

# Quick Start Guide

## SharkTap 10/100

### Ethernet Test Access Port (TAP)



- 1) Connect the NETWORK ports of the SharkTap to the link to be monitored, shown as A <-> B in Figure A below. For instance, you could plug the original cable from A into the left NETWORK port, then plug a short CAT5 (or higher rating) patch cable between the right side NETWORK port and B. The patch cable should be straight through (not cross-over).
- 2) Plug a CAT5 patch cord from the TAP port to the ethernet port of your PC, or other monitoring equipment.
- 3) Apply power to the TAP through the micro-USB connection on the back. The red LED will light to show power. You will typically plug the included USB cable into any free USB jack on your PC, but you can also use a phone charger type of A/C adapter. The SharkTap draws 250mA or less, at 5V DC.
- 4) You can do steps 1-3 in any order. Once the TAP is wired up and powered, you can run Wireshark or other software and capture a copy of all packets on the A and B ports. All packets received on the A or B ports are duplicated on the TAP port. Packets sent to the TAP port by your PC are discarded – they do NOT get sent to the NETWORK link.

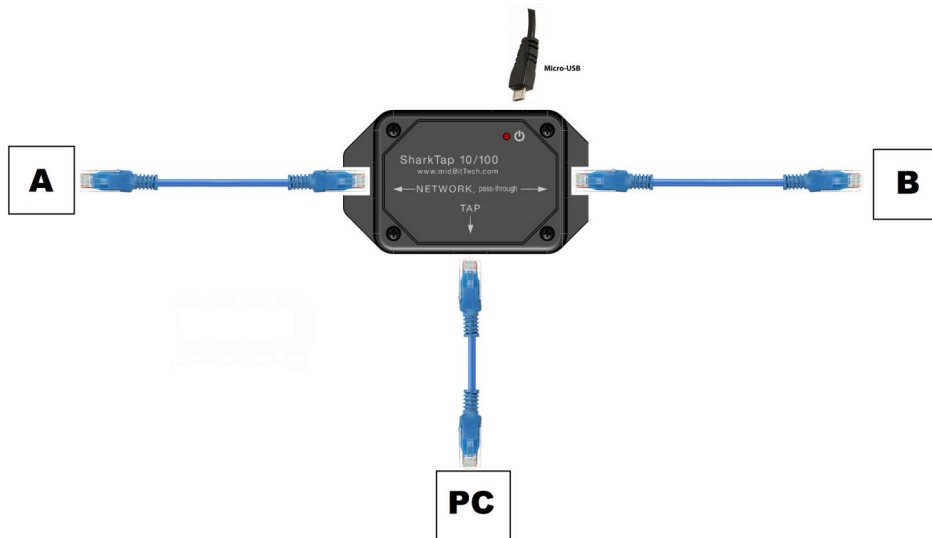
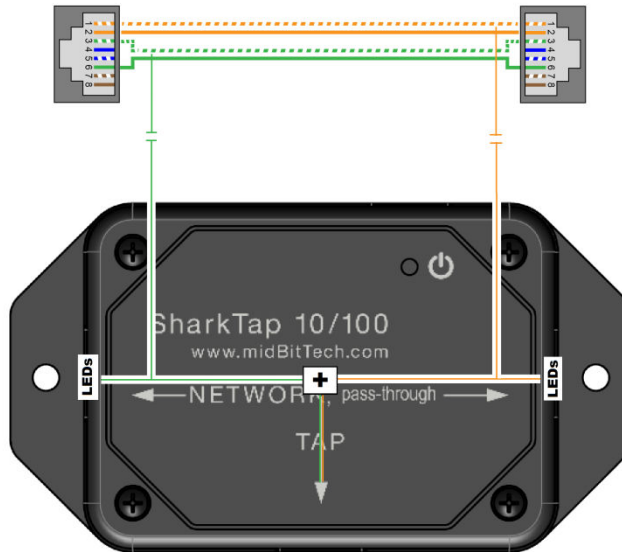


Figure A

The SharkTap 10/100 is a passive monitoring device. The NETWORK connectors are hard-wired to each other, so the SharkTap has no effect on the link, even if there is no power to the TAP. The SharkTap connects pins 1,2,3 & 6 of the two RJ45 connectors together. Pins 4,5,7,8 are unconnected. This is shown in Figure B. The two pairs are capacitive coupled to high-impedance (about 3K ohm) unity-gain differential amplifiers that generate a carbon copy of link signals to an ethernet switch chip that aggregates copies of packets on both links to the TAP port, using the 'port mirror' function of the switch.

The direction of data (transmit or receive) is relative to how your NETWORK link configures itself, but packets on the pins 1,2 pair are shown on the right hand LEDs and packets on the 3,6 pair are shown on the left LEDs. (You normally won't need to know this).



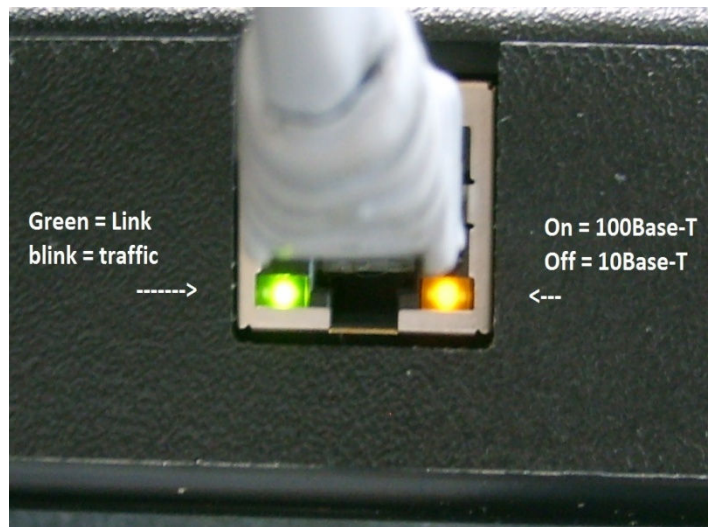
**Figure B**

# Indicators:

The Red LED glows when power is applied. The SharkTap uses the standard 5V power from a USB port, and draws 250mA or less current.



Each port jack has two LEDs. The Green LED is on when there is a valid link connection. The Yellow LED is on if the link is 100Base-T, off if it's 10Base-T. The Green LED will blink when there are packets sent on the pin pair detailed in Figure B.



**Power Over Ethernet:** If there is DC power on the NETWORK ports (a VOIP phone system, for instance), it will be passed through. There are no settings, power is just passed through. But only pin pairs 1,2 and 3,6 are connected.

Questions? Send us an email at [support@midbittech.com](mailto:support@midbittech.com)

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