



# LAN Control

for iRoom's iBezel

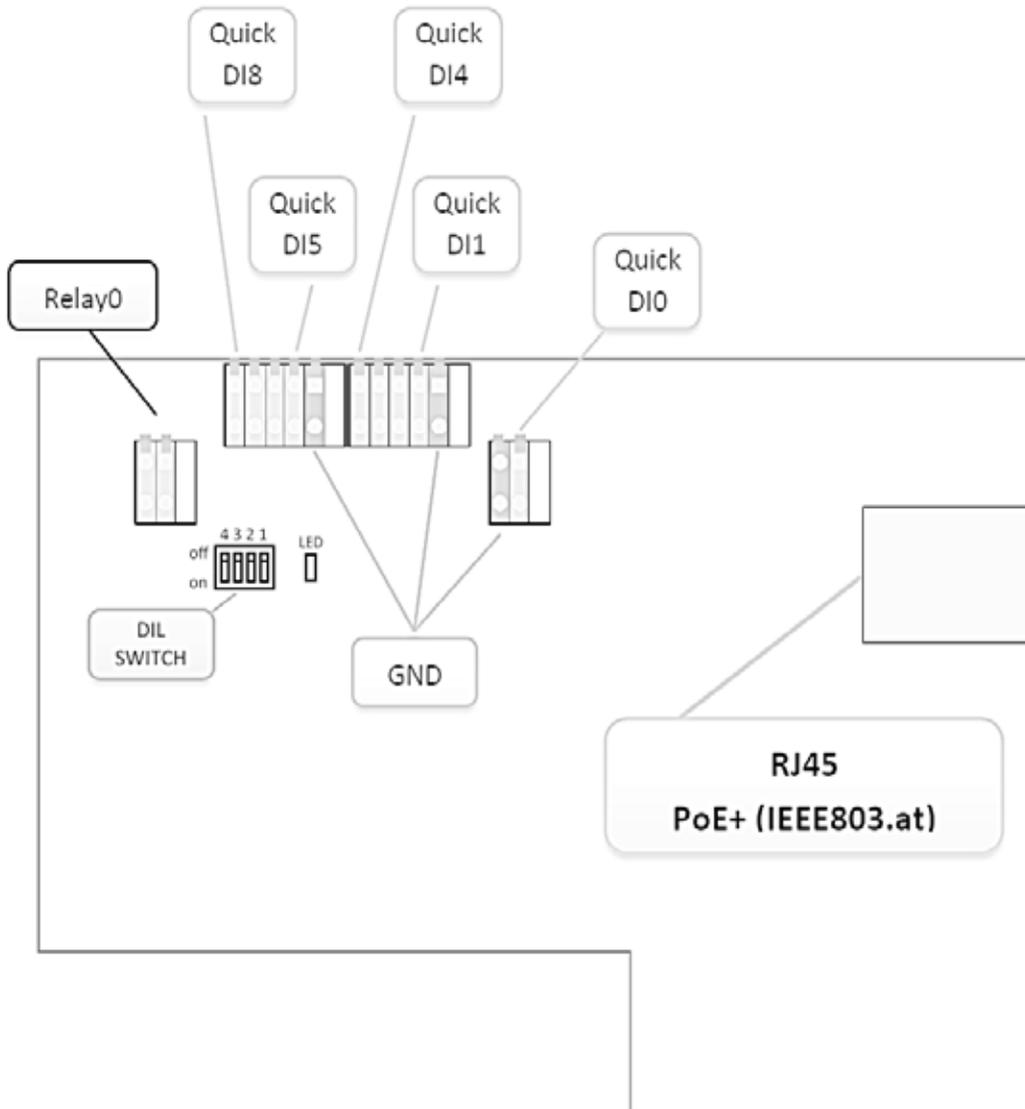


iRoom's  
**iBezel**  
Next Generation iPad® docking station

Find more on [www.iroomsibelzel.com](http://www.iroomsibelzel.com)



## 1 - Hardware overview main electronics

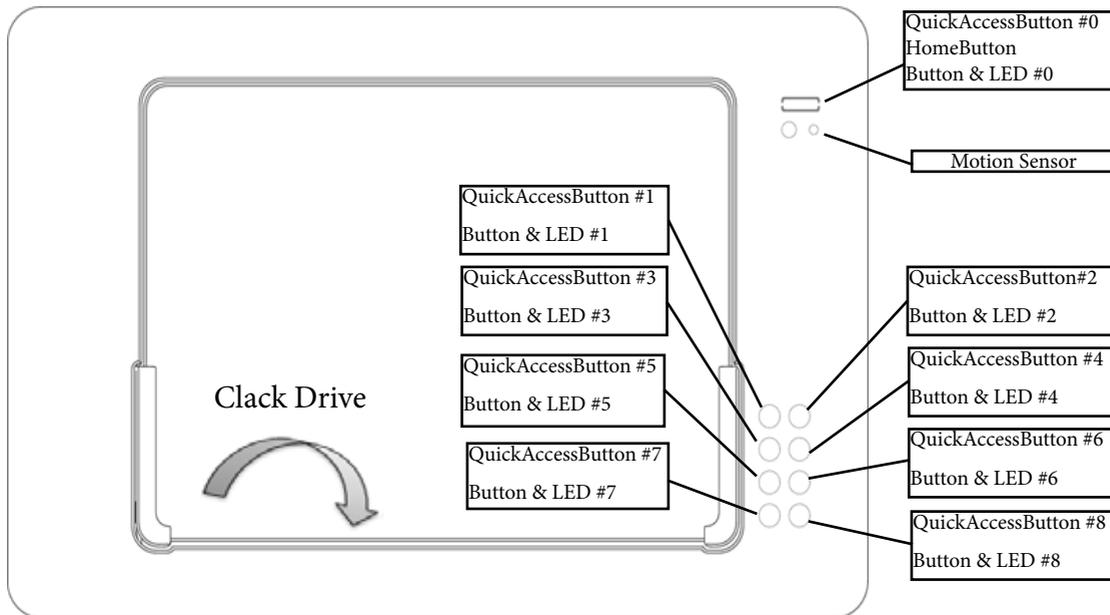


## 2 – Resources and Assumptions

ChangeLog:

- V.....
- V0.8 (2015-05-07)  
Spelling Changes in descriptions
- V0.9 (2015-05-27)  
New design
- V1.1 (2016-06-15)  
rectify typos, adding commands (music/volume control)

## Hardware overview iBezel



- iBezel available in glass black & white
- iBezel available for iPad Air & iPad Air 2

### 3 – Protocol definition

Communication speed	10Mbps/100Mbps
Communication port	TCP Port 13601
Communication single message length	255 char, all char are non-case-sensitive
Standard IP Adress	192.168.0.100
Standard device name	iBezel
Standard Port	13601
Number of concurrent IP connections	3
TCP connection timeout	300 seconds (TBD)
Change of IP Settings	by iOS App (3rd party) only
TCP/IP Communication check	Communication can be verified by using e.g. : "telnet 192.168.0.100 13601" or programms like putty & hercules

**Successfully executed commands are responded by suited information message.  
Wrong, unknown commands or commands with parameters out of range are ignored  
without sending error message!**

This document describes the "standard communication protocol" for standard drivers.

In further consequence we'll provide an extended communication protocol description with the possibility to interact in a much more detailed manner.

### 4 - General

The 1st block of the messages is the message type.  
The delimiter between type, command arguments and Data/parameter is a colon (:)  
A semicolon (;)terminates the message.

Example: type:command:parameter;

## 5 - Requests

A request command is used to trigger updating all available information on LAN.  
 All further information is updated automatically on LAN by change.  
 Frequent execution of "req:infupdate:standard;" must be avoided!

Functions	Type	Command	Parameter	Available values	Example
requests all	req	infupdate	standard	Standard	req:infupdate:standard;
request alive status	req	alive	1	1	req:alive:1;
request reboot	req	reboot	N/A	N/A	req:reboot;
request Dock Firmware	req	dock_fw	1	1	req:dock_fw:1;
request Dock Firmware	req	boot_fw	1	1	req:boot_fw:1;
request iBezel Firmware	req	bezel_fw	1	1	req:bezel_fw:1;

To keep the communication open the client has to send "req:alive:1;" at least once every 150 seconds. After successful receipt the server answers with "inf:alive:1;" Frequent execution of "req:alive:1;" must be avoided!

## 6 - Commands

With commands you're able to operate your device.

Functions	Type	Command	Parameter	Available values	Example
beep (unit: 0.1 s)	cmd	beep	30	1 ... 100 (0.1 ... 10 seconds)	cmd:beep:30;
operate iDock	cmd	idock	open	open   close   toggle	cmd:idock:open;
operates the LED HomeButton	cmd	Led0	75	0 – 100 %	cmd:led0:75;
operates the LEDs #1 ... #8	cmd	led1...led8	75	0 – 100 %	cmd:led1:75;
operates the Relay	cmd	relay0	close	open   close   toggle	cmd:relay0:close;
volume control	cmd	volume	up	up   down   mute   unmute   mute_toggle	cmd:volume:mute;
music control	cmd	music	play	play   pause   next   prev   playpause	cmd:music:play;

## 7 - Events

Functions	Type	Event	Sample Value	Available Values	Example
Message on status change of "HomeButton"	evn	button0	pushed	pushed released	evn:button0:pushed;
Message on status change of "Quick Access Button 1" to 8	evn	button 1...8	pushed	pushed released	evn:button1:pushed;
Message on status change of "Quick Digital Input 0"	evn	digital0	closed	closed opened	evn:digital0:closed;
Message on status change of "Quick Digital Input 1" to 8	evn	digital 1...8	closed	closed opened	evn:digital7:closed;
Message on threshold change of "proximity sensor"	evn	irevent	1	0 / 1	evn:irevent:1;

## 8 - Extended Information

Functions	Type	Information	Parameter	Available values	Example
Feedback of plug -drive	inf	plugdrive	docking	docking   undocking   docked   undocked	inf:plugdrive:docking;
Feedback of clack-drive	inf	clackdrive	opened	opening   opened   closing   closed	inf:clackdrive:opened;
Feedback of dock	inf	docking state	docked	docking   undocking   docked   undocked	inf:dockingstate:docked;
Feedback of relay0	inf	relay0	opened	opened   closed	inf:relay0:opened;
Beep	inf	beep	1	0   1	inf:beep:1;
Led of HomeButton	inf	led0	75	0 – 100 %	inf:led0:75;
Led of Button#1 ... #8	inf	led1...led8	75	0 – 100 %	inf:led1:75
Value of IR detector	inf	irLevel	128	0-255	inf:irlevel:128;
Alive feedback	inf	alive	1	1	inf:alive:1;
iDock in TouchCode Mode (not iBezel)	inf	iBezelMode	Mode	ibezel   touchcode	inf:iBezelMode:touchcode;
Volume	inf	Volume	75	0 - 100 %	inf:volume:60;
Docking Station Firmwaer	inf	Firmware Version	1.2.16	plain text	inf:dock_fw:1.2.16;
Bootloader Firmware	inf	Firmware Version	1.0.8	plain text	inf:boot_fw:1.0.8;
Touch bezel Firmware	inf	Firmware Version	0.138.0	plain text	inf:bezel_fw:0