SPORTS TIMING TECHNOLOGIES

PROFESSIONAL TIMING
FOR SPORTING EVENTS

Scope of work

Updated January 2016

OUR TIMING COMPANY
WE LOVE TO TIME YOU

MA:XX Timing

- More than 20 years' experience of sporting events
- 3 years' membership of the Frankfurt Marathon organising committee
- Diploma in Sports Science, majoring in IT
- Complete timekeeping and results available in real time
- Automatic cup results of several competitions possible!

The right chip

Every event is different and requires bespoke planning. It is important to choose the right chip for each type of sport.

Passive chip

Typical uses
Running events
Mass sports: cycling
Mass sports: cross-country skiing

Passive chips are systems that draw the energy required for communication and analysis of internal processes solely from the field generated by the read/write unit. Passive chips require no power supply of their own but are only able to work over short distances, are a little less accurate (1/10 sec), have a detection rate of 99.5–99.8 percent and are not always waterproof. The best-known variety is the Radio Frequency Identification RFID.

Active chip

Typical uses
Cycling & triathlon events
Inline skating races
Speed skating
Motor sports

Active systems have their own power supply. They feature on-board batteries or are connected to an external power grid, thus enabling longer-range communication and the management of larger databases. Integrated sensors can also be used. The systems are more exact (1/1000 sec) and have a detection rate of 99.9999999999 %. The chip is 100 % watertight as it is moulded as one part.

We use a range of systems from various manufacturers and will select the perfect system for your event.

All our systems are licensed by the DLV and IAAF in compliance with IWR (International Competition Regulation) 165.24 and are thus suitable for inclusion in record lists. The system has been successfully commissioned and tested by the BA WO, Federal Committee for Competition Organisation at the 20th German 100 km Road Running Championships (11.05.2006). **Our systems have already been used around the world at Olympic Games, world championships IRONMAN, national and international competitions and for almost all other kinds of sport, including Formula 1.**

Security

All data is secured at several levels, e.g. on a laptop, server, decoder and USB stick etc, to prevent data loss.

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EXTRACT FROM OUR
CLIENT AND EVENTS LIST

Event

ZDF Fernsehgarten Family & Friends Lauf
ZDF Fernsehgarten Triathlon
GARMIN Alps Triathlon
Rems Murr Cup
German Triathlon Championship Braunschweig
Europacup Paracycling
Woogsprint
Kinzigman
MTB Marathon Güntersleben
Bike Marathon Siedelsbrunn
Würzburger Swim & Run
German Duathlon Championship Eichelberg
Speedman Olympic Stadium Munich

Client

Heel
DSW Darmstadt
Santander Consumer Bank
City Marketing Braunschweig
Neckar Center Esslingen
BASF
TUS Griesheim
ATSV Braunau
Helios Clinics
RSC Wiesbaden
Decathlon Germany
TSV Gütersleben
Adventure World
RWE
VFL Münster
TSG Mainaschaff
TSV Calw

Agency

GoEvent!
Stöcker & Friends
Visions & Concept
Motion Events
af sportmarketing

And many more...

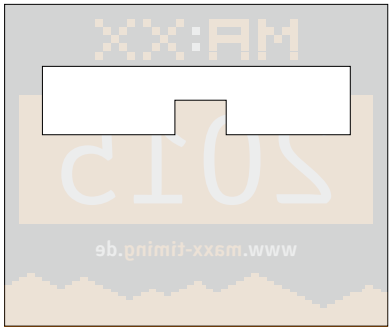
OUR TECHNOLOGY FOR RUNNING EVENTS
PASSIVE SYSTEMS & CHIPS

System 1
Reusable race number chips

This chip system is integrated into gates (6 patents) of variable widths between 2.50 m and 6 m, which means that there is no danger to the athletes from narrow antenna gates or from tripping over thick mats on the running surface.

Front side of the race number

Reverse of the race number with integrated disposable chip



Overview of a complete system

System 2
Single-use race number chips

This chip system is integrated into ultra-thin hard rubber mats which can be used in a range of widths between 2 m and 8 m. Widths of up to 16 m with two systems can be provide upon request.

Both systems are licensed by the DLV and IAAF in compliance with IWR (Internationale Wettkampf Regel/International Competition Regulation) 165.24 and are thus suitable for inclusion in record list.

A selection of the largest events with the chip system used

Cycling

- ✔ Roc d'Azur – FR (14,000 mountain bikers)
- ✔ Time Megève-Mt Blanc – FR (2,200 cyclists)

Running events

- ✔ Marseille Cassis Half Marathon, FR (17,000 runners)
- ✔ Melbourne Marathon, Australia (25,000 runners)
- ✔ City bay fun run, Australia (25,000 runners)
- ✔ Run for the Kid, Australia (35,000 runners)
- ✔ Abu Dhabi Half Marathon IAAF (15,000 runners)
- ✔ Boston Marathon
- ✔ Melbourne Marathon
- ✔ Toronto Marathon
- ✔ Madrid Marathon
- ✔ Cardiff Half Marathon
- ✔ The Great Scottish Run (Glasgow)
- ✔ Bregenz Marathon

Ski racing

- ✔ Lidingöloppet, Sweden (30,000 competitors)
- ✔ Foulée Blanche, FR, Cross-country skiing (4,000 competitors)
- ✔ Bieg Piastow, Poland, Cross-country skiing (4,000 competitors)

OUR TECHNOLOGY FOR RUNNING EVENTS
CALCULATION OF DISPOSABLE CHIP SYSTEMS

Correct finish configuration with 2 synchronised timing systems!

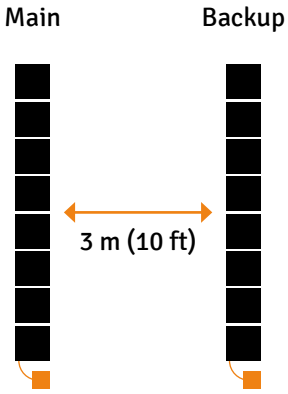
Main timing system

Backup timing system

The systems we provide always consist of two independent timing systems (decoder case). The first timing system is the main system (at the finish-line), the second timing system is a backup system (to the finish line) that we use to guarantee a double read rate for the disposable chips – and to have a full-scale backup system in the event of a technical malfunction!

Almost all other suppliers will configure your finish line with **only one timing system** (decoder case). This looks exactly the same as our setup, but these suppliers are **unable to provide any results at all if the timing system** (decoder case) **malfunctions**!

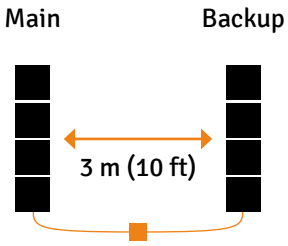
2 x 8-mats system with 2 decoders (main & backup)



Note

Should never be used at the finish line: data loss can arise as there is no proper backup if the timing system (decoder case) malfunctions!

2 x 4-mats system with 1 decoder (main & backup for split times)



Note

(See above)

6-mats system with 1 decoder

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OUR TECHNOLOGY FOR RUNNING EVENTS
DISPOSABLE RACE NUMBER INFORMATION

The race numbers are attached to the chest with four safety pins. As soon as you cross the ultra-thin mats at the start, the finish or along the route, these directly transmit your race number and the time to the finish via GSM modem.

Whatever the number of competitors, the length of the course, the duration of the race or the weather – the BibTag Timing System, using MA:XX Timing, is the most efficient and reliable automated timing solution currently available. The timing chip is attached to the reverse of the race number and the competitors simply put their race numbers on as usual. There are no complicated instructions and no deposit, reducing the risk of mistakes and maximising the read rate of the chips. The timing system provides reliable and speedy results – for every runner in every race.

The race number chip is a revolution in timing for all race events. The BibTag System uses only top-quality components and is based on UHF technology. The BibTag System is user-friendly and combines accuracy with the quality of the tried-and-tested MYLAPS ChampionChip system.

It has been tested under all conceivable conditions, including weather, distance, durations, number of competitors, density of competitors and the absorption of sweat onto the chip.

10 reasons for timing with MA:XX Timing

- Fewer instructions required for competitors
- No chip deposit
- The thinnest mats with anti-slip features
- Race number chip worn on the chest
- Top quality UHF technology
- Top quality active transponder technology
- Greatest accuracy
- No power source required & data via GSM / LTE
- Times and results in real time
- Operable in any weather

OUR TECHNOLOGY FOR TRIATHLONS & CYCLING – ACTIVE SYSTEMS & CHIPS

Our active system

Ankle chip – ProChip

This waterproof chip/transponder system with no less than 100 percent reliability is used for all events where the greatest accuracy and reliability are crucial, such as cycling, triathlon, downhill slalom, cross-country skiing, skating (speed, short track and inline), swimming and professional elite racing.

This system is currently the most reliable system in the world and has been used at two Olympic Games already. It has been in use for IRONMAN Triathlon events since 2013:

- the Olympic Games in Beijing 2008
- the Olympic Games in London 2012

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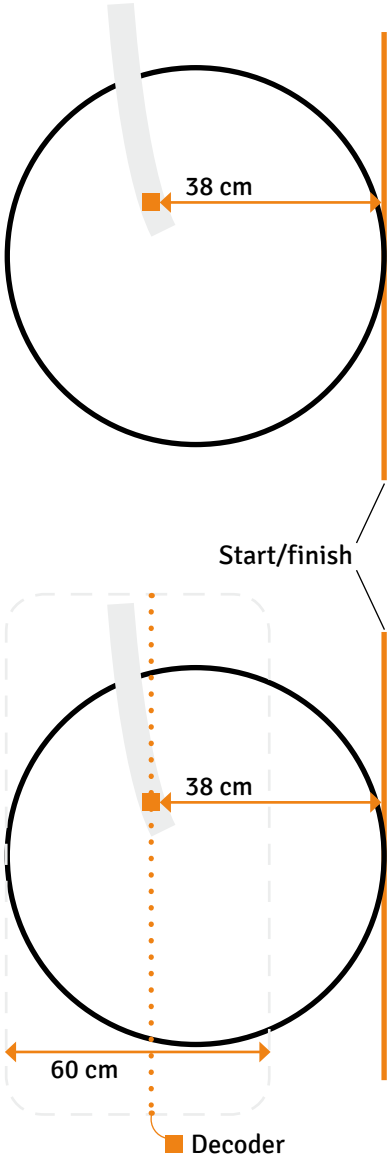
OUR TECHNOLOGY FOR TRIATHLONS & CYCLING – PROCHIP (ACTIVE CHIP) INFORMATION

The ProChip is a further development of the ChampionChip and is used especially for sports requiring the most accurate and reliable results.

"The ProChip is the only transponder system in the world with which the timing results are as accurate as a photo-finish camera". Combined use with a photo-finish camera is of course an option.

The ProChip is used particularly for triathlons, cycling events, swimming, skating or speed skating. The ProChip is supported by a number of courses (so-called "time points"), clubs and organisers around the world.

Time point use is being extended through Germany from 2014, which means it will be possible to train with ProChips in a range of sports halls, swimming pools, race and cycling tracks. The time points are installed permanently and will always be available for training purposes.



A few clubs have already made ProChip compulsory for licensed competitors in order to guarantee consistent timing quality in races. Others will be following suit soon.

The ProChip can either be tied to the lace of your running shoe or you can attach it to your ankle using the special strap provided. For cycling, it can be attached directly to the racing bike or mountain bike. We can also provide special brackets.

Here's how it works

The ProChip communicates with the system built into the course at the start and finish and optionally at additional points along the route. Every time you pass one of these timing points, your ProChip sends a signal to the contact strip integrated into the course. Using this signal, the system records your time and/or the number of laps.

Your lap times and results can be sent to

- ✔ Your account on the internet
- ✔ Display boards and monitors
- ✔ Your mobile (from 2016)
- ✔ Your Facebook account (from 2016)

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SPORTS TIMING TECHNOLOGIES

TURN SPORT INTO A MEDIA EVENT!
WITH SOCIALSHARE AND MORE...

EVENT-APP

FEATURES

- Design is individualised for the event or title sponsor
- Information about the event
- Route description
- Integrated online registration
- Live leaderboards
- Live tracking
- Integrated results
- Option for photo uploads
- Option for video upload
- SocialShares via Facebook and Twitter
- Personalised training plans[2]

MORE ABOUT THE APP
ON THE NEXT PAGES

SOCIALSHARE-MODUL

with Facebook, Twitter, E-Mail or SMS

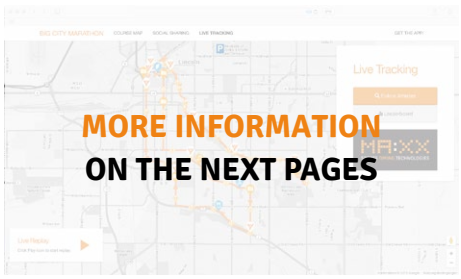
FEATURES

- Real-time updates for each competitor during event via Facebook, Twitter, email or SMS
- Option for event-specific bulletins including sponsor presentation

LIVE-TRACKING-MODUL

FEATURES

- Online map with live location of competitors
- Live position update
- Live leaderboard
- Anticipated finish time
- Supports exact GPS location[3]
- Live overview of individual times at each timing gate



MORE INFORMATION
ON THE NEXT PAGES

DOWNLOADABLE EVENT-SPECIFIC EVENT-APP
FOR IPHONE AND ANDROID

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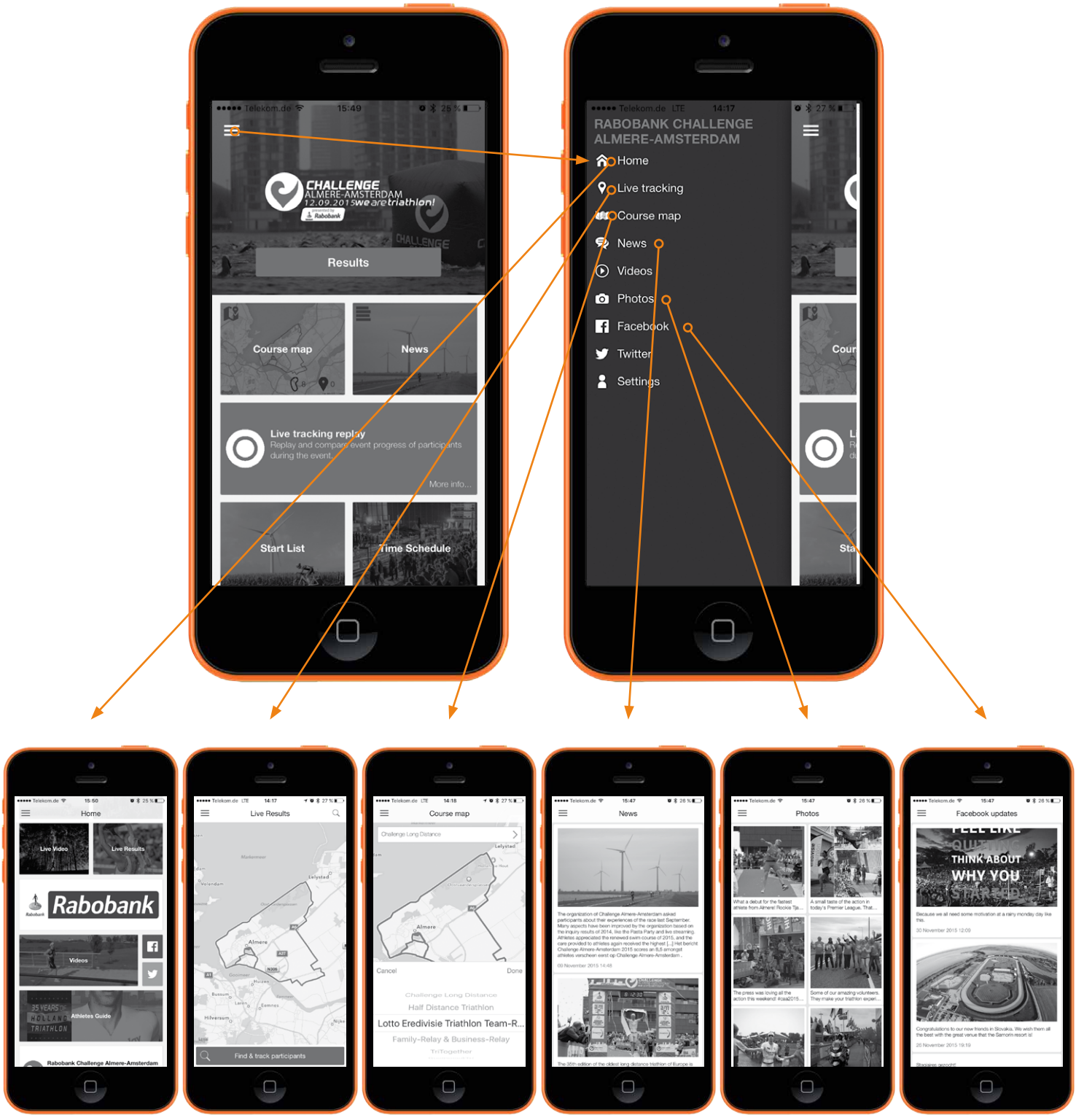
SPORTS TIMING TECHNOLOGIES

EVENT-APP – YOUR EVENT JUST GOT EVEN MORE INTERESTING – ALSO FOR YOUR SPONSORS!



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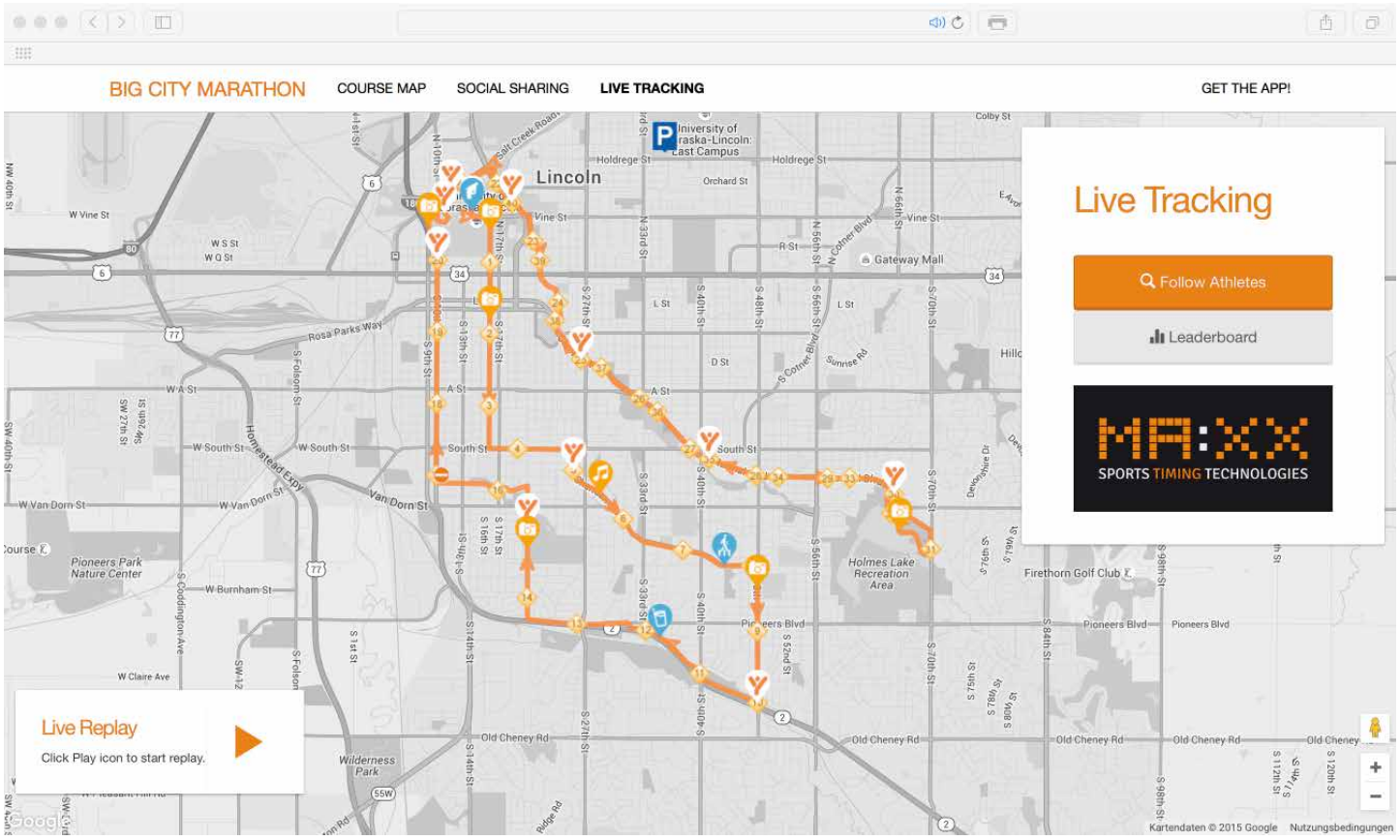
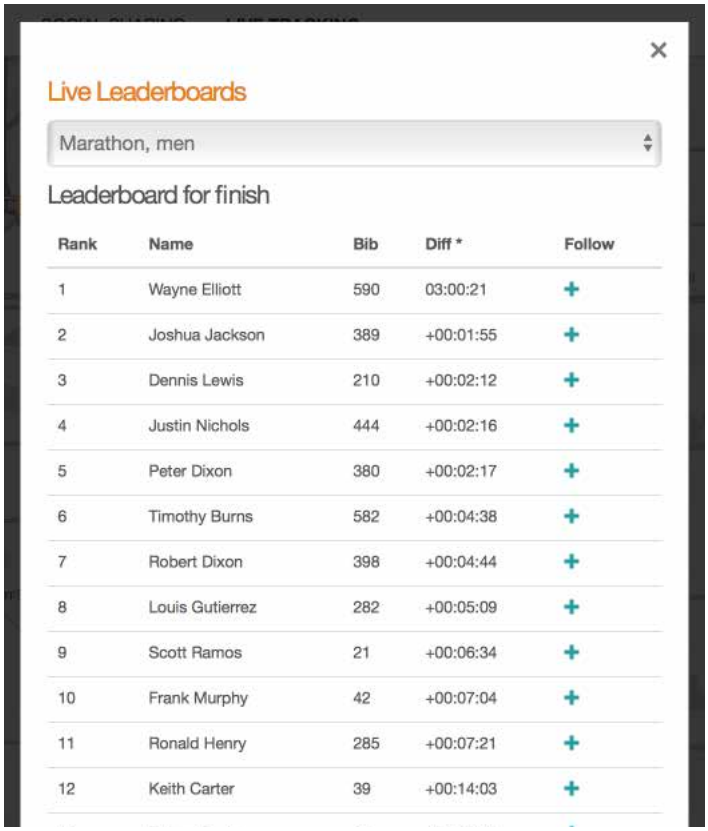
LIVE-TRACKING-MODUL
GET YOUR ATHLETS ON TRACK



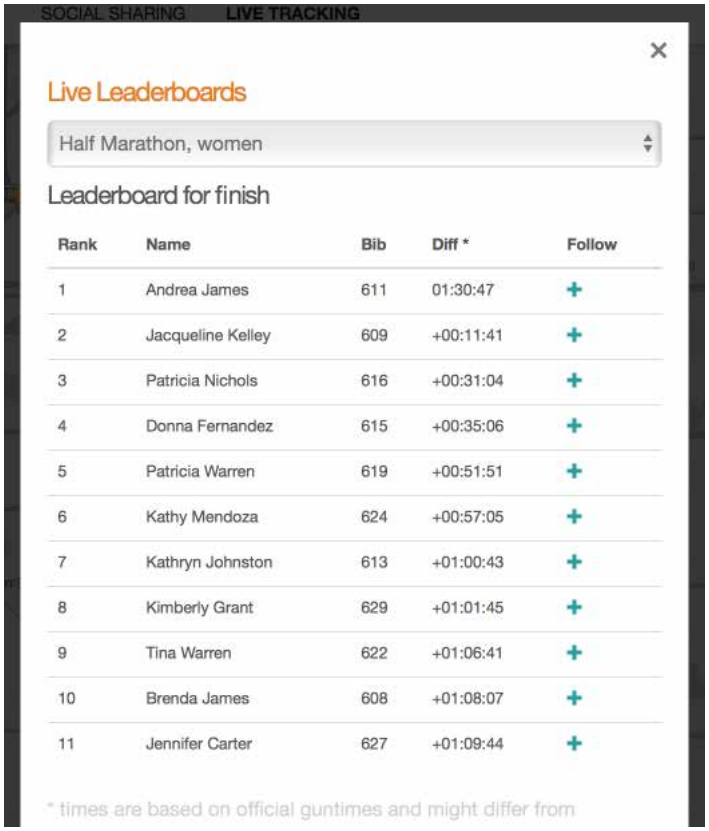


Live Leaderboards

Marathon, men

Leaderboard for finish

Rank	Name	Bib	Diff *	Follow
1	Wayne Elliott	590	03:00:21	+
2	Joshua Jackson	389	+00:01:55	+
3	Dennis Lewis	210	+00:02:12	+
4	Justin Nichols	444	+00:02:16	+
5	Peter Dixon	380	+00:02:17	+
6	Timothy Burns	582	+00:04:38	+
7	Robert Dixon	398	+00:04:44	+
8	Louis Gutierrez	282	+00:05:09	+
9	Scott Ramos	21	+00:06:34	+
10	Frank Murphy	42	+00:07:04	+
11	Ronald Henry	285	+00:07:21	+
12	Keith Carter	39	+00:14:03	+



SOCIAL SHARING LIVE TRACKING

Live Leaderboards

Half Marathon, women

Leaderboard for finish

Rank	Name	Bib	Diff *	Follow
1	Andrea James	611	01:30:47	+
2	Jacqueline Kelley	609	+00:11:41	+
3	Patricia Nichols	616	+00:31:04	+
4	Donna Fernandez	615	+00:35:06	+
5	Patricia Warren	619	+00:51:51	+
6	Kathy Mendoza	624	+00:57:05	+
7	Kathryn Johnston	613	+01:00:43	+
8	Kimberly Grant	629	+01:01:45	+
9	Tina Warren	622	+01:06:41	+
10	Brenda James	608	+01:08:07	+
11	Jennifer Carter	627	+01:09:44	+

* times are based on official guntimes and might differ from

HIGH PERFORMANCE TECHNOLOGY AT THE TIME POINT, FOR COMPETITIONS AND MORE

There are no extra charges for the chips for the organiser

Organiser information for active chips

Every event is different and requires bespoke planning. It is important to choose the right chip for each type of sport.

Option 1

The competitor already possesses a ProChip

If a competitor already possesses a ProChip, he/she can enter the globally unique serial number during online registration and use this for the event.

Option 2

The competitor hires the ProChip for an event

If the competitor does not possess a ProChip, he/she can hire one for the event for a small fee; the chip will be issued to him/her by the organisers on the day of the event. We will make arrangements for the hire charge directly with the competitor during online registration.

Any competitor not returning his/her ProChip will have the retail price of 100,00 € (including VAT) charged to his/her account.

Option 3

The competitor uses a FlexAbo flexible subscription for the ProChip (annual)

The competitor would not like to buy a ProChip as he/she is worried about injury or ending his/her career as a competitive athlete in the next few months. In such cases the competitor can make use of the great value Flex-Abo flexible subscription, which makes it possible to use the ProChip for 1, 2 or 5 years for an annual fee.

With option 3 the chip can be used for training purposes at any time point (training course) in the world. Further information on time points at www.time-points.de.

LICENSING CERTIFICATE

Licence number	200605100002	
Project	Transponder	Single-use chips / multiple use
Project description	Product name	D A G - Bib - SYSTEM
	Type	Philips RFID-CHIP
	Operating frequency	RFID-SYSTEM 13,56 MHz
	Manufacturer	DAG System – Villeurbanne-Lyon – France
	Timing regulation	Temperature-tested quartz and radio clock
	Chip attachment	Reverse of race number
	Antenna system	Gate shape and/or set-up up to 10 m in width and 2.50 m in height
Sales / licensing rights	MA:XX Timing	Alexander Stäudle Auf der Aue 2a 69488 Birkenau
Use	Athletics, cross country and street racing events	
Requirements	Complies with requirements for use in DLV (German Athletics Association) territory under international competition rules (Internationale Wettkampf Regeln, IWR) 165.24.	

The project indicated and its technical components have been commissioned and tested by the BA WO, Federal Committee for Competition Organisation at the 20th German 100 km Road Running Championships in cooperation with local competition umpires and Josef Vahle. The test was conducted successfully.

Darmstadt, 23. April 2010 Mainz, 17. April 2010

BA WO, Federal Committee for Competition Organisation	**FK Competition Systems & Equipment**	**Test conducted by**
Frank O. Hamm Chair of BA WO	**Klaus Schneider** CEO, FK Competition Systems & Equipment	**Josef Vahle** BA WO staff member

SPORTS TIMING TECHNOLOGIES

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