

INSTALLATION GUIDE

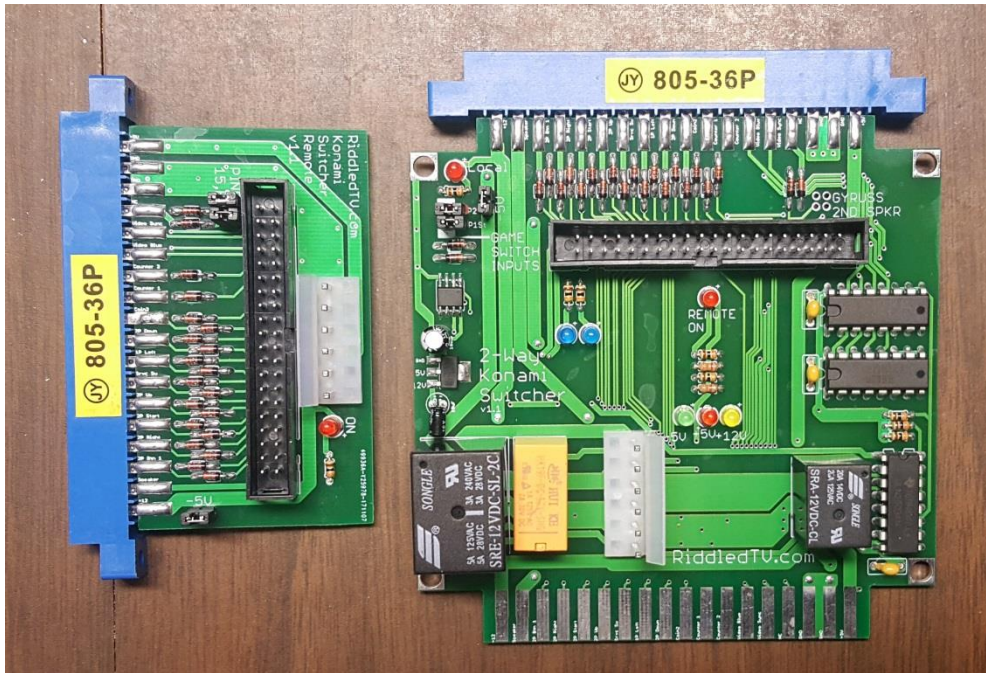


Figure 1. 2-Way Track & Field Switcher Kit

Each Kit Includes:

- Mainboard
- Remote Board
- 40pin ribbon cable
- 6wire power cable

Features:

- Supports 2 T&F or HyperSports boards
- Only 1 board is powered at a time.
- No external remotes are required
- Games are switched by holding Player1-Start and Player2-Start for 1.5 seconds, or alternate buttons can be connected.
- Supports up to 20 Amps on 5V

Mainboard Components:

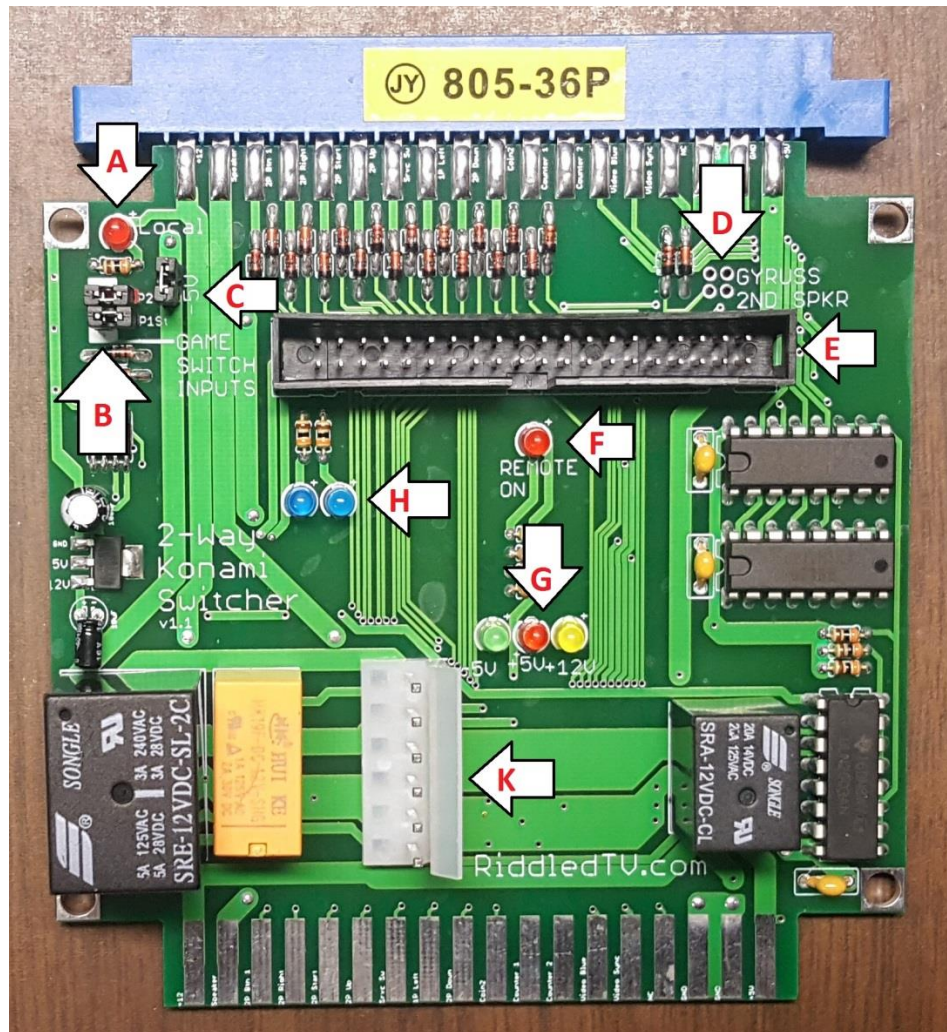


Figure 2 – 2-Way Switcher with Indicator Arrows

- A. Indicator light that local Gameboard is active
- B. Game Select Button Inputs. If jumpers are installed as shown, players 1 and 2 start buttons (held for 1.5 sec) will switch to the next game.
- C. -5V Jumper. Track & Field and Hypersports do not use -5V, and may cause problems if enabled.
- D. Gyruss 2nd Speaker jumpers. Not used
- E. Ribbon cable header. Plug the 40pin ribbon cable here, and similarly to the remote board.
- F. Indicator light that remote Gameboard is active
- G. Power indicator LEDs. 12V, 5V, -5V (these only indicate presence of voltage, not accuracy of voltage levels)
- H. Indicator lights that illuminate when 1 or both of the game select button inputs are active.
- K. Power cable header. Plug the 6pin power cable here, and similarly to the remote board.

T&F Switcher Pinouts

Solder Side		Parts Side	
-5VDC*** not used	A	1	+12VDC
Speaker	B	2	Speaker
4P Run 2 (cocktail only)	C	3	4P Jump (cocktail only)
3P Run 2 (cocktail only)	D	4	3P Jump (cocktail only)
1P Start	E	5	2P Start
2P Jump	F	6	3P Run 1 (cocktail only)
2P Run 2	H	7	Service Switch
1P Jump	J	8	1P Run 2
1P Run 1	K	9	4P Start
Coin (1)	L	10	Coin (2)
3P Start	M	11	Coin Counter (1) (not used)**
2P Run 1	N	12	Coin Counter (2) (not used)**
Video Green	P	13	Video Blue
Video Red	R	14	Video Sync
Not used	S	15	4P Run 1 (cocktail only)
GND	T	16	GND
GND	U	17	GND
+5VDC	V	18	+5VDC

Figure 3. Track & Field Switcher Pinouts

**Coin Counters are not connected when using this T&F Switcher

***T&F does not use -5VDC input. This can be disabled by removing the jumper marked “-5V”

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Installation Instructions:

1. Disconnect AC power.
2. Plug the Switcher into your existing T&F harness and mount in a suitable location.
Note: Do NOT connect the T&F gameboards yet.
3. Double-check all your work.
4. Reconnect AC power, and turn the power on.
5. Verify that the switcher is receiving inputs from your control panel by doing the following:
 - a. Press Player1-Start. Verify that the 1st Blue LED on the switcher circuit board illuminates as the Player1-Start button is pressed. Note, If an alternate input button is being used, verify the input from that button in place of Player1-Start.
 - b. Press Player2-Start. Verify that the 2nd Blue LED on the switcher circuit board illuminates as the Player2-Start button is pressed. Note, If an alternate input button is being used, verify the input from that button in place of Player2-Start.
6. Turn power switches off, and disconnect AC power
7. Plug the gameboards into the two available ports of the T&F Switcher. Make certain that all boards are securely mounted and are not contacting other wiring or metal supports inside your arcade cabinet
8. Reconnect AC power, and turn the power on
9. To advance to the next game hold down both Player1-Start and Player2-Start buttons.
10. You may need to readjust your monitor's color balance levels.

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Switching Games:

If both jumpers are installed as shown, the mainboard will switch games when buttons Player 1-Start and Player 2-Start are pressed for 1.5 seconds. To use alternate button inputs, disconnect the 2 jumpers, and connect two button inputs of your choice to the two terminals on the left side when positioned as shown in Figure 4. If only one input button is desired, connect it to BOTH pins. The Switcher will change games when both inputs are grounded for 1.5 seconds. If both buttons are held down, it will continue to cycle between games in 1.5 second increments.



Figure 4. Button Inputs for Game Selection

Indicator lights

The mainboard has 7 indicator LED lights:

- 2 Red LEDs to indicate which gameboard is active
- 3 Power Supply indicator LEDs. Red, Green, and Yellow LEDs indicate that “some” voltage is present on the 5V, -5V, and 12V power supplies. They do not indicate the accuracy of those voltages.
- 2 Blue LEDs indicate that the switcher detects one or both of the game-select buttons are pressed.