

# Switcher PC™

# Summary

Switcher PC is free remote control software for Windows PCs using the Zongle™ USB ZigBee transceiver and the ZigBee HC-L communications protocol for lighting and power control. It provides up to eight switches which may send on, off or toggle messages as required to one or more devices. You could even turn off all the lights in a house with on button press!

As ZigBee HC-L compatible device, Switcher PC works with other products from FlexiPanel's Switcher range and also with compatible products from other manufacturers.

# Features:

- Up to 8 switch inputs, sending Off, On or Toggle messages
- Fully compatible with FlexiPanel Switcher products and other ZigBee HC-L v1.0 compatible products.
- Uses FlexiPanel's Zongle USB ZigBee transceiver.
- Resides in System Tray when not needed.

Switcher PC		
All Off	Hall	
Living Room - Bright	Living Room - Soft	
Bedroom	Kid's Bedroom	
Kitchen	Bathroom	

Typiacl Switcher PC Screenshot



Windows PC Switcher Remote Control for ZigBee

#### Installation

Switcher PC uses the Zongle USB transceiver from FlexiPanel Ltd. This must be installed prior to running the Switcher PC application.

Install Zongle following the instructions in the Zongle data sheet. Take note of the COM port assigned to Zongle, as you will need to tell Switcher PC what the COM port number is.

Once Zongle is installed, download Switcher PC from FlexiPanel Ltd. Switcher PC does not require any setup program. You can simply copy the application to any convenient location such as the desktop.

#### Running Switcher PC

Double-click on the Switcher PC icon to run the application. Switcher PC will appear as shown in the graphic below.

Switcher PC		
Button 1	Button 2	
Button 3	Button 4	
Button 5	Button 6	
Button 7	Button 8	

The Switcher PC application is "System Tray resident". This means that if you close it, it continues running and appears as an icon in the System Tray at the bottom right of the Windows screen. (See below.)



To return to the application, double-click on the System Tray icon.

If you wish to terminate the application, select *Exit* from the System menu. (The System menu is the

menu you get when you click on the Switcher PC icon in the title bar - see below).

	Switcher PC		
×	Move Close	Alt+F4	2
	Exit		4
	Buttons		=
Connections		6	
About Switcher PC		$\equiv$	
	Button 7	Buttor	18

#### **Button Setup**

Buttons 1 to 8 can send switching signals to other ZigBee devices. The button names can be changed, as can their function – *Off, On* or *Toggle*.

To set the names of the buttons and their functions, select *Buttons* from the System menu. The dialog box shown below will be displayed, from which you should make your selections.

Buttons		
	Button Text	Effect
Button 1	All Off	Off 🔽
Button 2	Hall	Toggle 🔽
Button 3	Living Room - Bright	Toggle 🔽
Button 4	Living Room - Soft	Toggle 💌
Button 5	Bedroom	Toggle 🔽
Button 6	Kid's Bedroom	Toggle 🖌
Button 7	Kitchen	Toggle 💌
Button 8	Bathroom	Toggle 🔽
Layout	2 x 4 buttons	
	🗌 Initialize in TaskBar	Close

Note that you can also choose how many buttons are displayed, and also whether the application initializes as a dialog box or as a System Tray icon. The latter option is useful if you wish to configure the application to start automatically when the computer restarts.

#### **Network Setup**

To set up network connections, select *Connections* from the System menu. The dialog box shown below will be displayed, from which you should make your selections.

Connections		
Network status		
Message F0 sent for button 1		
You are already connected to Zongle, but if you wish to connect to a different Zongle, enter the COM port:		
36 Connect		
You are joined to an existing network. To join a new one, press Join or rejoin a different old one, press Rejoin. Join Rejoin		
To bind or unbind a button, select the button and press Bind		
Button 1 Bind		
To close this box, press Close.		
Close		

To communicate with the Zongle, enter the COM port number which it has been assigned in the box provided, and then press the Connect button.

Normally the Zongle will be pre-loaded with a MAC address and you will see the message "*Zongle detected on COMxx*:". However, if it has not been provided, you will see the dialog box below, and you should enter in the 16-hex-digit MAC address supplied with the Zongle.

Set MAC Address		X
The MAC address of the Zongle must be set Enter the MAC address provided with Zongle as 16 hex digits		
0015C8000000FFFF		
	ОК	Cancel

#### Joining the Network

There are two steps to the network setup process. The first is *joining*, where you tell a unit which radio network it is a member of. The second is *binding*, where you specify which inputs control which outputs.

To join a network, you should first set the network in a state where it will permit Switcher PC to join to a router or coordinator within radio range. For FlexiPanel Ltd products, this is typically achieved by pressing the Bind button once.

Once the network is ready, press the *Join* button in the *Connections* dialog. The network status box will indicate whether joining was successful. If joining fails, try again – it doesn't always succeed first time. (You may need to re-permit joining on the network.) Once Switcher PC has joined the network, you can rejoin it at any time by restarting the application. If you are unsure whether you are connected to the network, you can press the *Rejoin* button to re-establish the connection.

In circumstances, such as a power outage on the coordinator, the network may restart on a different frequency. In such instances, Switcher PC will take a couple of seconds to rediscover the network the first time a button is pressed, while it automatically rejoins the network.

### **Binding Endpoints**

Once you are connected to the network, you can select which devices are controlled by the 8 pushbuttons.

Binding an input control, e.g. a Switcher PC pushbutton to an output control such as a lighting controller, requires both devices to be told to *Bind* at the same time. Most devices allow up to 60 seconds for the binding device to find its partner.

To put a Switcher PC button into the *Bind* state, select the button to be bound in the drop-down list box in the *Connections* dialog, then press the Bind button. Then place the corresponding device in the same Bind Request state. (Refer to the other devices instructions on how to do this.) The Network Status box will indicate whether binding was successful or not.

If required, a bound pair can be unbound by repeating the binding process, *i.e.* it is a 'toggle' operation.

# **Button Operation**

Once binding is complete, you may press the buttons on Switcher PC as required to switch outputs.

Input and output devices are not limited to one binding each. A single button may turn on or off many outputs; likewise, a single output may be controlled by many inputs such as Switcher PC.

# **Developer Information**



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