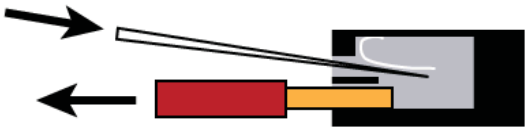
Inserting a small, thin tool (like the tip of a screwdriver or a paperclip) into the opening above the port will lift the terminal point, allowing you to remove the wire.



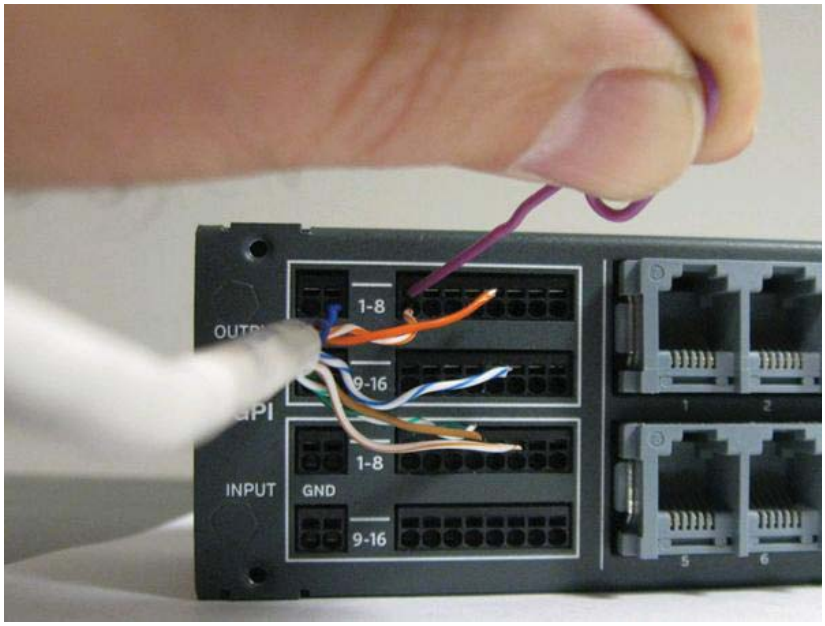


Figure 5: Removing a Wire with a Paperclip

Connect the AB5 COMs

There are eight RJ12 ports on the back of the AB5 unit, providing eight channels of serial I/O. For simplicity, the pinouts of these ports are consistent with an ADC tributary device. The AB5 can be directly connected to an ADC device server via an RJ12 jumper cable, such as Imagine Communications part F3L661. For other applications signal integrity needs to be preserved by obeying twisted pair groupings shown in Table 2: RJ RS422 Pinout (on page 10)

To connect the AB5 to the serial (COM) port of a device:

1. Use a cable with appropriate connectors. One end of the cable must have a male RJ12 connector.
2. Insert the male RJ12 connector into one of the RJ12 ports on the back of the AB5 unit.

3. Plug the other end of the cable into the serial port of the device you wish to communicate with.

Figure 6: Connected AB5 COMs

COM LED Indicators

There are bicolor activity LEDs located under the release tab of each RJ12 port. When an RJ12 plug is inserted into a port and activity occurs, the plug's release tab acts as a "light pipe" to display the activity. The lights and their associated activities are:

- Red: TxD
- Green: RxD

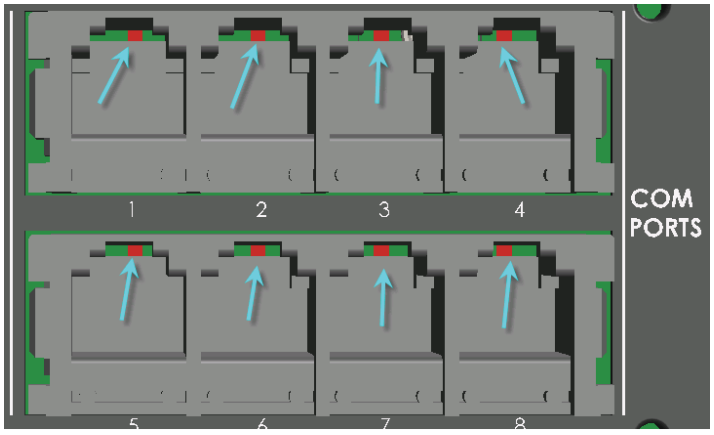


Figure 7: COM LED Indicators

Table 1: RS422 Wiring - EIA-422 DB9

GENERIC RS-422			SMPTE MASTER		SMPTE TRIB		IC MSTR RJ12 ADC		**IC TRIB RJ12 AB4 AB5**		IC MSTR RJ45 D-SERIES	
DB9 M	RS422 EIA-422		DB9M SMPTE	SMPTE MASTER	DB9F SMPTE	SMPTE TRIB	RJ12 ADC	IC MASTER	**RJ12**	**IC TRIB**	RJ45 D-Ser	IC MASTER
1	Tx-	→	2	Rx-	8	Rx-	3	Rx-	**2**	**Rx-**	6	Rx-
2	Tx+	→	7	Rx+	3	Rx+	4	Rx+	**1**	**Rx+**	3	Rx+
3	Rx+	←	3	Tx+	7	Tx+	1	Tx+	**4**	**Tx+**	1	Tx+
4	Rx-	←	8	Tx-	2	Tx-	2	Tx-	**3**	**Tx-**	2	Tx-
5	GND											
6	RTS-											
7	RTS+											
8	CTS+											
9	CTS-											

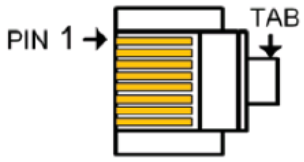
Table 2: RJ RS422 Pinout

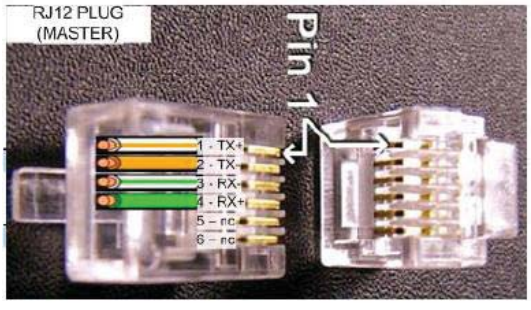
RJ45 D-Series			RJ12 RS422 (ADC / NEXIO/ VERSIO)						
RJ45	STANDARD CABLE Cat5 TP		RJ12	STANDARD CABLE Cat3 TP	**IC AB3 AB4 AB5 JACK**	IC FAN-OUT CABLE 502120 (1)	BELKIN JUMPER CABLE F3L661 (2)	Test Plug 422 (M)	Test Plug 422 loopback
1		Tx+							
2		Tx-	1		Rx+			Rx+	
3		Rx+	2		Rx-			Rx-	
4			3		Tx-			Tx-	
5			4		Tx+			Tx+	
6		Rx-	5		gnd	nc		nc	
7			6		nc	nc		nc	
8									

(1) VHDC168 to (16) RJ12

(2) RJ12 to RJ12 jumper cable shipped with Nexio products

RJ11 - 6 pos, 4 pin, 1 pair
RJ14 - 6 pos, 4 pin, 2 pair
RJ12 - 6 pos, 6 pin, 3 pair
RJ45 - 8 pos, 8 pin, 4 pair





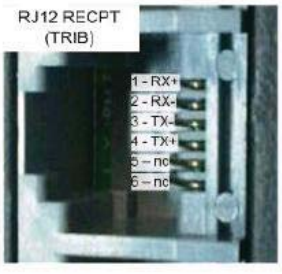


Figure 8: Master and Tributary Pins

AB5 RJ12 GPI Circuit

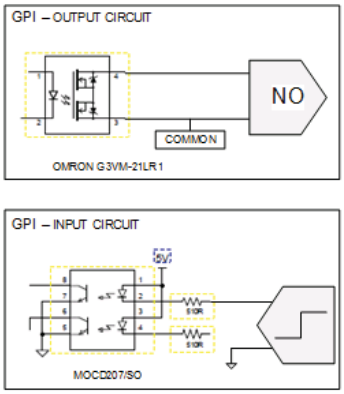


Figure 9: GPI Output and Input Circuits

DB9 - RJ12 Adapters

Table 3: External Device (Master) Controlling AB5 (Tributary)

IC 134-000721Q-00 MASTER				
SMPTE DB9M			IC RJ12F	
3	Tx+	›	1	Rx+
8	Tx-	›	2	Rx-
2	Rx-	‹	3	Tx-
7	Rx+	‹	4	Tx+
9	Gnd	–	5	NA
1	NA	–	6	NA
4	NC			
5	NC			
6	NC			

Table 4: AB5 (Master) Controlling External Device (Tributary)

IC 134-000722Q-00 TRIB				
SMPTE DB9M			IC RJ12F	
7	Tx+	›	1	Rx+
2	Tx-	›	2	Rx-
8	Rx-	‹	3	Tx-
3	Rx+	‹	4	Tx+
9	Gnd	–	5	NA
1	NA	–	6	NA
4	NC			
5	NC			
6	NC			

Table 5: RJ12 RS422 Crossover

IC 149-100100Q-0 MSRT X TRIB crossover				
IC RJ12F			**IC RJ12F**	
4	**Rx+**	‹ ›	**1**	**Tx+**
3	**Rx-**	‹ ›	**2**	**Tx-**
2	**Tx-**	‹ ›	**3**	**Rx-**
1	**Tx+**	‹ ›	**4**	**Rx+**
5	**NA**	–	**5**	**NA**
6	**NA**	–	**6**	**NA**

AB5 Pass-Through

There are two Type A USB ports on the front of the AB5 unit, allowing you to connect additional devices. These devices will communicate directly with your system, bypassing the AB5 unit entirely.

Figure 10: AB5 Pass-Through

You can attach only one additional AB5 device using this method. Please note that the attached USB devices will all be drawing power from your system's USB connection, so they must have low power requirements or they will not operate.