

Ford World Rally Team Uses RFID-Enabled DVDs for VIP Tickets

At the racecourse, an embedded passive tag allows access to the arena and a special VIP area; at home, fans can use the rectangular DVD to watch a presentation about the race team and its members.

By Claire Swedberg

Oct. 26, 2007—RFID-based ticketing solutions company [Eventixx](#) is providing the [Ford World Rally Team](#) with RFID-enabled DVDs that act as tickets for its VIP visitors to attend races in Trier, Germany. The RFID tag embedded in each ticket-shaped disc allows its holder to access the arena and a special VIP area. Then, after the races, the user can take the disc home and use it to view a multimedia presentation, including video and text about the race team and its members.

The solution is the first in a series of applications [Eventixx](#) and German CD and DVD replicator [CDA Datentraeger](#) intend to market, in conjunction with partners that includes [Brooks Automation](#). [CDA Datentraeger](#) is creating the discs in a variety of shapes, with embedded [UPM Raflatac](#) RFID tags. [Brooks Automation](#) manufactures the race team's RFID interrogators, used to capture data from the discs and thereby allow entrance for VIP guests. [Stora Enso Digital Solutions](#) is providing its digitally printed Discbox Slider packaging, a type of cardboard DVD sleeve.

The [Eventixx](#) discs the [Ford World Rally Team](#) is using are rectangular, with a hole in the center to fit DVD players. Each ticket consists of two 0.6 mm-thick discs glued together—one optically encoded with the multimedia presentation, the other imprinted with text. The ring-shaped passive 13.56 MHz RFID tag is placed between the discs, making it difficult to remove. The tag, which complies with the ISO 15693 standard, has 25 kilobytes of memory.

VIP guests were invited to the annual August Ford World Rally races in advance. Upon arrival, says [Nick Janssen](#), [CDA Datentraeger](#)'s international sales director, each guest picked up their ticket-shaped disc, on the front of which [Eventixx](#) had printed that person's name and seat number.

"Up to that point, nobody saw a DVD in rectangular ticket format with an integrated RFID chip which can be used in every customary DVD player prior, during and also after the event has been over," says [Andreas Setz](#), the event manager at [Eventixx](#). Before the event, [Eventixx](#) encoded each ticket's RFID tag with the individual's name and accessibility information.

When the user takes the ticket to a specific section of the event, staff members carrying handheld readers scan the ticket within a few centimeters and determine whether that guest can enter that area. Upon returning home, the user can then watch the DVD, which includes video footage of races and other promotional material about Ford World Rally events.

This is the first application for [CDA Datentraeger](#) and [Brooks](#). The two companies, together with [Eventixx](#),

are now marketing the solution to other end-users, such as football clubs and exhibition coordinators. The disc manufacturer currently uses high-frequency (HF) tags because the antennas used in ultrahigh-frequency (UHF) tags do not fit properly in the disk form factor. However, Janssen says, UPM Raflatac is working with CDA Datentraeger to create a Gen 2 UHF tag that would fit in a CD or DVD. "I am confident that we will have it by next year," he says. A UHF tag would allow a much longer read range.

CDA provided 500 optical disc tickets for the Ford World Rally event in August. Next year, the team may again distribute disc tickets, though details have not yet been decided. According to Janssen, the disc manufacturer has created a semi-automatic process to embed the tags in optical discs.

For Ford World Rally, the RFID-enabled tickets also provide a defense against counterfeiting, since the RFID and disc components make them impossible to replicate. "Currently," Setz notes, "organizers see, in the Eventixx RFID ticket, the first instrument to proceed against the black market."

RELATED_ARTICLES Additionally, Eventixx is entering into negotiations with several ski resorts in the Alps, Setz adds, to provide lift tickets in the form of a DVD containing an embedded RFID tag. The RFID tag would provide access control to the lifts, while the DVD could include details about accommodations, events and special videos the ticket holder could watch at home.

"During the rally, we determined that the Eventixx RFID disc changes the primary meaning from a 'normal' ticket to a collector's item," Setz states. "This was amazing for us to see."

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