

File Name	SC-iTouch.doc	Document Revision	1-0
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Description	Apple iTouch as GUI for Speakercraft and Rako using Global Cache and Command fusion.		



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iLED has been appointed as a Global Cache distributor – as part of our policy of only selling equipment that has been fully tested and approved by our engineers - we decided to test out an iPad and iTouch as the GUI connected to our existing Speakercraft MZC system through a Global cache Wf2SI.

iLED signed as a CommandFusion Integrator after investigating several products. We now have the ability to provide a complete package to our dealer base.

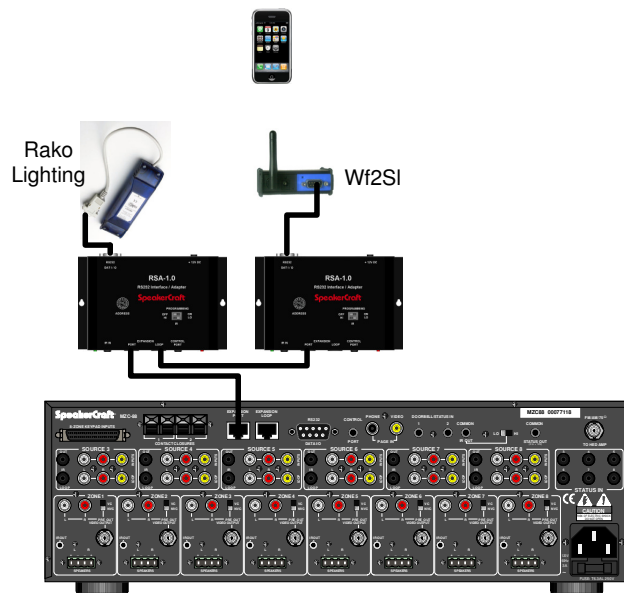
The result is a stunning user interface that works first time every time integrated seamlessly into an MZC Multi Zone controller.

To spice thing up, we added Rako Lighting control, an interface to motorised screen and Planar projector.

System Architecture

The Demonstration facilities at iLED head office consist of a fully configured MZC88 connected to a Rako lighting control system. The sub systems are listed below

- Lighting
 - MZC connected via RSA1.0 to RAV232+
- GUI Interface
 - MZC connected via RSA1.0 to iTach Wf2SI
 - iTouch connected via iLED wireless network to Wf2SI
 - iTouch running CommandFusion software.



The iTouch was setup to emulate the MZC88 button presses as programmed for the standard Speakercraft Mode Free wireless user interface. Full control was achieved and the speed of response was amazing. No command delays, no network hang-ups, no waiting for devices to wake up.

We programmed the MZC buttons as detailed in the Speakercraft EZI Tools project print out into the buttons of the iTouch using CommandFusion's guiDesigner. To get the command hex string I used the Speakercraft Control Emulator and simply set up the Button Press, Zone, Keypad address, Source and Button number as detailed in the project print out. The byte sequence was then modified to suit the hex format required by GlobalCache. All control commands allocated to the button press are then carried out by the MZC when it receives the button press string.

I was very impressed by the speed of response from the iTouch through the Wf2SI through the RSA1.0 to the MZC. My tests are not scientific but when I say the results are instantaneous, I mean that when a button is pressed, the command is executed before the button is released – no perceivable delay.

Phase 1 testing was completed with no meta data feedback between the MZC and iTouch. This is part of phase 2 testing which will be ready within the next few weeks. Global Cache iTach and GC products allow for bi-directional communications to provide the meta data feedback – the MZC protocol needs to be deciphered using REGEX commands to implement the meta data feedback. Watch this space.

The following equipment is used on the demo project

Head End

- Speakercraft MZC88
 - Source 1 tuner 1
 - Source 2 tuner 2
 - PACE DSTV Decoder
 - Sony BluRay DVD
 - Speakercraft iPod Docking Station
 - Speakercraft RSA1.0 and Rako RAV232+
 - Speakercraft RSA1.0 and Global Cache Wf2SI

Zones

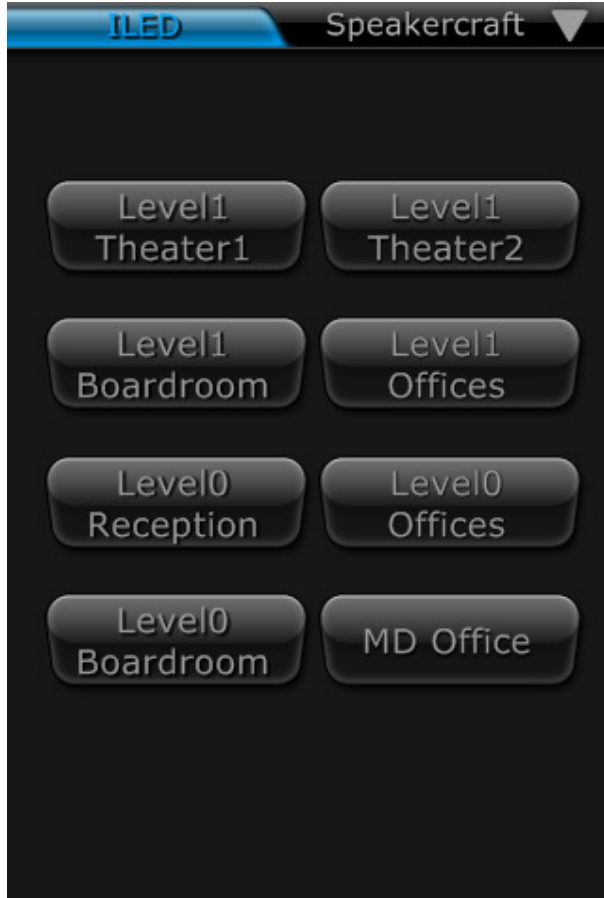
- Level 1 Demo Theater 1
 - 50" Panasonic Plasma
 - HDMI Switching
 - Rotel Audio Processor
 - Rako Lighting
- Level 1 Demo Theater 2
 - 50" Panasonic Plasma
 - HDMI Switching
 - Rotel Audio Processor
 - Rako Lighting
- Level 1 Boardroom
 - Planar Projector
 - Motorised Screen
 - Rako Lighting
 - 8" architectural Speakers
- Level 1 General Office
 - 42" Panasonic Plasma
 - Rako Lighting
 - 6" architectural Speakers
- Level 1 Operations Office
 - 42" Panasonic Plasma
 - Rako Lighting
 - 6" architectural Speakers
- Level 0 General Office
 - Rako Lighting
 - 6" architectural Speakers
- Level 0 Boardroom
 - 50" Panasonic Plasma
 - HDMI Switching
 - Rako Lighting
 - 6" architectural Speakers
- Level 0 MD office
 - 42" Panasonic Plasma
 - HDMI Switching
 - Rako Lighting
 - 6" architectural Speakers

iTouch screen examples

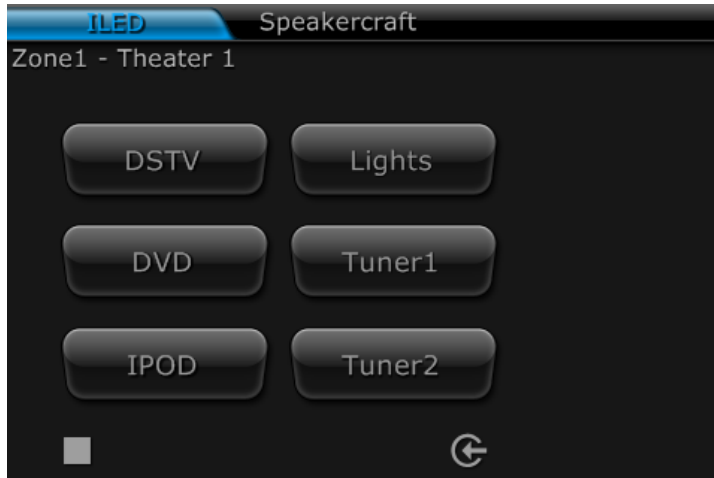
Landscape view of iPhone startup screen



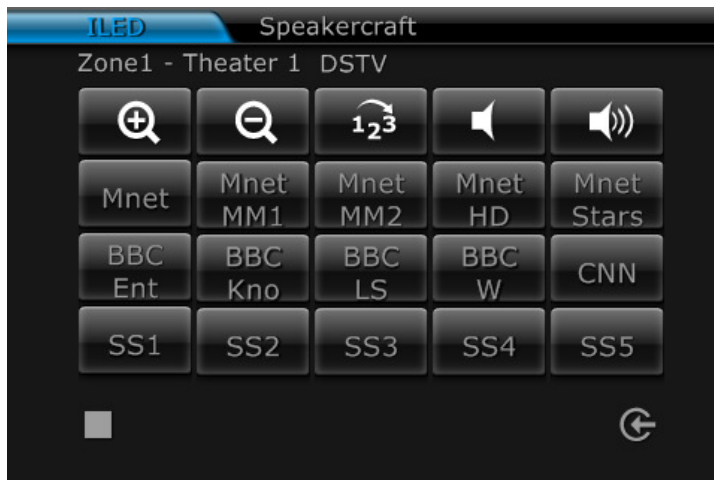
Portrait view of iPhone startup screen



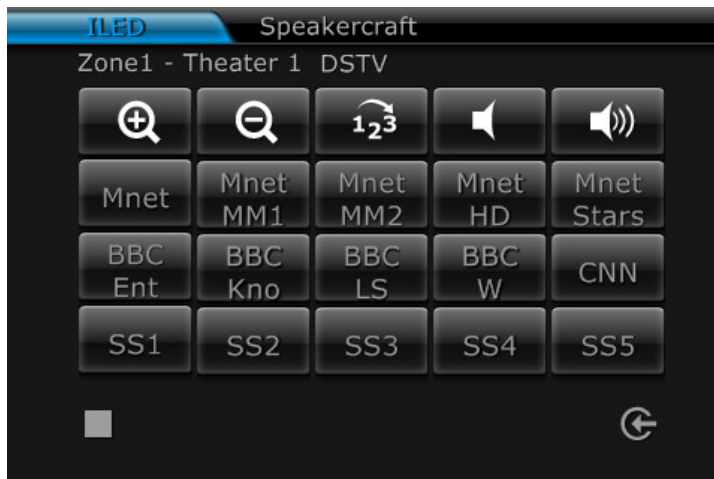
Landscape view of Level1 Theater1.



Landscape view of Level1 Theater1 DSTV



Landscape view of Level1 Theater1 DSTV Remote



iPad

During testing phase of the iTouch we received our iPad. Apart from the devices sexy looks, I was impressed by the iPads speed and build quality – this device is going to change the way we interact with our homes and offices in future – I really think that there is going to be a massive move away from the current user remote controls and touch screens.

I loaded the latest revision of Command Fusion Viewer that has iPad support and designed a simple GUI using a downloaded background from GUILink (hence the unallocated buttons on the skin).

This was not part of our original test planning and as can be seen from the screen dumps, very little time has been put into this exercise. I was so impressed by the results that I decided to include this as an appetiser for those of you not fortunate enough to have laid hands or eyes on an iPad yet.

I designed a project for my home theatre using a Global Cache GC-100-12. The theatre is controlled by RS232 and IR with an RS232 interface to an MZC88. Once the project is complete I will take some pics and post them on our website.

iPad landscape views.



Please note :

The reason for the test was to prove functionality. The screen shots indicate average looking layouts and in no way reflect the quality of graphics and layout that are achievable.