

How to Configure Global Cache iTach Flex with HC2

Step-by-step guide

Global Cache iTach Flex it's a device you can use to integrate any IR controlled device using Virtual Device in Home Center 2. iTach Flex allows you to control AV equipment (TV, AV receiver, cable/satellite box, DVD player) and any other automation device controlled with IR (infra-red commands) or RS-232



Flex Key Features

- · Connects almost any electrical device to a WiFi or wired Ethernet network instantly
- Access, monitor, automate, and control standalone equipment
- Web-based control protocol using HTTP
- 4 Megs flash memory store web pages and files accessible via URL
- Tiny footprint
- 4 conductor Flex Link Port allows for versatility using Flex Link cables
- Built in IR learning and access commands to cloud-based IR database
- Mounting dock for simple installation
- Made in the USA and RoHS compliant

iTach Flex Quick Start

Initially, or when default- ed, iTach Flex WiFi units are an unsecured "adhoc" device discoverable with any WiFi network-enabled device. After applying power using the power supply or USB to power, view available wireless networks and connect to the Flex in the Networks list. The Flex is named with its unique MAC ID, which is printed on the bottom label.

For example, if the MAC ID is 000C1E- 01B45C, the wireless network name will be ITACHFLEX000C1E01B45C. WPS is supported and can be initiated by holding down the side button on the Flex for 4 seconds and then releasing. The LED will flash quickly to confirm WPS mode.

Using iTach with Ethernet port you have to connect it directly to your computer and change network adapter settings to match IP range of default iTach Flex settings.

For example : 192.168.1.xX – represents any available value different than 70.

	Internet Protocol Version 4 (TC	P/IPv4) Properties
Networking Sharing	General	
Connect using:	You can get IP settings assigned supports this capability. Otherw administrator for the appropriat	d automatically if your network ise, you need to ask your network te IP settings.
Configure This connection uses the following items:	Obtain an IP address auto Obtain an IP address auto O Use the following IP addre	matically
	IP address:	192.168.1.10
🗹 📕 QoS Packet Scheduler	Subnet mask:	255 . 255 . 255 . 0
A liternet Protocol Version 6 (TCP/IPv6)	Default gateway:	
Internet Protocol Version 4 (TCP/IPv4) Internet Protocol	Obtain DNS server addres	s automatically
🗹 🛶 Link-Layer Topology Discovery Responder	Use the following DNS ser	ver addresses
Install Uninstall Properties	Preferred DNS server:	
Description	Alternate DNS server:	
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.	Validate settings upon ex	it Advanced
OK Cancel		OK Cancel



iTach FLEX WiFi will check for available wireless networks. Select your wireless network and put password associated with your network.

Once the connection is established, open a browser and view iTach's configuration page. If you're not directed to the default IP address for the Flex, http://192.168.1.70, then enter it in the address bar.



Select the SSID and enter the Passphrase of your network into the fields on this page. In order for the Flex unit to connect properly, the network credentials must match the router settings. At this point, the unit will connect to the chosen network using DHCP. Flex units require up to 30 seconds to connect to a network once settings are changed. The power LED will blink one time per second once connected. Flex units will not connect to a network with 802.11g disabled.

When testing IR functionality, verify the Flex Link Port is configured as "Single IR Emitter" and connect the supplied IR emitter to the unit. In the "Single IR Emitter" mode, the iTach Flex will respond to and execute commands related to IR functionality, i.e. "sendir."

When testing serial/RS232 functionality, verify the Flex's Flex Link Port is configured as "Serial" with the correct baud rate and serial settings necessary for your application. Then, connect the supplied Serial Flex Link cable to the Flex. Use the correct RS232 cable to connect to the device. The serial Flex Link cable provides a standard male DB9 connection with Tx and Rx on pins 2 and 3, Gnd on pin 5, and RTS and CTS on pins 7 and 8. The wiring of the cable between the RS232 Flex Link cable and the controlled hardware is determined by the settings of the device you are attempting to control.

Flex units ship with a metal cradle which can be secured to any surface for easy mounting and placement. Push the flange gently and pull the Flex carefully to remove from cradle.

IR Learning. Each Flex has an internal IR learner. To use it, download the iLearn application from downloads page and follow the tutorial located at **www.globalcache.com/support**. Once connected to the learner, simply point the remote at the small hole located at the top center of the Flex and input any button you want captured by iLearn.

Troubleshooting. Flex configuration can be reset to factory defaults by pressing and holding the reset button (located around the side to the right of the Flex Link Port) for 8 seconds and releasing. The LED will blink quickly at 4 seconds to confirm WPS, and blink faster at 8 seconds to confirm default.

Use following link to download GlobalCache tools to configuration software:

http://www.globalcache.com/downloads/



iHelp - The iHelp utility is used to locate and configure iTach Flex, iTach devices, and GC-100s installed on the network, and also facilitates the upgrade functionality for the iTach Flex and iTach family of products. Run iHelp.exe on a Windows PC connected to the same network as your GC devices. iHelp listens for iTach Flex, iTach, and GC-100 multicast beacons and displays every MAC ID and IP address within one minute. Configure your GC product by selecting it from the list, right-clicking on the unit, and selecting "Configure" to display the setup pages on your default browser. iHelp will automatically notify you if your unit is out of date to begin a firmware upgrade.

iHelp						
Detected Units						
Model	IP Address	MAC Address				
iTachWF2IR iTachFlexEthe	хоос.хоос.хоос.хоос ууу-ууу-ууу-ууу	000C1E045672 000C1E063824				
✓ Enable Upgrade Notifications						
Packet received from 10.1.10.70. About						

Network Settings

When you type in your browser IP address of your device you will access configuration page.





iLearn – This executable is the companion application for our IR products, including all iTach models, the GC-IRL, and the GC-IRE (with attached GC-RG1). This utility allows for the capture of IR commands, conversion between Global Caché and Hex (CCF) formats.

Select Connection IR Learner , type an IP address and click "Connect" button.

Connected device will be displayed and ready to learn IR commands.

ilearn
Connection Capture Options IR Learner IP Address Tach Rex Learner 10.1.10.129 Flex 1 710-2000-14 Disconnect Capture Options Module Connector Repeat Offset 1 1 1 1 1 1 1 300 100
Leamed Code
Format Global Caché - Edit
Edit View sendir,11.1,37825,1,1,171,171,21,64,21,64,21,22,21,22,21,22,21,22,21,22,21,22,21,64,21,64,21,64,21,22,21,22,21,22,21,22,21,22,21,22,21,22,21,22,21,22,21,22,21,22,21,22,21,22,21,64,21,64,21,64,21,64,21,64,21,64,21,778
Send IR TCP Button Name Save Change File C:\Windows\system32\TempIRdata.bd About

1. Point your remote to IR learner hole and press the button you want to learn. Lines with IR code will show up (highlighted in dark blue).

2. Press "Edit" button to trim the string and type Button Name.

3. Press "Save".

In the Edit View window our IR code will show up..

4. Copy trimmed code.

Our copied IR code line will looks like this:

In order to make this IR code works with our Virtual Device and be understandable for GlobalCache, add to the end of the code **0x0D0x0A**.

You can use Notepad to edit final code. Make sure there're no spaces inside the code and everything is trimmed as a single line.

Our final code will look like this and be ready to copy and paste inside our Virtual Device button sendir,1:1,1,37825,1,1,171,171,21,64,21,64,21,64,21,22,21,22,21,22,21,22,21,22,21,64,21,64,21,64 ,21,22,21,22,21,22,21,22,21,22,21,22,21,64,21,22,21,22,21,22,21,22,21,22,21,22,21,22,21,64,21,22,21,64 ,21,64,21,64,21,64,21,64,21,64,21,1778**0x0D0x0A**

Create new Virtual Device	To add the Virtual Device
Go to Device Tab and select Add or remove device. Select "To add, the Virtual Device"	Click Add to create a virtual device. A new configuration window will open. Add Import virtual device
	Browse No file selected. Import virtual device

Add Virtual Device in Home Center 2 software.

Name new Virtual Device, assign to the room is located, type IP address and TCP port of iTach Flex. For IR port number is 4998.

For SERIAL port number is 4999.

Press SAVE icon.

New Device				
General			Advanced	
			TV remote	
		TCP Port: Type:	Virtual device	
	TV remote Virtual device	($\overline{\mathbf{x}}$	
1-1				

In ADVANCED Tab select set of buttons you want to use and press "Add set " button.

Choose set of buttons					
Labe	el .				
		Three buttons per line -	max 10 signs / but	ton	
	One slider per line - max. 15 signs				
Add set	_		_	_	X
PWR	Label: ID:	PWR Button11	3/10 signs	Empty	Main
Change Icon	sendir,1:: 1,22,21,2 64,21,22,5 ,21,64,21	1,1,37825,1,1,171,171 2,21,64,21,64,21,64,2 21,22,21,22,21,22,21, ,64,21,64,21,17780x0D	,21,64,21,64,2 1,22,21,22,21, 22,21,22,21,64 0x0A	1,64,21,22,21 22,21,22,21,2 ,21,22,21,64,	,22,21,22,2 2,21,22,21, 21,64,21,64
	String	🔹 Lua code 🗸	Wait for device		

Copy and paste code inside our Virtual Device button :

sendir,1:1,1,37825,1,1,171,171,21,64,21,64,21,64,21,22,21,22,21,22,21,22,21,22,21,22,21,64,21,64,21,64,21,64,21,64,21,22,21,22,21,22,21,22,21,22,21,22,21,22,21,22,21,22,21,22,21,22,21,22,21,22,21,22,21,22,21,64

Check "Wait for device response" .

Label your button and it's ID so you can easily find it creating SCENES.

Paste earlier edited IR command.

Press SAVE icon.



Test each programmed button.