



easier when 5G is widely available,” Geoff remarked. A panic button can be installed which the driver can press to alert the depot if an incident is occurring so that managers can see what is going on; and take appropriate action. Recordings could eventually be held in the cloud and accessible through a password-protected portal. “Cloud technology is the way forward,” Geoff stated.

All the firm’s camera systems are covered by a two-year warranty. GPS is included as standard and provides vehicle location and speed data. The information it delivers synchronises with the video footage and audio recordings. Audio recording equipment is proving popular and can be combined with the aforementioned mini-dome camera. It enables recordings to be produced which can support allegations that a passenger used abusive language to the driver and the other way round.

Geoff is not attempting to suggest that all claims made by passengers are fraudulent. That is certainly not the case, he said. “If your vehicle is the one at fault however, and there is camera evidence, then you can manage the claim more quickly and efficiently to settle it on the best possible terms,” he said.

Without it, disputes over who did what and when can drag on for days, if not weeks. If the claim centres around damage done to a parked car, then the claimant’s car hire costs will rise and rise; and the bus company and its insurers will end up footing the bill.

Cameras can be mounted externally in order to monitor blind spots and the road ahead as well as positioned internally, Geoff points out.

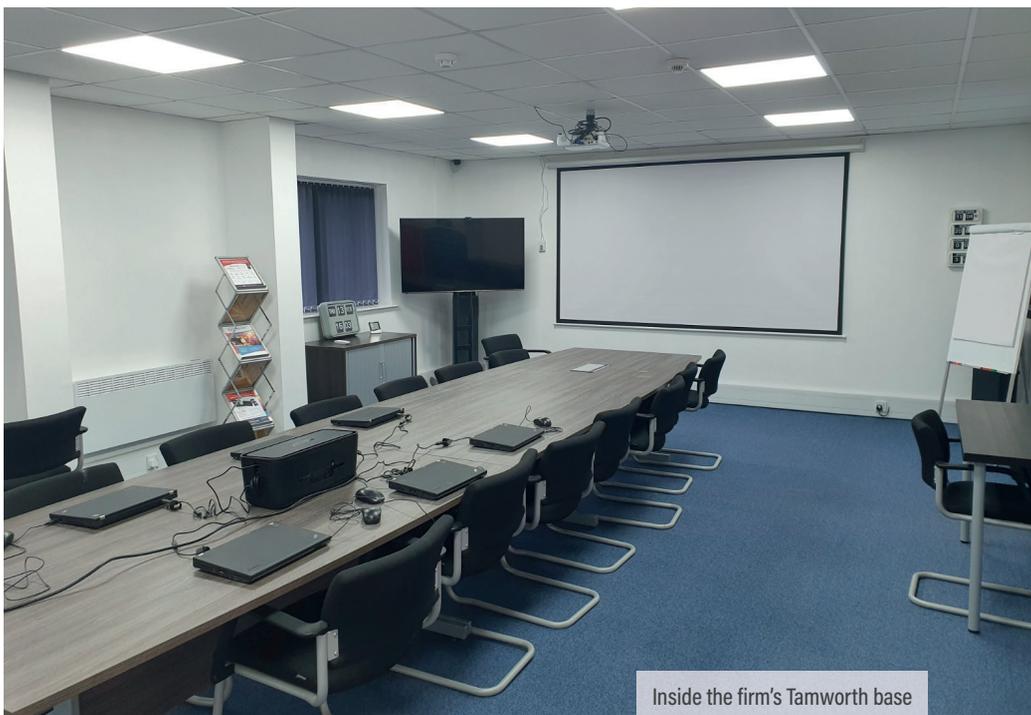
Worthy of note is Centrad’s CEN-303 weather-resistant reversing camera, which has a viewing angle of approximately 180 degrees. It comes with 12 infra-red LEDs which illuminate the area behind the vehicle up to 5m away.

The image can be viewed on a 7” CEN-205 in-cab monitor which the firm can also provide. Cameras are installed to provide full surveillance on every side and corner of the vehicle. Cameras can also be used to monitor drivers to ensure they are concentrating, not smoking, not using a hand-held phone while driving, and not exhibiting signs of fatigue. Tired drivers are a danger to themselves, their passengers and to other road users.

This type of camera can be integrated with an onboard driver monitoring system that can detect harsh acceleration and other instances of poor driving, including a failure to use indicators, and provide instant real-time alerts to the traffic office.

Centrad still offers LED destination displays

Geoff Cross, founder of Centrad



Inside the firm's Tamworth base

and has developed next stop announcement and remote tachograph download. Centrad can also install onboard WiFi; something bus passengers increasingly expect as a matter of course. The onboard device can be connected to one of the company’s DVR recorders using an ethernet cable which gives operators the ability to view and download camera footage and obtain live and historic GPS data. Customers can select from a range of data

packages.

Geoff hasn’t entirely given up operating buses. “I’ve got a 1997 Dennis Dart which we use to demonstrate the various products Centrad offers,” he said. He also owns a small private hire business called Midland Bus Hire which can provide a 1966 AEC Routemaster for weddings and other special events. Look out for it at venues around the West Midlands this year. //

