

Inside Abbey Road Studios—Interview with Mirek Stiles

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Radial Catapult RX4, TX4 4-Channel Cat 5 Audio Snake / Catapult MINI

REVIEW BY PAUL VNUK JR.

Radial Engineering is well known for offering solutions to audio problems big and small. You might not even be aware you need the solution until Radial builds it.

Such is the case with the Radial Catapult, a four-channel configurable audio snake that runs over Cat 5 or Cat 6 cable. If you're thinking, "Digital mixers have had Cat 5 snakes for years," note that the Catapult is an *analog* audio snake.

There are six Catapult models to choose from. All are housed in blue, all-steel, 6.5" x 4" x 1.75" baked enamel enclosures with rubber feet and bumpers, and a metal carrying handle.

The TX4 is the input side of the snake. It contains four female XLR inputs on one side and four parallel male thru outputs on the other. The RX4 is the receiver or output box, with four male XLR outs on one side and four parallel thru male outputs on the other. At the end of each box are a pair of RJ45 sockets for audio in, out, and thru respectively, plus a ground lift switch. You can use any standard Cat 5 or Cat 6 cable for passive microphones, but the use of phantom power requires shielded Cat 5 or Cat 6 cables—I learned this the hard way when I grabbed the wrong cable for a gig.

There are four upgraded models. The TX4M and RX4M are transformer isolated at mic level, and the TX4L and RX4L are transformer isolated at line level at the XLR thru, XLR outputs, and ethernet thru of each box.



One snake, many options

The Catapult system offers a comprehensive set of routing options for live and studio applications. You can send and split signals to several destinations, for example, the FOH mixer, monitor desk, and a computer interface, all at the same time. The Radial website provides a great walkthrough of use case scenarios and explains when and why you might need the transformer isolated units. Just like with standard splitters and direct boxes, it's all about eliminating noise when splitting signals.

In my studio

My studio, while possessing a professionally treated control room, is still just a standard converted office space. I track in what was once an antique gallery / showroom, directly adjacent to the control room. I have no wall-mounted patch panels. My solution for years has been to run a big, bulky, 16-channel snake between the rooms, with the door open wide enough for the cable to pass through. Elegant, it is not! With the new Catapult system, running Cat 5 cables around the perimeter of the room and under the door (which now closes) is, in a word, awesome! I have a cable guy friend who is going to help me install

shielded cables and wall plates in the walls for even easier setup and use.

The Radial Catapult is an excellent solution for home studios where the studio is in a bedroom or garage, but you want to track in the living room, or perhaps use the bathroom as an echo chamber. Cat 5/6 cable is thin, quickly run, and stays nicely out of the way. I did side-by-side recording tests with a pair of matched microphones, one with a standard mic cable, and the other with the Catapult snake, and I couldn't detect any difference or degradation of sound quality.

Catapult Mini

But wait, there's actually more. Radial also makes a trio of even more straightforward, yet just as effective Catapult Mini units. They are housed in a compact 16-gauge steel enclosure. An RJ45 connector lives on one side while the opposite end has four 4' fanned nylon braided cables that terminate in male or female XLR or 1/4" balanced connectors. Catapult Mini works seamlessly with the TX and RX units but has no transformer isolation options.

Conclusion

The Catapult is a convenient and well thought out expandable analog snake system that is a fantastic solution for studio and stage. ➡

Price: Catapult RX and TX \$139, RXL / TXL / RXM / TXM \$229, Catapult MINI \$89 each
More from: www.radialeng.com/product/catapult,
www.radialeng.com/product/catapult-mini