I-PAC Firmware version 50 Enhanced Modes

Features:

- Traditional I-PAC keyboard mode unaffected. This is still the default.
- Device mode can also be switched to Dual Directinput Game Controller or Dual Xinput Game Controller.
- These modes appear as entirely different USB devices so there is no mixed-device confusion which causes issues in Retropie.
- Selected mode is maintained after power off/on.
- Standard Dinput and Xinput Game Controller modes are preset for ease of use without any configuration.
- For advanced users who wish to create custom Game Controller configurations there are customisable game controller modes.
- Modes can be switched by pressing Start1 (or user-set alternate I-PAC shift) and holding this, and Player 1 button 1 through 5, for 10 seconds.

These modes apply to Player 1 and 2 controls.

I-PAC Connection	Mode 2 Dinput	Mode 3 Xinput	Mode Switching Hold Start1 and this Button for 10 seconds with no other key activity.
Left	Dpad Left	Dpad Left	
Right	Dpad Right	Dpad Right	
Up	Dpad Up	Dpad Up	
Down	Dpad Down	Dpad Down	
SW 1	Button 1	A	Mode 1 (Keyboard User Set)
SW 2	Button 2	B	Mode 2 (Dinput Preset)
SW 3	Button 3	X	Mode 3 (Xinput Preset)
SW 4	Button 4	Y	Mode 4 (Dinput User Set)
SW 5	Button 5	Left Rear	Mode 5 (Xinput User Set)
SW 6	Button 6	Right Rear	
SW 7	Z Left	Left Trig	
SW 8	Z Right	Right Trig	
COIN	Button 7	BACK	
START	Button 8	START	
A		HOME	
B	Button 7	BACK	
START plus P1 RIGHT		HOME	
START plus P1 LEFT		BACK	

Customising the board:

WinIPAC can only be used for customizing when in Mode 1 but changes made will also apply when switched to modes 4 and 5.

Chosen mode is maintained after power off/on.

Using WinIPAC, any input can be configured to any control including keys, power/volume, gamepad (Xinput or Dinput) across both players.
When this is done, keys configured as keyboard keys will respond in Mode 1, Keys configured as gamepad keys respond in modes 4 and 5.
Note this feature allows the entire 2-player panel to be configured as a one-player game controller if required, implementing every possible control.

Using WinIPAC, any key can be configured as mouse left or right button, Sleep, Wake, Vol Up, Vol Down. These will function in modes 1 and 4.

On Board LED:

When powered on, the LED will stay lit once the board has passed self-test and detected by the host system.

When switching modes, the LED will flash off, the number of times according to the mode number selected, after the 10 second period.

Automatic Mode Switching:

This is intended for use when WinIPAC is used for downloading configurations on the fly.

Mode will switch automatically under the following conditions:

- If a keyboard-only configuration is downloaded and the board is currently in gamepad custom mode 4 it will switch to keyboard mode 1.
- If a gamepad-only configuration is downloaded and the board is currently in keyboard mode 1, it will switch to gamepad custom mode 4.

Note switching to/from Xinput can only be done using the hotkeys.

Xinput Mode Notes:

Owing to the limitations imposed by the Xinput protocol, the following are not supported in Xinput modes but are supported in keyboard and Directinput modes:

Mouse buttons
Volume up and down buttons
Power, sleep, wake buttons
LED control (I-PAC Ultimate I/O only)
WinIPAC for configuration
Automatic switching to other mode.