Technical Note: Using the CM15 with HCA and Windows 10

Updated July 8,2016

In order to use the CM15 with HCA under Windows 10 you have to do a bit of work to get the HCA device driver installed. Unfortunately, Windows really hates this as it wants all the drivers to come from the Windows Update site and that will get you the ActiveHome driver which doesn't work with HCA.

And to make matters slightly more difficult we have to stop Windows Update replacing the HCA CM15 driver with the one from the Windows Update site – which can be challenging.

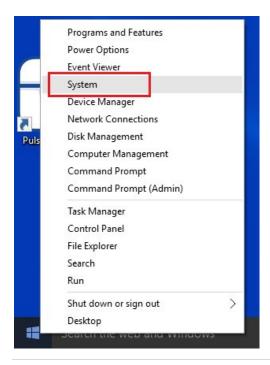
If you have not already connected the CM15 to your PC then the first thing to do is to connect it to your computer and let Windows install the driver for it. It will be the wrong driver but we have to start someplace.

Once that's done let's work on configuring Windows so that we can get the HCA CM15 driver installed.

There are a few procedures to follow before we start install the driver. The first configures Windows to not replace the HCA CM15 driver with the ActiveHome one. The second procedure allows the HCA driver to be installed even though it isn't signed.

Step 1: Configure Windows 10 to not replace the HCA CM15 driver with the ActiveHome driver

To begin, right click on the "Start" button and select "System" from the popup menu.



Then follow the Advanced System Settings link.

System			- 🗆 X
🗧 🔶 🕤 🛧 💆 > Control F	Panel → System and Security → Sy	rstem	✓ ♂ Search Control Panel
Control Panel Home	View basic information	about your computer	•
😌 Device Manager	Windows edition		
Remote settings	Windows 10 Home	_	
 System protection Advanced system settings 	© 2015 Microsoft Corpora	tion. All rights reserved.	Windows 10
	System		
	Processor: Installed memory (RAM): System type: Pen and Touch:	Intel(R) Pentium(R) CPU G645 @ 2.90GHz 2.90 GHz 4.00 GB (3.87 GB usable) 64-bit Operating System, x64-based processor No Pen or Touch Input is available for this Display	DELL
	Computer name, domain, and	workgroup settings	Support Information
	Computer name:		Change settings
	Full computer name:		
	Computer description:		
	Workgroup:	WORKGROUP	
	Windows activation		
	Windows is activated Rea	d the Microsoft Software License Terms	
	Product ID:		Change product key
See also			
Security and Maintenance			

Choose the "Hardware" tab in the popup dialog.

omputer Name	Hardware	Advanced	System Protection	Remote
Device Mana	ger			
			the hardware device	
	your compute perties of any		evice Managerto ch	ange the
proj	portico or any			
			<u>D</u> evice Manag	ger
	200			
Device Install	ation Setting	s		
Cho	oose whether	Windows do	ownloads driver softw	vare for your
Cho	oose whether	Windows do	ownloads driver softw tion about them.	vare for your
Cho	oose whether	Windows do		vare for your
Cho	oose whether	Windows do		
Cho	oose whether	Windows do	tion about them.	
Cho	oose whether	Windows do	tion about them.	
Cho	oose whether	Windows do	tion about them.	
Cho	oose whether	Windows do	tion about them.	
Cho	oose whether	Windows do	tion about them.	
Cho	oose whether	Windows do	tion about them.	
Cho	oose whether	Windows do	tion about them.	

Press the "Device Installation Settings" button. Note that the depending upon your Windows 10 install, the dialog may not have all these options in it. The key is to pick the "No, let me choose..." option.

Device Installation Settings	×
Do you want Windows to download driver software and realistic icons for your devices?	
○ Yes, do this automatically (recommended)	
No, let me choose what to do	
○ <u>A</u> lways install the best driver software from Windows Update.	
<u>N</u> ever install driver software from Windows Update.	
Automatically get the device app and info provided by your device manufacturer.	
Why should I have Windows do this automatically?	
Save Changes Cancel	1

If the other options are in the dialog pick "Never install driver from Windows update". And Press "Save changes". Then OK out of the previous dialog and then close the control panel.

Step 2: Allow Windows 10 to install unsigned drivers

The next procedure is a bit involved – but not complicated - and is necessary to allow install of the HCA driver which is not signed. We don't have screen images for these steps but just follow along with this procedure. Some of the steps will time out if you wait too long so read over the instructions before you start and then you can move along without too much delay.

- 1. Press the "Windows" key on the keyboard to open the start menu
- 2. Click on "Settings" in the list at the lower left. It's just above the "Power" choice
- 3. Click on the "Update & Security" icon
- 4. Click on "Recovery" in the list at the left side of the "Update & Security" dialog.
- Click on the "Restart now" button in the "Advanced startup" section. It takes a short time for the restart to happen and then the display shows "Choose an option" and has buttons for "Continue". "Troubleshoot", and "Turn off your PC". Press "Troubleshoot".
- 6. Click on "Advanced Options".
- 7. Click on "Startup Settings"
- 8. Click on the "Restart" button. The system restarts which takes a bit and then you get a text only screen that shows "Startup Settings" and shows nine options. You choose an option using the keyboard "F" keys at the top. Press the F7 key to "Disable driver signature enforcement". The PC restarts and you will have to login again.

Step 3: Download the HCA CM15 driver

The next step is to download the HCA CM15 driver from the HCA Support web site. Create a folder called "CM15" someplace on your disk. Your documents area is a good place. Follow this link and save the zip file into that folder. Depending upon your browser, it may download the zip file to your "Downloads" folder. If it does that then move it to the CM15 folder.

www.HCATech.com/download/CM15/winusbinf.zip

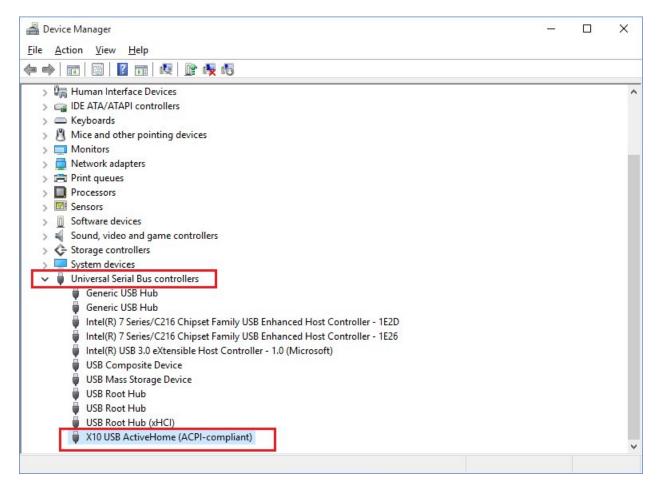
Using Windows Explorer, right click on the zip file and select "Extract all". The "Select a destination" dialog should show a path to the CM15 folder in your documents area and ending in a sub-folder called

winusbinf. If it doesn't show that then change it to show that. Press the "Extract" button. It extracts 32 items.

Step 4: Remove the ActiveHome driver

Right click on the "Start" button and select "Device manager" from the popup menu. It's usually the 5th choice from the top.

In the Device manager find the "X10 USA ActiveHome" driver in the "Universal Serial Bus Controllers" section and right-click on it and choose "Uninstall" from the popup menu. In the popup tick the "Delete the driver software for this device" and press OK.

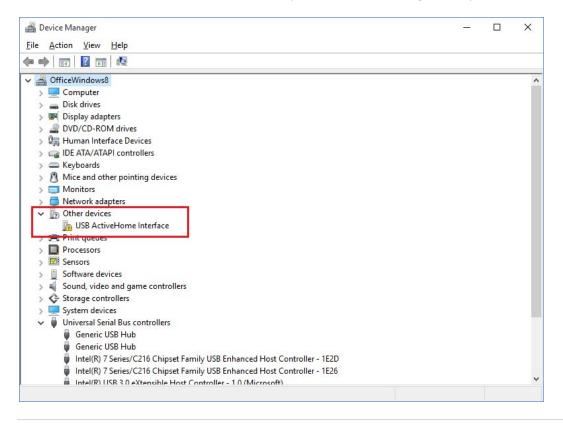


Confirm	n Device Uninstall		×
T	X10 USB ActiveHo	ome (ACPI-compliant)	
Warnin	g: You are about to ur	ninstall this device from	i your system.
Dele	ete the driver software	for this device.	
		ОК	Cancel

NOTE: The "Delete the driver software for this device" may not work. In fact, we have never seen it work on any of our machines. The Active Home driver file is called X10ufx2.sys and is in the Windows System32 Drivers folder. If you have problems with Windows going back to this driver – see note at the end of step 5A – you may need to manually remove this file.

Step 5A: Get the HCA CM15 driver installed

Now unplug the CM15 and plug it in again. The Device Manager display updates and it may show it as an "Other device" or under "Universal Serial Bus controllers". If it shows up again in the same place labeled the same as before - "Active Home" - then skip the rest of this and go to step 5B.



Right click on "USB ActiveHome Interface" and select "Update Driver software" from the popup menu.

Then choose "Browse my computer for driver software".

_	Indate Driver Software V10 USP Activelyance (ACDL compliant)	×
~	Update Driver Software - X10 USB ActiveHome (ACPI-compliant)	
	Browse for driver software on your computer	
	Search for driver software in this location:	
	C:\Users\kharm_000\Documents\CM15\winusbinf (1) V Browse	
	✓ Include subfolders	
	\rightarrow Let me pick from a list of device drivers on my computer	
	This list will show installed driver software compatible with the device, and all driver software in the same category as the device.	
	<u>N</u> ext C	ancel

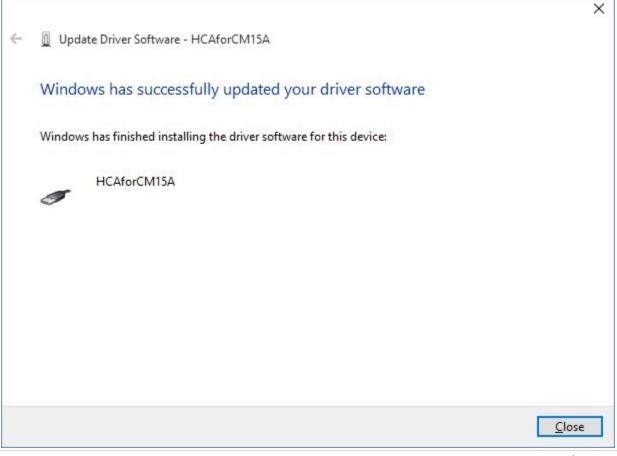
Use the browse button to locate the <u>folder</u> named "winusbinf" that was created when you unzipped the download. It should be a subfolder of the "CM15" folder you put the zip file into as described above.

And click "Next". Windows shows "Installing driver software" and then a VERY SCARY dialog appears:



Press "Install this driver anyway". The driver is fine and has been installed by many HCA Users.

After the install completes, this appears:



And when that dialog is closed, the device manager updates and now lists the correct driver.

Device Manager	8 <u>014</u>	×
le <u>A</u> ction <u>V</u> iew <u>H</u> elp		
• 🔶 📰 📴 💐 😰 🐙 🖏		
🚔 OfficeWindows8		
> 💻 Computer		
> 👝 Disk drives		
> 🐖 Display adapters		
> 🔐 DVD/CD-ROM drives		
> 🕼 Human Interface Devices		
> 🥁 IDE ATA/ATAPI controllers		
> 📼 Keyboards		
> 🖞 Mice and other pointing devices		
> 🛄 Monitors		
> 🛑 Network adapters		
> 🚍 Print queues		
> Processors		
> 🖾 Sensors		
> 🚺 Software devices		
> 🛋 Sound, video and game controllers		
> 🗲 Storage controllers		
> 💻 System devices		
🗸 🏺 Universal Serial Bus controllers		
Generic USB Hub		
Generic LISB Hub		
HCAforCM15A		
Inter(R) / Series/C210 Chipset Family USB Enhanced Host Controller - 1E2D		
Intel(R) 7 Series/C216 Chipset Family USB Enhanced Host Controller - 1E26		
Intel(R) USB 3.0 eXtensible Host Controller - 1.0 (Microsoft)		
LISB Composite Device		

Close the Device Manager and then close the Control Panel if it is open.

NOTE: Windows is getting harder and harder on device drivers and may just go ahead and replace the HCA driver with the Active Home one again. Check out this link.

http://www.howtogeek.com/223864/how-to-uninstall-and-block-updates-and-drivers-on-windows-10/

We have followed the instructions given at that site with success but on different machines different things happened. Yes, this really is annoying to us too.

One thing that is VERY important: If you unplug the CM15 from the computer plug it back into the same USB port. That seems to make a big difference.

Step 5B: Use this if the CM15 seems to be stuck on the ActiveHome driver

In the device manager right click on the USB Active Home device and select "Update Driver Software" from the popup menu. Click on the "Browse my computer for driver software" choice.

Windows w	utomatically for u vill search your compu	ter and the Internet	for the latest drive		
for your de settings.	vice, unless you've dis	abled this feature in	your device insta	llation	
	my computer for install driver software				
Locate and	install driver software	manualiy.			

In the next step click on the "Let me pick..." option.

		are on your co	mputer			
	ver software in thi		- C 2435 - C			
		nts\CM15\winusb	int (1)∖inf	~	B <u>r</u> owse	
✓ Include su	ofolders					
\rightarrow Let m	e pick from a	list of device	drivers on m	iv compu	ıter	
This list	will show installe	d driver software	compatible with			
SOILWAI	e in the same cate	gory as the devic	E,			

Click on the "Have Disk" button.

Select the device driver you want to install for	this hardware.
Select the manufacturer and model of your hardwa disk that contains the driver you want to install, clic	
✓ Show <u>c</u> ompatible hardware Model	
X10 USB ActiveHome (ACPI-compliant) HCAforCM15A	
	Have Disk
This driver is digitally signed.	

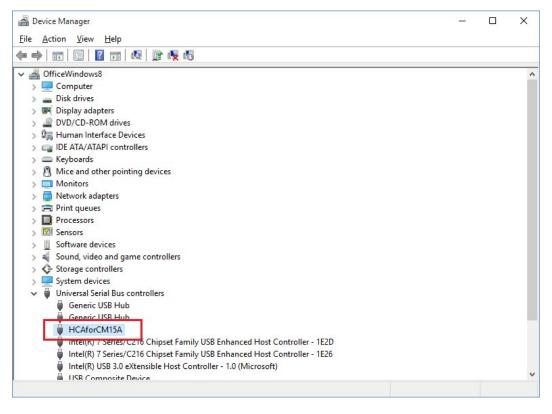
Use the browse button to locate the HCAforCM15.inf file that was part of the zip file extraction back in step 3. It is in the INF subfolder.

nstall Fr	om Disk	j.
	Insert the manufacturer's installation disk, and then make sure that the correct drive is selected below.	ОК
-		Cancel
	Copy manufacturer's files from:	

Close the dialog with OK. You may get the popup about the driver not being signed. If you do, then click on the "Install the driver anyway" choice. It should install and you see:

		×
~	Update Driver Software - HCAforCM15A	
	Windows has successfully updated your driver software	
	Windows has finished installing the driver software for this device:	
	HCAforCM15A	
	~	
		<u>C</u> lose

And when that dialog is closed, the device manager updates and now lists the correct driver.



Close the Device Manager and then close the Control Panel if it is open.

NOTE: Windows is getting harder and harder on device drivers and may just go ahead and replace the HCA driver with the Active Home one again. Check out this link.

http://www.howtogeek.com/223864/how-to-uninstall-and-block-updates-and-drivers-on-windows-10/

We have followed the instructions given at that site with success but on different machines different things happened. Yes, this really is annoying to us too.

One thing that is VERY important: If you unplug the CM15 from the computer plug it back into the same USB port. That seems to make a big difference on keeping the HCA driver.

Step 6: Connect HCA to the CM15

Now we are finally ready to start HCA! In the Interfaces category, press the Configure button, choose CM15A as the type and press the connect button. It should connect ok and display the firmware version.

artup	Client Server	Clock	Color and Then	ne Control Interface	Design Pane	Display Pane	Hardware	Visual Programmer	Web	Advanced	Legacy	Extra
			this computer:		200gr l alto						20300)	Duro
CM1	5A			~ 🔽	Ö	Unused				~		
USB	~	Configu	Ire Connect	CN	115	Unused	✓ Con	figure Connect	0			
Unus		CA								×]	
Unus		i +	lardware tes	t ОК								
		c	M15 firmwar	e revision 2							_	
Unus	ed	C	M15 firmwar	e revision 2	Lun	derstand					-	
Unus		C	:M15 firmwar	e revision 2	l un	derstand						
Unus	ed v	C	:M15 firmwar		Iun	Undeed						
Unus	ed v			~	Iun	Unused		Serve Connect		~		
Unus	ed v	Configu		~	Iun	Undeed	✓ Con	figure Connect		~		

Have fun with your CM15!