



System

version 3.4 English





	Main menu		2
KICH-1502.D6			

Using this manual

RICH-1502.D6

This manual is an interactive PDF. You can easily navigate through it, providing the answers you are looking for. There are several ways to utilize it:

Navigation/information bar navigate to the page: Contact Inmotio		go back o	on the path of visited pages navigat indication of page number	e to the previous page
иматю М į	1. Quick Access Toolbar		••••••••••••••••••••••••••••••••••••••	
version code of the manual navigate to the main menu navigate to the content This bar is on every page helping you to fi	screen layout indication of chapter nd your way.	go forward on the p	path of visited pages I	ate to the next page

Main menu, Content and Screen Layout

The Main menu offers you a choice between all subjects in this manual.

The Content shows a complete view of all items. You can click om the topic of your choice and you automatically navigate to that page.

The Screen Layout offers you the fastest way to find your way int the screen, you can click on one of the five windows.



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Chapters, subchapters and paragraphs

The beginning of a chapter, subchapter and paragraph is marked with a tab in orange (fading in colour). That indication turns into gray on the following pages and is then activated to switch to the beginning.



Navigation by windows

The five windows of the Screen Layout each have their own chapter in the manual. The screen shots of these windows are interactive. Here is an example of navigation using the Menu bar (window #2 in the Screen Layout):

navigate	to other Tabs in the Menu bar			
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Home Analysis Playlist	Pitch Tools View Database LPM	About		•
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Live/Record Prepare Open Cli Start recording Dataset Dat	sse Save Save Dataset Data aset Dataset Dataset as Properties filtering	Dataset to Remove Athlete Add Delete Group Database Athlete Properties Group Group Properties	Place Delete Marker Add Delete Evercise 333 Set Endtime Add marker Marker Properties Exercise Exercise properties gam	Delete Game Set Set Improve your performance game properties Start Stop
Live data	Dataset	Athletes Groups	Markers Exercises	Games About
navigate to another	navigate to	another part	navigate to another	
ection of the selected Tab	within the se	lected Section	section of the selected Tab	

Navigation in the text

When the explanation text is referring to another explanation, that part of the text is indicated by an orange rectangle. You can click on this text to navigate to this explanation.

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Navigation with shortcuts

		Rotat Click chan mous your If you	ing on the button at the bottom left (c) o ge the position of the field in the win e button pressed down. You can also keyboard. I select an athlete in "Datasets Explo	of the screen, in order to rotate t dow by clicking on the field and zoom in and out using the scrol rer (B)", this player will be high	the field through 90 degrees. You moving the mouse while holding II wheel on your mouse or the arro lighted on the field with a yellow	can also the left w keys on circle.
		Ver Displ Vou v conta optio	ay vill see a number of icons at the top l ining options such as "Viewer option ns", will appear (explained on the ne	eft of the module layout window s", "Camera control", "Measuri xt pages).	v (d). By clicking on an icon, a win ng tools", "Visualisations" and "F	ndow ecorder
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	cmd	Go forward on the Go forward on the	path of previously visited pages	(Windows). Equal to: (Mac). Equal to:		
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Introduction

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Dear User,

The Inmotio System has been developed being an efficient and user-friendly athlete monitoring system. The system is based on the measurement of athletes position data, heart rate, video streams and optionally the ball.

It serves both physical and tactical analysis of individual athletes and teams. The system provides real time feedback during live training sessions and games. The Inmotio System helps you to better understand the physical performance of individual players and of the team, increases tactical insight, helps to prevent injuries and allows you to build up individual player profiles.

The Inmotio System includes player tracking (LPM), dome (PTZ) cameras, a ball tracking system and advanced analysis software. This manual describes the system in general but focuses on the use of the analysis software.

The application is flexible and therefore any suggestions for improvement or extension are welcome and will be seriously considered.

If you have any questions or suggestions, please contact us by phone: +31 20 3632693 or e-mail: support@inmotio.eu



INMOTIO OBJECT TRACKING BV Founded by Abatec and TNO







The standard Inmotio System (for 1 football field) includes 4 sub-systems:

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Local Position Measurement (LPM) System	Pan, Tilt, Zoom (PTZ or dome) Camera System	Ball Tracking System	Inmotio Analysis (coaching) Software
capturing the position of the athletes includes:	capturing of automated HD video	capturing the position of the ball includes:	real time data analysis, database and reporting includes:
1 Base Station (10x)	6 PTZ or Dome Camera (2x)	8 Camera (12x)	10 imoServer *)
2 Reference Transponder (1x)	7 Dome Camera Application	9 Ball Tracking Servers	11 imoClient **)
3 Glass Fiber Hub (1x)			*) sofware, can be installed on same PC as imoClient or
4 LPM-server			seperate (rack-)server. **) software can be installed on deskton lanton or
5 Athlete Transponder			tablet PC.

	LPM-system	9
	Capturing the position of the athletes Local Position Measurement (LPM) System The LPM system measures real time position of the athletes. The system includes base stations 1 that are mounted around the measurement area. The athletes wear a transponder 5 that communicates with these base stations. A reference transponder 2 is positioned at an edge of the field for calibration purposes. The base stations are connected through a fiber optic infra- structure to a fiber optic hub 3. From here the base station data is transferred to the measurement PC (LPM Server) 4. The LPM Server calculates the position data of the athletes in real time. A sensor is connected to the transponder's telemetry channel socket. This sensor picks up the heart rate signal that is produced by a H2 or H3 Polar heart rate belt.	
2		

Transponders

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Athlete equipment

The vest contains the Polar heart rate measurement belt and the transponder.

Please make sure the antennas are positioned on the top of the shoulders. Adjust the vest if necessary.

Check the connection between the antennas on the shoulders and the transponder on the back of the player's vest.

Charging the transponders

After every measurement, the transponders must be charged in the charging station. When the transponder has been fully charged, a green light on the charging station will light up next to the transponder.

- Fully charged transponders will last for approximately 4.5 hours.
- Charging a transponder takes max. 1 hour (depending on the current power level of the transponder).

Activating the transponders

Adding transponders to the system and how to activate them, is explaned in "Setup Transponders" in the chapter "Prepare recording".





	Dome camera system	 11
RICH-1502.DG	Capturing of automated HD video The dome camera system 6 records the training session or match by means of 1 or more HD quality PTZ cameras. The video streams are recorded in sync with the position data of the LPM-system. The cameras can be controlled automatically by following 1 or more athletes.	
	Dome Control Application This application 7 takes care of the capturing of the video streams that are produced by the dome cameras (see "Dome- Control Application"). The application includes a live viewer.	

PICH 1502 D6				DomeControl Application	12
The Dome If the app this test s	eControl Application usually start lication is started without the im screen.	s automatically when a measure oServer, than the screen (with 1	nent starts in the imoServer. camera connected) looks like	Developed 1333	
Connected If the Me During re	t with the imoServer asurement Selection is activated cording, the sign 'REC' shows un	in the imoServer, the screen will der the camera number.	show the camera's view.		
Menu At 1 Cha stro	The Alt key makes nges made by unauthorised pers ngly discouraged.	the menu to appear. ons can jeopardize the camera co	onfiguration and is therefore	Settings Options Alt+O Logging Alt+L	

			\	\	13
RICH-1502.D6					10
		Lee en lee en lee en lee en lee		 ! !	

			Ball Tracking system	 14
RICH-1502.D6	8	Capturing the po The ball tracking system includ that are positioned around the capture the position of the ball, time by the feature servers. Eac three cameras. Fiber optic cables connect the synchronized and merged with	es 12 fixed CCD-cameras 8 measurement area. The cameras which is calculated in real ch feature server is connected to cameras. The ball data is the position data and video.	

		Inmotio analysis software		15
RICH-1502.D6		Real time data analysis database and reporting		
		Inmetio analysis software		
		The Inmotio analysis software or Inmotio Application (as shown in "Screen layout") gathers the position data, ball data and video streams. The application can be used to record, store		
		and analyze the data. A standard database can be connected to this application. Reports can be retrieved from this database by using standard report generating software.		
		Inmotio Server application		
		The Inmotio Server application or "imoServer" manages the communication between the LPM System, Ball Tracking system and the Inmotio Application. It is amongst others applied for activating and checking the status of the transponders in the system. It is used for controlling the dome cameras and		
		enabling multiple Inmotio Applications (clients) to monitor a measurement simultaneously.		
		Dome Control Application This application takes care of the capturing of the video streams that are produced by the dome cameras (see "Dome- Control Application"). The application includes a live viewer.		
	1		1	

		\setminus	imoServer	16
The user	interface of the imoServer includes of the following s	ections:	imoServer - v3.4.1.48 DEVELOPMENT Transponders	- • ×
Innote Serv	"Section Transponders" "Section Measurement selection" "Section Video server" "Section LPM Statistics" "Section Control Camera"	Heasurement election Pith Field 1	Intere Dentes Cart Cart Proj Output journame Output journame Proj Proj Output journame Proj Output joutput joutput joutput joutput	AntonnalD 1 0 1101 0 1111 0 1121 0 1121 0 1131 0 1141 0 1151 0 1151 0 1151 0 1151 0 1161 1181
and the fo	ollowing buttons (at the top): Settings . Please note that una use of this feature may jeopa system and is therefore disco	uthorised dize the uraged.	M 19 19 10 0 0.0 % 2 0.0 0.0 0.0 21	0 1191 0 1201 0 1211 1 1201 1 1201 0 1211 1 1201 1 120
P	Exit . Shut down the imoServe	Control cancers 1 [Hannel]		
Section Tr	ansponders		Select all Select none Store Deselect off field	
Shows the	e overview of all transponders, selected for this meas	urement.		
Vest	The ID of the vest (attached t	o the vest itself).		
Name	The name of the player, wear	ng the vest.		
Short	cut A key that enables you to swi	ch quickly between yes or not to fol	low with the dome camera.	
Cam	x A transponder with this box c	necked is followed by the correspond	ding dome camera.	
Freq.	The number of measurements	per second for this transponder.		
Quali	ty The quality of the signal in %			
Bases	stations The number of base stations box turns red, or else it is gre	used for calculating the last position en.	of this transponder. If smaller or equal to 6	, the
Λ, Υ	Position on the field.	paring the yest		
Anter	nalD1 The ID of the first antenna in	this transponder.		

			· · · ·		17
RICH-1502.D6		\backslash			
Select all	Select all of the shown t	ransponders.			
Select none	Deselect all of the shown	n transponders.			
- Store	Save the present combin	nation of selected transpor	ders.		
Deselect off field	Deselect off field. Desele quality and are therefore using this option, first a	ct all transponders that sh e considered to be off field Il transponders must be se	ow less than 10% . Please note that for lected		
! The buttons above are r taken over by "Prepare	nowadays barely used (only recording".	for testing purposes), sinc	e this option had been		
Conting Management coloction					
Section Measurement selection	1 	(D i		Measurement selection	
Select the Pitch you are inten	iding to use and select the i	type of Preparation you war	it to use.	Pitch Field 1	•
	.				
	Refresh to apply the late	st changes made in the co	aching software.	Prepare Preparation	- Activate
	Refresh to apply the late	st changes made in the co	aching software.	Prepare Preparation	Activate
Activate	Refresh to apply the late Start a measurement wi	st changes made in the co th the Activate button.	aching software.	Prepare Preparation	Activate
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Activate	Refresh to apply the late Start a measurement wi ! This is not the	st changes made in the co th the Activate button. same as starting a recordin	aching software. ng.	Prepare Preparation	Activate
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Activate Section Video server The icon shows if there is a c Camera selector input	Refresh to apply the late Start a measurement wi This is not the Onnection with the DomeCo Fill in this field by using (see "Section Transport case the camera is on.	st changes made in the co th the Activate button. same as starting a recordin ontrol application. g the short cut caracter and lers"). The checkbox of the	aching software. ng. I the camera number e camera is ticked in	Video server Camera selector input	Y Activate
Activate Section Video server The icon shows if there is a c Camera selector input	Refresh to apply the late Start a measurement wi This is not the onnection with the DomeCo Fill in this field by using (see "Section Transport case the camera is on.	st changes made in the co th the Activate button. same as starting a recordin ontrol application. g the short cut caracter and lers"). The checkbox of the	aching software. ng. d the camera number e camera is ticked in	Video server Camera selector input	Y Activate
Activate Section Video server The icon shows if there is a c Camera selector input	Refresh to apply the late Start a measurement wi This is not the onnection with the DomeCo Fill in this field by using (see "Section Transpond case the camera is on.	st changes made in the co th the Activate button. same as starting a recordin ontrol application. the short cut caracter and lers"). The checkbox of the	aching software. ng. I the camera number e camera is ticked in	Video server Camera selector input	Y Activate

RICH-1502.D6 Section LP The first ic status of t	M Statistics con shows the status of the conn the system.	ection with the LPM server. The	second line shows the previous	LPM Statistics Control connection to LPM system: Measurement selection not activated Performance of IPM system in the last 60 seconds	
The lower	part shows the detailed status o	f the sysem in the last 60 second	ds.	Sample frequency 1000 signal OK 100,00 % No reference 0,00 % No transponder 0,00 % All zero 0,00 % Too volatile 0,00 %	%
Section Co Select a ca window.	ntrol Camera amera to operate it manually. Yo	u can move the camera (pan and	tilt) by moving the cross in the	Control camera 1 [Manuel]	
Unde	efined You can s	tore and name maximum 4 came	ra positions.	Undefined •	
E Ma	an. zoom Zoom rule	r for the camera that is focussed	on a player (transponder).	Man. zoom	
_ (Zoom rule	r for a camera with no particular	focus.		

	 Get organized	General		19
RICH-1502.D6	The Inmotio coaching software a like players, teams, pitches, etc (datasets). Please note that training elemen By analysing the data we disting "Physical da "Tactical dat Reports can be build by third pa Tableau and others or by using .	nalyses data that has been stor is collected along with measure ts should be structured in order uish two kinds of analyses: ta analysis" a analysis" rty report building applications csv files in combination with MS	ed. In this database generic inforr ment data based on games and e r to be able to compare tests throu such as Visual Studio, MS Report S Excel.	mation, xercises ugh time. t Builder,
	General First, we have to define general in names, Agility Definitions and Exe This is done in the Section "Con help.	items like: Players, Teams, Clubs rcise Analyze Options . figuration" of the "Tab Databas	s, Training types, Dataset types, Exe e". Please ask your Inmotio const	e rcise ultant for
	Before a measurement can be st Properties". In case a training will be measur Game needs to be define first.	arted, a Team and a Dataset type red, one or more Exercises need	e must be selected in the "Datase to be defined first. In case of a m	t natch, a

|--|--|--|--|

RICH_1502.D6	<u>Get organized</u>	Physical data analysis		20
	After the "General" settings bein application for the first time, all The physical definitions can be the "Tab Database". Please, ask	ng finalized, the physical definit values are default. entered in "Exertion Analyze Op your Inmotio consultant in case	ions need to be filled in. When st tions" in the Section "Configurat you need support.	arting the ion" of
	Other parameters, like: Speed , H Category and Deceleration Catego known as "Options" in the "1. C	leartbeat, Acceleration, Decelerat ory, are defined in "Zones" in the Quick Access Toolbar".	ion, Power, Sprint Category, Accel e "Configuration and prefs"-men	eration J, also
	Analysing physical data			
	When the above mentionned der analyzed by using the "Exertion"	finitions are made and a dataset "-module in the Section "Genera	has been recorded, the physical al" of the "Tab Analysis".	data is
	Agility test			
	The Agility Test is applied to ana sprint or agility. For this test line finish, sector) must be defined f the "3D Object List" of the "3D Example The black start and finish line (r line) and the two red lines (Line row and LineRightArrow) are def the 3D Viewer. Then, the sequence of crossing defined in "Agility Definitions" i Section "Configuration" of the " Database". Now, it is possible to analyse the	Intyse a Intype a iss (start, intype a Intype a iss (start, intype a Intype a irst in Viewer". With the started intype a Intype a with the started intype a Int	General" of the "Tab Analysis".	

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The Inmotio tactical analysis modules have mainly been developed for 11 versus 11 games, played on full sizes football pitches. The tactical modules are based on definitions that have been developed by scientists and professional football trainers. Some of these definitions can be changed by the user. Please ask your Inmotio consultant for advice.

For performing tactical analysis a Game has to be defined first (see "Games" of the "Tab Home").

Example

Get organized

This example **Game** has two **Teams** with players, 2 parts (first and second half) and a team playing direction in the first half (the second half is automatically assigned the opposite playing direction). Selecting **Soccer lines** in the Visualization window section enables you to observe the relations between the different lines of a team in the "3D Viewer". The button **Analyse ball possession** has to be activated in order to analyse ball-related behavior in the tactical modules. Please note that **Analyse Ball Possession** must not be used in case the ball was tracked manually.



40:13.029) Aspire 97 - FC T 0:15:25.03 0:55:38.06 pe ts Aglity tests	wente 97 3 start 1 2 end first half	• •			
Aspire 97 - FC T	wente 97 3 start1 2 end first half	•			
0:15:25.03 0:55:38.06 pe ts Agility tests	3 start 1 2 end first half	•			
0:15:25.03 0:55:38.06 pe ts Agility tests	3 start1 2 end first half	•			
o 0:55:38.06 pe ts Agility tests	2 end first half	-			
ts Agility tests					
ts Agility tests		•			
Aspire		Members			
EC Twente		Selec 9 Cold	or Athletename	Role	^
Red	•	V	(12) Frans van Oldeniel	Regular	
- CCG	0.1	V	(13) Said Mousslih	Regular	
	••		(14) Dawid El Haik	Regular	
Right to Left	•		(16) Hidde ter Avest	Regular	-11
ation			(17) Octavian Deaconu	Regular	-
sualisation	Color 🔺		(18) Ruben de Jager	Regular	-11
ght line			(19) Delano Groothuis	Regular	-11
nclosing box			(20) Luuk Slegt	Regular	-11
verage distance from center			(22) Roy de Smit	Regular	-11
rea			(23) Marijn Wijkhuis	Regular	
occer Lines		× 🔽 (Sel	ect = Show selected transpone	ders only)	-
ngle to goal		Select all	Select none	• Se	lect
	Appre s FC Twente Red R		Appro Appro Second Color Col		Pecket Team Approx FC Twente Red Red Red Red Right to Left V Ition uslasation Color Itin Color V

Various tactical analyses can be made in the Section "Football Match" of the "Tab Analysis".



		Brief overview 23	
RICH-1502.D6		Dielovelview	
1. Quick A	Access Toolbar	the key, most frequently used features that the user can set up himself.	
2. Menu b	ars	contains tabs with the following menu bars:	
Tab F L	<mark>lome</mark> ive data ataset	contains the menu buttons, sub-divided into: starting or stopping a recording. opening, closing or saving dataset files, editing the properties of the dataset and setting the dataset filter.	
A G M E G	thletes Proups Parkers Xercises Pames	deleting athletes/transponders or editing athlete properties. adding or deleting a group of athletes or editing the properties of the group. placing, deleting or editing the properties of the marker. placing, deleting or editing exercise properties. adding, deleting or editing game properties.	
Analy G G Fi	rsis eneral craphs ootball Match	contains the menu buttons, sub-divided into: contains data analysis options. options for graphically displaying the analysis. analysis of the field occupancy.	
Playli <i>P</i>	i <mark>st</mark> Iavlist	contains the menu buttons, sub-divided into: making compilations of video's (under construction).	
Pitch Ti	rack/Field	contains the menu buttons, sub-divided into: the opening, saving or editing the properties of the measuring area and the menu buttons for adding pylons and goal(s).	
Tools F	vnort	contains the menu buttons, sub-divided into:	
li Li	nport MP	importing data from other programs. loading Ipm files.	
View M L	lodule windows ayout	contains the menu buttons, sub-divided into: options for displaying the modules in the module windows (tabs). opening and closing (multiple) module layout windows (tabs), storing the active layout window and taking a snapshot of the active layout window.	
Datat A C	p <mark>ase</mark> ctions onfiguration	contains the menu buttons, sub-divided into: modifying analyzes and removing datasets adding, deleting of editing players, teams, clubs and definition of agility tests and exercises.	

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LPM	onfiguration server	contains the menu buttons, sub-divided into: configuration of transponders and defining pitches, settings of the imoServer(s).
About		contains the menu buttons, sub-divided into:
Li	cense	to view the licence information and check for updates.
AI		
3. Dataset	s window	contains the following panes:
Datas	ets	the dataset of the live recording and any existing, open dataset files.
Datas	et Explorer	the athletes, groups, markers, exercises, games and playlists from the selected dataset.
Came	ra selector input	select the (set of) camera('s) you want to enable or disable.
Detail	window	the data from the selected transponder/group/marker/exercise/game.
4. Module	window	contains the following modules:
3D Vi	ewer	2D or 3D display of the field.
Graph		graphic display of data of the selected transponder/group.
Video	stream	video image.
Event	viewer	displays filtered details of events per athlete.
Sumn	nary	summary of the position, heart rate, speed and distance for each player.
5. Time pa	nel	contains the following components:
Timel	ine	display of time of the recorded measurement.
Time	indication	time of the current view and total duration of entire recording.
Time	slide	to take small steps forward or backwards in the time of a recorded measurement, and to slow down or speed up the playback speed.
Play/F	Pause	to play/pause a dataset and the buttons below it, to go 30 seconds forwards or backwards in the time of a recorded measurement.
Data	panel	settings for how the data are displayed in the window.

				Shortcuts					25
Work	ing with t	he Inmo	tio IpmSystem, you	may find the following shorto	uts very ha	ndy:			
Ctrl	S		Save Dataset		Ctrl	-	1 Fra	me back	
			Open Dataset				1 Frai	me forward	
Ctri	Ľ		Prepare recording		Ctn		Repla	iy faster	
Ctrl	R		Start Recording; L recording; Live/Re	ive/Record Start; Stop cord stop	Ctrl	Ţ	Repla	y slower	
Ctrl	L		Start Live data; S	top Live data					
Ctrl	D		Dataset to Databa	se					
Ctrl	F		Data filtering						
Ctrl	Alt	Μ	Marker on play po	sition					
Ctrl	Alt	L	Live marker						
Ctrl	Alt	Ε	Open Exertion mo	dule					
Ctrl	Alt	Α	Open Agility test i	module					
Ctrl	Alt	1	Open Time On Ice	module					
Ctrl	Alt	Т	Open Transition m	nodule					
Ctrl	F4		Close dataset						
Shift	F4		Close module/layo	out					
Ctrl	(space	ebar)	Toggle play/pause	dataset					
Ctrl	Page Up		Step forward						
Ctrl	Page Down		Step backwards						

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	1. Quick Access Toolbar			26
RLCH-1502.005 If ID Default - ID ID T	Open the window containing the main option previously saved datasets.	s of the application.	It also allows you to quickly ope	'n
Save Dataset as Close Dataset Esit				
(Propions) () Exit	Save			
🥔 🔚 🚺 🐹 Default 🔹 📾 🖙	Deptions Provides direct access to the "Configuration a	and prefs" window.		
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	Saves your present working space (combinati	on of open windows). Please also see: "Layout".	

RICH-1502.D6 🗉 🖻 🗖 📐 More buttons ٢ 🗀 👔 🌠 Default ٢ 👔 🌃 Default - 🔍 🖬 두 Customize Quick Access Toolbar A pull-down menu will appear, in which you can specify ✓ Save Dataset the desired options and can change the location of the Options ✓ Live/Record Start Quick Access Toolbar and the menu bar on your screen. ✓ Layout Load Lavout ✓ Store layout Customize Quick Access Toolbar... Show Quick Access Toolbar Below the Ribbon Customize the Ribbon... Minimize the Ribbon

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19,1	25,2 high speed running	25,00 Red
25,2	36,0 Sprinting	50,00 Maroon
0,0	10.0 standing	1.00 Line
10,0	20,0 walking	5,00 Green
20,0	40,0 jogging	10,00 Blue
40,0	53,0 running	15,00 Fuchsia
	70,0 high speed running	25,00 Red
53,0		
53,0 70,0	100,0 Sprinting	50,00 Maroon

Zones

The Zones tab contains the definitions of the absolute and relative zones for Speed, Heartbeat, Acceleration, Deceleration, Power, Sprint Category, Acceleration Category and Deceleration Category.

New zones can be added load by adding rows (**Add** button). It is necessary to adjust the zones, among other things for the movement statistics and exertion calculations.

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Batch export

The Batch export tab contains the values for exporting data **Report template**, **Options** (frequency) and **Columns to export**. These settings are used in the "Batch conversion" menu button in the Tools tab menu.

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🛏 😸 (c) 2014 Inmotio Object Tracking B.V.	Red	during a recording (Live Data rec	cording).	
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	Displays the date and duration of Type	of the recording. Select the kind of dataset (Matc Training, Test match, or Other, p in "Dataset types"). Select the team (prepared in "Te	h, repared eams").		
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	Calculation parameters Playback control	Set the heartbeat interval, hearth sensitivity, speed and accelaratio interval and maximum power. Wrap play: by ticking the box, the that is currently being played is each time it reaches the end of t	beat on frame e dataset restarted the	roperties Parameters lation parameters extinency 5000 ° ms down 14 extinency 77 ° ° % Remove 14 for a submotive for a	X 8 Spiles b Spiles
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		data (see Modules – Video strear Offset (ms). If Inmotio has suppli camera system, the video stream be recorded via this system and immediately synchronised with t	n) via ied a is will are he data.	a voora_come oronina (0001)a_come ()	Carcel

RICH-1502.D6 **Data filtering** Dataset filter 💿 🗊 📼 Opens a dialog box that Position calculation OK contains the settings for Ľ, 5 Calculate positions by Weighted gaussian average -Cancel 0.5 Close Save Save Dataset Data Dataset to the position and distance High Low set Properties filtering Database Dataset Dataset Dataset as... calculation. Inmotio sets the Algorithm sensitivity 85 % optimum values for your lpm Distance calculation system. If you want to change Calculate distance by 50 Hz position sampling these settings, you are advised * to do so after consulting Changing filter parameters affects the calculation of distances. Use the following Re-calculate indexes button to re-calculate the distance tables with the above settings. Inmotio. Spike detection/removal Detect spikes Remove spikes connect the dataset player to a player in the database. - 📻 🚍 📼 - = x **Dataset to Database** Team (Dataset) Team B Team Allows you to link the current Athlete name Firetname Firstname Lastname 0 Lastname Search 🔎 VestID Athletenam Database player State dataset to a database. 5 1 Shortname Player 1 Player 1 12 Player 2 Player 2 ~ Close Save Save Dataset Data Dataset to Firstname Middlename Lastname Shortname 1 Dataset Dataset Dataset as.. Properties filtering Database 13 Player 3 Player 3 14 Player 4 ~ ~ ~ ~ Player 4 15 Player 5 Player 5 16 Player 6 Player 6 Player 7 Player 7 1 18 Player 8 Player 8 19 Player 9 Player 9 ✓ 20 Player 10 Player 10 4 22 Player 11 Player 11 4 23 Player 12 (k) Player 12 (k) 1 24 Player 13 (k) Player 13 (k) 4 25 Player 14 Player 14 4 Player 15 26 Player 15 Replace Athletename with database player name on save OK Cancel

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ese LPM About	Athlete Properties Open the athlete properties dia Transponder	log: The definition of the transponder role (such as: athlete, ball, or referee) an the Vest ID .	Athlete properties	×
	Athlete	Define properties such as Name, Shirt Number, Colour, Role (function), Category and Remarks if any of the selected athlete/transponder.	Name Flover 1 Shirthumber 11 0 Color Yelow • Player role Regular Category Category Remark	
	Details	The Height and Weight of the selected player and other relevant remarks.	Visible in 3D Viewer Details Height ISO Compared to the second temperature of tempe	
	Personal Maximums	Define the Maximum heartbeat, Maximum speed and Maximum acceleration of the selected player/transponder.	Preferred shooting arm Right Running economy	
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		Members	Define the composition of the group of players by checking or unchecking the box for the ID number and the name of the player.	Team May 2 (10) Convertig ble Mayre 2 (10) Monotorial average ble	negalar Kaşalar Kaşalar Raşalar Raşalar Raşalar Raşalar Raşalar Raşalar Raşalar Raşalar	
		Visualisation	Select how the group will be displayed in the "3D Viewer".	Select al Select none	Select	
		You will find a created group of	athletes in the "Datasets Explore	er (B)".		
	And a 100 (1996) and and and a 10	Delete Group				
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prope	rties Exercis	Exercises		Begin time, End time and Traning Type of the exercise.	Training Type - Team Ranks Applicy tests	
			Analyse ball possession	Based on the data, the system calculates the ball possession of a player and his passes. The results can be used for "Tactical data analysis" later on.	None Free 1 Projection Members None Test 1 Start Operation Registration 0 Registration 0 Start 0	Robe A Rogular Rogular Rogular Rogular Rogular Rogular Rogular Rogular Rogular
			Tab Team Properties	Define the properties such as the Name, Shirt Colour, Score and Play direction of the	Proper St CO Program St CO Prove	Regular Regular inders only) • • gelecti
				teams. You can add or delete a buttons (above the tabs for the	team using the New Team/Delete teams).	e Team
			Members	Define the composition of the te for the ID number and the name	eam by checking or unchecking t e of the player.	he box
			Visualisation	Choose how the team is display	ed in the "3D Viewer".	

RICH-1502.D6	Tab Parts Define parts of the exercise usin buttons. You will find an exercise the Dataset Explorer.	ng the New Part/Delete Part se created under "Exercises" in	Course geografic Course Course (schodd).000) Name Registre Property Course (schodd).000 Total the Property Course (schodd).000 Total the Total Total Total the Total the To	- • X
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Monter reparties	Plete Exercise Exercise Exercise	Exercise properties Open the dialog box for the prop	perties of the selected exercise (see "Add Exercise").	
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	Tab Team Properties	Define the properties such as the Name , Shirt Colour , Score and Play direction of the teams. You can add or delete a	team using the New Team/Delete	Regular Regular solution Comment Team
	Members	buttons (above the tabs for the Defining the composition of the for the ID number and the name	teams). team by checking or unchecking e of the plaver.	the box
	Visualisation	Choosing how the team is displa	ayed in the "3D Viewer" module.	

RICH-1502.D6	Tab Parts You can define parts of the game using the New Part/Delete Part buttons. You will find an game created under "Games" in the Dataset Explorer.		
		These Respit free End free Downlow Part 1 0.0000 000 0.00100 000 0.00100 000	
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	Select which agility tests are executed in this exercise. These tests are earlier defined in "Agility Definitions".	Conceptopolas Concept	
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Set Starttime Set Endtime Set Endtime Add game game game Set Start Sta	Delete Game Delete the selected game.			
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Exertion Agility Exertion Control of the sector of the sec	efault • • • • Analysis Playlist Pitch Tools View Detect max. heatbeat al Plat Bar graph graph Crapher	Exertion Open the Exertion module in the set the data for analysis in the r Details, Bins, Sprints, Distances, button thereafter.	e module layout window (tab). A ight column of the screen. These Accelarations, Decelarations and	I data come from the database. e data are displayed in the tabs Heatmap when you click on the	You can Summary, Analyse
Timeframe	Define the time interval for the data to be analysed. <u>Normally</u> : keep default 'All games and exercises' and press Analyse.	model Quertor IX Remark Quertor IX Statutor St	No Space Ang Nox Ang Nox Sur Some Sur Some Ang Nox Sur Some Sourd Some And Some 51.31 54.47 50.00<	Acc rules: # Accel: Mars. Brand. Mars. # Decel: Mars. Acc. rules: Mars. Mar Mars. Mars. Mar Mars. Mars. Mar	Analyses and exercise - Hermit Causes and exercise - Hermit Objections - Hermit Objections - Hermit Objections - Caulom Settings
Defined optio	ns Check box Custom Settings and edit the settings like: Ca Heatmap options. Calculations with Cust	Iculation options, Zone parameters	s, Sprint options, Acceleration opt	Defined Options	akalakino options y me parameters y print options y ecatmap options y letatmap options y letatmap options y teatmap options y let Player 1(11) y Player 2(2)
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Print Single thread	Allows you to print the analy analysing The calculations are execute exeption log to Inmotio, in ca	sis. d on one core. This works slower, ase something goes wrong.	but enables you to send the	Add Bins to Summary Splits Accel-Deceleration Bins Add categories to summary Zone parameters *	Payer 17.00 Payer 17.00 Payer 18.02 Payer 18.02 Payer 18.02 Payer 10.01 Payer 10.01 Payer 10.01 Payer 10.01 Payer 10.01 Payer 10.01 Statch Salact.Name
Export	Allows you to export the anal	ysis to a .csv file.		Sprint options * Acceleration options * Heatmap options *	Shint O Scoot

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Agility Test

Open the Agility test module in the module layout window (tab). You can set the data for analysis in the right column of the screen. These data are displayed when you click on the **Analyse** button thereafter.



You can select this moment by selecting an athlete and then pressing the **Select** button. You can then review this moment in the "3D Viewer" and "Video stream" modules.

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Timeframe

Athletes

Apply Max

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٢	Home	Analysis				
2	٩		×	Ĩ]	8	Þ
Exertion	Agility test	Detect max. heartbeat	Plot graph	Bar graph	Transition	Positi Cre
	Genera	1	Gra			

Detect max, heartheat

Open the Detect Max. Heartbeat module in the module layout window (tab). This shows if an athlete has a higher maximum heart beat than he currently has (Athlete line turns red in case). You can set the data for analysis in the right column of the screen. These data are displayed when you click on the Analyse button thereafter.



			Graphs	48
RICH-1502.D6 The Park Park Park Park Park Park Park Park	About Immonto Immonto Improve your performance About			= d ¹ × ^
Image: Second	Plot graph Open the dialog box for the Plot layout window (tab) with the Pre	graph module in the module seets and Custom tabs.	Creph options	×
Presets Make a se distance, I will then a window at graphic. T in the "Da dragging displayed	election in the type of graphic: Sg Measurement frequency or Heartbe appear in the module layout wind the left, click on a part of an ex hen drag the players whose grap atasets Explorer (B)" window on a t to the graphic. You can see the in the legraph lay the graphic	eed, Acceleration, Cumulative eat. The graphic of your choice dow. In the Dataset Explorer ercise and drag it to the hic you want to see, by clicking a Transponder/player and players for whom the data is	Nulliple sories, multiple axis and advanced datatype graphs can be configured using the cus datage.	ton tab page of this
You can zoom into the graphic by mo the graphic and pushing downwards mouse button. This enlarges the port have selected. To zoom out, move th while holding down the right mouse	, in the legend below the graphic wing the cursor to a position in while holding down the right ion of the graphic that you e mouse from bottom to top button.			

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Custor	m You can si Here as w to kilomet	imultaneously display various pa ell, the scale of the axis-value ca res, as well as a high number of	rameters in the Custom tab. In be changed, from metres other parameters in order to	Graph options Press: Custom Data selection mode Source multiple (drag/drag) = Press to					
	adjust you	ir calculation.		Left Axis	ß	Right Axis			
				Value	*	Value	· ·		
				Argument	*	Argument			
				Minimum		Minimum			
				Maximum		Maximum			
				Options					
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C EN Default		Par graph		C Display athle	ete properties				
Celuit		bai graph					OK Cano	el	

Plot

Plot Bar graph graph Open the Bar graphic module in the module layout window

(tab). You can set the data for the analysis in the right column of the screen. These data are displayed in the **Data** and **Chart** tabs when you click on the **Analysis** button thereafter. If you have conducted an analysis and wish to create another bar graphic with new data, click on the **Clear** button.



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				×
Image: Spectrum Image: Spe	Heatmap Inprove your performance About			
	Transistion			
Pitch Tools View Database LPM About	Open the Transition module in t	he module layout window (tab).	You can set the data for the analy	/sis in
Image: Second	the right column of the screen. All Passes", "Tab Pass Summary" thereafter.	These data are displayed in the ' ', "Tab Details" and "Tab Graphs"	"Tab Possession", "Tab Transitions " when you click on the Analysis bu	", " Tab utton
Timeframe Select the game/part for the	e data to be analysed.	Particles April 27 - FC Thereis 5/31. *		O Analyse
Options Define the degrees passed f	orward and back.	had per		With parties * Game: Digite 97 - FC Twent *
<i>Export</i> This allows you to export the	e analysis to a .csv file.	1.100 2108 1:00 4:00 1:00 4:00 7:00 6:00 9:00 10:00 11:00 12:00 15:00 16:00 17:00 16:00 17:00 16:00 19:00 General	20100 21:00 22:00 21:00 24:00 25:00 24:00 27:00 20:00 25:00 30:00 31:00 30:00 30:00 30:00 30:00 30:00 37:00 37:00	Options 40:0 Degrees passed forward 5 : Degrees Passed back 5 :
Tab Possession		Agana 87-76 Thomas 97 Within paras J	ueer17 27 00.000 0 9 00.033 3.0 3 000.3	
Shows an overview of the ball possession. second. Yellow is the transaction time in b correspond with the team colours in the 31 The table shows the total figures: Total # poss Number of times ball posses	Blue is the first team, red the etween. These colours do not O Viewer. ssion.			
Total Time Poss Total time ball possession (a	and transactions) of that team.			-
% possession Percentage of ball possession	on.			13 0001
<i># possession</i> Number of times when the l definition).	ball came in possession (by			
Time possession Total time ball possession w	ithout the transition time.			
Avg Possession Average duration of ball pos	session.			
# Transitions Number of times the ball was before it became in possess	as in the team, but lost it ion (by definition).			
<i>Total Time Transition</i> Total time the ball wa	s in transition.			
Avg Time Transition Average duration of a	transition time.			

RICH-1502.D6

Tab Transitions

Shows an overview of all transitions.

BeginTime	Begin time possession, counting from the start of the part
EndTime	End time of possession.
Short BP	If checked, the possession was too short to be counted as
	ball possession, therefor counted as transition.
Duration (see	The duration of the transition.
First Player	The first player in possession.
Dir.before BP	Direction of first player before team got ball possession.
#PassTrans	Number of passes during transition time.
Pass Direction	<i>n</i> The direction of the first pass.
Pass length	(m) Pass length in meters.
#Passes Pos	Number of passes during possession.

irag a column hea	ider here to grou										
sme	Part	Team	Begin time	End time	Short BP	Duration (Sec)	First Player	Dir. before BP	# Pass Tran Pass Direction	Pass length	#Passes Pos
pire 97 - PC Twe	First half	FC Twente 97	00:00:01	00:00:21		20,0	Delano Groothuis	Backwards	1 Backwards	19,6	6
pire 97 - FC Twe	First half	Aspire 97	00:00:21	00:00:32		10,0	Bassam	Forwards	1 Forwards	15,5	3
pire 97 - PC Twe	Pirst half	PC Twente 97	00:00:32	00:00:33	V	1,0	Delario Groothuis	Backwards	1 Beckwards	22,5	1
pire 97 - FC Twe	First half	Aspire 97	00:00:33	00:00:41	m	7,0	Hassin	Forwards	1 Backwards	7,6	2
pire 97 - FC Twe	First helf	FC Twente 97	00:00:41	00:01:05		24,0	Rody de Graaff	Forwards	0 Decloverds	15,0	G
pire 97 - FC Twe	First half	Aspire 97	00:01:05	00:01:12		6,0	Monkez	Forwards	0 Forwards	5,2	. 1
pirc 97 FC Two	First holf	FC Twente 97	00:01:12	00:01:15		33,0	Dowid El Haik	Forwarda	2 Backwords	2,0	10
pire 97 - FC Twe	First half	Aspire 97	00:01:45	00:01:46	v	0,0	Saeed	Forwards	1 Backwards	8,8	1
pire 97 - FC Twe	First half	FC Twente 97	00:01:46	00:01:49		3,0	Roy de Smit	Forwarde	1 Forwards	13,5	2
pire 97 - FC Twe	First half	Aspire 97	00:01:49	00:02:09	12	19,0	Adel	Width	0 Backwards	8,4	3
pire 97 - FC Two	First half	FC Twente 97	00:02:09	00:02:43		34,0	Marijn Wijkhuis	Forwards	0 Forwards	8,6	8
pire 97 - FC Twe	First half	Aspire 97	00:02:43	00:03:18		34,0	Adulrahman (GK)	Forwards	0 Forwards	16,8	7
pire 97 - FC Twe	First half	FC Twente 97	00:03:18	00:03:20	7	1,0	Marijn Wijkhuis	Width	1 Backwards	4,4	1
pre 97 - FC Twe	Hrst half	Aspre 97	00:03:20	00:03:44	1	Z3,0	saeed	Forwards	0 width	1/,6	1
pire 97 - FC Twe	First half	FC Twente 97	00:03:44	00:03:55		11,0	Dawid El Haik	Forwards	1 Backwards	10,6	4
pre 97 - FC Two	First half	Aspire 97	00:03:55	00:03:55	v	0,0	Saeed	Forwards	1 Forwards	6,6	1
pire 97 - FC Twe	First half	FC Twente 97	00:03:55	00:03:58	111	3.0	Hidde ter Avest	Backwards	0 Short	0.0	1
pire 97 - FC Twe	First half	Aspire 97	00:03:58	00:03:59		0,0	Saced	Forwards	1 Forwards	1,1	1
pire 97 - FC Twe	First half	FC Twente 97	00:03:59	00:04:40		40,0	Frans Van Oldeniel	Badowards	0 Forwards	18,8	10
pire 97 FC Two	First half	Appire 97	00:01:10	00:01:51	10	10,0	Adulrahman (CK)	Forwards	0 Forwards	26,5	2
pire 97 - FC Twe	First half	FC Twente 97	00:04:51	00:05:01		10,0	Hidde ter Avest	Backwards	0 Backwards	14,5	3
pire 97 - FC Twe	First half	Aspire 97	00:05:01	00:05:04		3,0	Ghassen	Badowards	0 Forwards	45,3	1
pire 97 - FC Twe	First half	FC Twente 97	00:05:04	00:05:20	12	16,0	Frans Van Oldeniel	Backwards	0 Forwards	26,3	3
pire 97 - FC Twe	Firsthalf	Aspire 97	00:05:20	00:05:22	2	1,0	Bassam	Badowards	2 Forwards	8,7	2
pire 97 - FC Twe	First half	FC Twente 97	00:05:22	00:05:25		3,0	Dawid El Haik	Forwards	2 Short	0,1	3
pire 97 - FC Twe	First half	Aquire 97	00:05:25	00:05:26	4	0,0	Saeed	Barkwards	1 Short	0,1	1
pre 97 - FC Twe	Hirst half	EC Iwente 97	00:05:26	00:05:25	v	0,0	Luuk Slegt	Backwards	1 Short	0,1	1
pire 97 - FC Two	First half	Aspire 97	00:05:26	00:05:29	2	2.0	Abdullah Ali	Width	5 Short	0,1	5
pire 97 - PC Twe	First half	PC Twente 97	00:05:29	00:05:29	¥	0,0	Dawid El Halk	Backwards	1 Forwards	2,9	1
pire 97 - FC Twe	First half	Aspire 97	00:05:29	00:05:49	m	20,0	Moh Atef	Forwards	1 Forwards	7,9	3
pite 97 - PC Twe	First helf	PC Twenle 97	00:05:49	00:05:15		25,0	Marijn Wijkhuis	Forwards	0 Backwards	14,8	6
	e	4 1 47									

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Tab All Passes

Shows an overview of all passes.

Athlete name	The player who has received	the ball.
Received from	The player who passed the	ball.
Passed to	Next player who passed Ath	lete to.
PassOptions	Number of pass options whe	en the ball was passed.
WasOption	Checked if the 'next player'	was among the options.
Distance (m)	The distance of the pass in	meters.
Ball Speed (km/h,	Average speed of the ball d	uring the pass.
Duration (sec)	The duration of the pass in	seconds.
Direction (deg)	Direction of the passing (se	e inserted picture).
Time	Time in the part of the game	е.

Part	Aspire 97 - PC Twe	ente av/ri +										
Poss	ession Transitions All Par	sses Pass Su	mmary Details	Graphs								
Drag	g a column header here to g	group by that i										
Nr	Athlete name	Received f	from	Passed To	PassOptions	Reached	Was Option	Distance (m)	Ball Speed (km/h)	Duration (sec) Direct	ion (deg)	Time
1	(19) Delano Groothuis			(16) Hidde ter Avest		7	4	19,6	40,4	1,8	-67	0:00:01.457
2	(16) Hidde ter Avest	(19) Delan	io Groothuis	(22) Roy de Smit	1.00	¥ ¥	V	13,7	28,9	1,7	178	0:00:05.527
3	(22) Roy de Smit	(16) Hidde	ter Avest	(16) Hidde ter Avest		3	V	20,4	40,6	1,8	0	0:00:08.907
4	(16) Hidde ter Avest	(22) Roy d	ie Smit	(24) Rody de Graaff	1	2	2	12,1	11,1	4,0	-19	0:00:12.007
5	(24) Rody de Graaff	(16) Hidde	ter Avest	(22) Roy de Smit		3	V	29,3	41,2	2,6	178	0:00:16.997
6	(22) Roy de Smit	(24) Rody	de Graaff	(38) Bassam		5 E	*	30,5	53,3	2,1	96	0:00:21.827
327	(38) Bassam	(22) Roy d	le Smit	(36) Adel	1	2		15,5	56,8	1,0	61	0:00:23.967
328	(36) Adel	(38) Bassa	m			• E	1	2,9	3,5	2,9	-95	0:00:27.147
329	(38) Bassam			(19) Delano Groothuis		. 17	1	20,9	72,4	1,0	151	0:00:32.767
7	(19) Delano Groothuis	(38) Bassa	m	(30) Hassin		2 10	1	22,5	43,7	1,9	-12	0:00:33.987
		Delan	o Groothuis	(35) Abdulrahman		3	V	7,6	26,7	1,0	-119	0:00:36.377
		Hassi	n			5 E	E	2,2	7,7	1,0	135	0:00:41.617
		Abdu	rahman	(16) Hidde ter Avest		2		15,6	36,9	1,5	-111	0:00:46.263
		Rody	de Graaff	(12) Frans Van Oldeniel		5	v	27,7	39,0	2,6	-136	0:00:49.083
		Hidde	ter Avest	(22) Roy de Smit			4	14,0	35,0	1,4	142	0:00:51.827
		Frans	Van Oldeniel	(16) Hidde ter Avest		. V	V	18.5	34,4	1.9	-17	0:00:55.457
		Royd	le Smit	(22) Roy de Smit		3	2	19,1	43,2	1,6	172	0:01:01.837
	-	Hidde	ter Avest			. IEI	10	14,6	32,6	1,6	143	0:01:05.967
		Royd	le Smit			5 1	m	5.2	38.0	0.5	33	0:01:12.467
	· · ·	Monke	ez	(23) Martin Witkhuis		V	E	2.9	6.2	1.7	-155	0:01:12.577
	\checkmark	Dawic	l El Haik				E	0.9	0.0	1,9	41	0:01:14.237
				(22) Roy de Smit		2	V	15.8	31.5	1,8	-75	0:01:16.627
		Marije	n Wilkhuis	(16) Hidde ter Avest		1 (V)	V	23.8	39,8	2,2	-23	0:01:20.287
		Royd	le Smit	(23) Mariin Wikhuis		2	1	27.2	43.7	2.2	164	0:01:27.147
		Hidde	ter Avest	(22) Roy de Smit			2	7.7	20.0	1.4	-57	0:01:29.777
		Marite	n Wilkhuis	(16) Hidde ter Avest		3	2	21.0	37.8	2.0	-27	0:01:32.417
		Royd	le Smit	(24) Rody de Graaff			2	8,2	24.6	1,2	-70	0:01:40.837
		Hidde	ter Avest	(22) Roy de Smit		1		18.8	43.3	1.6	-163	0:01:42.857
26	CALLSON OF MILL	UZ4) Rody	de Graaff	(32) Saeed		8 1171	10	4.4	49,4	0.3	65	0:01:45.587
333	(32) Saeed	(22) Roy d	le Smit	(22) Roy de Smit		2 177	17	8.8	15.8	2.0	-12	0:01:46.097
	(02) Davida Cerit	(22) Carrie	4	(17) Octaviao Deacoou		100	121	12.5	20,2	0.7	-14	0.01.40.407

RICH-1502.D6

Tab Pass Summary

Shows an overview of the passes of each player.

Passes	Number of passes by the player.
Reached	Number of passes reached a team member.
Was Option	Number of passes to a team member being a pass option.
Lost, W.O.	Number of passes not reaching a team member in cases there were pass options.
Avg Options	Average number of pass options at the moment a ball is passed.
Distance (m)	Average pass length in meters.
Ball Speed (k	<i>m/h</i>)Average ball speed.
Duration (sec	Average duration of the passes.
Direction (de	g) Average direction of the passes (see inserted picture).
Could receive	How often this player was a pass option.
Did receive	Number of times this player received a pass, being a pass option.
Zero Options	Number of passes when there was no pass option. \square
Z.O.Reached	Number of received passes by a team member in cases there was no pass option.

Tab Details

Shows the details per player per part of the game. The top grid section (a)is similar to the **Pass Summary**. In the second grid (b):

Passed to	The selected player passed to this player.
Recvd from	The selected player received from this player.
Options to	Number of times this player had a pass option to a team member.
Options from	Number of times this player was a pass option for a team member.

The third grid (c) shows all passes of the selected cell in grid (b). Double clicking on a pass, will show this pass on the field (d)

t Apre	97 - FC Twente 97/N *												
ssession Transit	tions All Passes Pass Summar	Details Gr	aohs										
ag a column hea	der here to group by that colun												
anti i	Athlete name	Passes	Reached	Was Option	Lost, W.O.	Avg Options	Distance (m)	Ball Speed (km/h)	Duration (sec) Dir	ection (deg)	Could receive	Did Receive	Zero Option: Z.O. Rea
Twente 97	(12) Franc Van Oldeniel	3	5 2	8 22		7 2,7	21,8	32,8	2,4	91	94	15	0
Twente 97	(13) Said Mousslih	1	3	4 2	1	3 2,6	8,8	31,7	1,0	10	41	3	2
Ewente 97	(14) Dawid El Halk	2	1 2	3 7	1	1 2,7	11,0	26,9	1,5	2	55	7	0
Ewente 97	(16) Hidde ter Avest	6	1 4	2 33	1	7 2,4	18,3	27,9	2,4	25	90	40	2
Wente 97	(17) Octavian Deaconu	1	5	0 6		5 2,3	9,0	20,2	1,1	30	67	5	2
wente 97	(18) Ruben de Jager	2	4 1	.1 8	1	2,3	10,2	9,1	4,1	-9	40	- 4	3
wente 97	(19) Delano Groothuis	2	9 1	4 12	1	2 2,6	16,3	22,3	2,6	-12	66	12	3
wente 97	(20) Luuk Slegt	2	3 1	5 9	1	3 3,2	16,8	31,4	1,9	40	110	16	0
Twente 97	(22) Roy de Smit	3	9 3	2 28		7 2,8	20,2	35,3	2,1	54	79	30	0
wente 97	(23) Marijn Wijkhuis	4	2 2	8 18	1	2,2	17,6	18,7	3,4	-10	90	14	4
Wente 97				5 12		5 2,3	17,1	25,7	2,4	-43	85	11	3
re 97				1 7		2,7	10,5	15,6	2,4	0	41	4	2
re 97				3 6	1	4 2,7	19,3	17,2	4,0	17	85	10	0
re 97				5 3	1	4 2,0	6,6	20,4	1,2	7	25	4	4
re 97			- I E	4 11		7 2,7	17,6	15,7	4,0	28	65	9	1
re 97				6 1		2,3	13,7	19,0	2,6	55	40	6	- 4
re 97			- I E	8 14	1	2 2,7	13,9	17,7	2,8	24	42	11	1
re 97				7 2	1	2 2,8	9,1	11,7	2,8	11	36	- 4	2
re 97				3 6	1	3 2,4	18,9	20,4	3,3	48	67	10	2
re 97	-			8 7		7 3,1	10,8	13,2	3,0	17	63	3	0
re 97				7 9		7 2,5	26,9	25,8	3,8	64	82	5	0
re 97	100/			5 4		4 3,9	9,3	22,5	1,5	66	51		0
			$\begin{bmatrix} \\ \\ \\ \\ \end{bmatrix}$										
Transition	_	-		_									- 6
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Statement of the local division in which the local division in the	Olderson Development Database	10.00										T	meframe (onne)

	and a second													
Part	Aspire 97 - FC Two	rite 97/4. *												O Analyse
Descention	Travellove, Al Ru-	rent Dave Surveyord Data	Sector.											Timeframe (none)
A Brians	0.000	March .	- Belochd											Wth games
Antese	C (LUTTATS VAL	voene •												Come: 10 Across 97 - 07 Tourst 1
Passes	Reached	Was Option	Lont, W.O.	Avg Opt	tons Dis	tance (n) Dal	I Speed (m/h)	Duration	(sec) Direction (deg)	Could receive	Did Receive 2	no Options	r.O. Reached	and Made to the second
	29	4 4	4	<i>A</i>	4,1	21,0		32,0	2,4	-	94 ES	0		
Ta/From	30, Mar 12, Fra	13, Sei 14, Dev 15, Ma	r 16, Hd 17, 4	OCT 18, 84	b 19, Del 20,	Luu 22, Ray 23, M	ar 24, Rod 30	, Has 31, Gha	32, Sae 33, Tar 34, Mon 3	S, Abd 36, Ade 3	38, 8as 39, Moh 41, Ad	42, Abd No re	scep Total	Options
Record from			11 0		1		- 1	1 2	2 2 2				30	Degrees passed forward 5 1
Options to		2 2 0	24 2	2 0	3 3	15 14 18	13	0 0	0 0 0	0 0	0 0 0	0 0	94	Degrees Passed back 5.0
Option from	0	2 6 0	31 3	2 1	4 3	14 29 0	15	0 0	0 0 0	0 0	0 0 0	0 0	94	
Nr Re	ceived Prom	Passed To	PassOptions 3	Reached	Tas Option	Distance (n) Ball Sp	weed (km/h) Dur.	ation (sec) Direct	ion (deg) Time			_	_	
1 (1	5) Hidde ter Avest	(22) Roy de Smit	3	1	8	14,0	35,0	1,4	142 0:15:15.850					
2 (23	2) Ray de Smit	(16) Hidde ter Arest	2	1	8	17,7	61,1	1,0	79 0:19:18.590					
2 (2)	2) Saeed	(22) Roy de Smit	3	1	10	15,5	41,5	1,6	158 0:19:31.440					
4		(13) Said Nouselh	2	1	15	42,7	63,3	2,4	79 0:20:23.720					
5 (II	1) Ghassen	(22) Roy de Smit	3	×	1	26,3	56,0	1,7	148.0120137.080			6		
6 (H	6) Hidde ter Avest	(24) Rody de Graaff	1	8	8	22,1	\$3,5	1,5	40 0:23:04.140					
7 (2-	6 Rody de Graaff	(16) Holde ter Avest	3	100	10	15.9	39,9	1,4	166 0.23.11.860					
8 (2)	5) Hidde ter Avest	(22) Roy de Smit	3	100	10	19.5	43.0	1.6	32 0.23:19.960					
9 (23	2) Ray de Smit	(16) Hidde ter Avest	Z	1	1	15,5	38,3	1,5	158 0.23:25.190		1 (
30 (14	5) Hidde ter Avest	(22) Roy de Smit	2	8	8	11,6	27,2	1,5	155 0:25:32.300			++		
11 (23	2) Ray de Smit	(16) Hidde ter Avect	3	80	8	15,7	\$3,4	1,1	37 0:28:35.170				A L	
14		(19) Deano Groothuis		N)	10	37,4	+3,0	3,1	71 0:31:39.230		A .		* A	
13 (22	zji tang	(22) KOY DE Shit	3	20	8	25,3	46,2	2,1	/4 0.32.23.400		11 .		• •	
54 (25	zj navj de Silit	(in) Abdurahilan		-		47,6	83,9	3,2	/1 0/30/44.340				•7 \ []	
	o secondrinari	THE REAL PROPERTY AND LODGE		-		13,1	37.4	1.6	100 0 00 00 000		52 *	1	52	
17 (24	a) muue uer Aviest. 6 Musikasi	Last Party de drift	2	e 1	100	12,1	-17,2	7.9	147 0.35 28-330					
10 (11	th Taxia	1207 margin (19005	-	10	10	0.2	245	0.7	10.040.57.20			1		
22 (34	() Moniant	(15) Delana Constituis	3	12	12	41.6	\$2.0	3.0	73 0:40:27 320					
20 (14	C) Hidda har downt	(16) Helda tar Avant	1	100	10	12.7	23.1	2.0	28 0:42:26 250			•		
21 (15) Delano Groothuis		2	11	81	20.1	15.5	0.0	120 0.43.45.210			<u> </u>		
22 (23	D Martin Wikhuis	(16) Hidde ter Avent		10	10	9.5	44.5	0.0	29 0:47:24.400					
23		(24) Rody de Graaff	4	10	10	33,9	41,8	2,9	61 0 47 36 820					
24		(23) Martin Wilkhuis	3	1	N.	25.1	23.3	3.7	131 0.51(24.870					
25 (2)	3) Marijn Wijkhujo	(16) Hidde ter Avesit	2	191	N.	17,1	38,0	1,6	46 0.51.33.000					
25 (25	5) Hidde ter Avest		2	10	10	10,8	7,5	5,1	136 0.51:41.280					
27 (2:	i) Marijn Wijkhuis		2	13	10	39,7	26,9	5,3	73 0:51:57.020					
28 (31	1) Chassen	(16) Hidde ter Avest	2		1	16,3	40,2	1,5	43 0:52:18.540					
29 (23	2) Martin Wijkhuls	(16) Hidde ter Avect	1	96	80	8,3	32,2	0,9	32 0:52:37.660					
30 (11	5) Hidde ter Avest	(17) Octavian Deaconu	2		25	37,1	51,3	2,6	128 0.53-12.540					
31 (3)	5) Hidde ter Avest	(16) Hidde ter Avest	2	1		0,0	0,0	0,0	79 0.53:25.090					
32 (1	6) Hidde ter Avest	(16) Hidde ter Avest	2	1	10	8,3	17,8	1,7	25 0.53:34.500					
33 (26	5) Hidde ter Avest	(15) Delano Groothuis	1	1	8	37,5	20,1	6,7	115 0:54:02.360					
34 (33	2) Saeed	(30) Hassin	5	10	10	6,6	7,9	3,0	64 0.54:27.590					
35 (X	5) Hassin		6	10	15	23,6	45,8	1,7	67 0.54:31.600					Coport in

RICH-1502.D6 🚳 &Transition _ = × Tah Granhs

	iab draphs		Part Acrise 97 - EC Twente 97/M x	(Analyse
	Shows a gra	aphic visualisation of the passes of a team.	Possession Transitions Al Passes Pass Summary Details Graphs	Timeframe (none)
	White circle	Number of correct passes is in between 1 standard	Select team Aspire 97	With games -
		deviation of the team avarage.	Setup 4-3-3 - Player label Shirt number -	Game: Q Aspire 97 - FC Twent *
	Red circle	Number of correct passes is less then 1 standard de	viation Player position	Options
		of the team.	N & Athlete name 1 1 Moh Atef (39) 30 42	Degrees passed forward 5 0
	Green circle	Number of correct passes is more then 1 standard	2 Adulrahman (GK) (41) 3 Abdulrahman (35)	Degrees Passed back 5 C
		deviation of the team	4 Ghassen (31) 5 Bassam (38)	
			6 Monkez (34) 7 Tariq (33)	
	Small circle	Number of passes less then 1 standard deviation.	8 Adel (35) 9 Hassin (30)	
	Middle circle	Number of passes in between 1 standard deviation.	10 Abdullah Ali (42) 11 Saeed (32)	
	Large circle	Number of pases larger then 1 standard deviation.		
	In (or betwe	een) the circles:		
	Number	Shirtnumber.		
	Bleu lines	Direction of all passes.		
	Pink line	Avarage pass direction.		
	Arrows	Dominant passes.		
			Draw Clear	@ Export
1				

RICH-1502.D6



Positioning Cross

Open the Positioning Cross module in the module layout window (tab). You can set the data for the analysis in the right column of the screen. These data are displayed in the **"Tab All Crosses"** and **"Tab Visualisation"** when you click on the **Analysis** button, when the **[] Pass** event is checked.

		_								
Timeframe	Select the game/part for the data to be analysed.	📧 Posit	ioning Cross							
		AI Crosses Vsualisation							🖒 Analyse	
Event	Select the event of your choice.	Drag a o	olumn header here	to group by that column						Timeframe (none)
Export	This allows you to export the analysis to a new file	Nr	Team	Athlete name	Position	Was Cro 🔺	Reached	Distance (m) # Ir	16m # Around	16 With games
LXPUIT	This allows you to export the analysis to a .csv me.	1	FC Twente 97	(14) Dawid El Haik	Late		1	6,0	0	1 Game: All games and
		3	FC Twente 97	(13) Said Mousslih	Early	E		1,1	0	1
Tab All Cri	20220	5	FC Twente 97	(13) Said Mousslih	Early		V	17,2	0	0 Event
	0303	7	EC Twente 97	(39) Morr Ater (19) Delano Groothuis	Late	10	10	52.3	1	0 [T] [Interception]
Shows all	passes done in a certain area of the field. (From half field part	8	FC Twente 97	(18) Ruben de Jager	Late	E		51,9	1	0 [Pass]
		9	Aspire 97	(34) Monkez	Late			0,4	0	0 [Reception]
of the opt	onent (see inserted picture).	12	FC Twente 97	(17) Octavian Deaconu	Late		V	6,0	0	1 [Transition A-H]
Was Cross	Checked if this pass was a cross	13	FC Twente 97	(14) Dawid El Haik	Late		V	14,4	2	1 [Transition H-A]
1145 01055	offectived in this pass was a cross.	14	FC Twente 97	(23) Marijn Wijkhuis	Early		v	8,1	0	1
Reached	Checked if the pass was reached by a member.	15	EC Twente 97	(17) Octavian Deaconu (23) Martin Wildhuis	Late	E		9.1	1	0
nouonou		17	FC Twente 97	(18) Ruben de Jager	Early	m	10	2,4	0	1
Distance	Passing distance.	19	Aspire 97	(34) Monkez	Late			11,5	0	1
		20	Aspire 97	(33) Tariq	Early		V	9,2	1	1
# In 16	Number of players in 16m area.	22	Aspire 97	(33) Tariq	Late			29,4	3	1
		25	FC Twente 97	(17) Octavian Deaconu	Early		V	11,3	1	0
# Around 16	Number of players just outside the 16m aera.	2	FC Twente 97	(17) Octavian Deaconu (18) Dubon do Jacor	Late	V		16,5	2	0
	· · · · · · · · · · · · · · · · · · ·	10	Aspire 97	(36) Adel	Early			10,5	0	0
		11	FC Twente 97	(14) Dawid El Haik	Late		V	11,1	0	1
		18	FC Twente 97	(20) Luuk Slegt	Early	V	1	37,3	3	0
		21	Aspire 97	(34) Monkez	Late	V		17,6	2	1
		23	FC Twente 97	(24) Rody de Graaff	Early	V		22,2	0	0 Select All Se
		24	FC Twente 97	(14) Dawid El Halk	Late	V		11,9	2	2
		26	FC Twente 97	(14) Dawid El Haik	Early	V		15,4	1	1 Export

RICH-1502.D6

Tab Visualisation

The top field reflects where all passes were done. In the dropdown selection at the top you can select a player doing crosses.

When clicking on a dot in the top field, the situation at the beginning of that pass is reflected in the lower field.



RICH-1502.D6



Football duels

Open the Football Duels module in the module layout window (tab). You can set the data for the analysis in the right column of the screen. These data are displayed in the **"Tab Duels", "Tab Summary"** and **"Tab Visualisation"** tabs when you click on the **Analysis** button thereafter.

Timeframe Options Select the game/part for the data to be analysed. Options Define parameters as: Min. speed, Distance to hall 1, Distance to hall 2, Distance between players, Min. time distance, Min. time after, Ball passed back. Image: Comparison of the data to be analysed to a csw file. Eport This allows you to export the analysis to a csw file. Image: Comparison of the data to be analysed to a csw file. De geschreven tekst lijkt weinig overeen te stemmen met de getoonde schermen Image: Comparison of the data to be analysed to a csw file. Tab Summary Shows the scores of the Duels. Image: Comparison of the data to be analysed to a csw file. Tab Summary Shows the scores of the Duels. Image: Comparison of the data to be analysed to a csw file.	
Options Define parameters as: Min. speed, Distance to ball 1, Distance to ball 2, Distance to a .csv file. Tab Duels De geschreven tekst lijkt weinig overeen te stemmen met de getoonde scherren Destense parameters as: Min. steme distance 0, Dist	
Options Define parameters as: Min. speed, Distance to ball 1, Distance to ball 2, Distance between players, Min. time distance, Min. time after, Ball passed back. Image: Distance between players, Min. time after, Ball passed back. Export This allows you to export the analysis to a .csv file. Image: Distance between players, Min. time after, Ball passed back. Tab Duels De geschreven tekst lijkt weinig overeen te stemmen met de getoonde schermen Image: Distance between players, Min. time after, Ball passed back. Tab Duels De geschreven tekst lijkt weinig overeen te stemmen met de getoonde Image: Distance Min. Min. Min. Min. Min. Min. Min. Min.	Analyse
Options Distance to ball 2, Distance between players, Min. time distance, Min. time ball, Min. time after, Ball passed back. Image: Comparison of the ball 2, Distance between players, Min. time distance, Min. time ball, Min. time after, Ball passed back. Export This allows you to export the analysis to a .csv file. Image: Comparison of the ball 2, Distance between players, Min. time distance, Min. time after, Ball passed back. Tab Duels Destance to the ball 2, Distance between players, Min. time after, Ball passed back. Image: Comparison of the ball 2, Distance between players, Min. time after, Ball passed back. Tab Duels Destance to the ball 2, Distance between players, Min. time after, Ball passed back. Image: Comparison of the ball 2, Distance between players, Min. time after, Ball passed back. Tab Duels Destance to the ball 2, Distance between players, Min. time after, Ball passed back. Image: Comparison of the ball 2, Distance between players, Min. time after, Ball passed back. Tab Duels Destance to the ball 2, Distance between players, Min. time after, Ball passed back. Image: Comparison of the ball a distance between players, Min. time after, Ball passed back. Image: Comparison of the ball a distance between players, Min. time after, Ball passed back. Tab Duels Descent the ball a distance between players, Min. time after, Ball passed back. Image: Comparison of the ball a distance between the back at the ball a distance between the ball a distance between the ball a distance back at the ball a distance back at the ball a distance ball a distance ball a d	Timeframe (none)
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Tab Duels Image: Second se	nember =
Case of the balls, Min. time after, Ball passed back. Image of the balls, Min. time after, Ball passed back. Export This allows you to export the analysis to a .csv file. Image of the ball, Min. time after, Ball passed back. Tab Duels Image of the ball, Min. time after, Ball passed back. Image of the ball, Min. time after, Ball passed back. Tab Duels Image of the ball, Min. time after, Ball passed back. Image of the ball, Min. time after, Ball passed back. Tab Duels Image of the ball, Min. time after, Ball passed back. Image of the ball, Min. time after, Ball passed back. Tab Duels Image of the ball, Min. time after, Ball passed back. Image of the ball, Min. time after, Ball passed back. Tab Summary Image of the ball, Min. time after, Ball passed back. Image of the ball, Min. time after, Ball passed back. Image of the ball, Min. time after, Ball passed back. Tab Summary Shows the scores of the Duels. Image of the ball, Min. time after, Ball passed back. Image of the ball, Min. time after, Ball passed back. Image of the ball, Min. time after, Ball passed back. Tab Summary Shows the scores of the Duels. Image of the ball, Min. time after, Ball passed back. Image of the ball, Min. time after, Ball passed back. Image of the ball, Min. time after, Ball passed back. Tab Summary Shows the scores of the Duels. Image of the ball, Min. t	Options
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Export This allows you to export the analysis to a .csv file. Image: Character of the analysis to a .csv file. Image: Character of the analysis to a .csv file. Tab Duels Degeschreven tekst lijkt weinig overeen te stemmen met de getoonde schermen Image: Character of the analysis to a .csv file.	Dist. to ball 1 1.00 0
Laport Inits allows your to export the allohysis to a .bs/r init. Image in allows your to export the allohysis to a .bs/r init. Tab Duels De geschreven tekst lijkt weinig overeen te stemmen met de getoonde schermen Image in allows your to export the allohysis to a .bs/r init. Image in allows your to export the allohysis to a .bs/r init. Image in allows your to export the allow	estion. Dist. to ball 2 3,00 3
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Tab Duels Image: New York of the Duels. Image: New	Min. time ball 1,0
Tab Duels Image of the buels. Image of the buels. <thimage buels.<="" of="" th="" the=""> Image of the buels.</thimage>	Min. time after 1,0 (
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De geschreven tekst lijkt weinig overeen te stemmen met de getoonde schermen Tab Summary Shows the scores of the Duels.	Add appanent duels
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schermen Tab Summary Shows the scores of the Duels.	esion.
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11 10:303 10:408/10 (10) Made me	nenber
Bit	
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Tab Summary Image: Control of Control	
Table Summary No	O Analyse
Shows the scores of the Duels. ^{n+m+1}	Timeframe (none)
Shows the scores of the Duels. ¹	0 % With games
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Pictura 19 Old Markage 11 Markage 12 Markage	100 %
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C* Create 37 C3 Start (Propulsa) I <	0 % Dist. to ball 1 1.00
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Tab Visualisation

The top field reflects all duals for a team. In the dropdown selection at the top you can select the team.

When clicking on a dot in the top field, the lower field shows the postion of all players.



A Export

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Pitch Tools Bar raph	View Database LPM About Positioning Football Ball Cross duels Designed to the second data and the second	Ball pressure Open the Ball pressure module the right column of the screen. you click on the Analysis button	in the module layout window These data are displayed in t thereafter.	r (tab). You can set the the "Tab Individual" an	e data for the an d "Tab Summary '	alysis in " when
Timeframe	Select the game/part for the	e data to be analysed.	Individual Serences Drug scalane hande here to puncifies het colume Di Number Game Part (the Possession before Name Player IP Stars pressure Pressure player Back	ing places — [Named to Recoption (Nas Angle (Angle to Recop) Datamot at recoy Speed to rec(Dd Press) Cou	id Press Result	Andreas
Options	Define parameters as: Min. Min. calculated speed, Zone pressure, Maximum pass forv	pass time, Min. speed to pwb, high pressure, Zone medium vard, Min. possession time.	10 Alexa of the hole of th	B B	Interface 1 6 0 0 1000000000000000000000000000000000000	Game Idigene and cances Optime Idigene and cances Mission from Idigene and cances
Export	This allows you to export the	e analysis to a .csv file.	40 3 Ages 57 - 67 Tr Mole gave 00:28-61 (F trends 57 C10 Ontoine Destrow, Ages 37 C40 Meter 41 3 Ages 57 - 67 Tr Mole gave 00:28-61 (F trends 57 C30 Ontoine Destrow, Ages 37 C40 Meter 41 3 Ages 57 - 67 Tr Mole gave 00:28-61 (F trends 57 C30 Beau C5 Twents 57 C30 Octorion Destrow 41 3 Aget 57 - 67 Tr Mole gave 00:28-61 (F trends 57 C30 Beau C5 Twents 57 C30 Octorion Destrow	171 96 8,13 1,51 No Low 75 84 4,12 22,13 No Low 8 87 45 5.09 17,05 No No	Mars To revolve To cass. 2 0 0 0 Mars End preventSteck. 1 5 3 2 Mars End preventSteck. 1 8 0 0	Min, prozession time ULC 1 Mel Pitter results on direction
Tab Individ	lual		0 0	0 0		a di fami

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Tab Summary	Individual Summary	C Analyse
	Drag a column header here to group by that column	Tenfens(ess)
	Game Part Team pressure Pressure player Close to BPP Moved to BPP Could Press Did Press D	d press % Did press Won Did press won %
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RICH-1502.D6					
Pitch Tools Description	View Database LPM About	Heat map Open the Heat map module in t the right column of the screen.	the module layout window (tab). These data are displayed when y	You can set the data for the analy you click on the Analysis button th	sis in ereafter.
Timeframe	Select the game/part for the	e data to be analysed.	Toolary T		Ö Aniyoe Tameframe (82852)
Heat map pa	arameters Define the resolution of the want to see how many seco certain area.	heat map and check if you nds a player has been in a			Wing and
Transponder	s Select the athletes you wan	t to analyse.			Image: 7 (27) Image: 7 (27)
Export	This allows you to export the	e analysis to a .csv file.			B Player 1120 B Player 120
Moet hier	nog wat meer over verteld worde	n?			a) There 15:00 a) There 10:00 a) There 10:00 a) There 20:00
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-			-		Tab Playlist	Playlist	61
RI	CH-1502.D6	Analysis Playlist Pitch Analysis Playlist Pitch A Delete Play A nitem Playlist Improve	Tools View Database LPM	About			- e ^p ×
	Free Marcola Delete List	efault • • • • • • • • • • • • • • • • • • •	Atch Tools View	New list Open the dialog box to create a	new play list.	New playlist Name OK	Cancel
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Tab Pitch

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Home Analysis Playlist Petch Tools View Database Sove Petch Design Add Add line Add green Add Petch Properties Pitch Design Add Add line Add green Add Track/Field	About About About	
Image: Solution of the soluti	Open Pitch Open an .ifd file with the related properties of the measuring are These are set by Inmotio and the regular user will not use this function.	Pitch Properties
Image: Second	Save Pitch Save the current measuring area. These are set by Inmotio and the regular user will not use this function.	Color Green
Image: Second	Pitch Properties Open the dialog box with the properties of the current measuring area. These are set by Inmotio and the regular user will not use this function. Tab Field	Field box -55.000 ‡ mm to 55.000 ‡ mm Field box -38.000 ‡ mm to 38.000 ‡ mm X coordinates from -55.000 ‡ mm to 55.000 ‡ mm Y coordinates from -55.000 ‡ mm to 55.000 ‡ mm Y coordinates from -38.000 ‡ mm to 38.000 ‡ mm
	Pitch Define the Colour, Material and the Sport type of the measuring area. Measurement box The X and Y coordinates of the area to be measured. Field box The X and Y coordinates of the field to be measured. Transpose coordinates The measuring area can thereby be shifted in X-and Y-direction.	Transpose coordinates X coordinates 0 \$ mm Y coordinates 0 \$ mm Rotate positions
		OK Cancel

	\setminus	
ICH-1502.D6		
	Tab TrackTrackDefine the Track orientation, Colour and the dimensions of the measuring area.Start/Finish lineThe X and Y coordinates of the start/finish line.Track coordinatesThe length and radius of the track.	Pitch Properties X Field Track Image: Track Image: Track Track Image: Track Track Solid color Color Black Corner 1 X: 0: Track
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	Pitch Properties	Design Pitch	Add Pylon Track	Add goal /Field	Add line between TP	Add green pole	Add re	d

Add line between 2 transponders

Draw a line between two athletes. After you have opened the 3D Viewer module and clicked on the **Add line** button, a dialog box appears to let you choose from which athlete to which other athlete you want to draw a line. You can edit the properties of the line or delete it in the "3D Object List".



Default	× [Ŧ			
ne Analy	/sis Pl	laylist	Pitch	Tools	View Dat	abase l
	Â	٩	C	~	-	2
Pitch Properties	Design Pitch	Add Pylon	Add goal	Add line between TP	Add green pole	Add red pole
		Track	/Field			3

Add green pole

You can place a green pole. After you have opened the 3D Viewer module and selected an athlete, you click on the **Add green pole** button to place a green pole on the location of the selected athlete. You can delete or move the green pole by right-clicking on the pole. You can edit the properties of the green pole in the "3D Object List".



Default	*		Ŧ			
ie Analy	/sis Pl	laylist	Pitch	Tools	View D	atabase l
	Â	٨	Ø	\sim	•	
Pitch Properties	Design Pitch	Add Pylon	Add goal	Add line between TP	Add gree pole	n Add red pole
		Track	Field			

Add red pole

You can place a red pole. After you have opened the 3D Viewer module and selected an athlete, you click on the **Add red pole** button to place a red pole on the location of the selected athlete. You can delete or move the red pole by right-clicking on the pole. You can edit the properties of the red pole in the "3D Object List".



			Tab Tools		Export	66
For the second s	Analysis Playlist Pitch Tools View Database LPM Analysis Playlist Pitch Tools View Database LPM Earlich Database SportifU Stats event Import Conversion Export Import Import Import Import	About		-		- d × ^
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On clickir selection	ng the Get data button, you will in the "Result set" tab.	see the results of your	Select All Select None Summary Total number of rows 575 Total number of columns	Show detailed description where ava	alable Select AI Select Nore	Expand Al Collegee Al

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Result set Selection Result set The result of the selected data that you have created in the "Tab Selec-Player 1 Player 2 Player 3 tion". You can export the data to a .csv file (Export to text file...), an .xls MaxHearthe Pirl -1,19236 312 0.59 0 Player 1 11 0 200 file (Export to Excel), or save a copy to the clipboard (Copy to clipboard). 100 -1,319 36,300 1,44 0 Player 11 0 200 200 200 -1 491 36,299 0 Player 1 11 0 300 -1.681 36.278 2.19 0 Player 200 200 400 -1.917 36 269 0 Player 1 500 -2,182 36.261 2,76 0 Player 11.0 200 200 600 -2.469 2.09 0 Plauer 1 11 0 700 36.247 3.19 0 Player 11.0 200 900 26 244 3.35 0 Player 1 200 900 -3,443 36 249 3,38 0 Player 1 200 200 1000 36,259 3.26 0 Player 1 11 0 1100 -4,094 36,270 3,09 0 Player 11 0 200 200 1200 -4,396 36.277 2.97 0 Player 11.0 1300 -4,689 36,280 2.93 0 Player 1 11 0 200 1400 -4.982 36.279 2.94 0 Player 1 11.0 200 1500 -5,278 36,274 2,98 0 Player 1 11 0 200 1600 36,266 3.00 0 Player 200 1700 -5.878 36.254 3.02 200 0 Player 1 11 0 2 -6.180 200 1800 36.243 0 Player 1 200 1900 6,482 36,234 0 Player 1 11 0 -6,782 200 2000 36.224 2.99 0 Player 1 2100 -7.079 36,208 2.97 0 Player 1 200 2200 -7.374 36, 184 2.95 0 Player 1 200 -7.667 200 2300 36,151 2.96 0 Player 1 11 0 2400 -7.963 36.118 0 Player 1 200 -8.259 200 2500 36.094 3.00 0 Player 1 -8 561 36 087 3.04 0 Player 1 200 200 2700 -8.867 36.095 3.09 0 Player 11 0 2800 -9.179 3.18 0 Player 1 200 36,114 200 2900 -9.503 36,138 0 Player 1 11 0 -0.841 3 44 0 Player 1 200 36,160 11 0 3100 -10,186 36,180 0 Player 1 11 0 200 Export to Excel... Export to text file... - 🝙 🝙 📼 **Batch conversion** 🥥 📴 👔 🏹 Default Tools elect directory Open the dialog box with batch conversion options. Including files in sub-directorie Here, you can specify the directory in which the batch 40 ø conversion should be stored, which file, and which part is to be Batch Save changed Imo-Files Create a backup file before save Conversion Export converted, and you can also see the progress of the conversion. Export Positions To CS

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RICH-1902.DS Figure Analysis Phyliat Pitch Tools View Figure Analysis Phyliat Pitch Tools View Figure Analysis Phyliat Pitch State com- position Professories Conversion Export	Database Export values Open the dialog box with Export Database va to export data that matches a single imo-file this imo-file. Select one of the Queries and press Next.	Lues. If you want then first open	n na y na na politika na polit
	Fill in the required parameters. If using the dataset with an opened imo-file, be preselected. Press Next .	this dataset will	
	Press Export and the result dataset will be ex format given.	ported in the	

				Import	69
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	r & mport	Select a game and press import . Save it any time you are done.	An imo-file is now created.	Import spitoss 0% 0% 1og Samong m/QL samo at 102 148.172 1.1306 for Spent/U databases	Import
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		Filename First select the Open Open the file. Transponder ID Select the transded to the datast	file by clicking the Folder button. he file is now loaded into the ponder ID the ball gets when ad- set (see "Setup Transponders").	- Also data ta alagiay y	
		<i>Time to add</i> Add some time an offset in the	Add button. to synchronise in case there is ball data and the position data.		

			LPM	71
RICH-1502.06 Total Control Conversion Export State work Import State LPM Export Export State Conversion Export State work Import State LPM Export State Conversion Export State Conversion Export Import State LPM Export State Conversion Export State Conversion Export Import Impor	About Concett DarkSet About			- # ×
View Database LPM About	Load LPM File It is possible to import a backup created during a live recording This may be necessary if, by mi saved and the Ipm file is still ac	p file - which is automatically using the Inmotio system. stake, a dataset is not properly ccessible.	EMD Disk Judger Inter Anderes B Add Index y withd 0 1 Open Argunation To go column handler for it is young by Stat Labora The Thompsonder (it is young by Stat Labora The Thompsonder (it is 'young by Stat Labora The Thompsonder (it is 'young by Stat Labora The Thompsonder (it is 'young by Stat Labora Thompsonder (it is 'young by Stat	Poort Ad
	Select the lpm file and press Op Import . The entire recording will saved again.	en. After the file is read, press then be available and can be	cites data to displays	
View Database LPM About	Concat DataSet Two datasets (.imo files) can be shortly created after each other was stopped by mistake). If the time between the two file the message "Keep time between	combined into one, if they are (for instance, when the first s is too long, you will receive n dataset".	Concer dataset at the end of current dataset Herune Cross time between dataset 0 %	

	Tab View	Module windows	72		
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Change Module Split Split Split Split Split Split Sup Module	Change Module The main modules screen appears, in which you can select a different module.	sector worker sector worker sector worker So there Societ Soci	,		
Image: Default Image: Default Image: Default Image: Default Image: Default Home Analysis Playlist Plach Tools View Image: Default Split Split Split Split Split Change Module Split Split Split Swap Close Module View Module windows Module Module Module	Module Options Open the dialog box, if available, containing the options for the currently active module.				
Image	Split Left/Right Split the module window into two parts (side by side) so that you pane.	u can open another module in the righ	nt		
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Image: Split	Swap modules Change the modules in the split module window.				
RICH-1502.D6					73
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Change Module	Image: Split State Module Module Module Module Module Split S	Close Module Close the open module.			
	modules × select module Change Module	Dropdown Menu These options may also be found to the bar with the module name	d in the "Drop-down menu" that e.	appears when you click on the a	rrow next
	Module Options Split Left/Right Split Top/Bottom Swap modules Close Module				

				Layout	74
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Database New Close layout layout	LPM About Load Store Snapshot Show in separate Layout layout layout Layout	Load layout Open a selected, previously save	ed layout of your workspace (con	nbination of open windows).	
V Database Vew Close layout layout	LPM About Load Store Layout Isyout Show in separate Maxim Layout window works	Save layout Save your present working space	e (combination of open windows)).	
y Database Periodic State New Close layout layout	LPM About Load Store Snapshot Layout Iayout Layout	Snapshot layout Create a snapshot of the curren snapshot taken, that you can sa	tly active layout window (tab). Th ve if you so desire.	ne dialog box shows a preview of	the

Ch.	
Database LPM About Database LPM About Close Load Store Snapshot sut layout Layout layout Layout Layout	how in seperate window pen the module layout window in a separate window. You can also open a separate pane of the layout rindow module by right-clicking the mouse on the dark grey bar (next to Tab modules) and clicking on Show in separate window'.
Database LPM About Database LPM About Conse Load Store Snapshot Show in separate Waining w Close Load Store Snapshot Show in separate workares nut layout Layout Layout	laximize workarea laximizes the "4. Module window" on your screen, leaving unshown most of the "2. Menu bar" and "3. latasets window". This can be made undone by clicking the same button.

			Tab Database	Actions	76
RICH-1502.D6	uut	- About	1000 4148 00.000		
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Remove Actions Actions	Analysis Playlist Pitch Tools View Analysis Playlist Pitch Tools View Starts Clubs Authentication Dataset Exe types nat	Remove Datasets Get an overview of all datasets selected datasets can be remov	in the database. If a line turns re ed from the database.	d, it can not be found. One or m	ore

Configuration

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Pitch Tools View Database LPM About hentication Dataset Exercise Training types types Configuration	Agility Definitions Open the Agility Definitions map in the module layout window (tab). (Example: sprint an arrow-shape left or right) The field(s can be defined in the colomn at the right.	
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e LPM Abou	Exertion Analyze Options	Exertion Analyze Options Open the Exertion Analyze Option window (tab). Here you can specify how you w	ons map in the module layout ant to analyze an exertion.		(and
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e LPM Abou	Exertion Analyze Options	Database Export Queries Open the Database Export Quer window (tab) to make Export quer from the database can easily be Create a new export query by cl existing one on Open . Description Complete the fields and press the	ies map in the module layout eries from the database so data exported to a .csv file. icking on New or to open an ne tab Query .	Indust Every Garran & Indust Every Garan & Indust Every Garran & Indust Every Garran & Indust	

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RICH-1502.D6	Query Complete the query and press Test Query . If everything is OK, the result dataset will be shown.	Conception C	AB_DISTANCE_M4.0))/1000.0 as HighSpeedRunning, Ib. TA_ID and TAA_CATEOORY between 5 and 6) as AccelerationsZone5_6, Ib. TA_D Dat TAA_CATEOORY between 5 and 6) as AccelerationsZone5_6, Ib. TA_D Dat TAA_CATEOORY bit as AccelerationsZone5_6	
	When testing for the first time, it is quite normal you encounter some errors. Often, this is because some parameters are left blank.	177, ANAL 2020 bis pion DATASETS of the on (dst_DTS_DD = ta.DTS_DD) DATASET_TYPEER de on (dt.DT_DD = dst_DTJ_DD) pion 174, MARCHER THE de on (dst_DTS_DD = tp.DTS_DD and ta.DTS_DD = tp.DTS_DD and ta.DTS_DD = tp.DTS_DD and ta.DTS_DD = tp.TS_DD = tp.TS	17. JD = 박. TP _ D) 18. JD = ext. ER. JD) nd spd_j58. (JD = 1 and spd_j5.8. Z. JD = 5) nd spd_j68. (JD = 1 and spd_j6.8. Z. JD = 6)	
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	Fields Here you can change the name of export format of the field.	of the field and the display/	International (Section Section	



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Image: Second seco	License information Open the dialog box containing Press on the arrow next to the C dongle with license information - Write current license inform it to Inmotio, when needed - Update dongel with license file.	the license information. Close button and select "Update from file". mation to file. (So you can send) e information from (updated)	License information	x TO Cose
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				3. Datasets window	Datasets (A)		84
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		athl		Detail	willdow		
	Chinown C	a athl a athl a athl a athl a athl a athl		Datasets (A) Displays the names of the open saved under any name), and ha Dataset Explorer (B)	ed dataset files. The icon is red s the description 'Live Dataset'.	during a Live recording (a record	ing not
	- & Unknown	athl					
	Groups Warkers	a athl a athl a athl a athl a athl	B	Shows the Athletes, Groups, Ma Camera selector input (C) Select the (set of) camera('s) you mation about the shortcuts and Control Camera" in the chapter	arkers, Exercises, Games and Pla ou want to enable or disable with the camera control you will find "imoServer".	ylists. help of easy shortcut keys. Mor in "Section Video server" and "	e infor- Section
	Exercises Games Playlists			Detail windows (D) The bottom panel (D) displays t	the details relating to the selection	on in the panel above.	
	Camera selector Camera selector Unknown att 0 BP 0 DP 0 0,00 r 0,00 r out o out o	r input hlete • • • • • • • • • • • • • • • • • •	C D				

Datasets Explorer (B)

Athletes

Image: Second	ICH-1502.D6				
Current speed acceleration Current speed acceleration By selecting a transponder/athlete and right-clicking the mouse button, you can open the dialog with the Athlete Properties (also see "Athletes"). This can also be done by double-clicking on a transponder/athlete. Deroise Core attent of the second structure of the second structu	Datasets Dataset Subire Cam SC Dataset Explore Cam SC Dataset Explore Cam SC Dataset Unknown att Unknown att	Under Athletes, you will find deta area to be measured. The ID num 'Athletes'. When you select a trai athlete will appear in the Details transponder ID number frequency of measurement name of the athlete (edit if colour of the athlete as show current pulse	ailed information about the action nbers and names of the athletes nsponder/athlete by clicking on pane (D) at the left bottom of t or sampling rate so desired) wh in the 3D Viewer (edit if so d	vated transponders located withi are displayed by clicking on '+', the ID number, the details of the he screen: esired)	n the left from related
Concernent of the second	Unknown athl	current speed			
	Ukrown athi	By selecting a transponder/athlet Athlete Properties (also see "Athle	te and right-clicking the mouse etes"). This can also be done by	button, you can open the dialog double-clicking on a transponde	with the pr/athlete.
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					Groups	86
RICH-1	502.06 Datasets 20101116 0950-1126NEC.imo Dataset Explorer Image: Strange Str	Group Properties Add Group Delete Group Follow Group	By clicking on '+', left from 'Gra a group by clicking on the name Details pane (D): group name (edit if so desi group colour (edit if so desi the selected visualisation(s current speed current position of the cen By selecting a group and right- dialog or Add Group , or delete th you double-click on a group.	oups', you will see the compiled e of the group, detailed informati ired) sired) s) tre of the group on the course, ir clicking the mouse, you can oper the group (Delete Group). The Grou	group(s) of athletes. When you so ion about this group will appear i ndicated by the X and Y coordinat the Group Properties (also see "(up Properties window will also app	elect n the tes Groups") pear when
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RICH-1	502.D6				Markers	87
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	 0:18:02.796 end sprints 0:20:15.397 sprint 2 0:25:51.920 end sprints 2 0:33:59.331 11 vs 11 0:35:11.817 	D	By selecting a marker and right "Markers") or Place Marker dial the marker (Goto Marker).	-clicking the mouse button, you og box, delete a placed marker (can open the Marker Properties (a Delete Marker), or go to the time	llso see point of
	O ::52:07.752 Loosing ball : O ::52:07.752 Loosing ball : O ::55:07.752 Loosing ball : O ::55:07.752 Loosing ball : O ::52:05.983 highly P ::18:13.927 end 2nd D ::22:05.692 tarts smaller O ::22:05.694 start 1 O ::22:05.694 start 1 O ::22:05.694 start 1	Marker Properties Place marker Delete Marker Goto Marker				
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RICH-1502 D6	.		Exercises	88
Datasets Dat	When you click on '+', left from during the measurement. When related Exercise will appear in the exercise is start time of the exercise at end time of the exercise at end time of the exercise at end time of the exercise at time Select Set start Set end Properties There are three buttons under the select Select Set start Set end By selecting an exercise and rige "Exercises") or Add Exercise dia Part). By selecting a part of the Exercise the Details pane at the bottom	Exercises', you will see informative vou select an Exercise by clicking the Details pane (D) at the left bound button with arrow to move the button button with arrow to move the button	ation about the exercises that wer ng on an Exercise, the details of t ottom of the screen: e play control to the start time e play control to the end time bar the exercise he exercise open the Exercise properties (also Exercise) or add a part of an exerci- ning the part of the exercise will a	e created the see ise (Add appear in
Camera selector input C C C C C C C C C C C C C C C C C C C				

		Games	89
If you click on '+', left from 'Ga the measurement. If you select appear in the Details pane at th appear in the Details pane at the appear in the Details pane and the appear in the Details pane and the appear in the Details pane (D) at the bottom appear in the Details pane (D) at the bottom	mes', you will see information al a Game by clicking on it, detaile the bottom left of the screen: a button with arrow to move the the button with arrow to move the the button with arrow to move the beson the same: selects the exercise in the time defines the (new) start time of the defines the (new) end time of the clicking the mouse, you can oper exercise (Delete Game) or add a p e, detailed information concernin left of the screen.	bout the Games that were created ad information concerning the Ga play control to the start time he play control to the end time the exercise he exercise n the Game properties (also see "C hart of a game (Add Part). g the part of the game will appea	during me will Games") ar in the
	If you click on '+', left from 'Ga the measurement. If you select appear in the Details pane at the • name of the Game • start time of Game and the • end time of the Game and • end time of the Game and • Select Set start Set end There are three buttons under the Select Set start Set end By selecting a Game and right- or Add Game dialog, delete the of Details pane (D) at the bottom	If you click on '+', left from 'Games', you will see information a the measurement. If you select a Game by clicking on it, detailed appear in the Details pane at the bottom left of the screen: name of the Game start time of Game and the button with arrow to move the end time of the Game and the button with arrow to move the end time of the Game and the button with arrow to move the select restart select selects the exercise in the time of set start Select set start selects the exercise in the time of defines the (new) start time of defines the (new) end time of the game dialog, delete the exercise (Delete Game) or add a per or Add Game dialog, delete the Game, detailed information concernint Details pane (D) at the bottom left of the screen. 	If you click on '+', left from 'Games', you will see information about the Games that were created the measurement. If you select a Game by clicking on it, detailed information concerning the Game appear in the Details pane at the bottom left of the screen: • name of the Game • start time of Game and the button with arrow to move the play control to the start time • end time of the Game and the button with arrow to move the play control to the start time • end time of the Game and the button with arrow to move the play control to the start time • end time of the Game and the button with arrow to move the play control to the start time • end time of the Game and the button with arrow to move the play control to the start time • end time of the Game and the button with arrow to move the play control to the start time • end time of the Game and the button with arrow to move the play control to the start time • end time of the Game and the button with arrow to move the play control to the end time • Select selects the exercise in the time bar • Select selects the exercise in the time bar • Select selects the exercise in the time of the exercise By selecting a Game and right-clicking the mouse, you can open the Game properties (also see "Cor Add Game dialog, delete the exercise (Delete Game) or add a part of a game (Add Part). By selecting a part of the Game, detailed information concerning the part of the game will appear Details pane (D) a

RICH-1	502.06					Playlist	90
HOIP1	Datasets Dataset Explorer Dataset Explorer Dataset Explorer Contemporation Dataset Explorer Contemporation Dataset Explorer D	-1126NEC.imo	Α	If you click on '+', left from 'Pla by clicking on it, the name of the By selecting a Playlist and right Playlist (Delete List) or add an it	aylists', you will see the Playlists ne list will appear in the Details p t-clicking the mouse, you make a tem to the list (Add Item).	you already made. If you select a pane at the bottom left of the scr New List (also see "Playlist"), de	a Playlist een. elete the
	P Markers Exercises Games Paylists Est		New List Delete List				
			Add Item				
	Camera selector i	input	C D				

modules Select module	
30 Viewer Graph	Video stream Event viewer Summary
	The available modules of your Ipm system will be found in the module layout window (tab). You can open a module by double-clicking on one of the icons. It is possible to simultaneously open several modules (Split Left/Right or Split Top/Bottom) or several module layout windows (tabs), side by side. You can find these options in the Menu bar under the "Tab View".
Select module	Drop-down menu You will also find these Module windows options in the "Dropdown Menu" that appears when you click on the arrow next to the bar with the module name.
Change Module	You can manually change the size of the window in which the modules are displayed, by holding the cursor at the edge of the window and moving the mouse while holding the left mouse button pressed
Module Options	down.
Split Left/Right	
Swap modules	
Close Module	

				3D Viewer	92
KICH-1	SU2.D6 modules Select module 3D Viewer	Graph Video stream	Event viewer Summary		
	If you oper the activat field displa	n the 3D Viewer module, the ted transponders will appear ay using the interface button	field with the athletes carrying on the screen. You can change the s:		a
		a	Zoom Move the slide at the top right (a) of the screen up (to zoom in) or down (to zoom out). Tilting		
		b 📲	You can tilt the field using the arrows at the bottom right (b) in the screen. You can also tilt the field by clicking on the f down.	field and moving the mouse while keeping the right mouse button	pressed
	8	С	Rotating Click on the button at the botto You can also change the positio while holding the left mouse bu on your mouse or the arrow keys player will be birblighted on the	Im left (c) of the screen, in order to rotate the field through 90 deg on of the field in the window by clicking on the field and moving th utton pressed down. You can also zoom in and out using the scroll s on your keyboard. If you select an athlete in "Datasets Explorer (rees. e mouse wheel B)", this
	✓ 3D Viewe	er C	Display You will see a number of icons a window containing options such ons" and "Recorder options", w	at the top left of the module layout window (d). By clicking on an i h as "Viewer options", "Camera control", "Measuring tools", "Visu vill appear (explained on the next pages).	icon, a alisati-

1			\		
				Viewer options	93
RICH-1502.D6	ewer	The display options include:		modules 🗵	
1 2	9 💿 🗹 🗘 🌍 🕹	Antialias rendering	smooth display of the lines of the field.	 → 3D Viewer → 3D Viewer → 3D Viewer → 3D Viewer 	
Viewer	options	Show interface buttons	tick-mark to display the interface buttons.	Viewer options AntiAlias rendering	×
		Show path of selected athle	ete	Show interface buttons Show path of selected athlete	
			tick-mark to display the selected athlete's route.	 Show goalkeeper position Display an identifying label above each athlete 	
		Display an identifying label	above each athlete	Type Athlete name	•
			Colour, Size) to be displayed.	Color Yellow Size small -	•
		When in 2D view mode, she	ow in object circle	When in 2D view mode, show in object circle	
			(transponder ID/shirt number)	transponder ID	• •
			that should appear in the object circle.		
		Identify selected	tick-mark and select the data to	o be displayed.	
solution solution	100 ×				
AntAlias rendering	s article				
Sittin goaldeper pos Display an identifying Type Color	aon label above each athlete Ablete name -				
Size When in 2D view mode, s	meni how in object dride transponder ID				
Identify selected	twagonder •				
	10,3				

502.06			Camera control	94
 → 3D Viewer → → → → → → → → → → → → → → → → → → →	The options for the view of Enable first person view	the field: w mode tick-mark in order for the mode with a player's-eye-view display.	view Camera control	
	Tilt mode Movement mode View direction 3D view from side 2D view from side	select how the field should be tilted in the view. select whether the view should display the motion in the field. select the viewing direction of the display. If you select the option 'look at target', you select it under Target. select the viewing direction of the 3D-display. select the viewing direction of the	Enable first person view mode Tilt mode right mouse d Movement mode left mouse dr. View direction Target Presets 3D view from side: 2D view from side: 1	rag up/down • ag • rag left/right • •
success s				

1 1 1 1 1 1 1 1 1 1			Measuring tools	95
			Incusul ing tools	
VICH-160206	The options for displaying the r Distance between groups For selected athlete show	neasuring instruments: tick-mark and selecting the groups between which the distances should be displayed. tick-mark and selecting what information concerning the selected athlete should be displayed.	modules Solution modules modules	
detail a detail				

1				Visualisations	96
RICH-1502.DG	er ions ions ions	The options for the display of th Show influence circles Show running Lines Distance labels options Group visualisations shown	e visualisations: tick-mark to display influence circles and defining the distance from the circles. tick-mark to display motion lines and selecting for whom there should be a motion line, and how long it should be. select color and size. select which visualisation should be displayed for the group.	Visualisations modules 3D Viewer Visualisations Show influence circles Show running lines for Length 5 Distance labels options Color Black Size Size Size Size Size Show running lines Color Color Black Size Size Size Midfiel yellow - Connecting line Midfiel yellow - Connecting line Midfiel yellow - Connecting line Midfiel white - Connecting line	96
Answer of the second seco					

	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		,	Free draw	97
RICH-1502.D6	ewer aw X	This option enables you to: Draw Move Add text Remove	a line or rectancle yourself with its dimensions in the color of your choice; an athlete to another place; whereever you want; all the dawn items.	→ modules × → 3D Viewer → ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ Free draw × → ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	
				· · ·	
- mage # - 30 Webs - 20 Webs - 10 We	90 -				

502.06			3D Object List	
 3D Viewer 	This option enables you to:		modules ×	
2 3 9 0 🗹 🙆 🏵 😂	Change	an existing line or circle, being a part of the field;	→ 3D Viewer	
3D Object List	٨dd	a now 3D object like a pylon		
	Add	a new SD object, like a pylon,	3D Object List	_
		goal, basket of het depending	Object type Name	_
		on your sport;	Line BacklineWest	
	Move	these objects by completing	Line BackineEast	
		the X- and Y- positions	Line SidelineNorth	
		the X- and 1- positions.	Line SidelineSouth	
			Line Midline	
			Circle MidCircle	
			Line WestGoalAreaNorth	
			Line WestGoalAreaSouth	
			Line WestGoalArea	
			Line PenaltyAreaEastNorth	
			Line PenaltyAreaWestNorth	
			Line PenaltyAreaWestSouth	
			Line PenaltyAreaEastSouth	
			Line WestPenaltyArea	
			Line EastGoalAreaNorth	
			Line EastGoalAreaSouth	
			Line EastGoalArea	
modules (×			Line EastPenaltyArea	
- 30 Viewer			Circle WestPenaltySpot	
30 Object List ×			Circle WestPenaltyCircle1	
Unice Midine Content C			Circle WestPenaltyCircle2	
Line WestSoalAreaNorth Line WestSoalAreaSouth			Circle EastPenaltySpot	
Line WestGoalArea Line Penalty/sreaflastNorth			Circle EastPenaltyCircle?	
Line Penaltykeetissouth			Circle NorthWestCorper	
Line WesPenaltyArea Line EastGoalAreaNorth			Circle NorthEastCorper	
Line EastGoolAreaSouth Line EastGoolAreaSouth		<u> </u>	Circle SouthWestCorper	
Circle WestPenaltySpot			Source Sourcestcorrect	
Cricle WestPenahyCricle2 Cricle BastPenahyCricle2 Cricle BastPenahyCricle2 Cricle BastPenahyCricle2 Cricle NortWitesCriticner Cricle NortWitesCriticner			New Save Cancel Delete Adv	an
Circle SouthWestCorner Circle SouthCartCorner			3D Object Type	
Securitical California Eccuritical California Maria Data I			Name	
New Sine Carod Dolete Advanced 30 Object Type PVon			Color White	_
Name pylon1 M			Visible	

R(H1502.06	11111111111111111111111111111111111111		Recorder options	99
Recorder options	The options for recording the Begin recording at End recording at Resolution Scale By clicking on the camera icc	data: specify the starting point of the recording. specify the end point of the recording. select the resolution. select the scale.	modules × JD Viewer Solution Conservation Begin recording at End recording at 1:35:59.501 End data ×	×
	where the image file (.avi) sho	buld be stored.	Resolution 1280 x 720 (HD 720) ~ Scale 2,50 ‡	
p∰ Deze pc € Netwerk Bestandspaam: testavi		~		
Ogslaan als: AVI Files (*.avi) Mappen verbergen		Qpslaan Annuleren _d	Videocompressie Compressieprogramma: Microsoft Video 1 Compressiekwaltet: 75 Compressiekwaltet: 75 Configureren Info Info	×
				1



j02.D6			
modules X			
Select module			
~			
3D Viewer Graph	Video stream Event viewer Summary		
Double clicking on the Gran	hic module icon will open the Plot Graph in t	he module layout window (tab)	Graph options
and the dialog box containir	ing the graphics options with the Presets and (Custom tabs.	Presets Custom
Presets	Make a selection from the possible gran	nics for the selected transnonder	On selected transponder The following graphs are active on the currently selected transponder
1103013	or for the selected group . The graphic of	your choice will then appear in	Speed Acceleration Cumulative distance Measurement frequency Heartbeat
	the module layout window. Double clicki	ng on the graphic will again open	On selected group
	the dialog with the options for the graph	ics.	The following graphs are active on the currently selected group Speed Acceleration Cumulative distance
Custom			X position Y position
Data calentian mode	coloct the Course of the graphic		Nuttple series, multiple axis and advanced datatype graphs can be configured using the custom tab page of dialog.
Laft/Dight Avia	set the volues for the vertical even of the	graphic (Volue, in unit Minimum	
Leit/Right Axis	Maximum).	graphic (value, in unit, winnihum,	
Horizontal Axis	set the values for the horizontal axis of t	he graphic (From, To, Axis unit).	OK
Options	If the box for the Disnlay legend is check	ed the legend shall be displayed	
options	at a location of your choice. If Display at	hlete properties is tick-marked,	
	the Details pane containing the details o	f the selected athlete will be	Graph options
	displayed in the module layout window.	You can also define the thickness	Data selection mode
	of the line.		Source multiple (drag/drop)
Double click on a displayed	graphic to change its options. The dialog box	will reappear.	Left Axis Right Axis Value Value
			Argument - Argument - in unit - in unit -
			Minimum default - Minimum default - Maximum default - Maximum default -
			Options
			Display athlete properties



PICH 1502	De				1111111111	Video stream	 103
- s	modules X ielect module 3D Viewer	Graph	Video stream	Event viewer	Summary		
lf th lf Yo bi	you sele ne measu no recor n the "Da ou can sy utton.	ect the Video stre rement by clicki dings are availal taset Properties' ynchronise the vi	eam module, sele ing on the arrow ble, please first a ", tab Parameters ideo image with	ect a video re next to video add one or mo s. the data via t	cording linked to stream. ore video streams he Change offset	(Conners) Marinetta Marinetta Marinetta (Marinetta) Marinetta (Mar	 Oracinal

With help of the "Drop-down menu", you can show several windows at the same time. For instance, you can watch the 3D View, real videorecording, the heart beat and the speed of the player of your choice all at once. The graph windows automatically show the details of the player at stake, but

this is similar to the the Dataset detail



104 **Event viewer** RICH-1502.D6 modules × Select module... 3D Viewer lideo strear Event viewer Double clicking on the Event Viewer module icon, a two-part screen will appear in the module layout window. The top part contains a table of INMOTIO events with the number per person. The bottom part contains the selected events. 20110815 Next You can use this to navigate to the next record. Transpon CR (S) bal (11) Unknown Athles You can navigate to a previous record Prev (12) Unknown Athlet (14) Unknown Athlete (this only works well if the dataset is in (16) I Inimourn Athlete (12) Unknown Athlet (14) Linknown Athlat (18) Unknown Athlete (16) Linkmourn Athlat (19) Unknown Athlete 'pause'). (15) Unknown Athlet (20) Unknown Athlete (19) Unknown Athlet (21) Unknown Athlete 20) Linknewn Athlet (22) Linknown Athlete Delete This allows you to delete an event. (23) Unknown Athlet (24) Unknown Athlete This can no longer be undone after the (25) Linksons Athlete (26) Univoun Athlete Label 0-29-15.000 0-29-15.000 (20) Unknown Athlet 0,0 (21) Unknown Athle dataset is saved. (50) Unknown Athlete 0132-32.000 0132-32.000 0.0 (21) Linknown Athlete 0.0 (21) Linknown Athle (NI) Unknown Att (ST) Unknown Athleb 1:05:03.526 1:05:03.526 0.0 (21) Unknown Athlete (55) Unknown Athlete (55) Unknown Athlete This allows you to export the selected 1:10:34.526 1:10:34.526 Export (56) Unknown Athlete

10001 526 101201 526

Next Prev Edit Delete

(57) Unknown Athleti

(59) Linknown Athlete (60) Unknown Athlete (61) Unknown Athleb (CT) I telescon Arti-

known Athlete

9 0.0PM 1,12 km/h 0.6 m/sz

0.0 (21) Linknown Athlet

(50) Unknown Athle

Cache Hits: 93,73 %; ags: 16 🌾 Pos 85 🔅

Buport

0:00:00.000 / 0:00:00.000 👭

If 1 or more boxes are selected in the topmost screen segment, all the associated events will be visible in the bottom part.

events to a .csv file.

One can jump to the 'Start' time in the time bar by double-clicking on an event. As a result, the 3D viewer/Graphics and Video also jump to that time.

Ik krijg hier nu heel weinig data van in mijn scherm dus dit is overgenomen van de vorige versie.

502.D6				
Select module Solution Solu	ph Video stream	Summary		
Double clicking on the window in the modul and Agility tests . Summary	he Summary module icon will open the le layout window (tab) with three tabs: Shows a summary of the p beat , speed and distance f in the module layout wind	e Summary Summary, Live position, heart or each player ow.	harkar	
Live	Shows in all exercises the Speed Index-calculated to Int), the Acceleration Inde to 1 minute- (Acc Int) and beat (Avg HB) for each pla module layout window.	Absolute b 1 minute- (Sp ex-calculated Average heart yer in the		

1500.00			1
Agility tests	Shows a table with the results of yo summary: the Time (sec), Distance	El contro de Securitor de LEDICOZICIONES - COMUNICACIÓN Contrologiel Portunio De LEDICOZICIONES - COMUNICACIÓN De LEDICOXICIONES - C	Kuray App Test
	(m), Max. Speed, Average Speed, Max. Acceleration, Split 1, Time 1, Split 2, Time 2.	X. Time	1/ ann sh
		Definition Amore 100 I Amore 100 Image Amore 100 Amore 100 Image	9 Anna Age

S. Time window Timeline, indication Timeline, indication Image: Second Seco					
The Time window contains the following parts: Time indication (B) shows the duration (right) of the entire recording and the time of the current view (left). Time slide (C) to take small steps forward or backwards in the time of a recorded measurement, and to slow down or speed up the playback speed. Play/Pause (D) to play/pause a dataset. Data panel (E) settings for how the data are displayed in the window. Timeline (A) By clicking on a specific time in the Timeline, you can review a specific point of time in the record file. Indicator Markers The placed markers (see "Markers" in the Monu bar or "Markers" in the Dataset window) are shown as a small blue vertical line. The placed markers (see "Markers" in the Monu bar or "Markers" in the Dataset window) are shown as a small blue vertical line with a dto or the symbol you have choosen. The beginning of an Exercise/Game is marked with a green vertical line and the end with a red one. Time indication (B) duration entire recording time of the current view and the end with a red one. Time indication (B) duration entire recording time of the current view shown at the left.		5. Time window	Timeline, indication		107
The Time window contains the following parts: Time link (A) display of time of the recorded measurement. Time indication (B) shows the duration (right) of the entire recording and the time of the current view (left). Time slide (C) to takes small steps forward or backwards in the time of a recorded measurement, and to slow down or speed up the playback speed. Play/Pause (D) to play/pause a dataset. Data panel (E) settings for how the data are displayed in the window. Timeline (A) By clicking on a specific time in the Timeline, you can review a specific point of time in the record file. Indicator The placed markers (see "Markers" in the Menu bar or "Markers" in the Dataset window) are shown as a small blue vertical line. Image: State indication (B) Time indication (B) Undicator The placed markers (see "Markers" in the Menu bar or "Markers" in the Symbol you have choosen. Image: State indication (B) Time indication (B) Undicator The placed markers (see "Markers" in the Menu bar or "Markers" in the Symbol you have choosen. Image:	502.D6				
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The Time window contains the following parts: Timeline (A) display of time of the recorded measurement. Time indication (B) shows the duration (right) of the entire recording and the time of the current view (left). Time side (C) to take small steps forward or backwards in the time of a recorded measurement, and to slow down or speed up the playback speed. Play/Pause (D) to play/pause a dataset. Data panel (E) settings for how the data are displayed in the window. Image: Play Pause (D) to play/pause a dataset. Data panel (E) settings for how the data are displayed in the window. Image: Play Play Comparison of the entire record file. Timeline (A) By clicking on a specific time in the Timeline, you can review a specific point of time in the record file. Indicator The current time is indicated with a thick, light blue vertical line. Markers The placed markers (see "Markers" in the Dataset window) are shown as a small blue vertical line with a dot or the symbol you have choosen. Image: Play Comparison of the current time is indicated with a green vertical line and the end with a red one. Image: Play Comparison of the current time is shown at the right. image: Play Comparison of the current time is shown at the left.	Data window Around playpos • 30 seconds • bef	fore to 5 seconds after		0:00:00.000 / 1:3	35:59.501 🙀 🕅
Time line window contains the following parts: Time indication (B) display of time of the recorded measurement. Time indication (B) shows the duration (right) of the entire recording and the time of a recorded measurement, and to slow down or speed up the playback speed. Play/Pause (D) to play/pause a dataset. Data panel (E) settings for how the data are displayed in the window. Timeline (A) By clicking on a specific time in the Timeline, you can review a specific point of time in the record file. Indicator Markers The jaced markers (see "Markers" in the Menu bar or "Markers" in the Datase window) are shown as a small blue vertical line with a dot or the symbol you have choosen. Time indication (B) duration entire recording time of the current view shown at the reght. shown at the left.	TI T	C H = 1			
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Play/Pause (D) to play/pause a dataset. Data panel (E) settings for how the data are displayed in the window.	Time slide (C)	to take small steps forward or backwards playback speed.	in the time of a recorded measur	rement, and to slow down or spee	d up the
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Timeline (A) By clicking on a specific time in the Timeline, you can review a specific point of time in the record file. Indicator Markers The placed markers (see "Markers" in the Menu bar or "Markers" in the Dataset window) are shown as a small blue vertical line with a dot or the symbol you have choosen. Time indication (B) Outration entire recording time of the current view shown at the right.	0:05 0:10 0:15 0:20		55 1:10 1:15 1:1		÷ •
Timeline (A) By clicking on a specific time in Indicator Indicator Markers The placed markers (see "Markers" in the Menu bar or "Markers" in the Dataset window) are shown as a small blue vertical line with a dot or the symbol you have choosen. Itage Exercises/Game Time indication (B) duration entire recording time of the current view shown at the right. shown at the left.		are second are		P. C. C. C. R	
By clicking on a specific time in the Timeline, you can review a specific point of time in the record file. Indicator Indicator Markers The current time is indicated with a thick, light blue vertical line. The placed markers (see "Markers" in the Menu bar or "Markers" in the Dataset window) are shown as a small blue vertical line with a dot or the symbol you have choosen. Exercises/Game The beginning of an Exercise/Game is marked with a green vertical line and the end with a red one. Time indication (B) duration entire recording time of the current view shown at the left. shown at the left.		Timeline (A)			
Indicator The current time is indicated with a thick, light blue vertical line. Markers The placed markers (see "Markers" in the Menu bar or "Markers" in the Dataset window) are shown as a small blue vertical line with a dot or the symbol you have choosen. Itime indication (B) Time indication (B) duration entire recording time of the current view shown at the right. shown at the left. shown at the left.	η	By clicking on a specific time	in the Timeline, you can review a	specific point of time in the reco	rd file.
Markers Markers The placed markers (see "Markers" in the Menu bar or "Markers" in the Dataset window) are shown as a small blue vertical line with a dot or the symbol you have choosen. 1:35 Exercises/Game The beginning of an Exercise/Game is marked with a green vertical line and the end with a red one. 0:00:00.000 / 1:35:59.501 duration entire recording time of the current view shown at the right.		Indicator	The current time is indicated w	vith a thick, light blue vertical lin	e.
Exercises/Game The beginning of an Exercise/Game is marked with a green vertical line and the end with a red one. 0:00:00.000 / 1:35:59.501 duration entire recording time of the current view time of the current view shown at the left.		Markers	The placed markers (see "Mark Dataset window) are shown as symbol you have choosen.	ers" in the Menu bar or "Markers a small blue vertical line with a d	s" in the lot or the
Time indication (B) 0:00:00.000 / 1:35:59.501 duration entire recording time of the current view time of the curr		Exercises/Game	The beginning of an Exercise/G and the end with a red one.	ame is marked with a green verti	cal line
0:00:00.000 / 1:35:59.501 duration entire recording time of the current view bown at the left.		Time indication (B)			
time of the current view shown at the left.	0:00:00.000 / 1:35:59.501	duration entire recording	shown at the right.		
		time of the current view	shown at the left.		

	·	Time slide, play buttons	·	108	
KICH-1002.D0	Α.		C		
0:05 0:10 0:15 0:20 0:25 0:20 Data window Around playpos S Seconds • before to Seconds • at	0:15 0:49 0:45 0:59 0;55 111 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			÷:59.501 € ₩	
	Time slide (C) If you click and move the big bl go forwards or backwards in tim If you move the time slider with release.	ue dot with the left mouse butto e. the CTRL key pressed down, the	n pressed down during a replay, y playback speed will be maintain	you can ed after	
	Plus-button	Clicking on the plus button spe	eds up the playback speed of the	dataset.	
	Minus-button	Clicking on the minus button sl dataset.	ows down the playback speed of	the	
Deta window Around playpos	0:35 0:40 0:45 0:50 0;55 0;56 0;56 0;56 0;56 0;56 0;56 0;			559.501 (1)	
	Play/Pause button (D) With the play button (C) you can a dataset, you can freeze it with	n play back a previously recorded the pause button.	d measurement (dataset). While r	eplaying	
	Backward-button Forward-button	Move 30 seconds backward in t Move 30 seconds forward in tin	time in a recorded measurement. ne in a recorded measurement.		
			(
----------------------------	---	---	---	--	---
			Data panel		109
RICH-1502.D6					
G:05 Data window Around	0:10 0:15 0:20 0:25 0:30 d playpos	0:50 055 after			
Data panel	I (E)				
In the dat	a panel, you can define the inte	rval with which the dataset will b	e played; around the playing pos	sition or at a fixed interval.	
Aroun	d playpos If you ch position, after the	oose to play around the play you can set the time for until playback position.	Data window Around playpos - 30 seconds	• before to 5 seconds • after	
Fixed	interval Using the can defin fixed inte in the tin	e Set start/Set end buttons, you e the start and end time of a rval. This selection is greyed out neline.	Data window Stored Interval Set st	art Set end Cache Hits: 100,00 %; ags: 89 🍞 Pos 85 🛟 %	
Error	correction Using the you can o heartbeat for all.	e Set start/Set end buttons, correct an invalid position or t. You can select one or choose	Data window Error correction	art Set end Correct P maldate r Cache Hits: 100,00 %; ags: 89 Pos 85 : % Invalidate r Provided to r Restore po Restore Po	osition selected > osition selected sostion all met beat selected sion all or beat selected sostion selected >

502.D6	Troparo rocoranig		
Introduction			
It is advisable to link athletes already t transponder during a measurement. Als connection to their transponder are already	o their transponder before any meas so when you start the imoClient-soft eady in the database and ready to us	urement will take place. T ware on any other device (l se.	his avoids the action to link an athlete to a laptop/tablet), the names of the athletes and the
This is done at the button Prepare Reco	ording in the section "Dataset" of	🚍 modine 🜌 Presser recording i *	
the Menu Bar, Tab Home.		Backeds Drag a rolawer hander here til grund by flut okken Open D Pakh Description 1 Net Cefluit	Powerlake * Type politione Jacke Post-Office parent politik
Visible is the grid with all the preparati	ons.		
<u>♦</u>	Grouping and filtering pitches	A Creat	Open the selected preparation. Or double
Di <mark>Pitch column header</mark> here to group b	By dragging the column	- open	click on the selected row. This wil bring
ID Pitch V Descr	header to the top, the grid can		you to the "Edit screen".
5 Pielo 1 Mañn	be grouped by the pitches.		
Pitch 💽 🕻 escription	It is also possible to filter the	New .	
(All) Mannen - vrouwe	grid. Point your cursor to the		Create a new preparation.
Field 1	column header en press the marked button.		
Field 4			
Refresh	Refresh the grid.	- Delete	
			Delete 1 or more selected preparation.

			Edit screen	General settings	111
On the ed	lit screen you can set	up the preparation of the measurement.	entere data (Contraction)		M mot
Save	and Exit	Saves the changes and shows the search screen.	Perspent PAD Detective Det Perspentition Constraints of the Particular Stream Laboration of the Particular Stream Laboratio of the Partic	ant too prive for photos	D tan Tant S tank D tan
💥 Can	cel	Close the edit screen without saving changes.	1 2 3 Ange 2 04 4 6 Page 4 05 5 6 Page 4 05 6 7 6 Page 4 07 7 6 Page 6 7 08 7 7 6 Page 7 08 7 7 7 Page 6 03 7 9 Page 7 7 03 7 9 Page 8 7	Торика ССС Тарика СССС Тарика	Proteine Moderne Lastiene Software Software Proteine 10 (p) 10 (p) 10 (p) Proteine 10 (p) Proteine 10 (p) Proteine 10 (p) 10 (p) 10 (p)
Descr	iption	A useful name for the preparation to make it easy to identify in the imoServer.	013 11 97 Pare 11 022 22 28 Pare 12 023 23 28 Pare 12 (0) 024 24 28 28	Nan A S22 Nan A S23	Name Dis Proper Dis Pager Dis Proper Dis
Pitch		On which pitch is the measurement taking place.	transponder selector	list of prepared transponders	player selector
Ехрес	t Date	On what date is the measurement going to happen. In the imoServer all preparations without a date are visible and those whith a date are only visible on that particular date.			
Datas	et type	Required for reports when different type of	f recordings are done	with LPM.	
Inmo	tio field definition	The ifd-file that has to be loaded by the 'i	moClient' when the red	cording is started.	
Store	Live Pos in DB	Save the Gaussian filtered data in the dat when the WebClient is running. Positions size of the database low so the Express ve	abase for transponders are removed from the rsion of MS SQL Serve	that are connected to players. T database a day after recording in er can be used.	nis is only useful order to keep the
Active	e	This preparation can be selected if check	ed.		
Tab Trans	oonders				
Set		Selection box of the set of transponders, of	configured in "Setup Ti	ransponders".	
Clea	r All	Removes all Transponders from the list.			
Name		Choose how the name of the player is visi	ble in the system.		
Search		Search for a player or players in a team.			

			Selectors	112
RICH-1502.D6 Transponder selector Selection transponders	for a preparation. Select the set you want to use.		Transponders Other	
	Add selected transponder to the list.		Set Set 0	▲ TP
	Add all transponders to the list.		010 020 021	20 21
	Remove all unassigned transponders from	the list.	024	24 25
	Remove selected transponder from the list connected.	, even if there is a player	026 027 028 029 030	26 27 28 29 30 30 20 20 20 20 20 20 20 20 20 20 20 20 20
Player selector Select players for the r	neasurement. Select a team and press search so all men listed. You can also search for "first name" You don't need to type the whole name in	nbers of that team will be ', "last name" or "short name".	Team Team A Firstname Lastname Shortname	search P
	find the right person. Replaces the player of the selected transp in the search grid. Add the player in the search grid to the tra	onder with the selected player		
	automatically connected to a transponder. Add the whole search grid to the transpon is available in the "Transponder List" or in automatically connected to this transpond Disconnect the player from the selected tr	der list. If the "DefTP" the "Set", the player is er. ansponder.		

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RICH-1502.D6							
The lis	st of prepared transponders			Extend of Americansky S Second Seco	z 🖉 Bare Lae Paujin 20 🔗 Achie		
Ē	Clear Al	Removes list	all the transponders from the	bit form percent () percent	Taon Taon A Taon A Taon A Taon A Taon A Taon A	A (rest D) Tom Ta Promote D Promote D	and Total Souther Souther
Pl	ayer name	When add list this is created.	ding players to the transponder s how the Player's name is	CD Di Page 7 CB 20 Pice 8 CB 20 Pice 8 CB 20 Pice 10 CB 20 Pice 10 CB 20 Pice 10 CB 20 Pice 10 CB Pice 10 Pice 10 CB Pice 10 Pice 10	Tana A Tana A Tana A Tana A Tana A Tana A Tana B	27 27 28 27 28 27 28	33 Parent 33 28 10 Parent 35 22 12 Parent 10 28 13 Parent 18 30 14 Parent 18 31 15 Parent 18 31 16 Parent 18 31 20 Parent 12 34
	÷	When the add him	player is not in the DB you can by clicking this button.				
Ve	est ID	Because	a transponder is no longer				
		unique or	n the first 2 digits, It is now calle	d 'Vest ID' so also the 'Set ID' is	a member of this v	alue.	
		Cell 'Vest	ID' is mandatory, when it is not	filled it is marked red.			
0	10	Select a '	Vest ID' from the dropdown list.				
02	20						
02	21 24						
02	25						
0	26 27						
0	28						

RICH-1502.D6				Tab ()ther	11	14
Tab Other You can se should be	elect all the agility tests that are defined in the corresponding In	going to be played in the trainin motio Field definition (see "Track	g. When doing this, the lines /Field").	Transp Agility	onders Other		
When the	agility tests are selected in the	preparation, you can see live resu	Its during the measurement.	Select	Agility Test Arrow Left		
					Arrow Right		
							I

				Setup Transponders	115
RICH-1502.06 Adding tra database. This is don "Config Se	ansponders to the system shoul ne in 'imoClient' at the button . erver" of the Menu Bar, Tab LP	d be done by adding them to the Available Recording in the section M.	Home Analysis Report Pitch Tools Trip Available Config Sever ImmeDiate ImmeDiate ImmeDiate ImmeDiate Distancement Io ImmeDiate ImmeDiate ImmeDiate ImmeDiate ImmeDiate Vest ID 0 0 1001 0 1001 0 Vest ID 5t ID Anterna ID 1 Anterna ID 2 Anterna ID 2 Anterna ID 2 0 101 0	Sternal View Database EPM About	Add
Adding tra	nsponders to the system		016 0 1601 0 017 0 1701 0 018 0 1801 0 014 € 0 of 59 ▶ ₩ ₩ = √ % €	0 1604 IT ransponder 0 1704 IT ransponder 0 1804 IT ransponder	•
Digits Digit . Anten Check Role Add	XX (TP) This is the .XX. (Set) In some na checkboxes If a Tran uses the manually cbox 'combined' Meaning Can be T If 'Trans If 'Ball' The tran the Add	he 'old' transponder ID. applications this field is called Fi sponder has more than 1 antenna same antenna ID except for the I in the table. The Abatec LPM server combines Transponder or Ball . ponder' it can be added to the Ab it will not be added to the Abatec sponder is added and the Digits X button until all the available trans	eld ID, here it is called Set ID bec , please check all the antenna's ast digit. If in some cases the ID the AntennaID's to only Antenna atec Transponder.ini Transponder.ini X. is increased automatically so ponders are inserted.	ause it is not limited to a field. that are in use. We assume a trar of the antenna differs, you can o a ID 1. adding transponders is as easy as	nsponder change it s pressing

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inn	LOCAL POSITION MEASUREMENT	inmotiotec GmbH local position measurement Oberregauer Straße 48 A-4844 Regau Austria	營 +43 昌 +43 薈 infc 昌 www	8 (0)7672 27720-0 3 (0)7672 27720-401 @inmotiotec.com w.inmotiotec.com	
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