

The IPM+ is designed to send serial data to trigger our line interactive media players. With the IPM+, you put the player into interactive mode and load the video files onto a USB or SD Card. The video files need to have specific names so the player knows what video to play when a button is pressed. You will need a video named 000.xxx (xxx = whatever the file extension is like MP4, MOV, or VOB). This 000.xxx file is the file the player automatically starts playing on power up and repeats until a button is pressed. When button #1 is pressed it will play the file named 001.xxx. When it finishes the player will go back to playing the 000.xxx file. When button #2 is pressed it will play the file named 002.xxx. When it finishes the player will go back to playing the 000.xxx file... and so forth.



The serial data sent to the player is the file number the player is to play. The format of the serial data being sent is TTL voltage levels of 0 volts to +5 volts. It is transmitted at 4800 Baud and a data length of 8 bits. It has no parity bit and 1 stop bit.

The serial data code is the file number meant to be triggered in Hexadecimal format sent twice with no character or space between. For example, to trigger file number 001 you will send Hexadecimal 0101. To trigger file number 016, you will send Hexadecimal 0F0F.

**If you would like to use the IPM+ to control another manufacturer's player, there are a couple of different possibilities depending on the player's capabilities.**

If the player has RS232 serial data capabilities, you can use a standard TTL to RS232 adapter. This adapter will convert the TTL serial data voltage levels of 0 volts to +5 volts to the RS232 standard of -13 volts to +13 volts. You can then set the player to respond to the file trigger number commands.

If the player has the ability of receiving commands through a USB port, you can use a standard off the shelf serial TTL to USB adapter. This type of adapter will look like a USB serial data device to the player. The player will then be able to receive the file trigger number commands and can be set to respond to them.

If the player has dry contact inputs, you can create a small interface using an Arduino or BASIC Stamp. An Arduino or BASIC Stamp can be designed to read the serial data from the IPM+ and trigger relay outputs that are connected to the dry contact inputs of the player. The Arduino or BASIC Stamp can then be programmed to trigger the proper relay output according to the file trigger number command from the IPM+.

**We can also create a custom circuit to communicate with most media players on the market.**