Digital USB Driver
Installation Guide

Version: R5.0
Release Date: 11-2012
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Documentation Information

This section describes the conventions and revision history of this document.

Documentation Conventions

Instructional Icons

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
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<tbody>
<tr>
<td>Tip</td>
<td>Indicates information that can help you make better use of your product.</td>
</tr>
<tr>
<td>Note</td>
<td>Indicates references that can further describe the related topics.</td>
</tr>
<tr>
<td>Caution</td>
<td>Indicates situations that could cause data loss or equipment damage.</td>
</tr>
<tr>
<td>Warning</td>
<td>Indicates situations that could cause minor personal injury.</td>
</tr>
<tr>
<td>Danger</td>
<td>Indicates situations that could cause major personal injury or even death.</td>
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Notational Conventions

<table>
<thead>
<tr>
<th>Convention</th>
<th>Description</th>
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<tbody>
<tr>
<td>“ ”</td>
<td>The quotation marks enclose the name of a software interface element. For example, click “OK”.</td>
</tr>
<tr>
<td>Bold</td>
<td>The text in boldface denotes the name of a hardware button. For example, press the PTT key.</td>
</tr>
<tr>
<td>-&gt;</td>
<td>The symbol directs you to access a multi-level menu. For example, to select “New” from the “File” menu, we will describe it as follows: File -&gt; New.</td>
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Revision History

<table>
<thead>
<tr>
<th>Version</th>
<th>Release Date</th>
<th>Description</th>
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<tbody>
<tr>
<td>R5.0</td>
<td>11-2012</td>
<td>Updated the USB driver program, installation and loading process.</td>
</tr>
<tr>
<td>R3.0</td>
<td>05-2012</td>
<td>Updated the document template.</td>
</tr>
<tr>
<td>R1.0</td>
<td>06-2011</td>
<td>Initial release</td>
</tr>
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</table>
1. Overview

1.1 Purpose

This manual guides user how to install and uninstall Digital USB driver.

1.2 Scope

The new USB driver is suitable for the user groups as below: Dispatcher user: As this new USB driver has improved performance in radio dispatching of PC, it is suitable for third party developers who require high USB reliability at the PC side.

32/64 bits OS user: This new USB driver has support of operating in 32/64 bits OS (such as Windows XP, Windows Vista and Win7). However, it is important to take note that this driver has not got the digital signature. Thus, it will incur some extra steps for users to have the USB drivers run successfully in the PC (Refer to the introductions below).
2. Installation and Uninstallation

The methods of the installation and uninstallation in 32 bits OS are the same as in 64 bits OS. In the following introductions, we take the operations in 32 bits OS as the example.

2.1 Installing and Loading

2.1.1 Installing the Driver

Follow the steps below to install the USB driver.

**Step 1** Disconnect the radio from the PC.

**Step 2** (Optional) If an old USB driver is installed in the PC, uninstall it by referring to its Installation Guide.

**Caution:** After uninstalling the old USB driver, reboot the PC, otherwise, you cannot load the new driver.

**Step 3** Unzip the installation package, such as: USB_Driver_V5.30.41.0.rar.

**Step 4** Double click the program (Setup.exe) and the following dialog box will pop up.

![Install Driver](image)

**Step 5** Click “Browse” to select the target path (The default path is recommended).

**Step 6** Click “install” and the following window will pop up and the installation starts.

![Install Driver](image)

**Step 7** If any of the following dialog boxes appears during the installation, follow the corresponding instructions below.
• If the dialog box appears in Windows XP System, select “Continue Anyway”. If the dialog pops up repeatedly, always select the same option.

![Software Installation]

• When the following dialog box appears in Windows Vista System, select “Install this driver software anyway”. If the dialog pops up repeatedly, always select the same option.

![Windows Security]

• If the dialog box appears in Win7 System, select “Install”. If the dialog pops up repeatedly, always select the same option.
Step 8  If the following box pops up, the installation is successful. Click “Finish” to finish the installation.

![Windows Security](image)

**Note:** The installation time varies with PCs with different configurations or different operation systems.

2.1.2 Loading the Driver

After the installation is completed, the driver programs (including Digital USB Composite Device, Digital Remote NDIS Device and Digital xxx Serial Device) will be loaded when you connect the radio to PC.

**Note:** For different USB devices, the driver loading process will always be executed for the first connection. During the process, the prompt boxes, “Found New Hardware Wizard”, will pop up. Follow the instructions below to finish the loading.

**In Windows XP OS**

If you are going to install the USB driver in Windows XP OS, follow the steps below:

**Step 1**  Connect the radio to PC and turn on the radio. The prompt box “Found New Hardware Wizard” will appear in about 10s.
Step 2  Select the option "No, not this time" and click "Next".

Step 3  Select the option “Install the software automatically (Recommended)” and click “Next”, and PC will start the loading the USB Composite device automatically. When loading is done, the following screen will appear.
**Step 4** Select the option “Finish” and another prompt box “Found New Hardware Wizard” for “Digital Remote NDIS Device” appears as follows:

**Step 5** Select the option “Install the software automatically (Recommended)” and click “Next”, and PC will start the loading Remote NDIS Device automatically. When loading is done, the following screen will appear.
Step 6 Click “Finish” and another prompt box “Found New Hardware Wizard” for “Digital xxx Serial Device” appears as shown below:

**Note:** The name in the orange circle above will vary with different radios connected:

- For portable radios: Digital Portable Serial Device
- For mobile radios: Digital Mobile Serial Device
- For repeaters: Digital Repeater Serial Device
**Step 7** Select the option “Install the software automatically (Recommended)” and click “Next”, and PC will start the loading Serial Device automatically. When loading is done, the following screen will appear.

![Found New Hardware Wizard](image)

**Step 8** Click “Finish” to finish the loading process.

**In Windows Vista OS and Win7 OS**

If you install the USB driver in Windows Vista OS or Win7 OS, the system will finish the loading process automatically without user intervention. PC will give the USB loading process at the bottom right corner of your desktop as shown below:

![Installing device driver software](image)

When the installation is done, the following prompt will be given at the bottom right corner of your desktop:

![Your device is ready to use](image)

By double-clicking this prompt, you can see the installed driver as shown below:
2.2 Uninstalling

Windows XP, Windows Vista and Win7 OS have the same process of uninstalling the USB driver. We take Windows XP OS as an example in the following introductions.

⚠️ **Caution:** The radio must be disconnected from the PC before uninstalling the USB driver. Otherwise, failure may occur.

**Step 1** Go to “Control Panel” and select “Programs”. Find the program “Digital USB Driver Software”.

**Step 2** Click “Change/Remove” and the following dialog box will pop up.

**Step 3** Click “Uninstall” to start the uninstalling process. Several seconds later, the following box will pop up to show that the uninstalling is successful.
Step 4  Click “OK” and another dialog box will appear to prompt you to reboot the PC.

Step 5  Click “Yes” to reboot the PC to finish the uninstalling.

⚠️ Caution: After uninstalling the USB driver, you must reboot the PC. Otherwise, the new USB driver installation may fail.
3. FAQ

3.1 An old version of USB driver exists

Phenomenon
If you see the following prompt when you run the “Setup.exe” to install the USB driver, it means an old driver is installed.

![Install Driver]

Digital USB Driver was not installed successfully (15)
There is a driver installed for the device, please uninstall it first.

Solution

Step 1  Go to “Control Panel -> Add/Remove Programs”, find the old driver program and click “Change/Remove” to uninstall it.

Step 2  After the successful uninstalling, reboot the PC.

Step 3  Retry to run “Setup.exe”. If you still see the aforesaid information, open the unzipped folder from the installing package of the USB driver.

Step 4  Find and run the “drivers_clean_up.bat” file and forcibly clear the installation program of the old driver.

Step 5  After clearing the program successfully, reboot the PC.

3.2 Windows XP OS disallows the installation

Phenomenon
During the installation, if you see the following dialog box, it means the system disallows you to install the driver without signature.
Solution

Step 1  Right-click "My Computer" on your desktop, and go to "Properties -> Hardware" as shown below.

Step 2  Click "Driver Signing" and the following box will pop up.
Step 3  Select “Ignore” and then click “OK”.

Step 4  Reinstall the driver.

Step 5  (Optional) After installing the USB driver successfully, you can change the “Driver Signing” back to the original setting by following the steps above.

3.3 The PC cannot recognize the radio

Phenomenon

When the USB driver is installed, the PC cannot recognize the radio connected to it when the radio is on.

Solution

Step 1  Right-click “My Computer” on your desktop and go to “Manage -> Device Manager”. Then you will see the window below:
Note: You can also run the “devmgmt.msc” order or use other ways to open this window.

Step 2 Choose “DMR Radio” and right-click to select “Update Driver”. Then you will see the window below:
Step 3 Select “Install from a list or specific location (Advanced)” and click “Next”. Then you will see the window below:

Step 4 Select “Don’t search. I will choose the driver to install.” and click “Next”. Then you will see the window below:
Step 5  Click “Next” and the following box will pop up.

Step 6  Click “Have Disk” and click “Browse” in the pop-up window to find the driver files:
Step 7  Enter the driver installation directory (default path: C:\Program Files\Digital\Digital USB Driver), select the "bkrwbus.inf" file and click "Open" to return to the window.

The inf file in different installation directories is corresponding to different drivers:

- bkrwbus.inf: USB Composite Device driver.
- bkrwnndis.inf: USB NDIS Device driver.
- bkrwbk.inf: USB Serial Device driver. Note that if the radio is in burn mode, you need to select the bkrwbl.inf file instead of the bkrwbk.inf file.

Step 8  Click "OK" to return to the "Hardware Update Wizard" screen.

Step 9  Click "Next" and PC will start the loading Serial Device automatically. When loading is done, the following screen will appear.
Step 10  Click “Finish” to finish the loading process.

Step 11  (Optional) If the system cannot install the USB NDIS device and USB Serial device automatically, you can install them manually following the steps above.

3.4 “Found New Hardware Wizard” does not appear

Phenomenon

The window does not show up after the radio is connected to the PC.

Solution

Step 1  Reconnect the radio to the PC.

Step 2  Right-click “My Computer” on your desktop and go to “Manage -> Device Manager”.

Note: You can also use the “devmgmt.msc” order or other ways to open this window.

Step 3  Choose any hardware name and right-click on it to select “Scan for hardware changes”.
**Step 4**  Follow the steps in “Solution” in “3.3 The PC cannot recognize the radio”.

### 3.5 Fail to load “USB Composite Device”

**Phenomenon**

The system fails to load the USB driver after the successful installation, as shown below:
Solution

Step 1  Uninstall the USB driver following the steps in “2.2 Uninstalling”.

Step 2  Reboot the PC.

Step 3  Install and load the driver again.

3.6 Fail to load the driver

Phenomenon

The loading is not successful after the radio is connected to the PC, because the PC is in loading status for too long. See the following figure.
Solution 1

Step 1  Disable the network connections (e.g.: remove the network cable).

Step 2  Reload the program again following the “Solution” in “3.3 The PC cannot recognize the radio”.

Step 3  Re-enable the PC network connections.

Solution 2

Step 1  Right-click the Taskbar on your desktop to open the “Windows Task Manager” window.
**Note:** You can also enter “Windows Task Manager” by pressing Ctrl+Alt+Del or run the “taskmgr.exe” order.

**Step 2** End the “Found New Hardware Wizard” task.

**Step 3** Follow the steps in “Solution” in “3.3 The PC cannot recognize the radio”.

### 3.7 The PC cannot obtain USB port number

**Phenomenon**

After successful installation and loading of the USB driver, the PC cannot obtain the USB port number when the radio is connected to it.

**Solution**

**Step 1** Right-click “My Computer” on your desktop and go to “Manage -> Device Manager”.

**Note:** You can also use the “devmgmt.msc” order or other ways to open this window.

**Step 2** Check if the information of the USB driver program exists in the Device Manager window.

If the information is different from that in the orange circle in the following figure, the installation is not successful. You will need to reinstall the USB driver again following the “Solution” in “3.3 The PC cannot recognize the radio”.

![Windows Task Manager](image-url)