



Truma launches next generation Control System

With its CPU based hub, Truma iNet X System will be able to handle the much faster CAN bus, and almost any other technology that may come along. This is because software updates will always be able to keep it bang up to date. The philosophy fits perfectly with Truma's mantra 'Start smart. Be smart. Stay smart'

Words Terry Owen

Truma's iNet system, launched back in 2015, broke new ground, winning the European Innovation Award in 2016. Not only did it allow things like heating, lighting and air conditioning to be controlled from a convenient central panel, it also allowed those same functions to be controlled from anywhere via a smartphone app, as long as there is a minimum 2G signal at each end.

The reason iNet could work with such a basic signal is that it relied on text messaging to send commands. This is fine for a wide variety of functions but, roll forward six years, and communication technology has come on leaps and bounds. 4G is now the norm with 5G being rolled out in many places.

What's more, the internet of things (IOT) is now truly here with just about everything being connected to the internet sooner or later. The new technology provides the opportunity for much

more sophisticated control and the deployment of high bandwidth devices such as 4K CCTV cameras. The bottom line is that, with the Truma iNet X System, RV's can offer ever more comfort, safety and convenience.

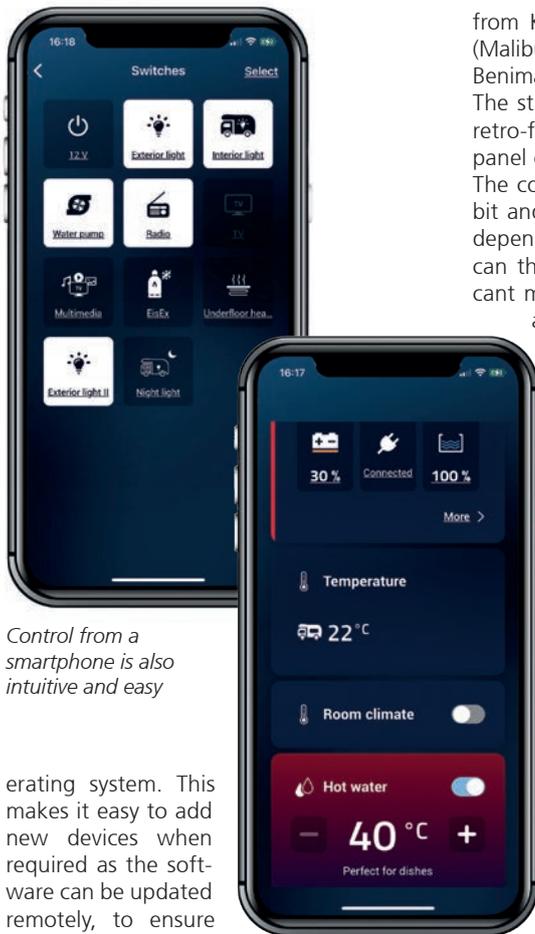
To embrace this emerging world Truma has given iNet a complete makeover. Enter the

iNet X System, a brand-new system that Truma describes as 'blazing a trail into the future of travel'. Gone is the reliance on text messaging and in its place is a whole new range of advanced communication and control protocols.

Key to the new system is its open architecture and a new central op-



The iNet X control panel can display any image and duplicate it simultaneously on a smartphone for remote control



Control from a smartphone is also intuitive and easy

erating system. This makes it easy to add new devices when required as the software can be updated remotely, to ensure the system is always up to date. Control is via an intuitive colour touchscreen panel or via a mobile phone app using the 4G network. The Truma iNet X System comprises four basic modules – a standard panel, a Pro panel, a smartphone app and a communication Hub. To ensure a smooth and trouble-free take up, Truma is staging the roll out of the iNet X system and its functions. The Truma iNet X Pro panel is being launched first, in new installations as a standalone control panel that connects directly to the appliances within the RV. It is already beginning to appear in selected models

from Knaus Tabbert (Weinsberg), Carthago (Malibu) and Trigano (CI, Roller Team and Benimar).

The standard panel will launch in 2022 for retro-fit applications although the iNet X panel can also be retrofitted – see later. The communication Hub is the really clever bit and will launch in 2022, the exact date depending on supply chain constraints. You can think of it as a computer with significant memory and processing power that is able to handle a wide variety of bus systems, including CAN bus. In this way it will be as future-proof as possible. The Hub will connect directly to the control panel (either standard or Pro) and greatly enhance its capabilities.

Eventually the plan is for the Hub to be able to work independently with human interface devices such as tablets, smartphones, semi-transparent touch-controlled windows and so on.

Touch screen technology

In choosing which technology to use for its control panels, Truma wanted something that was to be reliable, robust, and not prone to mis-keying - where a slight touch in the wrong place results in an unwanted reaction. It therefore went for the industry standard, resistive technology where signals are generated as different layers in the screen touch one another when pressed. This gives a tactile feel and means that

functions can be activated with virtually any object (finger, stylus, gloved hand, pen, etc.). The technology also has a low power consumption and is resistant to the effects of surface contaminants such as oil, grease and moisture.

The main alternative would have been to use capacitive technology such as is used in many smartphones but this was considered less robust in an RV environment. Dealers should be aware that users may need to give a firm press for functions to operate, and advise them accordingly.

Truma iNet X Panel vs Truma iNet X Pro Panel

As you might expect the main difference between the two panels is capability. The Pro panel supports more functions and devices. Among other things, it is possible with the Pro variant to display and control information from the vehicle (e.g. water tanks, lights, battery sensor values, etc.) subject to matching communication protocols. In addition, the variant also supports more devices, such as the heating system Alde 3020.

Retrofit scenarios

End user with CP Plus panels can ask their dealers for an upgrade to the new iNet X panel. It does involve cutting a larger hole but a template for this is delivered with the panel. The upgrade opens up the RV to the Truma iNet X System with all its advantages, such as controlling third party devices and intelligent services such as predictive maintenance, all extendable through the iNet X Hub.

Conclusion

In the last couple of years there has been an explosion of touchscreen control and information panels for RV's. Proprietary systems aside, most of these use CI-BUS or LIN-BUS technology. However, as demands increase, these technologies will struggle to meet bandwidth requirements. Against this fast-moving background Truma has come up with a solution that will stand the test of time.



Left: confirming the pairing of the panel with a smartphone

Truma Open Innovation

In developing iNet X System, Truma has been, and continues to, consult closely with both customers and end users, in order to integrate their ideas into intelligent product solutions. It's something Truma calls its Open Innovation path, where the system solution is designed as an open interface solution for interaction with customers. It's a fact that involving users in this way helps firms better address their customers' underlying needs. The result is reduced market risk at launch along with improved return on investment and a faster time to market.

