kvaser Blackbird from the network", click the "Select..." button.

Devices Channel Info Synchronization Diagnostics Global Settings Tools About	Select Kvaser Blac	kBird From the Network
Setup enviseer becarra Setup	Select	Search for Kvaser Bla
Select Kvaser Biod&rd From the Network Select		select devices to use.
Network Enumeration Service The service is numing.		
The service starts automatically. Start Stop Auto Manual		
Customer Data Thank Handle nuttherer data in devices that surgery it is		
NASER		
ess F5 to refresh. ESC to exit. Press F1 for Help.		



- 新的窗口"Kvaser Network Device Selector"会弹出, 连接在 PC 的 Blackbird 无线网络会被显示, 如果没有, 请点击左上角的刷新按钮"Refresh List"
- A new window of "Kvaser Network Device Selector" will be popped up. Current available Blackbird wireless connection will be shown, if not, press the "Refresh List" Button

lefresh list	Connect	Add	Edit	Remove	Networks	? Help			
Name				Device EAN	Serial Number	Status	IP Address	Connect	In Use
💒 Kvase	r Wireless #10	0065	000733	0130004535	10065	Alive	192.168.1.20		Free
	free.								
Device is		auired. Firmw	are V2.08.8	320.					
Device is Public, no	password re								
Device is Public, no Service: 3	o password re State=12 (ST/	ANDBY)							
Device is Public, no Service: 3	o password re State=12 <mark>(</mark> ST/	ANDBY)					ſ	(

Figure 9.2



Step 10 第十步

- maser	Network Device	Selector							
⊈5 Refresh list	Connect	Add	Edit	Remove	Antworks	? Help			
Name				Device EAN	Serial Number	Status	IP Address	Connect	In Use
Kvaser	Wireless #1006	5	0007330	130004535	10065	Alive	192.168.1.20	Yes	Free
Device is	free.								
Device is Public, no	free.	ed. Firmwa	are V2.08.8	20.					
Device is Public, no Service: S	free. password requir State=6 (CONNEC	ed. Firmwa CTION UP)	are V2.08.8	20.					
Device is Public, no Service: S	free. password requir State=6 (CONNEC	ed. Firmwa CTION UP)	are V2.08.8	20.					
Device is Public, no Service: S	free. password requir State=6 (CONNEC	ed. Firmwa CTION UP)	are V2.08.8	20.			(√ ОК	Cancel

Figure 10.1

- 选择一连接的 Blackbird 无线网络并且点击上面的连接按钮"Connect"
- 恭喜您, 所有点安装步骤已经完成, 您可以返回"Kvaser Hardware Configuration"软件的主 菜单上, 点击"Device"标签, 并发现 Kvaser Blackbird 已经连接并显示为(remote),
- Select a wireless connected Blackbird then click the "Connect" button above
- Go back to the main windows of "Kvaser Hardware Configuration" and select the "Device" tab page. You will find the Kvaser Blackbird has become a "Remote" device.

Kvaser Hardware						
Devices Channel Info Synchronization	Diagnost	ics Glob	oal Settings	Tools	About	
▲ · 盐 Hardware	Ch. C	Card Ch.	Device Nar	ne		Transceiver
Image: Waser Statuting (vemote) Image: Statuting (vemote) <th>0 1</th> <th>1 2</th> <th>Kvaser Bla</th> <th>ckBird (Re</th> <th>emote) emote)</th> <th>82C251 82C251</th>	0 1	1 2	Kvaser Bla	ckBird (Re	emote) emote)	82C251 82C251
KVASER						
Press F5 to refresh. ESC to exit. Press F1	for Help.					

Figure 10.2