

# High-tech coaching on wheels: Digital play analysis right on the pitch

DVfB Stuttgart is using an innovative mobile tactics vehicle based on Sharp technology on the training pitch

With more than 67,000 members, VfB Stuttgart 1893 e.V. is the largest sports club in Baden-Württemberg. As of recently, the Bundesliga football team has been assisted by a specially designed mobile tactics vehicle with state-of-the-art display technology from Sharp. It means training analysis and discussions can take place directly on the pitch.





# The concept: improving the efficiency of training sessions

In line with its digitalisation process, VfB Stuttgart recently increased its investment into modern and innovative systems. A number of touch displays have been installed in the corporate stands for interactive cooperation. Sharp was involved as the technology partner for the display equipment in the new mobile tactics device.

Alongside Sharp, VfB Stuttgart also worked with C&S GmbH, who are experts in networking, directional radio and IT. As well as its IT expertise, C&S also specialises in the development and construction of specialist vehicles, providing further starting points for the cooperation with VfB Stuttgart. Together with Mathias Munz, who is responsible for science, technology and innovations within the sports department, the C&S team led by Managing Director Miran Percic developed the idea into the high-tech mobile tactics vehicle which will help improve the efficiency of football training.

When the plans were finalised based on an extensive preliminary study in late 2019, VfB Stuttgart commissioned C&S with the production of the specialist vehicle, which needed to meet the exact requirements and individual needs of the Bundesliga football team.

#### Compact high-tech miracle on wheels

On the one hand, the vehicle needed to be as compact, lightweight, quiet and energy-efficient as possible. At the same time, it needed to have enough space for a state-of-the-art AV system with a built-in Sharp touch display. It also needed customised configurable storage options and space for training

equipment and supplies. As well as comprehensive functions and connectivity, it was important to VfB that there was a reliable, seamless interaction between all the components used.

There was also a focus on user-friendliness. The vehicle itself and all the technologies needed to be as easy as possible to operate so that the trainers and players could get to work with it as quickly and efficiently as possible. "The real challenge lay in combining the complexity and strict technical requirements in a user-friendly, completely reliable functionality," remembers Miran Percic, Managing Director of C&S GmbH.

# Focus on individual requirements and user-friendliness

With these requirements in mind, C&S developed a completely electric vehicle with a single voltage level and a tailored boot design. Directional radio technology was used to achieve seamless integration into VfB's existing IT environment with complete interactive connectivity. It also enables accurate live tracking of the players directly on the built-in PN-80TH5 display from Sharp.

The display, which has a screen diagonal of 80 inches and a resolution of 3840 x 2160 pixels, enables precise training analysis both in real time and offline. Content can be played back in high resolution with precision details thanks to Direct Optical Bonding. With 30 contact points, the display is also really fast, reactive and multi-touch compatible, making it perfect for collective play analysis for the VfB team. Another decisive criterion in the choice of the Sharp PN-80TH5 was its user-friendliness. The display does not require complex



configuration or prior knowledge from the users in order to operate it. This means players and the team of trainers can work intuitively with the system at the touch of a button.

## Technology and discussion centre right next to the pitch

It was important to VfB that using the mobile tactics device would not cause major changes to their established training routines. The high-tech vehicle also needed to be integrated into the existing processes and provide real added value for the cooperation. The training sessions still begin with an initial chat between the trainers and the team. The moves and the strategic objectives of the session can then be shown, saved and shared on the integrated Sharp display. During the training itself, the players can be tracked and traced on the display in real time, allowing high-precision analysis and direct, dynamic intervention by the coaching team into the different situations.

In the meetings between the training sessions, during drinks breaks and in the final consultation, strategic adjustments can be clearly shown on the display for all the players to see. For example, the pitch, individual player positions and moves can be displayed, with comments added on the display. These can then be saved centrally.

"Overall, the display allows easy participation of all the players in the meetings, thus enabling active and digital development of new solutions. And all this with the greatest possible transparency," explains Mathias Munz with a smile. Miran Percic adds: "The C&S mobile tactics machine with the Sharp display lays the foundations for visual digitalisation in professional sport. The next step is to expand the mobile LED technology on a larger scale."



### Positive summary and further projects

The mobile tactics vehicle has received nothing but positive feedback since it was first used in June 2020. VfB Stuttgart really appreciate the ease of use of the Sharp display and the outstanding audio and video quality. It makes training sessions really dynamic and interactive, with the shared analysis helping all parties to learn. The mobile tactics machine also enables fast transport of training materials and refreshments and stores a first-aid kit and a defibrillator for medical treatment.

"For our professional team and our up-and-coming talent, we have generated real added value to everyday training," explains Mathias Munz. "We have already received enquiries from other professional clubs who want to know about our technical setup so they can implement similar projects. We are pleased that interest is being shown and we are proud of the fact that we have been able to play a pioneering role in making training more innovative. We have two reliable partners for the future in C&S and Sharp."

Markus Eisemann, Manager Channel Sales DACH at Sharp Business Systems Deutschland GmbH, is also excited. "Our interactive displays provide a high-performance, flexible platform for real-time training analysis and interactive presentation of information. This improves cooperation within the team and makes training sessions more efficient. We are pleased that our solutions are being used in this particular environment and that we have been able to support VfB Stuttgart as a technology partner in implementing these innovative ideas."



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