

UD-USB Decoder (15 Pin D-Sub Version)



Introduction:

This device can “decode” the USB signals from most wired XBOX 360 or PS3 controllers/joysticks and output the digital button and direction signals to a 15 Pin D-Sub connector (often referred to as a DB-15, though technically it is a DA-15). This makes for easy use of XBOX 360 and PS3 controllers with Superguns, consolized arcade systems, and Neo Geo (with the use of a proper connector extension cable).

Button & Direction Signals:

All button and direction signals are active low, common ground, as is typical for arcade electronics. These output signals are compatible with logic voltages of +5V or lower. Most arcade systems use +5V logic for the control inputs.

Firmware Update Pushbutton:

On the bottom of the decoder is a small pushbutton switch. If the switch is active while powering up the decoder, it will enter a firmware update mode. The switch will not affect normal operation if pressed after power up.

LED Indicator:

The LED indicator reports important information that will allow you to know the state of the decoder. Below is a list of states:

Solid GREEN - Game Controller detected/ready

Flashing GREEN - Button Re-Mapping mode

Solid YELLOW - When the decoder was powered up, another 5V source on the USB port was detected (not permitted)

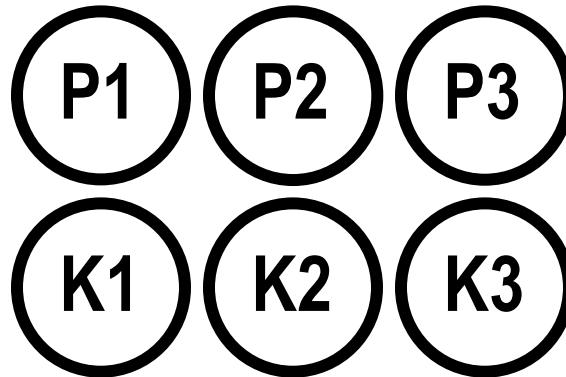
Flashing YELLOW - Unsupported device plugged in

Flashing RED - USB power problem (possibly a damaged device was plugged in)

Flashing RED/GREEN - Bootloader mode

Button Mapping:

The standard button mapping for the UD-USB Decoder is to follow that of classic Street Fighter 2 where the P1, P2, and P3 would be the top row of buttons on the controller layout and K1, K2, and K3 would be the bottom row.



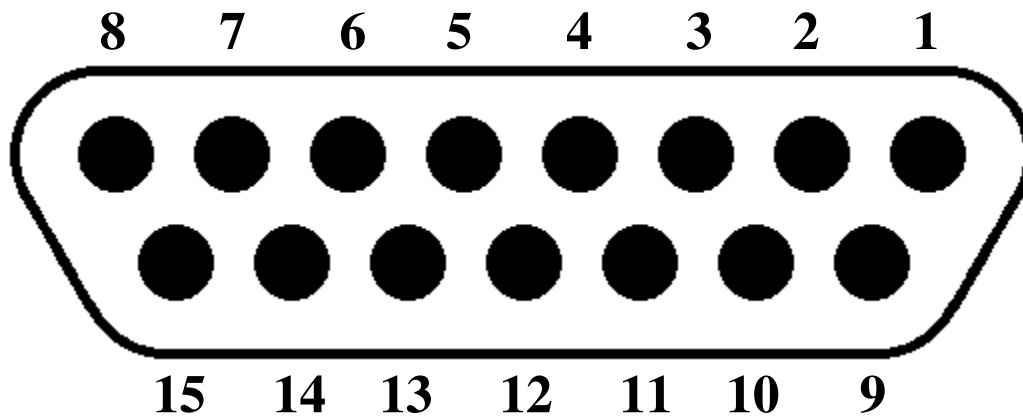
Some controllers do not follow this standard button mapping scheme and will require manually mapping the buttons. Any button on any compatible controller except for Select/Back, Start, and Home/Guide can be re-mapped to any of the other 6 button output signals on the decoder. To re-map the buttons on your controller, hold down any 3 buttons* when you plug in the controller, wait for the LED indicator to flash GREEN (after about 3 seconds), then release the 3 buttons and press in sequence the buttons you wish mapped to P1, P2, P3, K1, K2, and K3. At this point the LED indicator should stop flashing and go solid GREEN. Re-mapping is not stored in the decoder after the controller is unplugged or the decoder is powered down. This is so that during tournament play, one player's button mapping doesn't affect the next player.

*Some controllers may not be properly handled by the firmware yet and may not enter re-mapping mode due to not all buttons being recognized. If you encounter this, try holding more than 3 buttons when plugging in the controller.

Decoder Pinout:

The decoder has a Female connector and follows this signal order with the following signal assignments -

(Looking into front of connector, holes)

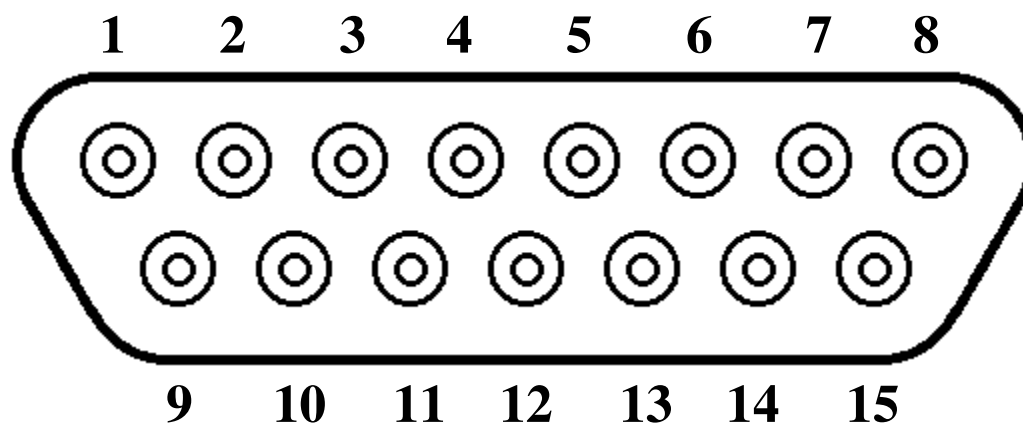


- | | |
|-------------------------|-------------|
| 1. GND | 9. Not Used |
| 2. K3 | 10. K2 |
| 3. Coin / Select / Back | 11. Start |
| 4. K1 | 12. P3 |
| 5. P2 | 13. P1 |
| 6. Right | 14. Left |
| 7. Down | 15. Up |
| 8. +5V | |

System Pinout:

The system that the decoder will be plugging into should have a Male connector and must follow this signal order with the above signal assignments -

(Looking into front of connector, pins)



Firmware Update Procedure:

0. Download firmware and Windows bootloader application from **udgametech.blogspot.com**
1. Power down the UD-USB Decoder
2. Attach USB cable (Male A to Male A) to both your PC and the decoder
3. Open the Windows bootloader application
4. Hold down the Firmware Update Pushbutton on the decoder and power it up
5. Verify the LED indicator is flashing RED & GREEN (if not, power down and re-try Step 4)
6. From the Windows bootloader, select the desired firmware file
7. Click "Program/Verify" button and wait until complete
8. Power down the decoder
9. Remove USB cable from both your PC and the decoder

UD GAME TECH

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