AES3 Transmitter External Components

The output drivers on the CS8420 are designed to drive both the professional and consumer interfaces. The AES3 specification for professional/broadcast use calls for a 110 Ω source impedance and a balanced drive capability. Since the transmitter output impedance is very low, a 110 Ω resistor should be placed in series with one of the transmit pins. The specifications call for a balanced output drive of 2-7 volts peak-to-peak into a 110 Ω load with no cable attached. Using the circuit in Figure 30, the output of the transformer is short-circuit protected, has the proper source impedance, and provides a 5 volts peak-to-peak signal into a 110 Ω load. Lastly, the two output pins should be attached to an XLR connector with male pins and a female shell, and with pin 1 of the connector grounded.

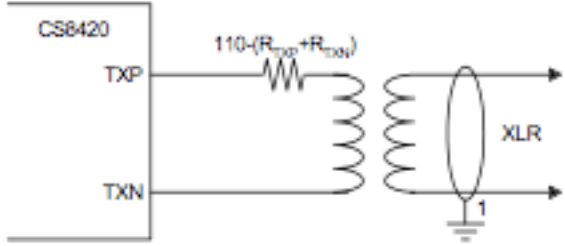

Figure 30. Professional Output Circuit