

AR-ALPHA MANUAL ADDENDUM . Replaces following chapters:

16.4 Software installation page 149

16.5 Software registration pages 150-151

Software installation and registration are not needed anymore. Simply insert the USB license dongle in a free USB port on your PC.



(actual design may vary)

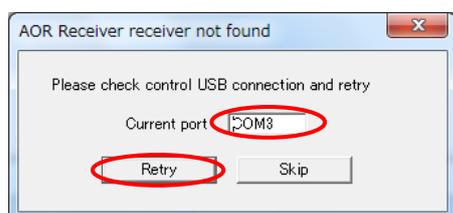
■ Using the USB license dongle for the first time:

- ① Insert the USB dongle in an available USB port of your PC. Windows will automatically install a driver, recognize it as a common USB flash drive named AR-IQ and assign a drive letter such as “D:”, “E:” etc...

WARNING: Our USB dongles are guaranteed without virus infection, nevertheless some virus detection software may detect the execute file “ar-iq.exe” as a virus (or Trojan). This is called a false-positive alarm and does not mean that “ar-iq.exe” is indeed infected. Whenever your virus detection software informs you about a possible threat, it usually gives you a choice of options about what to do next. Be sure to flag “ar-iq.exe” as a SAFE file, otherwise the AR-IQ2 software will not run and “ar-iq.exe” might be rendered unusable or even deleted by the virus detection software.

It is your responsibility to make sure that your virus detection software does not accidentally render the USB dongle and I/Q software unusable. The license information data inside the USB dongle is unique and cannot be copied or backed-up. If you damage the USB dongle, a new one needs to be purchased.

- ② Inside the USB dongle, locate the folder “ar-iq v.X” (“X” being the software version). The software’s executable “ar-iq.exe” is located inside this folder. The software should be run directly from the USB dongle.
- ③ Double click “ar-iq.exe” to start the program.
- ④ When you start the software for the first time, Windows will ask you to which COM PORT the device (receiver) is connected. Providing the correct number is entered, it will be saved in the registry, therefore you should not need to enter it again. Nevertheless, after connecting the receiver to a different USB port on your PC, the COM port number will change. If the com port number you entered is incorrect, the following error message will appear:



To check the COM PORT number to which the receiver is connected, click on:

START > CONTROL PANEL > SYSTEM > HARDWARE > DEVICE MANAGER and search for COM & LPT PORTS. Click on the + sign to extend the directory.

Look for USB SERIAL PORT (COMX) where X is the com port number you need to enter.

- ⑤ Validate with the RETRY button.

Refer to the following chapter for details on how to operate the software.

Do never record I/Q data directly to the USB dongle! Choose a location on your hard drive instead.

- Note:
- One USB 2.0 port is required to use the USB dongle license system, as it needs to be inserted every time the software is used.
 - This USB dongle is unique and cannot be reproduced.
 - The license information data inside the USB dongle is unique and cannot be backed-up or moved. If you lose or damage the USB dongle, a new USB dongle needs to be purchased.
 - Do not use this USB dongle for any other purpose such as data storage. Formatting the USB dongle, overwriting or deleting its content will destroy the licensing system, and another USB dongle would have to be purchased.

AR-ALPHA MANUAL ADDENDUM . Additions to following chapter:

11. I/Q DIGITAL OUTPUT IN DETAILS FOR DEVELOPERS

5.2.5 ALPHA SET CAPTURE SIZE

When you make your own application software code , you can modify the IsoBufferSize by using the following API call.

	ALPHA_SET_CAPTURE_SIZE
Prototype	<pre> BOOL DeviceIoControl(HANDLE hDevice, // = Device Handle DWORD dwIoControlCode, // = ALPHA_SET_CAPTURE_SIZE LPVOID lpInBuffer, // = PULONG DWORD nInBufferSize, // = sizeof(ULONG) LPVOID lpOutBuffer, // = NULL DWORD nOutBufferSize, // =0 LPDWORD lpBytesReturned, // = the pointer of the transferring number of byte register LPOVERLAPPED lpOverlapped // = the pointer for Overlapped); </pre>
Function	<pre> Setting the buffer size on Isochronous buffering. AOR_IsoBufferSmall // Small AOR_IsoBufferMedium // Medium AOR_IsoBufferLarge // Large </pre>
Structure	
Appendix	<pre> Header of Including AORAlphaDD.h #define AOR_IsoBufferSmall ((0x600)*(256)) #define AOR_IsoBufferMedium ((0x600)*(512)) #define AOR_IsoBufferLarge ((0x600)*(1024)) </pre>

To use this application software, you have to edit the registry information in the Windows system.

Registry pass : \HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\services\AorAlpha

Value	Default(hex)	function
	Range(hex)	
Type	1	This service is the kernel driver.
	Fixed	
Start	3	This driver is loaded in the PnP.
	Fixed	
ErrorControl	1	Display an error message when driver detected an error.
	Fixed	
Group	Extended Base	Booting group = "Extended Base"
	Fixed	
DebugInfo	101	Just For debugging
	0~ffffff	
IsoBufferSize	2	ISO buffer size (1:Small, 2:Medium, 3:Large) 1: ((0x600)*(256)) 2: ((0x600)*(512)) 3: ((0x600)*(1024))
	1~3	

You can modify the IsoBuffer Size by using "regedit" of Windows.

After you set "IsoBufferSize"=1, the smallest buffer size will be available.