



A few weeks after I had returned the Bolt, another contender for my credit card turned up - The Teletest Telesend HD video wireless link system.

This also works within the 5GHz licence-free band, and again factory paired units dynamically select frequencies on the fly. However Teletest have come up with their own unique way of providing a wireless link between the camera and monitor.

Firstly Teletest claim that they have made the worlds first monitor with a built in wireless HD receiver. This is a great idea. It removes the need for cables between the RX (receiver) and the monitor, and an integrated system makes operation much easier than two separate units.

At the transmission end Teletest have designed the TX (transmitter) to be easily coupled with the camera. The transmission system of the Telesend is HDMI although, amongst pros, HDMI has a bit of a poor reputation, mainly bought about by the thought of consumer HDMI cabling and plugs. But, as an HD codec, it is uncompressed and broadcast quality and so certainly fit for this sort of use. However using HDMI has some effect on the size of the Teletest equipment. The cheapest and smallest model of TX is an HDMI-in only, however to use the TX on a professional camera, where an HD-SDI signal is being inputted to the unit, obviously conversion is needed to HDMI. This means that the TX becomes a bigger unit to house the extra electronics and so also heavier. Whilst on a shoulder-mounted camera the size and shape of the unit is not a problem, on a small camera it would become more of an issue.

The TX unit can be attached to cameras in many different ways. For my PMW500 it came with male and female v-loc fittings, so it fits between the camera and the battery. This is very neat, needs no external power cables, and being centrally placed at the back of the camera, gives maximum line of sight to the RX. Teletest also make a large range of fittings so the unit can be attached to a range of cameras and powered by different batteries. All the TX units have HDMI in and out sockets so can be used whatever your camera.

The SDI-in models have an loopthrough as well to feed to on-camera monitors etc. and all models have 2 Dtap power outputs for powering other accessories.

At the monitor end the inbuilt RX feeds the HDMI signal directly to the monitor and the cheapest base model also has two CVBS BNC inputs on the rear. If you feel you need HD-SDI inputs or outputs these can be spec'd at purchase but add to the cost. Again a range of battery mounts are available.



# REVIEW

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A double receiver can also be supplied to allow a director to switch between two RX-equipped cameras.

Sound is not taken from the embedded HD-SDI video signal, but a feed needs to be taken from a camera output. Using the mini-jack will of course cut off the loudspeaker and not allow the cameraman to monitor sound. On my PMW500 the five-pin XLR could be used as an alternative, and other cameras may have an alternative output to avoid having to use the headphone output. Either way it means an external cable, which is a pity after not needing an external cable for power on my camera. Not to be able to use the embedded sound seems an inconvenience with little benefit. I'm told this may be an issue that is addressed in future batches of TXs.

The advantage of the combined RX and monitor is that both units work from one power switch. This means that the RX is switched off when the monitor is not in use saving battery power and allowing cooling. To reboot the RX system turn the monitor power switch on and off.

Overheating was not a problem with either unit. The camera TX gets hot but not worryingly so like the Bolt, and the RX is quite happy to sit inside the monitor case all day, something the Bolt, in my experience, could just not do. It has no internal fan. Heat and its dissipation is a major difference between this kit and the Bolt.

I had the opportunity to test out the kit on three different shoots, one in a school, all interior, and two mixed interior/exterior shoots. All my directors were impressed with the all up weight of the monitor, even with a v-loc battery it's easy to carry around all day. The picture is very good, certainly as good a monitor as a director would need, and it has the advantage of a fitted "director proof" guard over some of the controls to stop inadvertent twiddling – a useful feature!

The supplied monitor case is just about sufficient, it's an odd shaped package it has to contain, and there is a bit of movement within the case. I found the inbuilt sunshade made it difficult to view the screen straight on, which is not



ideal. Work to do there. But the icing on the cake for this unit is its performance. Teletest doesn't make over-optimistic range claims as Teradek do for the Bolt. They claim 70m is achievable but 20m-30m for a rock solid signal. I agree with this. At close range the link seemed pretty bombproof, it never dropped out and the picture was always completely stable. There is zero delay. For mission critical use - as a broadcast link for example - it would seem well up to the job. As a director's monitor it is absolutely ideal. Even at extended range, drop outs were infrequent. When it did, it often reconnected quickly when back in range, only once did it need the monitor/RX unit to be switched off/on - which is easy with the single power switch.

In conclusion, the system works very well and as specified, and the camera-mounted TX and

single RX/monitor make it all very easy to use. It is switch on and forget.

The cheapest HD-SDI-in pair would be priced at about £1500, which don't forget, includes a monitor, although you may possibly need up to three battery mounts/plates to add to that.

While the Telesend Transmitter and receiver/monitor are definitely not things of great beauty, they've clearly been designed to be practical and I'd say they are a good price, for a piece of kit that WORKS! Teletest product details and prices here:

<http://www.teletest.tv/hd-video-wireless-link.aplos>