



# Power over the MDI using the two Signal Pairs

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# 2 Signal Pair Operation

- Overview
- Phone Discovery
- Power Delivery
- Signal Quality Impact

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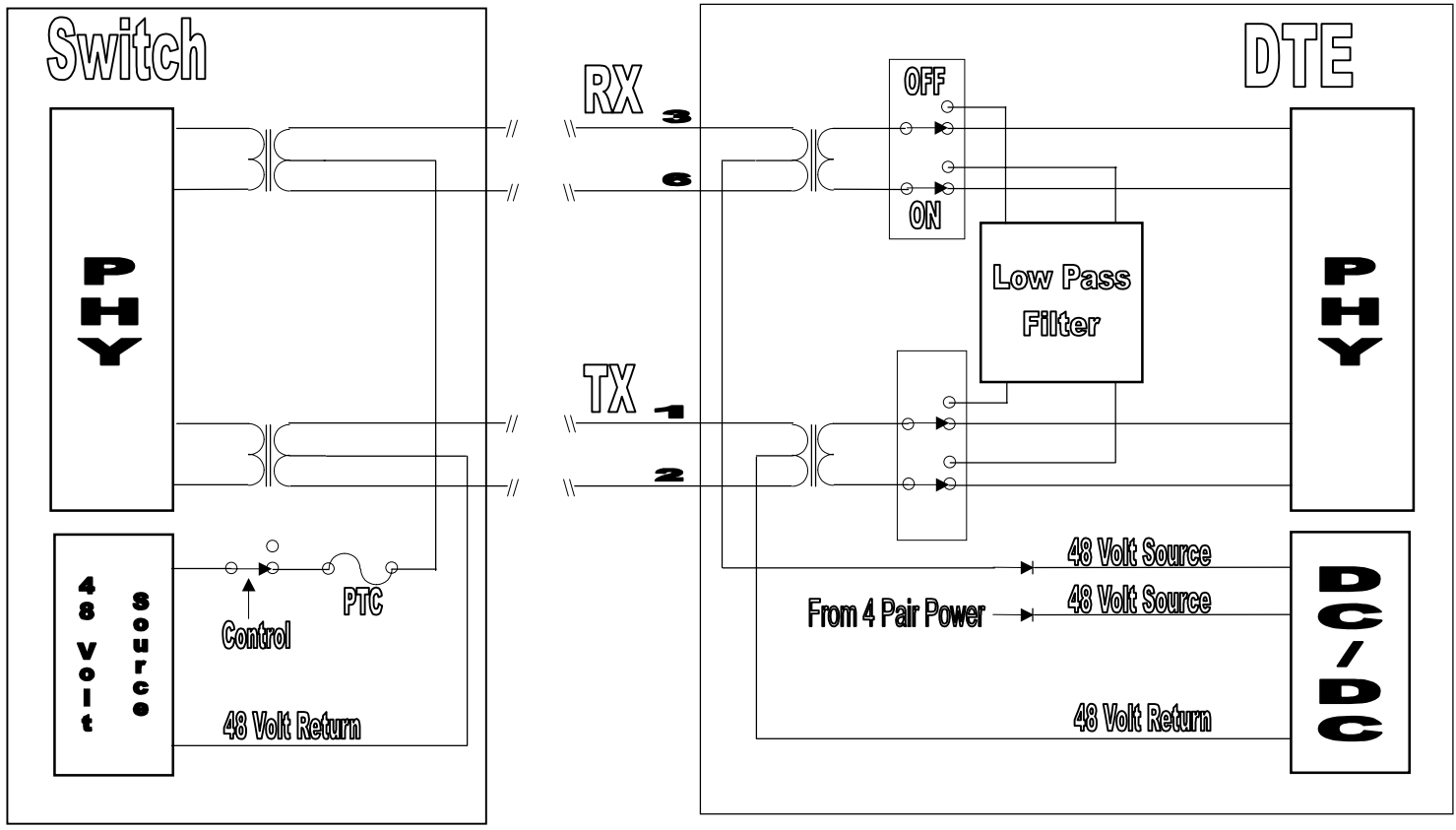
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# 2 Signal Pair Overview



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# Phone Discovery

- **Using Discovery Tone in Loopback without power (see “DTE Power via MDI” by Vafa Rakshani and Kevin Brown of Broadcom on 11/8/99, 3/8/00)**
- **Each Port on Switch Individually Controlled**
- **Power from Switch up to 8-10 Watts @ 48V (see “LAN Magnetics operating under DC Bias Conditions” by Henry Heinricks of Pulse Engineering on 11/8/99)**

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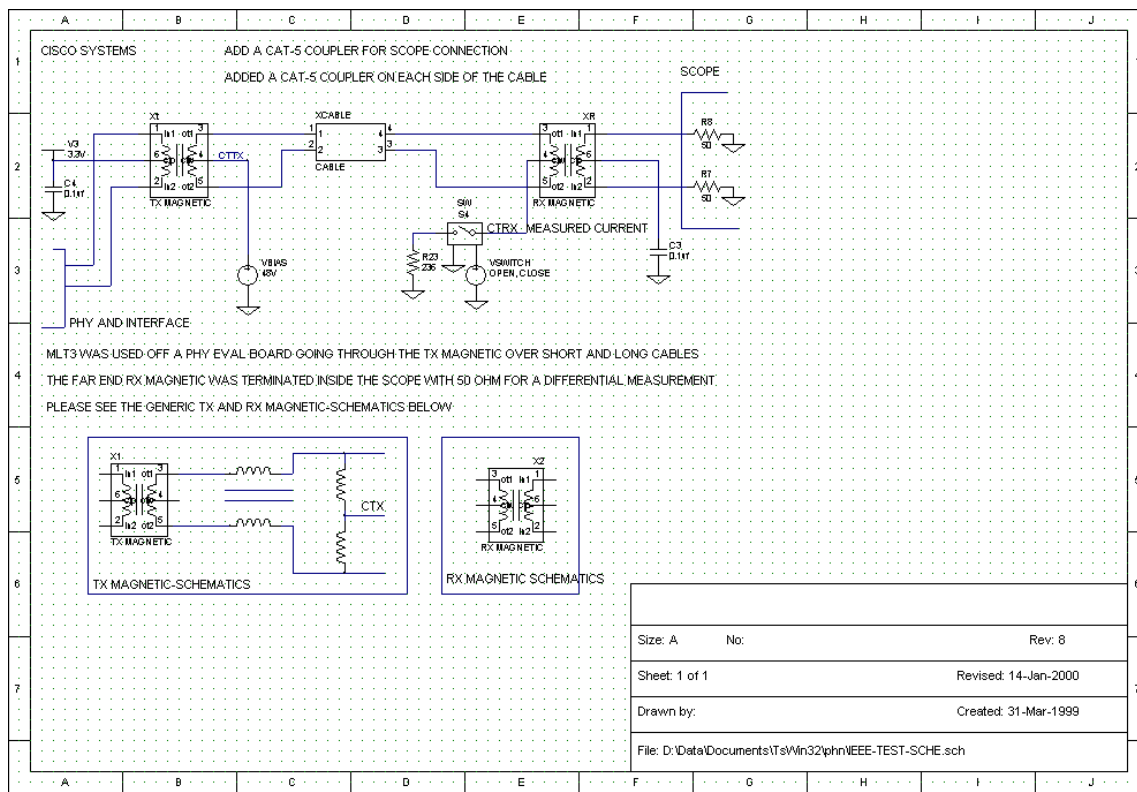
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# Signal Quality Measurements



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