

**PICTORIAL HANDBALL MATCH STATISTICS***(PHMS for Windows 7 Version E5.3)***User's Manual****March 2012**

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to the hardware planning. Ask technician for help when necessary.

## 9. Help

Click "HELP" in the Initial Interface to enter the Help interface. You can find the help you want by clicking relevant content on the Help Interface.

When doing other operations, especially when scouting on the spot, just clicks "Help" for help. All the updated usage will be included in HELP.

## 10. Live Score Broadcast

After installation of PHMS, you would find an icon "LiveScore" on the desktop of your computer.



This is a module for Website Live Score Broadcast. The function is to upload match data to the website where match score is live broadcasting.

Click the "Live Score" icon and setup the connection with Internet, the system will do the rest for Net Live Score Broadcast.

Please refer to "Technical Manual" for detailed information of Live Score.

## Epilogue

Should there be any questions aroused, please contact us.

PHMS staff members

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Chinese Handball Association

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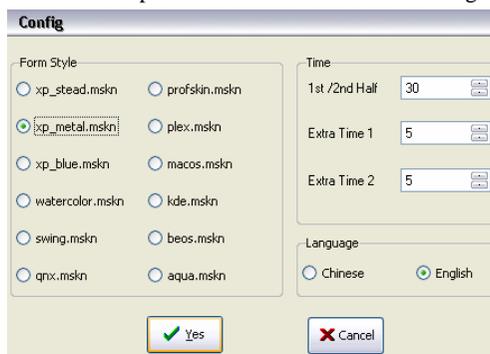
## 8. Configuration

### 8.1 Style

The system provided options of the interface style. Operators could choose their preferred style of the interface, language, port of communication, and match time.

#### 8.1.1 Interface Style

There are 12 styles of interface in different colors. Operators could choose the style they like and to make the operation of PHMS more interesting.



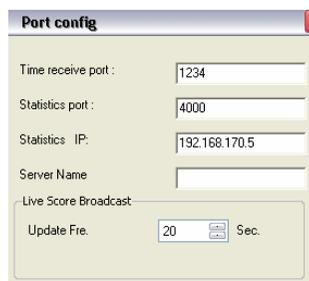
Options of configuration

#### 8.1.2 Language

Choose the right language according to the requirement of the tournament. The system will print reports based on the default language. There are two languages available in the system. Please be noted that the language would not change after choosing another language till the system rebooted.

### 8.2 Match Time

Set up match time in accordance with the regulation of the tournament. The default match time had been set according to the IHF playing rules. It's not necessary to set the time in normal situation.



Port Setting

### 8.3 Port

Configure the communication port according

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Composed Print

**7.6.6.4 Print to PDF**

Features of Print to PDF are similar with Multi-Print. Multiple reports could be printed by one click. But all print outs are PDF files. It’s printed by the system’s own PDF printer. All other requirements are the same as it is of Multi-Print.

**7.6.6.5 Execute Print**

Print task will display in the Print Manager Interface when it has been preset and so dose the related notice. Click the concerned task to see the match number; files to print, and the reminder. Press “Submit” to print the preset task. Or click “Edit” to modify the task.

Click Edit to Modify Task

Preset Print Task

**7.6.6.3 Composed Print**

Composed Print is to combine different type of reports into one and print by one click. Please click “Add” to get the task preset window, fill in the title of the task in the Task Title Box, Select reports to print by press the key “Select”, fill in notice in the Reminder Box, saying that when the task should be done. Configuration of default printer must be a PDF printer (Please refer to the “Technical Manual” of PHMS).

Preset Composed Task

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## 1. System

### 1.1 Introduction

Pictorial Handball Match Statistics (PHMS), based on the latest on-the-spot techniques scouting theory, is developed by Longman Sportsoft Group.

This System has the following advantage and characteristics:

#### Easy to operate

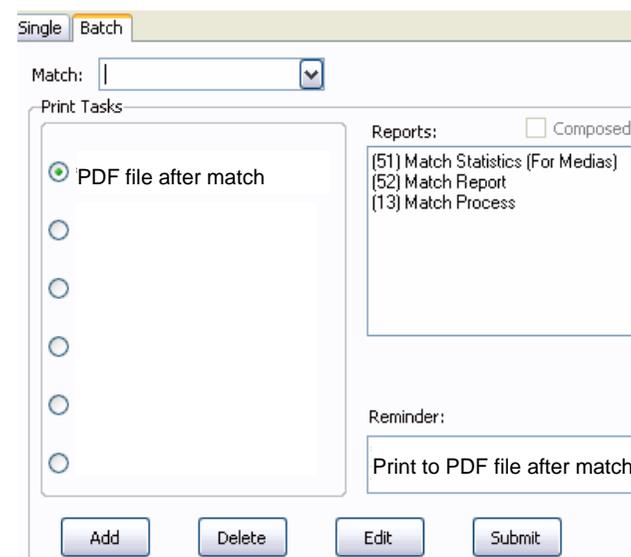
Instead of using code input, what the operator needs to do is just point and click, that is, on-the-spot match data are recorded with the mouse and on the pictorial interface, thus the system successfully breaks the bottleneck of speed limit for inputting large quantity of data. Operators need not memorize any data code and people with some handball knowledge can learn to use the system without much difficulty or training.



#### Highly automatic and intelligent:

With the technology of automation and intelligence applied in data input, the system can use the preset logic algorithm and relevant parameters to create and transform pictorial data automatically. Automation and intelligence in the process of recording greatly decreases the labor quantity and intensity of the operators.

window. The function of Print in Batch is so excellent that it could simplify a large scale of complicated printing tasks and reduce the working intensity of the operators.



Print in Batch

Print in Batch provides the following functions: Preset and print different sorts of reports by one click; Preset a combination of different sort of reports and print them into one file afterwards by one click; To connect the preset task to a notice reminding the operator when the task should be executed.

#### 7.6.6.2 Multi-Print

Multi-Print is one of the functions provided by Print in Batch. Preset task of printing multiple reports could be done by one click with this function. Please click "Add" to get the task preset window, fill in the title of the task in the Task Title Box, Select reports to print by press the key "Select", fill in notice in the Reminder Box, saying that when the task should be done. Configuration of default printer would decide whether the print out is hard copy or a digital file.

Selecting "Print" in the "Print Type" window means a regular printing. Select an option in the "Key Word" window in accordance with the type of the report. Select "No need" when printing multiple reports and hard to specify a key word.

Interface to enter the Auto Name window. All reports of PHMS have their own official file name. The function “Auto FinleName” could change the official name of a file into your preferred name. The system then would use your preferred name automatically when printing out the concerned report.

Please select a report first for rename and its official name will display at the bottom of the window. Fill in your preferred name of the report in the box at the bottom. Then press “Save” to confirm and return. Please note that there must be a symbol “%” in the file name which is a key variable representing “Match No.”, “Team”, and “Date” respectively.

## 7.6.5 Single Print

Press the key “Single” in the Print Manager Interface to enter the Single Printing window. Report number must be selected for single printing. Report Number could be filled in or selected by press the key aside the Report Number box.

Single Print

A notice of report type will display in the notice box at the bottom informing what should be done next. For example, a notice will show after report 52 (Official Match Report) selected as: Printed by Match No. It means that a match number must be selected next for printing.

Report 52 of one or more matches could then be printed after all options being done.

## 7.6.6 Print in Batch

### 7.6.6.1 Brief

Press the key “Batch” in the Print Manager Interface to enter the Printing in Batch

## Powerful in error correction

The system has the powerful function of correcting errors in data inputting. During the on-the-spot recording, operators have to remain concentrative on the fast progress and many changes in the ongoing match, and thus are prone to make mistakes. The flexible function of error correction and audio notice are set in the system. In the recording of complex data, the later inputted data will replace the former accordant items till the concerned record completed. This function provides the operator with much convenience and makes rectification very easy.

## Large in capacity

Match statistics are presented in the pictorial form for the first time in handball, which can directly and clearly reflect the whole match process. This system can print out more than 50 sorts of match reports either in table or pictorial form right after the match; therefore it can be applied to professional and amateur matches of all kinds and is thus able to meet the needs of any events to the greatest extent.

## Real time data transmit

With its specific interface, PHMS can simultaneously transmit real time data to Internet and TV live broadcast. All result reports could be on line right after the match and confirmed by technical delegate. People in the hall or far away from the playing venue could enjoy the real time information generated by PHMS.

## 1.2 System Name

PICTORIAL HANDBALL MATCH STATISTICS

PHMS for Windows 7 Version E5.0

Developed by Longman Sportsoft Group

Approved as official system by Chinese Handball Association and the International Handball Federation.

## 1.3 System Function

This system is especially designed for the technical statistics of indoor handball matches of international and domestic, professional and amateur events. It has the following functions:

- To record initial data of tournament, team roaster, technical officials, etc.
- To record in the pictorial form all kinds of technical events and actions happening on the court in a match, such as scoring, infringements, offensive and defensive, succeeded and failed actions, etc.
- To provide result reports to help the organizer and facilitate the tournament

organizing works.

- d) To provide integrated and detailed match reports to media.
- e) To sort out the recorded data and print out detailed statistics reports in both pictorial and table form.
- f) To exchange data among different venues through networks.
- g) To provide data for the timing and scoring system.
- h) To provide scouted data for Internet.

## 2. Setup and Start

### 2.1 Running Environments

#### 2.1.1 Hardware

IBM compatible CPU 2.0GHz or higher, memory 1G or higher, display 1024 \* 768 or higher, HP laserJet 1010 or later version or compatible.

#### 2.1.2 Software

Windows XP or Windows 7, Microsoft Office, PDF reader and printer.

### 2.2 Setup

To install the system, insert the system CD in the CD-ROM drive, click the Set Up file and then follow the instructions till installation completed. You may use the default directory for the system or create your own. When the setup is completed, you will find "PHMS" on your program menu from the Start list.

### 2.3 Start

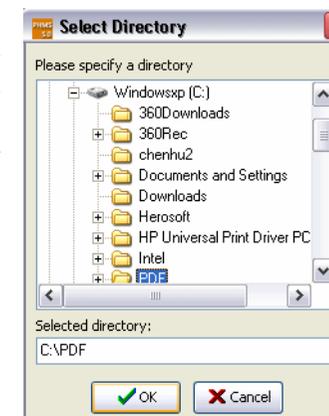
#### 2.3.1 Open

Click "PHMS" from the program list on the pop up menu and you will see the notice "Please insert USB key". Insert the key, click "Yes" and the following interface "Starting program" will appear for a few seconds.

Following is the main interface of PHMS when it's ready to work.

### 7.6.2 Directory

Press the key on the right of the "Save to Directory" box, a window of "Select Directory" will pop up for your selecting a directory for saving the printed out files. The directory selected must be the first one after the root. Click "OK" to return.



Select Directory

### 7.6.3 Print Options

There are three options concerning print. "Print Type" is to decide the way of printing. Preview, Print and Print to PDF can be selected.

"Print Option" is to configure the default

printer. The preset default printer is the key to fulfill the printing task automatically. Refer to the "Technical Manual" of PHMS for a detailed configuration of default printer.

Pages can also be set with this function. Some of the reports have lot of pages but usually one would be enough. Preview the report when number of pages of the report was unknown.

"Task Delay" is special technical functions to allow a slow running PC fulfill the heavy printing task by prolong the interval of each task. Make it a few seconds longer when the computer used for the system was too slow to ensure a smooth printing of a long queue of reports.



Auto Name

### 7.6.4 Auto Name

Press the key "Config" in the "Auto FileName" box in the Print Manager

Legend: %=Match No/Team Code/Date

Press “Team Roaster” will print out all 16 players. Only players who are going to play would be printed out if the key “Line Up” pressed.

## 7.6 Print Manager

### 7.6.1 Introduction

As there’s heavy printing task before, during, and after the match, PHMS provide the function of “Print Manager” to facilitate the heavy printing work and enhance the printing efficiency.

Click “Print Manager” in the Print pull down menu to get into the “Print Manager” interface.

Functions and options in the interface are as follows:

“Save to directory” is the directory where the files printed by the system are saved. Special attention must be paid to the set up of this directory as it must be set as the first directory after the root.

“Auto FileName”. All reports output from the system has its own official name. The function “Auto FinleName” could change the official name of a file into your preferred name. The system would use your preferred name automatically when printing out the file.

“Print Type” is to decide the way of printing.

“Print Option” is to configure the printer, number of copy and pages.

“Task Delay” is a special technical function to allow a slow running PC fulfill the heavy printing task by prolong the interval of each task.

“Single” is to print one sort of report of many matches at the same time.

“Batch” is a particular and strong function of the “Print Manager”. It can print out different sort of reports separately at the same time. Or combine different sort of reports into one file and print it out with a preset name and format. With this function, the system can fulfill preset complicated printing tasks with one click. It greatly simplifies the printing work and enhances the working efficiency.

#### Remarks:

*The function of Print Manager is based on the performance of software “PDF Printer” which is not included in PHMS. A free software “PDF Printer” named Free PDF is included in the PHMS package. But it dose not guarantee that all functions of Print Manager be well performed.*

(52) Match Report  
(53) Team Roaster (For Medias)  
(54) Team Roaster (For Match)  
Print Manager



### 2.3.2 The main menu

On the initial interface, you’ll find 8 menus as Data Service, Tournament, Match, Print, Config, About, Help, Exit.



## 3. Tournament

### 3.1 Brief

The function of Tournament is to set up a tournament, add a new one, delete an old one, or modify information of an existing tournament. When a new tournament is set up or an existing tournament is selected, it becomes the default tournament of the system. All the later operation of the system will be on this tournament automatically. Initial information of the tournament like team’s data, referees and officials would be entered with this function.

### 3.2 Open

To enter the Tournament Interface, click the initial menu “Tournament”, you’ll see the 6 submenus like: Setup, Teams, Referees, IHF Officials, Grouping and Tournament Logo as follows:



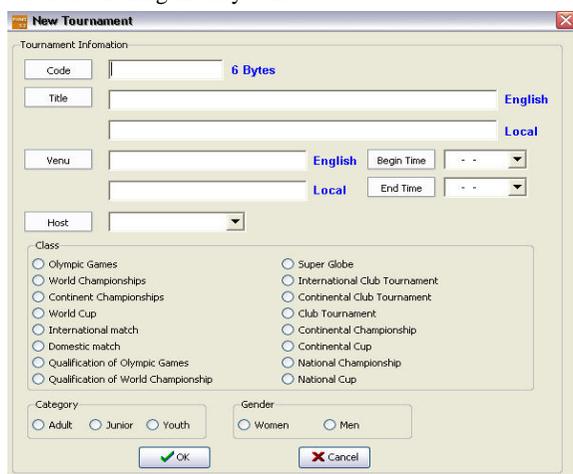
### 3.3 Seting up tournament

The following window could be seen when “Setup” was selected.



#### 3.3.1 Add

The function of “Add” is to create a new tournament. The following window could be seen after clicking the key “Add”



IHF representatives are correct before printing out the blank match report. This blank match report will be used as the IHF official score sheet by the scorekeeper through out the match after it’s signed by both responsible team officials. The copy of it could be used as the Team Roster of the match for Medias.

At the end of the match, a filled out match report with all the details such as scores, goals by players, warning, 2 minutes should be print out. It is helpful in comparison with the official Match Report filled out by scorekeeper at the match. The official score sheet is prevail when there is any difference.

If there was any problem during the match and the referees confirmed he would like to write something on the Match Report, it could be entered in the Match Setup Interface and fill in the remarks of referee right at the end of the match.



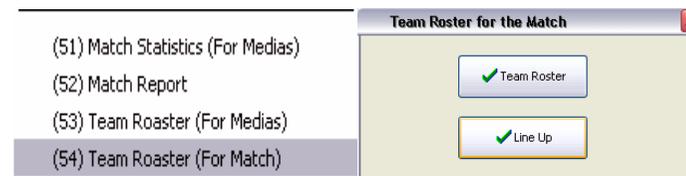
Blank Match Report with only player’s names can still be printed out even at the end of the match by clicking the option “Blank Report” in the Printout Interface.

#### (53) TEAM ROSTER (FOR MEDIAS)

With all the details of players and team officials, such as age, height, weight, position, etc, the Team Roster for Media is of great help for Medias to get to know the background of the team. It’s optional that printing one team only or a few teams when printing.

#### (54) TEAM ROSTER (FOR MATCH)

Only number and names of players and team officials participating in the match will be printed out in the Team Roster for Match. Team Roster for Match is useful for correct the names of all the teams before the opening of the tournament, good for coaches to check and hand in the player’s list before match, and helpful for a final check to the team list by technical officials before the match. PHMS recording will be carried out based on the Team Roster signed by both responsible team officials and technical official.



There would be two options as above in the “54 Team Roaster (For Match)”.

each team in one match.

#### (3404) INDV TOTAL DEFENSIVE TECHNIQUE

Statistic of defense actions succeeded and failed made by individual player of each team in the whole tournament.

### 7.5.4 Shot Report

There are totally 3 Shot Reports.

#### (41) MATCH SHOT REPORT

Statistic of shooting areas and landing spots of the ball at the goal frame of the two matching teams and each player as well, in one match.

#### (42) TOURNAMENT SHOT REPORT

Statistic of shooting areas and landing spots of the ball at the goal frame of each team and each player as well, in the whole tournament.

#### (43) GOALKEEPER TOTAL REPORT

Statistic of saving areas of goalkeeper. Result of goalkeepers of all teams is printed in one report to facilitate studying of goalkeepers.

### 7.5.5 Competition Report

#### 7.5.5.1 Brief

The Competition Reports are mainly designed to meet the requirement of competition management and Medias. They can provide standard Team Roster, blank official Match Report before the match and filled out Match Report at the end of the match, and a highly compressed “all in one” statistics report in one paper for medias.

#### 7.5.5.2 Print outs

##### (51) MATCH STATISTIC (FOR MEDIAS)

The report of Match Statistic (For Medias) is a highly compressed “all in one” statistics table in one paper for medias. It contains most of the important match data like shooting efficiency, error, assistant pass, punishment and running score, etc. to meet the needs of Medias.

##### (52) MATCH REPORT

It is the IHF official report with statistic data of the two matching teams exactly in the IHF official format. At the beginning of the match, a blank Match Report with team’s list would be printed out for the use of scorekeeper and Medias. Operator should check and ensure the match date, time, hall, name of technical officials and

### 3.3.1.1 Tournament Code

Being the only and most important mark of a tournament, Tournament Code must be first set in the tournament setup. Tournament code is composed of 6 bytes, which can be numbers or letters. This limited number of code should be fully used to indicate the characters of different tournaments. For example, with the former four indicating the year and the latter two the serial number of tournament in the year; or the former two indicating the match level (category, age, etc), the two in the middle representing the year and the latter two the serial number, the code could simply carry information of the tournament. For instance, 200409 indicate the 9th tournament of 2004, and JW9901 represents the first tournament of 1999, which is a junior women's championship.

Code	200409	6 Bytes
------	--------	---------

#### Remarks:

*If there were both male and female matches in a big event, matches of male and female teams must be marked separately with different tournament codes.*

Since it is a very important mark of record, Tournament Code must be arranged uniquely. When a new tournament code is setup, all the following records will be marked solely by the code. If you want to retrieve records of a former tournament, just input the accordant code and you will find all the information concerned.

### 3.3.1.2 Tournament Title

The official title of a tournament is composed of up to 45 bytes. You can select a tournament title from the popup panel. If there is none, key in the title.

Title	MEN'S CHAMPIONSHIP 2004 JIANGSU	English
	MEN'S CHAMPIONSHIP 2004 JIANGSU	Local

Tournament title could be in both English and local language. Local language is for kind of indication only, it could not be printed out.

### 3.3.1.3 Tournament Date

Input the date when the tournament begins and ends. You may select the date from the panel or just input it manually.

Begin Time	2004-09-19
End Time	2004-09-26

**Remarks:**

When setting the tournament, the system will automatically set the present date as the date when the tournament begins. Remember to reset the date when necessary.

**3.3.1.4 Tournament Venue**

The venue of a tournament is usually a city name, such as Beijing or Tokyo. In international tournaments, the venue should be the name of a country, such as China, Japan and so on. Venue name in English and local language should be inputted separately.

Place	FRANCE	English
	FRANCE	Local

**3.3.1.5 Tournament Host**

The host of a tournament is usually a country, which could only be selected from the popup menu. This is an important key word for the system.

**3.3.1.6 Class**

It indicates at what class or level the tournament is. You may select one from the 16 classes in the window accordingly.

Class	
<input type="radio"/> Olympic Games	<input type="radio"/> Super Globe
<input type="radio"/> World Championships	<input type="radio"/> International Club Tournament
<input type="radio"/> Continent Championships	<input type="radio"/> Continental Club Tournament
<input type="radio"/> World Cup	<input type="radio"/> Club Tournament
<input type="radio"/> International match	<input type="radio"/> Continental Championship
<input checked="" type="radio"/> Domestic match	<input type="radio"/> Continental Cup
<input type="radio"/> Qualification of Olympic Games	<input type="radio"/> National Championship
<input type="radio"/> Qualification of World Championship	<input type="radio"/> National Cup

**3.3.1.7 Gender**

It indicates whether the tournament is men's or women's. Select one from the window.

match.

**(3102) TEAM TOTAL ATTACK/DEFENSE**

It's a useful statistic for teams' offense and defense efficiency in the whole tournament.

**(3103) INDV MATCH OFFENSE /DEFENSE**

It's a useful statistic of offense and defense efficiency for individual player of each team in one match.

**(3104) INDV TOTAL OFFENSE /DEFENSE**

It's a useful statistic of offense and defense efficiency for individual player of each team in the whole tournament.

**(3201) TEAM MATCH SHOTS**

Team shot statistic for the matching teams in one match.

**(3202) TEAM TOTAL SHOTS**

Team shot statistic for teams in the whole tournament.

**(3203) INDV MATCH SHOTS**

Shot statistic for individual player of each team in one match.

**(3204) INDV TOTAL SHOTS**

Shot statistic for individual player of each team in the whole tournament.

**(3301) TEAM MATCH OFFENSIVE ERRORS**

It's the statistic of offensive errors made by each of the matching teams in one match.

**(3302) TEAM TOTAL OFFENSIVE ERRORS**

It's the statistic of offensive errors made by each team in the whole tournament.

**(3303) INDV MATCH OFFENSIVE ERRORS**

It's the statistic of offensive errors made by individual player of each team in one match.

**(3304) INDV TOTAL OFFENSIVE ERRORS**

It's the statistic of offensive errors made by individual player of each team in the whole tournament.

**(3401) TEAM MATCH DEFENSIVE TECHNIQUE**

Statistic of defense actions succeeded and failed made by each of the matching teams in one match.

**(3402) TEAM TOTAL DEFENSIVE TECHNIQUE**

Statistic of defense actions succeeded and failed made by each team in the whole tournament.

**(3403) INDV MATCH DEFENSIVE TECHNIQUE**

Statistic of defense actions succeeded and failed made by individual player of

Score standings are ranked in order of the shots saved by goalkeepers. The column "Rate" refers to the percentage of each sorting item in the table. The following tables are the same.

#### (1702) SCORE STANDINGS (NON-7M GOALKEEPER)

Score standings ranked by non-7 meter throws saved by goalkeepers.

#### (1703) SCORE STANDINGS (7M GOALKEEPER)

Score standings ranked by 7 meter throws saved by goalkeepers.

#### (1704) SCORE STANDINGS (FIELD SHOT SAVED)

Score standings ranked by field shots saved by goalkeepers.

#### (1705) SCORE STANDINGS (LINE SHOT SAVED)

Score standings ranked by line shots saved by goalkeepers.

#### (1706) SCORE STANDINGS (SIDE SHOT SAVED)

Score standings ranked by side shots saved by goalkeepers.

#### (1707) SCORE STANDINGS (FAST BREAK SAVED)

Score standings ranked by fast breaks saved by goalkeepers.

#### (1708) SCORE STANDINGS (BREAK THROUGH SAVED)

Score standings ranked by breakthroughs saved by goalkeepers.

#### (1709) SCORE STANDINGS (FREE THROW SAVED)

Score standings ranked by free throw saved by goalkeepers.

#### (1710) THE BEST GOALKEEPER

Score standings ranked by general evaluation.

## 7.5.2 Pictorials

Pictorial Statistics print out is the outstanding specialty of PHMS system.

#### (21) PICTORIAL MATCH STATISTICS

Shooting player's number, shooting spot player, landing spot of the ball, score or not, etc, shown in a pictorial form. 7-meter throw results are shown in a small goal frame separately.

The result of 1st and 2nd Halves would be printed in one paper. And the two 5 minute of the first extra time would be printed in one more paper, so as the second extra time and the win by 7-meter throw period.

## 7.5.3 CHN Tables

There are totally 16 CHN Tables.

#### (3101) TEAM MATCH OFFENSE/DEFENSE

It's a useful statistic for the matching teams' offense and defense efficiency in the

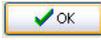
Gender  
 Women  Men

### 3.3.1.8 Category

It indicates whether the tournament is for adult, junior or youth. Just select one from the window.

Category  
 Adult  Junior  Youth

### Remarks:

When all the tournament data mentioned above are inputted, click  to complete the new tournament, Click  to abort setting up the new tournament.

## 3.3.2 Modify

The function of "Modify" is to change information of an existing tournament.



Click the key  to enter the modifying window. But the tournament code is not changeable after the tournament begins.

## 3.3.3 Delete

All the data of a tournament would be erased permanently when it's deleted.



Click the key  to delete a selected tournament. Two question windows will ask you to confirm the operation. The data would no longer be restored once the operation was confirmed.

Confirm  
 Delete tournament [100717] ?  
 Yes  No

Confirm  
 All the data of the tournament will be deleted, continue?  
 Yes  No

### Remarks:

When setting up data of a tournament, see that it is done within one main

computer and then export the inputted tournament data to other sub-computers. Then data of teams, referees and officials could be inputted in sub-computers in different venues. Data inputted in local sub-computers must be sent back to main computer and distribute again the composed data to each sub-computer to ensure that tournament data in different venues kept Synchronized.

This step must be done whenever data in different venues was changed.

### 3.3.4 Select

Click the tournament title to select a tournament and click the key  afterwards to confirm the selection of the tournament. Then the title of the selected tournament will be in yellow on a red background as follows. The selected tournament will be the default tournament of the system and all the later operations will be on it automatically.

Tournament		
Code	Name	Place
100717	XVII WOMEN'S JUNIOR WORLD CHAMPIONSHIP 2010 IN KOR	KOREA
201100	2011年全国女子手球冠军杯赛	湖北宜昌
201105	IHF SUPER GLOBE QATAR 2011	Al Gharafa Sports Club Hall

### 3.3.5 Exit

When operations on tournament are completed, click the key  to finish and leave the window.

## 3.4 Teams

### 3.4.1 Brief

This is for inputting initial data of participating teams. Previous data of the teams are usually available for reference in the system. The team data would be kept in the historical database of the system as long as the team had ever played a match with the system. For instance, if you want to input the data of a team, you may find the team's data from the historical database if the team have played a match ever before with the system. If there's no data of a certain team available or incorrect, the data could be keyed in manually.

### 3.4.2 Open

Score standings are ranked in order of the scores gained by court players. The column "Rate" refers to the percentage of each sorting item in the table. The following tables are the same.

(1602) SCORE STANDINGS (NON-7M PLAYER)

Score standings ranked by non-7 meter throws of court players.

(1603) SCORE STANDINGS (7M PLAYER)

Score standings ranked by 7 meter throws of court players.

(1604) SCORE STANDINGS (BY FIELD SHOT)

Score standings ranked by field shots of court players.

(1605) SCORE STANDINGS (BY LINE SHOT)

Score standings ranked by line shots of court players.

(1606) SCORE STANDINGS (BY SIDE SHOT)

Score standings ranked by side shots of court players.

(1607) SCORE STANDINGS (BY FAST BREAK)

Score standings ranked by fast breaks of court players.

(1608) SCORE STANDINGS (BY BREAK THROUGH)

Score standings ranked by breakthroughs of court players.

(1609) SCORE STANDINGS (BY FREE THROW)

Score standings ranked by free throw.

(1610) SCORE STANDINGS (BY ASSIST)

Score standings ranked by assistant passes of court players.

(1611) SCORE STANDINGS (BY BLOCKS)

Score standings ranked by blocking shots of court players.

(1612) SCORE STANDINGS (BY DEFENSE)

Score standings ranked by turnovers (intercepts, steals, etc) made by court players.

(1613) SCORE STANDINGS (BY ERRORS)

Score standings ranked by errors (lost balls) of court players.

(1614) SCORE STANDINGS (BY PUNISHMENTS)

Score standings ranked by number of punishments gained by court players.

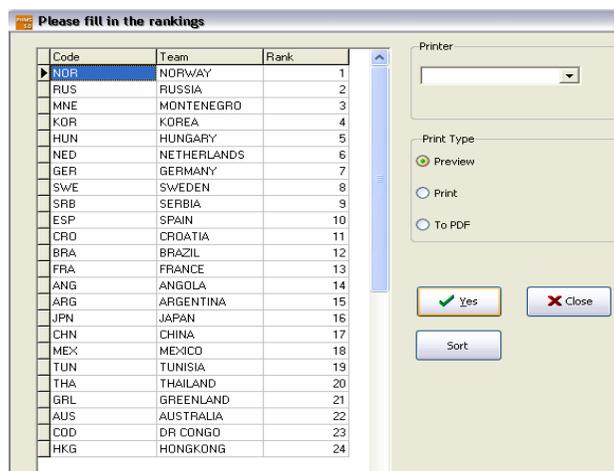
(1615) THE BEST PLAYER

Score standings ranked by general evaluation.

### 7.5.1.7 Report 17

(1701) SCORE STANDINGS (GOALKEEPER)

printing out.



Due to the accuracy and technical reason, PHMS would not make the final standing automatically. It must be done manually. Click the boxes in the column of “Rank”; fill in the final ranking of the teams. Press “Sort”, the teams would be ranked in accordance with the ranking filled manually in the boxes.

### 7.5.1.3 Report 13

#### (13) MATCH PROCESS

Step by step record of the match.

### 7.5.1.4 Report 14

#### (14) INDV/TEAM MATCH STATISTICS

It's report of Individual and the team statistics for the match.

### 7.5.1.5 Report 15

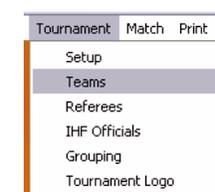
#### (15) INDV/TEAM TOTAL STATISTICS (UP TO)

Individual and the team accumulated statistics for the whole tournament. If print out was done in the middle of the tournament, the accumulation will be up to that printing day.

### 7.5.1.6 Report 16

#### (1601) SCORE STANDINGS (COURT PLAYER)

Click “Teams” to enter the Teams’ Interface as follows.



The interface is composed by Caption Bar, Status Bar, Information Window (left) and Data Inputting Window (right). Information of all teams, players and officials are organized in a tree structure. It could be easily browsed in the information window. Information of teams, players and officials could be input, modified in the Data Inputting Window or imported from the historical database.

#### Remarks:

The Teams’ Interface has three statuses: add, edit and browse. When the Data Inputting Window is in the “add or edit” status, Team data in this window could be modified. But the Information Window on the left would become grey and could not be operated. The Data Inputting Window would become grey and could not be operated when the Information Window on the left is in “browse” status. The information of status could be seen on the Status Bar.

### 3.4.3 Team Data Inputting Window

The Team Data Inputting Window has four functions: add a new team, import team data from the historical database, modify or delete data of existing teams.

#### 3.4.3.1 Add and Edit

Click the key  or  to enter “add” or “edit” status. Data of teams could be added or modified here in the following windows.

When adding or modifying team data, you may first find the team you want to add or modified from the Information Window on the left. If you could not find the right team, you may import it from the historical database. You may input the team data manually only when you couldn't find the team from the places mentioned above.

When you input team data, please be aware that the abbreviation of a team should usually be composed of 3 capital letters and no more than 6 in the case of a domestic or club tournament.

#### Remarks:

The system has kept abbreviations of all the member federations of IHF. It's strongly recommended to add or import team abbreviations from the system instead of input it manually if it's an international tournament.

Click the key  to cancel the added or modified data and return to "browse" status from "add" or "edit" status.

Click the key  to save the added or modified data and return to "browse" status from "add" or "edit" status.

To do the ranking manually, click the ranking box, write the correct ranking. Click "Sort" afterwards. Then the ranking would follow the manual made one. Please do remember tick the small box "Add Preliminary Score" when printing the group result for the main round. Press "Print" when everything is OK and come into the "Print Group" window. Select the group that you want to print. And click the box "Select All" to print out result of all groups.

Please refer the "Technical Manual" for further information of "Export Text".

#### (1203) RESULT SUMMARY

Result of all matches of selected round.

Click "12 Result" then "1203 Result Summary" on the pull down menu of "Print" and get the following interface.

Stage and Date are selectable when printing report 1203 "Result Summary".

Result of matches of the selected stage(s) would be printed out when stage was selected.

Result of matches of the concerned date would be printed out when date was selected.

#### (1204) FINAL STANDINGS

It's the Final standing of the tournament. Manual confirmation is required before

The system can print out the following statistical reports in tables or pictorial format.

### 7.5.1 Standard Tables

There are totally 33 Standard Tables. 8 of them are regular tables. 25 are Score Standings. Numbers in the bracket are serial numbers for reports.

#### 7.5.1.1 Report 11

##### (11) START LIST

Player's list of matching teams, officials and referees for the match.

#### 7.5.1.2 Report 12xx

##### (1201) RESULT BULLETIN

Result of the match and scores by each player.

##### (1202) GROUP RESULT

Result of each group which had been setup in the tournament window.

Click "12 Result" then "1202 Group Result" on the pull down menu of "Print" to get the following interface.

Group Ranking window showing a table of team statistics for Group A. The table includes columns for Rank, TeamCode, pts, MP, W, T, L, GF, GA, and Diff. The data is as follows:

Rank	TeamCode	pts	MP	W	T	L	GF	GA	Diff
1	NOR	10	5	5	0	0	168	114	54
2	GER	7	5	3	1	1	146	122	24
3	SRB	6	5	3	0	2	164	127	37
4	FRA	5	5	2	1	2	145	113	32
5	TUN	2	5	1	0	4	142	176	-34
6	GRL	0	5	0	0	5	85	198	-113

The window also includes a 'Preview' section with radio buttons for groups A, B, C, D, M I, and M II, and a checkbox for 'Add Preliminary Score'. At the bottom, there are buttons for 'Refresh', 'Sort', 'Print', 'Export Text', and 'Close'.

Click to select a group for previewing the result. Carefully check and see if there's any mistake. Press "Refresh" to update the group data when necessary.

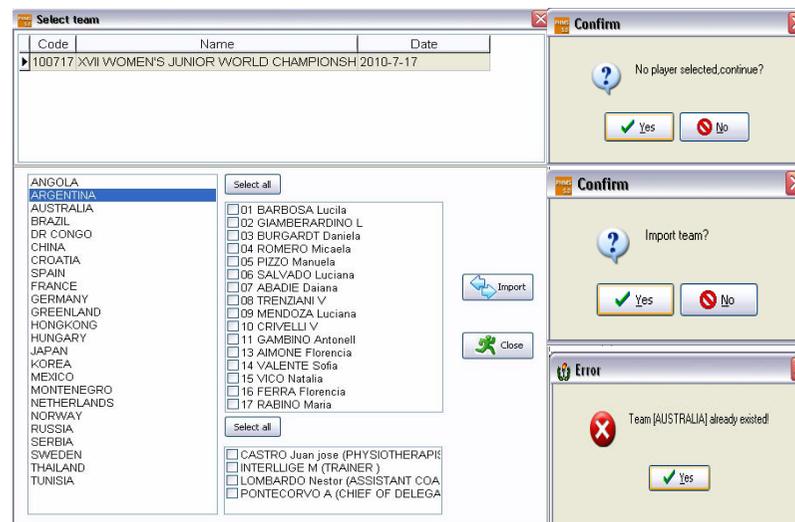
The group ranking is done in the order of Points, Goal Difference (Dff), and Plus Goals (GF). Ranking could be done manually if the situation was too complicated and the system could not manage it.

### 3.4.3.2 Import

The function of "Import" here is to import team data from the historical database of the system to the database of the present tournament. When click the key , you'll see the following window.



Chose "From history" and click "OK", you'll see the "Select Team" window as follows.



Click to select the right tournament from the upper window, the team from the lower left window. And select the players and officials you want of the selected team by ticking the small boxes next to the concerned person. Then click the key  to finish "Import".

If you clicked only the team and then the Import key without select any players or officials, there will be a question window asking to confirm the operation.

If you had selected players and now click another team, the system will remind you to finish the first action of imports as follows:

If the team you want to import from the historical database has already existed in the present database of the present tournament, a reminder will show.

If chose "From file" and click "OK", you would need to find the right file which contains the team's data in a prescribed format.

### 3.4.3.3 Late Replacement Notice

Make the following steps to show information of Late Replacement in Report 53.

- 1) Complete the Player Late Replacement operation in the Player Data Inputting Window;
- 2) Turn to the Team Data Inputting Window, select the team which had made the

late replacement, click the key ;



- 3) Select the number of the new player in the pull down pane (left) and the number of the excluded player (there would be no any number if there was no excluded player) in the pull down pane (right). The name of the excluded (replaced) player will be shown on the right side.

- 4) Click "OK" and the late replacement notice will be shown in the text window down there. Modify the text in the window directly if something was wrong. Click "Save" and "Close" to close the window.

- 5) This notice will be shown in Report 53 as follows.

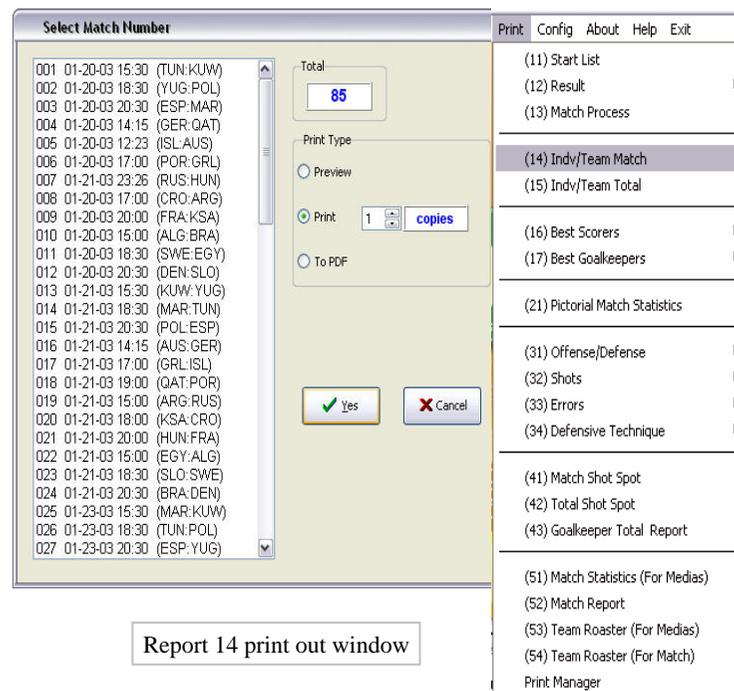
	163	45		
	169.7	59.7		



### 3.4.4 Player Data Inputting Window

out window. You may preview or printout the report, or print it to a PDF format by just ticking the small circle "To PDF", then click "Yes".

And select how many copies you want. Click "Cancel" to leave the Interface.



### 7.3 Statistics

The system will automatically make statistics before printing the first report. It may take a few seconds. Please wait for its completion.

### 7.4 Preview

All printing interface has the function of preview. If you were not sure it's correct or not, you may preview the table or pictorial match reports that you want to print out. When no mistake is found, you can setup the printer and then click "PRINT". If you don't want to print at the time, just click "CLOSE" and exit. Or just view the report without printing it out to avoid any waste of paper.

### 7.5 Reports Introduction

57 reports are divided into 5 groups as follows:



Serial number on upper right corner

Reports initiated with number 1 are standard reports. There are 33 standard reports, 8 of them are regular reports and 25 are Score Standings.

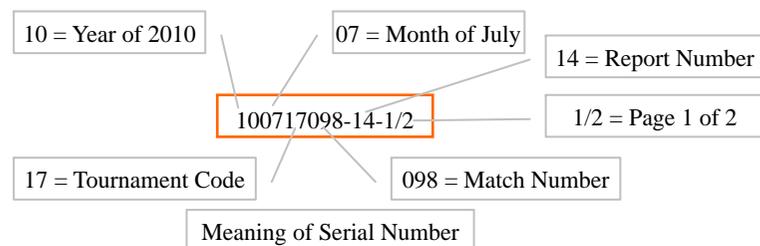
Report initiated with number 2 is Pictorial Statistics. There is only one this kind of report.

Reports initiated with number 3 are so called CHN Reports. There are 16 CHN Reports.

Reports initiated with number 4 are Shot Reports. There are 3 reports.

Reports initiated with number 5 are Competition Reports. There are 4 of this kind.

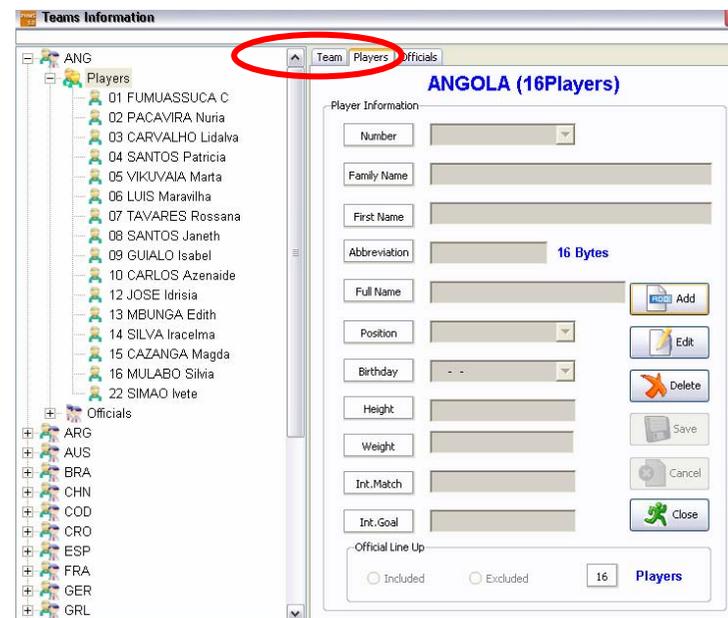
On the upper right corner of each report, there is a serial number. Its' meaning is as follows:



## 7.2 Open

Click "PRINT" in the menu of the Initial Interface, you can see lot of print out selection.

Select the report you need and you'll see different print out window according to what kind of report you are printing. Following is an example of report 14 print



### 3.4.4.1 Number of Player

Click "Players" on the Data Inputting Window to enter the Players' Interface. Player's number is composed of 2 bytes. You may enter the player's number first and change it later or just leave it blank till the beginning of the first match.

### 3.4.4.2 Name of Player

The name of each player is composed by two parts, Family name and first name. Family name should be put in capital letters and first name put in small letters except for the first one. Example: SMITH John. Then the system will show the abbreviation name automatically in no more than 16 letters in the Abbreviation Pane. If the family name were more than 16 letters, it would be left with only 16 and without first name. If number of letters of a full name were more than 16, it would be cut right at 16. Please modify the abbreviation name in a proper form. The full name will also be kept by the system (No more than 26 letters) and be used in report 52, 53 and 54, while the abbreviation name (16 letters) would be used in all other reports.

### 3.4.4.3 Position of Player

Click to show the pull-down menu and select a position for the player.

#### 3.4.4.4 Birthday of Player

Click to select the right date.

#### 3.4.4.5 Height of Player

The unit is centimeter, with one decimal and totally composed of 5 bytes.

#### 3.4.4.6 Weight of Player

The unit is kilogram, with one decimal and composed of 5 bytes.

#### 3.4.4.7 International Matches

Number of international matches played by the player.

#### 3.4.4.8 International Goals

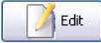
Number of goals got in international matches by the player. Click “Close” to return to the Teams’ Interface.

#### 3.4.5 Edit players

Click a team in the Information Window and select a player. Information of the player will show in the Data Inputting Window. Click “Edit” to modify the player’s information.

#### 3.4.6 No more than 16 players

According to IHF regulation of official tournament, no more than 16 players are allowed for a match. If players added for a team was more than 16, the system will remind you to exclude the extra player. To include or exclude a player, select

the concerned player first and then click  and the option “include” or “exclude” in the following option window to keep the team within the limited of 16. The players excluded then will be blacked in the left window.



NOC Code			
<input checked="" type="radio"/> 1 Africa <input type="radio"/> 2 America <input type="radio"/> 3 Asia <input type="radio"/> 4 Europe <input type="radio"/> 5 Oceania			
Continent	Code	Name(ENG)	Name(CHN)
1	ALG	Algeria	阿尔及利亚
1	ANG	Angola	安哥拉
1	BEN	Benin	贝宁
1	BOT	Botswana	博茨瓦纳
1	BUR	Burkina Faso	布基纳法索
1	BDI	Burundi	布隆迪
1	CMR	Cameroon	喀麦隆
1	CPV	Cape Verde	佛得角
1	CAF	Central African Republic	中非共和国
1	CHA	Chad	乍得
1	COM	Comoros	科摩罗
1	CGO	Congo	刚果
1	CIV	Cote d ivoire	科特迪瓦共和国
1	COD	Democratic Republic of the Congo	刚果民主共和国
1	DJI	Djibouti	吉布提
1	EGY	Egypt	埃及
1	GEQ	Equatorial Guinea	赤道几内亚
1	ERI	Eritrea	厄立特里亚
1	ETH	Ethiopia	埃塞俄比亚
1	GAB	Gabon	加蓬
1	GAM	Gambia	冈比亚
1	GHA	Ghana	加纳

#### Remarks:

For safety purpose, NOC code could not be deleted after it's add to the data base.

### 6.5 Refresh Data

The data base of the system requires refresh after collecting data from venues. Just click “Refresh” to update the data base after composing lot of data from different computers. The system might not calculate correctly after collecting data without refreshment.

## 7. Print

### 7.1 Introduction

Large print out capacity is one of the PHMS system’s advantages and characteristics. PHMS can print out 57 sorts of match reports either in table or pictorial form. These reports can meet the requirement of handball tournament at all levels, professional or amateur, a single match or a high level championship, in any respects to the greatest extent.

Task frequently done with this function is to collect all the match data from different venue at the end of the day and then send the file with composed data back to each venue for printing out tournament based reports

### 6.3 Connect

This is a special function for a network with two computers working together. The task of Computer 1 is doing the scouting work on the spot; while Computer 2 is responsible for printing out. Please refer to the “Technical Manual” of PHMS for details of how to connect the two computers.

Data Service	Tournament	Match	Print
Export	▶		
Import	▶		
Connect	▶	Remote Data	
NOC Code		Local Data	
Refresh			

Computer 1 will select “Local Data” and Computer 2 “Remote Data”. It would be the same to choose “Local Data” or “Remote Data” when a computer is working alone.

#### Caution:

*Computer 1 selecting “Local Data” is the main computer for scouting and it will frequently read and write the database of the ongoing match. Computer 2 selecting “Remote Data” is mainly responsible for printing out only. It may setup a new match and print out the Match Report (Report 52) for the coaches’ examination before the next match. NEVER try to modify any data of the ongoing match from Computer 2 and it would cause great problem.*

### 6.4 NOC Code

The three digit Codes of National Olympic Committee is approved by IOC and preset in the system. The code will be used in international tournament. A code could be add to the system when it could not find in the data base (usually for a new found country). It’s not recommended to add codes of club teams into the data base.

To add a NOC code, click “NOC Code” in the “Data Service” pull down menu and the following window will appear. Click “Add” to add a new NOC code.

### 3.4.7 Player Late Replacement

According to IHF regulation, it’s defined as “Player Late Replacement” when one of the 16 players was replaced by a new player. In this case, one of the 16 included player must be excluded first and then include the new player. Operation of Player Late Replacement is as the same as excluding an extra player. This information could be shown in Report 53 as Late Replacement Notice. Refer to 3.4.3.3 Late Replacement Notice for detail.

### 3.4.8 Team Officials

Click “Officials” to enter the Official Interface as follows, add, edit and delete team officials’ data here. Click  to input officials' family Name, first name, full name and function. Click  to save the data. Click “Close” to leave the interface.

Official information

Family Name

First Name

Full Name

Function

Letter

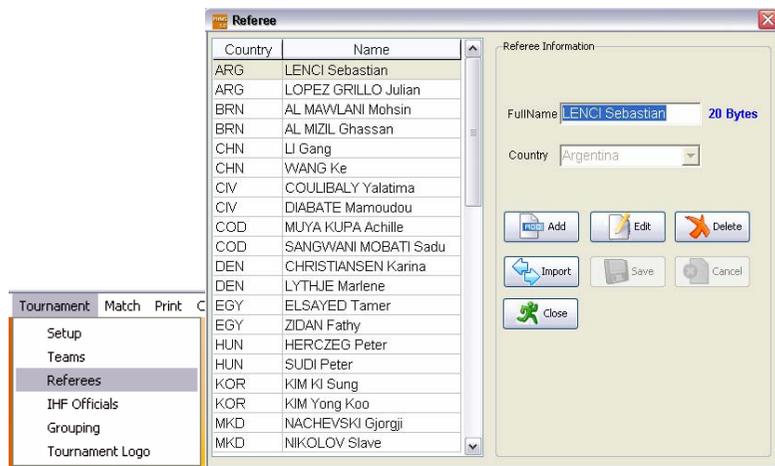
 Add    Edit    Delete

 Save    Cancel    Close

### 3.5 Referees

#### 3.5.1 Open

Click “Referees” to enter the Referees’ Interface as follows.



### 3.5.2 Functions

Referees' Interface has the following Functions: add a new referee, import referee's data from the historical database, modify or delete data of existing referees. Click the key  to import referee's data from the historical database of the system. Following is the Referee's Importing Window.



The left window shows all the referees existing in the historical database. Referees in the right window are for the default tournament. It's easy to import a

pull-down menu.

### 6.2.1.2 Between PHMS PCs

To exchange data between PHMS PCs, select DATA SERVICE > EXPORT in the pull-down menu, and choose from Tournament, Match, Team or Referee, which you wish to export. You also have to choose Tournament Code, Match Number, and Team Name, etc according to the type of data to be exported, and designate the object driver and the filename.



Export teams

When export data of teams, you may select all the teams in the left window or just select the teams you want to export.

The selected data will be exported to the designated destination as a file from the source computer, and then the file with the exported data may be imported to the computer executing final statistics.

### 6.2.2 Data Import

Click "Data Service" in the menu of the Initial Interface and select "Data Import" in the pull-down menu to enter Data Service Interface.

Then choose the data you wish to import. Input the filename of the imported data, and the selected data will be imported to the target computer.



time table when they go separately. Neither do the team time out. This “Match” function provides a chance to modify the time of team time out.

### 5.21.4 Time Played

“Time Played” of the Modification function is to modify the time a player played on court.

Most of the time, the system could calculate the time played by each player during a match. But some times there might be mistakes when the operator made something wrong. Then the “Time Played” function would provide a chance of modification to these mistakes.

Down there at the bottom of the window, there is time played of goalkeepers. It’s different between goalkeeper and player. There is only one goalkeeper any time on court. So the accumulated time of goalkeepers is always the same as the time of the whole match.

## 6. Data Service

### 6.1 Introduction

When the matches are played at different places, or recorded by different computers in one arena, match data are respectively stored in different computers. In order to analyze the data efficiently of the whole tournament, all the data should be round up in one computer. To do this, you can use the function of Data Service in the system, which can not only convert all the data into the central computer but also backup the data to ensure safety. However, if what you want to print is the data of only one single match, you don't need to activate this function.

With Data Service, you may exchange data between computers in different venues, share data between two computers within one network, setting up logo for the default tournament, refresh the whole data base, etc.

### 6.2 Data Transit

#### 6.2.1 Data Export

##### 6.2.1.1 Open

To enter DATA SERVICE Interface, Click “Data Service” in the menu of the Initial Interface and select “Data Export” in the



referee from the left window or remove one from the right. If you tried to import an existing referee, an Error Window will remind you.



When selected a referee and click  to remove him, a question window will ask for your confirmation.



### 3.6 IHF Officials

Click “IHF Officials” to enter the IHF Officials’ Interface as follows.



The IHF Officials’ Interface has the same Functions as the Referee’s Interface. Please refer to Referees’ Interface for details.

#### Remarks:

When entering data of team, referees, IHF officials of a tournament, see that it is better done within one main computer and then export the inputted data to other sub-computers in different venues. If modifications to the team data are done in a sub-computer, the data must first be exported and sent to the main computer, then sent the composed data back to each sub-computer again, so as to ensure the uniform of the initial data of a tournament.

### 3.7 Grouping

#### 3.7.1 Open

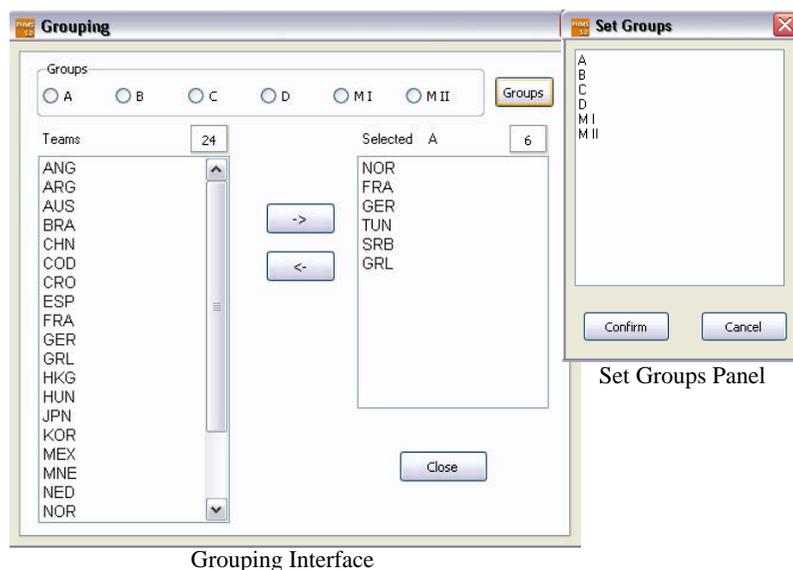
Grouping is one of the most important works of setting up a tournament which is

played in groups. Grouping information is the essential parameter for printing group results (table 1202). Click “Grouping” in the tournament menu to enter the Grouping Interface as follows.



### 3.7.2 Setting Groups

There are two steps, “Setting Groups” and “Grouping”, to setup the group information. “Setting Groups” means input the name of groups according to the competition schedule. “Grouping” means to locate the participating teams into each group. “Setting Groups” must be done before “Grouping”.



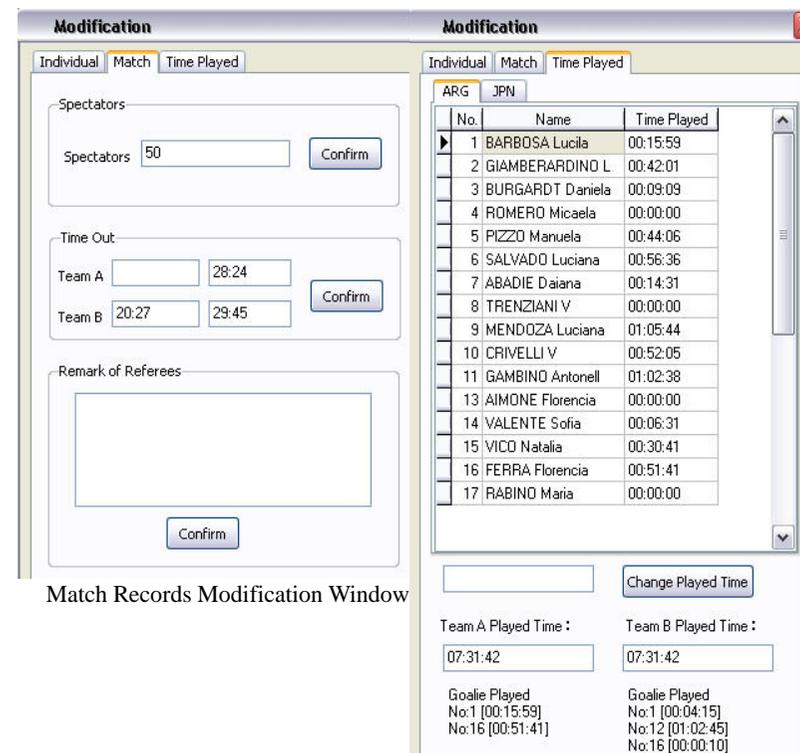
To set up groups, click **Groups** on the upper right corner of the Grouping Interface to enter the “Set Groups” panel and enter the group names by write them inside the Set Groups panel or delete a group by directly erase it in the panel.

Then Click **Confirm** to return to the Grouping Interface.

The set groups will then show in the “Groups” window on top of the grouping

qualification will go the same way as that changing the wrong player number of goals. To add Warning and 2 minutes could be done in this interface. But it must be done in the Match Recording Interface to add a new goal or delete a goal, a warning, a 2 minutes and a disqualification.

### 5.21.3 Match Records



Time Played Modification Window

“Match” of the Modification function is to add or modify Match records such as: number of spectators, time of team time out, Remark of referees, etc. The following work could be done in this window:

To add number of spectators in the “Spectators” box and click the key “Confirm” for confirmation. To fill in the correct time of the team time outs in the relevant box and click the key “Confirm” afterwards. To help the referees to drop down a few words in the box of “Remark of Referees” and click “Confirm” thereafter.

It’s normal that the timing in PHMS could not be exactly the same as that at the

## 5.21 Match Report Modification (F10)

### 5.21.1 Open

The system has another strong function of quick modifying data in the match report at the end of the match.



(53) Team Roaster(For Medias)

(54) Team Roaster (For Match)

Modification (F10)

Print Manager

Print - Modification Window

At the end of the match, PHMS should print out the match report (Report 52) to compare with the report made by scorekeeper.

To make use of this function, PHMS should stay in the Match Record Interface and click the key "Print", then select "Modification". There are three windows in this interface: Individual, Match and Time played.

The screenshot shows the 'Modification' window with three tabs: Individual, Match, and Time Played. The 'Individual' tab is active, displaying a table of player statistics for ARG and JPN. The 'Details' tab is also visible, showing a table of individual records for player 10.

ARG	JPN					
No.	Name	G.	W.	2'	D	DR
1	BARBOSA Luc	0	0	0	0	0
2	GIAMBERARD	0	0	1	0	0
3	BURGARDT D	0	1	0	0	0
4	ROMERO Mica	0	0	0	0	0
5	PIZZO Manuel	2	1	1	0	0
6	SALVADO Luc	3	0	0	0	0
7	ABADIE Daian	1	0	0	0	0
8	TRENZIANI V	0	0	0	0	0
9	MENDOZA Lu	9	1	0	0	0
10	CRIVELLI V	9	0	1	0	0
11	GAMBINO Ank	2	0	0	0	0
13	AIMONE Flore	0	0	0	0	0
14	VALENTE Sofi	0	0	0	0	0
15	VICO Natalia	2	0	1	0	0
16	FERRA Floren	0	0	0	0	0

No	Half	Record	Time	Action	Result
10	1	253	24:56	A06	R01
10	2	22	01:06	A07	R01
10	2	149	17:10	A06	R01
10	2	253	28:40	A07	R01

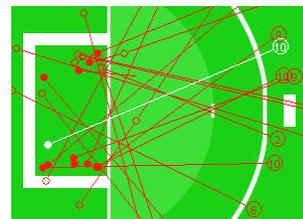
Individual Records Modification Window

### 5.21.2 Individual Records

"Individual" of the Modification function is to modify individual records such as: Goals, Warnings, 2 minutes and disqualifications, etc.

To modify an existed wrong goal, click the player number with the wrong goal, all the goals scored by the concerned player will display in the details window.

The graphic of the goal will show in the Match Recording Interface in white when the concerned record number is clicked. Then fill in the correct player number and click "Change No." to confirm the modification. Modifying the wrong recorded Warning, 2 minutes and



Goal shown in white

interface and can be found in the Group Box when setting up a match.

### 3.7.3 Grouping

To locate teams into different groups, click first the concerned group on top of the grouping interface and then select teams from the left window into the right window. Then the next group till all teams is located to groups.

#### Remarks:

Grouping must be done after setting up a tournament and all team names are inputted.

## 3.8 Tournament Logo

### 3.8.1 Functions

This function is to preset the tournament logo for all the reports printed by the system. The preset logo will be displayed on the upper right corner of all reports as follows.



### 3.8.2 Open

Click "Tournament Logo" to enter the Tournament Logo Interface as follows.



Click "Import" to import a logo from a BMP file. Size of the logo file should be no more than 271X130pix. Click "Save" and then "Exit" to complete the logo presetting.

## 4. Match

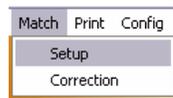
### 4.1 Brief

The function of Match is to set up a new match, delete an old one, modify information of an existing match, or correct wrong match parameter. Initial information of a match like Match Number, Match Time, Playing Hall, Team and Team's line up, Match Stage, Technical Officials, Referees and Table Officials of the match and so on, would be selected in this window.

To perform the main function of the system, to start RECORD, is also via this menu.

### 4.2 Open

To enter the Match Interface, click the initial menu "Match", you'll see the 2 submenus: Setup and Correction as follows:



### 4.3 Match Setup

To setup a new match, click "Setup" to enter the following interface. Initial data of match will be input in this window.

 A screenshot of the 'Match' setup window. The window is titled 'Match' and has a close button in the top right corner. It is divided into several sections:
 

- Match Details:** Includes fields for Match No., Match Time, Playing Hall, Stage, Group, and Round.
- Teams:** Two sections for Team A and Team B, each with a 'Players' button.
- Referees:** Fields for 1st and 2nd referees.
- Officials:** Fields for Organizer, Techn. Delegate (two), and IHF Official.
- Number Of Spectators:** A text input field.
- Remarks Of Referee:** A large text area.
- Table Official:** Fields for Timekeeper, Scorekeeper, Statistician1, and Statistician2.

 On the right side of the window, there are several action buttons: Start, Edit, Save, Delete, Cancel, and Close. At the bottom of the window, there is a status bar showing '100717 | XVII WOMEN'S JUNIOR WORLD CHAMPIONSHIP 2010 IN KOR | 2011-4-21 | 0:24:27'.

use Afterward Modification.

### 5.20.2 Afterward Modification

#### 5.20.2.1 Delete

The system has the function of modifying data after several other events have been recorded.

On the record interface, there is a bar of record number located between the sideline and substitution benches. When a new record is inputted, a number will be added in the bar.

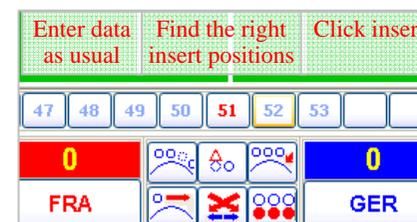
When an error is found in on-the-spot record and instant modification is difficult, you can take down the number of the mistaken record, so that it is easy to trace the record afterwards.

To modify a record, you must find the number of the record in the bar and click the number with the mouse left button. The number will then shift to the middle of the bar and the record will be displayed in the information window.

You can delete the selected record and then insert the modified one. The key "Delete" and "Insert" are located at the bottom of the interface.

#### 5.20.2.2 Insert

To insert a record, you can input the record as usual, which is numbered the last. Then find out the right position where you want to insert the new record, and click the record number to move it to the middle, and then click "INSERT". For example, to insert a new record between record No. 50 and No. 51, what you should do is: input the record as usual > click and select No. 51 > click INSERT, The former record No. 51 will become No. 52, and the new record is inserted as number 51.



How to insert

any parameters of the Match Interface.

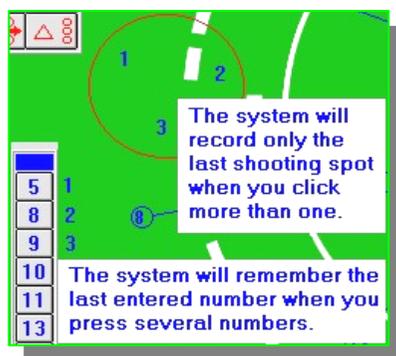
There will be two choices before the system really shot down: “Suspend match” and “End match”. The difference is that “End match” will send an ending message to Internet system and “Suspend match” will not.

## 5.20 Record Modification

### 5.20.1 Immediate Modification

When you find errors in recording and need to modify, the system can help you with its data modifying function, which is easy to master and simple to use.

In shots record, when you find mistakes in recording shooting spot, number of player or shooting technique, you can re-enter the data before recording landing spot of the ball. The data re-entered will cover the previous data.



Re-entered data cover previous data.

#### Remarks:

There are 4 steps in recording special shots while only 3 in regular shots, therefore, you can easily change the record from "Regular Shot" to "Special Shot" (3 steps can be replaced by 4), but you can not do it the other way round (4 steps cannot be replaced by 3). If you want to change special shot to regular shot, you should use the Delete Function.

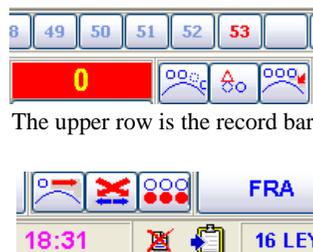
If you find mistakes after recording the landing spot of the ball, you just click



"DELETE" in the middle of the information bar in the lower part of the program window, and re-enter.

When recording other events, only the player's number can be modified by re-entering, other contents should be modified by clicking DELETE and re-entering.

If mistakes are found later when several events have already been recorded, you can



The key “Delete” and “Insert”

## 4.3.1 Initial Data

The Initial data of a match, such as time, teams, round, referees, officials etc, must be correctly setup by the operator before each match. The data will be frequently used during on-the-spot record. The initial data of a match could be inputted only after the tournament setup is completed.

If operator attempts to start on-the-spot record before match setup is finished, the system will give a message to remind him to complete the match initial data.

When the initial setup is completed, click "SAVE" to store the Initial Data inputted, or click "START" to save the Initial Data and directly enter the Record Interface.

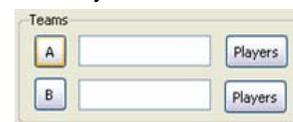
## 4.3.2 Match Details

According to the match program, input match details such as match number, match time, match playing hall, stage, group, round, etc. Match number is a very important parameter that must be checked carefully with the program. Stages could be selected from the pull-down menu. Group could also be selected from the pull-down menu in the Group Box. Groups shown in the menu were those had been set up during the tournament setting up procedure with one exception. On the first row of the Group Box, there is always an option of “x”. Please select “x” when the match is not belong to any groups such as the final, semi-final and placement matches.



## 4.3.3 Teams

Press key A to select team A for the match, and B to select team B.



## 4.3.4 Players



After selecting a team name, just click "PLAYERS"  to open the Player Selecting Panel. The system will show all the players of the selected team. You can select players with the mouse pointer. According to the regulations, no more than 16 players are to be selected for each team in an official match. This limit is not for informal matches, though. On the selection panel, the icon ">" means selecting one or more players, while ">>" indicates selecting all the players; "<" means deselecting one or more players, and "<<" indicates deselecting all the players. Number of players selected will show on the upper right box above the "Selected" window.

#### 4.3.5 Team Officials

According to IHF regulation, 4 officials will be allowed for each team in an official match. It's recommended to selected official A first and then official B, etc. Official A will be the responsible one of the team. The letter A, B, C, D, E, and F of officials had been set up during the teams set up.



#### Remarks:

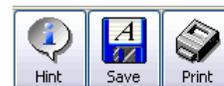
When changing ends in the middle of the first Extra Time, remember NOT to click the key "CHANGE ENDS", but to click "CHANGE HALVES". It is the same with the second Extra Time.

#### 5.16 Win by 7M

You can record "win by 7M" the same way as in Extra Time 2. Shots of either team should be recorded in respective goal frames instead of in the same goal. This is the only difference between the system and the practical situation on court.

#### 5.17 Interruption of Playing Time

On the Match Interface, there is a function key "SAVE" located on the upper left of the screen. If the match is interrupted by any special or irresistible circumstance, you can click "SAVE" and temporarily stop recording the match. The system saves all the interface parameters before interruption for access again when the match is resumed.

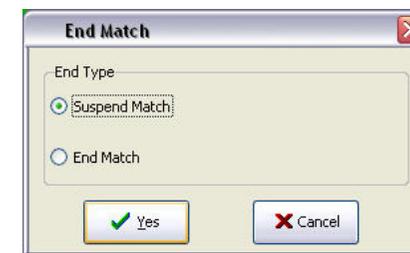


#### 5.18 Resume of the Match

If the match is interrupted by special or irresistible circumstance and has to stop temporarily. Click "SAVE" and the system will automatically save all the Interface data. When the match is resumed, after accessing the Record Interface, you must reset the clock according to the time when the match interrupted. And all other status of the match will remain the same as it was when the key "SAVE" was last clicked.

#### 5.19 End of the Match

When the match ends, you should check to see whether all the data inputted are complete and accurate, whether there are any modifications to make. After that, you can click "EXIT", and the system would leave the match without holding

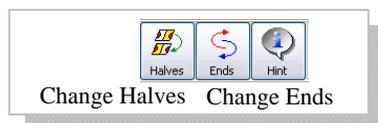


Two choices before system shot down

Since portable computers have the function of "Auto-Screen-Save", you may leave the computer without exit or turning off it when record is suspended at half time break. But the cover should be closed so as to prevent the LCD screen from accidental damage in case. Just put up the screen when resuming your work.

### 5.13 The Second Half

When the match resumes at the second half, directly access the Recording Interface. Then click "CHANGE HALVES" in the upper left of the window, the status bar on the top of the screen will then shift from "1st Half" to "2nd Half". Record the 2nd half of the match the same way as the 1st half. Press the same key "CHANGE HALVES" when going into extra time.



Difference between Change Halves & Ends

#### Caution:

Please pay close attention to the difference between "Change Halves" and "Change Ends" carefully, as the function of these two keys is quite different and might cause serious result if a wrong key was clicked.

### 5.14 Change Ends

When the match shifts from the 1st to 2nd half, the system will change the ends of both teams automatically. During the extra time, the system will also change the ends of both teams between the two 5 minutes automatically.

Since the ends are chosen by a draw before each extra time, the ends may or may not be changed. On this occasion, you have to refer to the function of changing ends in the system.

You can change ends by clicking with the mouse "CHANGE ENDS" in the upper left of the Recording Interface.

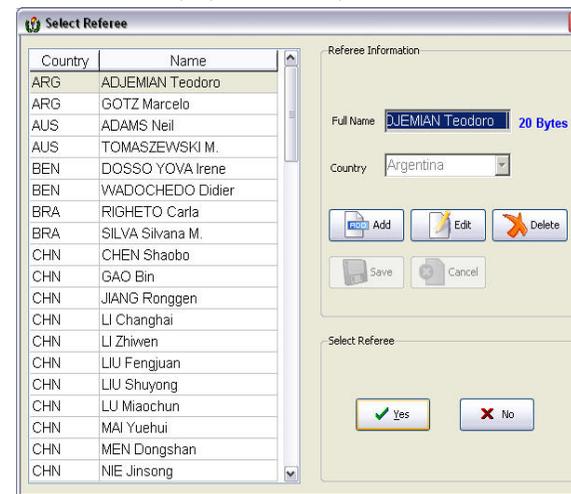
### 5.15 Extra Time

Record of extra time is started the same way as in the 2nd half. Click "CHANGE HALVES" in the upper left of the window and the status bar "2nd Half" at the top of the screen will shift to "Extra 1-1". You just record the game the same way as in the 1st and 2nd halves; the system can automatically separate data in extra time from those in the either half.

If you couldn't find the official, you must go back to Tournament and Team Setup window to enter the missing official.

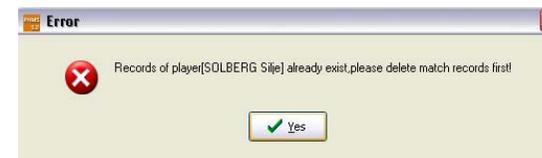
### 4.3.6 Referees

Select the names of the 1st and 2nd referee according to the arrangement by the Technical Committee of the tournament. If you couldn't find the right referee, you may enter the name manually by click the key "Add".



#### Remarks:

1) When match setup is completed and the key "Save" is pressed, no modification could be done. You have to press the key  to modify the data. 2) If you try to deselect a player or an official after the match has started and the player or official has already had match record, the system will stop you and give you an error message. 3) The match records of the concerned player or official must be deleted before deselecting them.



### 4.3.7 Technical Officials

Select the names of the technical officials from the preset list and locate them into the position arranged by the Technical Committee of the tournament.

#### 4.3.8 Table Officials

Names of table officials like local timekeeper, scorekeeper, and statisticians have to be input manually for their first match. Then the names could be selected in the pull down pane from the second day on.

#### 4.4 Correction

This function is for correction of wrong match parameters like Match Number and Match Half Time only. All the other match data should be modified in Setup window.

Click “Correction” in the Match Menu to enter the following interface.

##### 4.4.1 Change Match Number

Match number is a very important parameter of the concerned match. It must be checked carefully with the competition program when inputting the Match Number.

The function of Change Match Number is for changing a wrong set up match number. A wrong match number can be changed by clicking the key  after filling in the wrong match number in the first pane and the right number in the second pane.

#### 5.10.1 Team Time out

When recording team timeout, first select the name of the team asking for timeout, and then click the key "TIME OUT". The timing clock stops when the icon over the key turns red from blue. When clicking "TIME OUT" again, the icon turns blue from red, and the timing clock starts again. (The actual time for timeout will be recorded automatically.)



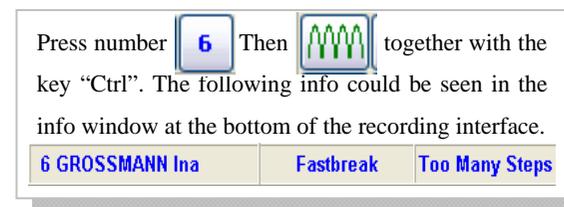
Record Timeout

#### 5.10.2 Referee's Time out

When recording referee's timeout, click the key "TIME OUT" only; the clock will stop and the system will record the Referee's Timeout.

#### 5.11 Separate Recording of Events in Fast Breaks

For the purpose of match statistics, apart from shots, all events happening in fast breaks, are recorded separately with those in Position Play. Events happening on court are classified into 9 types: 7M caused and 7M, offensive errors (7 sub-types) under two categories of Fast Break and Position Play.



Recording Events in Fast Breaks

Events in fast break should be recorded separately from position play, and respectively according to its types.

Events in fast breaks (except shots) are recorded in this way: After inputting the number of the player, hold down the key "Ctrl" and choose the concerned type of action in the main keyboard with the mouse. The system will add the words "Fast Break" in recording.

#### 5.12 Half Time Break

At half time break, click “EXIT” in the top menu of the Match Interface and select “Suspend Match” to exit the recording interface.

Moving, Switch, Others. Refer the following table for concepts of defensive techniques.

All defensive techniques should be recorded only after each shooting or shooting attempt from the offensive side.

### 5.8.2 Defense Succeeded

It's a succeeded defense when an offensive chance is destroyed or obviously interfered by the defender with proper defensive technique whatever the defending team got possession of the ball or not.

Click the number of the succeeded defender first and then click "DEFENSIVE TECHNIQUES" with the left mouse button to record a succeeded good defense.

### 5.8.3 Defense Failed

It's a failed defense when the offensive team launched a shot or shooting attempt successfully 'cause the defender's incorrect defensive action whatever the offensive team got a goal or not.

Click the number of the failed defender first and then click "DEFENSIVE TECHNIQUES" with the right mouse button to record a failed defense.

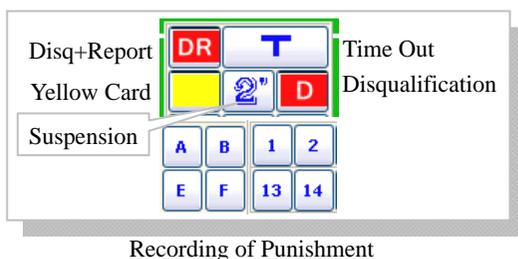
If you click "DEFENSIVE TECHNIQUES" without player number first, the system will give a message "Please input the player's number".

## 5.9 Record Punishments

There are 4 types of punishments. When recording punishment to a player, you just input the number of the player and the type of punishment. When recording punishment to an official, you should input the letter A, B, C or D of the team official and the type of punishment.

The order of recording punishment to a player:  
number of the player > type of punishment.

The order of recording punishment to an official:  
letter of the team official > type of punishment.



### 5.10 Record Timeout

### 4.4.2 Change Half Time

Record on the spot sometimes would be made in a wrong half time of a match due to the high press in the hall. A wrong match half time can be changed by

clicking the key  after filling in the concerned match number, the wrong half time, and the right half time. For example, if the Record of the first half was done within the interface of the second half, it must be changed from

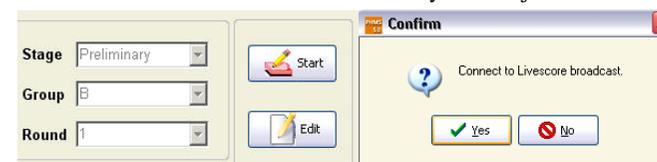
second half to the first half by clicking the key  after filling in the wrong half (second half) in the first pane and the right half (first half) in the second pane.

## 5. Record

### 5.1 Introduction

#### 5.1.1 How to Access Record

On-the-spot record, which is based on the initial input of tournament and match information, is the major task of this classification system. To access to the Record Interface, you must enter the Match Interface; check all the initial data to ensure its right. Then presses the key "Start", the system will ask "Connect to TV broadcaster?" before the Record Interface appear. Press "Yes" if there is a TV Server for live TV broadcast or "No" if there is not (the TV broadcast system is now under renovation. It needs to work with the TV graphics system to perform the function). The system will then turn to the Record Interface immediately. The Record Interface will show the new match you have just finished setting up.





**Remarks:**

Whether you press “Yes” or “No” while the system is asking “Connect to TV broadcaster?” the Record Interface will work correctly.

**5.1.2 Hint**

**5.1.2.1 Text**

An icon marks every function key in the Record Interface. A tool tip is set in the icon. The tool tip will appear when the mouse pointer is positioned over the icon



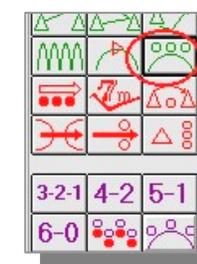
as follows. If you click the key in the menu bar on top of the screen and select “Text”, the tip bar will not appear anymore. Click "Text" once more to see the tip again.



**5.1.2.2 Sound**

To help operators avoid mistakes, the system provides different sound notes for

It refers to errors or lost ball other than those mentioned above. Recording order: number of the player > OTHER ERRORS. When "OTHER ERRORS" is clicked, the system will give a message "Input opponent's number". You are supposed to input the number of the defender who causes the offensive error or ignore it by clicking the message bar.



Defense Formation

**5.7 Record Defense Formation**

The purpose of recording defense formation is to count up the percentage of the time when a team uses different types of defense formation.

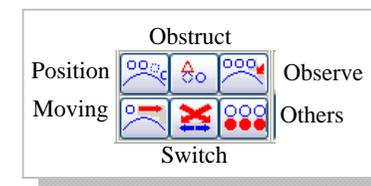
When recording defense formation, you just click the key "DEFENSE FORMATION", and the menu of defense formation will be prompted. Choose: name of the defending team > type of defense formation.

**5.8 Record Defensive Techniques**

**5.8.1 Brief**

Defensive techniques are recorded and added up according to individual players.

The key "DEFENSIVE TECHNIQUES" is located in the lower middle part of the match interface between the substitution benches of both teams.



Defensive Techniques

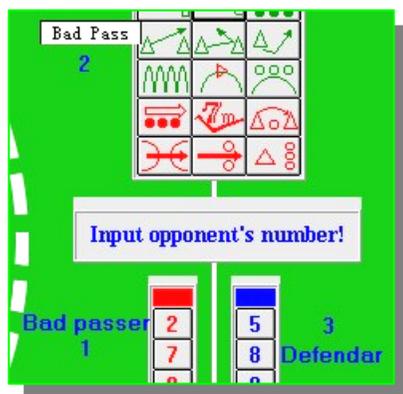
Defensive Tech	Concept
1 Position	The location where the player occupies in defending.
2 Obstruct	Move into the key position and block the path of the attacker on time.
3 Observe	The player is keeping the whole situation on the playing court under observation.
4 Moving	The defending player is moving from one place to the other at the key moment.
5 Switch	Two Man to Man defenders exchange their defending opponents when the attackers making a cross cooperation.
6 Others	All other actions of defense which is not mentioned above.

Defensive techniques are classified into 6 types as: Position, Obstruct, Observe,

the opponent. Recording order: number of the player entering the goal area > ENTERING THE GOAL AREA.

#### 5.6.4 Bad Pass

Bad pass is recorded in the following order: number of the passing player > BAD PASS > number of the opponent. When "BAD PASS" is clicked, the system will give a message "Input opponent's number". You are supposed to input the number of the player who intercepts the ball. Or you may ignore it by clicking the message bar.



Bad Pass Record Sequence

#### 5.6.5 Bad Receive

Recording order: number of the receiving player > BAD RECEIVE > number of the opponent. When "BAD RECEIVE" is clicked, the system will give a message "Input opponent's number". You are supposed to input the number of the player who intercepts the ball.

#### 5.6.6 Dribbling Error

Recording order: number of the dribbling player > DRIBBLING ERROR > number of the opponent. When "DRIBBLING ERROR" is clicked, the system will give a message "Input opponent's number". You are supposed to input the number of the player who successfully defends and causes the offensive player to make error.

#### 5.6.7 Offensive Foul

Offensive foul often occurs in the form of jumping, running into or faulty screening the opponent. You can record offensive foul in the following order: number of the attacker > OFFENSIVE FOUL > number of the opponent. When "OFFENSIVE FOUL" is clicked, the system will give a message "Input opponent's number". You are supposed to input the number of the defending player who causes the offensive foul.

#### 5.6.8 Other Errors

different function keys, record areas and actions. When the operator clicks a correct function key, a nice sound note will help him ensure it. If the operator clicks a wrong key or area, a different sound note will help him find his mistake and correct it immediately. If you needn't any sound note, just click the key "Hint" and select "Sound" to cancel it. Click again to recover it.

#### 5.1.3 Configuration

This is a very useful function when taking shot records during the match. The default configuration of the system is to show all the shot records on the Record Interface. The Record Interface may show only one kind of shot records, or a few sorts of shot records according to the configuration. To modify the configuration,

click the key  to enter the Configuration Panel as follows, select the shot you want to show and tick it at the small box.



- 1) The last: the last shot record taken, whatever sort it would be.
- 2) Wing: the wing shots record will show.
- 3) Field: the field shots record will show.
- 4) Breakthrough: the breakthrough shots record will show.
- 5) Free throw: the free throw shots record will show.
- 6) Line: the line shots record will show.
- 7) Fast break: the fast break shots record will show.
- 8) 7M: the 7M shots record will show.
- 9) All: all the shots record will show.

### 5.2 General Operation

#### 5.2.1 Essential Knowledge

Events to be recorded on the playing court are put into two categories: Shots and other events.

There are two different kinds of shots:

a) Regular Shots (or normal shots): This kind of shots will be classified by the system automatically such as Wing Shot, Line Shot, Field Shot and 7M shot, etc. For these shots, you must pay close attention to the spot where the player jumps when shooting (Shooting Spot of player) and the spot where the ball landed (Landing Spot of the Ball).

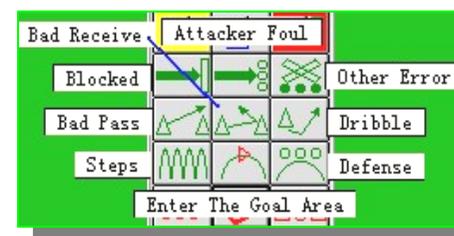
b) Special Shots: This kind of shots would be classified manually by click the relevant Shot Key.

Apart from shots, there are other 29 events of 8 categories should be recorded. Among them, 8 offensive events should be recorded together with succeeded defensive actions. 9 offensive events should be recorded and divided into position play or fast break. Please refer the following table for details:

	Categories	Events	D	F
1	Shots Record	Regular Shots		
		Fast Breaks		
		Breakthrough		
		Free Throws		
		7M		
		Shots Blocked	Y	Y
2	offensive Actions	7M caused	Y	Y
		Assists		
3	Offensive Errors	Steps	Y	Y
		Entering the Goal Area		Y
		Bad Pass	Y	Y
		Bad Receive	Y	Y
		Dribbling Error	Y	Y
		Offensive Foul	Y	Y
		Other Errors	Y	Y
4	Defensive Action Succeeded	Eight (8) Recorded with offense		
5	Defense Formation	Six (6) types		
6	Defensive Techniques	Six (6) types		
7	Punishments	Four (4) types		
8	Timeout	Team Timeout		
		Referee's Timeout		
9	Events in Fast Breaks	Nine (9) offensive Events		

- D = To be recorded with Defensive actions.

	Offensive Errors	Concept
1	Steps	Walking more than three steps with ball
2	Entering the goal area	Step into the goal area and gain advantage
3	Bad Pass	A pass that is impossible to be caught
4	Bad Receive	A pass not received cause of the receiver's mistake
5	Dribble	Bounce and then catch the ball for more than once
6	Offensive foul	Run into, jump into and screening the opponent
7	Other Errors	Other offensive errors lead to lose the ball



Main Keyboard

When recording offensive errors, you must follow this order: number of the erring player > error type > number of the opponent. When "ERROR TYPE" is clicked before the offensive player's number, the system will give a message "Input the player's number"; you should input the number of the offensive player before clicking "ERROR TYPE". When recording of the error type is completed, the system will give a message "Input opponent's number", which refers to the player who successfully defends and causes the offensive player to make error. You may ignore it by clicking the message bar.

#### Remarks:

Please note that all the recordings should start with the offensive side (i.e., you should first record the offensive events, then the defending ones).

### 5.6.2 Steps

Too Many Steps (more than 3 steps) is a kind of infringement of rules. You can record this kind of infringement in the following order: erring player's number > STEPS.

### 5.6.3 Entering the Goal Area

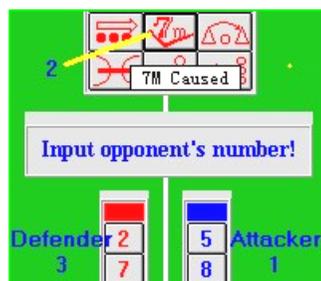
Which means the attacking player gains advantage by entering the goal area of

## 5.5 Record Other offensive Actions

### 5.5.1 7M caused

This refers to the award of a 7M throw to the offensive team, as a punishment to the defending player.

An offensive player gets a clear chance of scoring and then because of a defensive foul, the clear chance is spoiled and a 7M is awarded to the attacking team. This 7M is caused by the concerned offensive player because of his great attacking effort and the player should be recorded with a 7M CAUSED.



Record Sequence

The system records both the offensive player causing 7M and the defending player penalized by 7M.

The recording order: number of the offensive player > 7M CAUSED > number of the defending player. After clicking the key "7M CAUSED", the system will give a message "Input opponent's number". You can input the number or ignore it by clicking the message bar.

### 5.5.2 Assists

If an outer player of the attacking team skillfully passes the ball to an advantage position where his teammate can shoot to score, he is doing assist, whether or not the shooting player scores.



The recording order is: number of the assisting player > ASSIST. The record is completed when the key "ASSIST" is clicked.

## 5.6 Record Offensive Errors

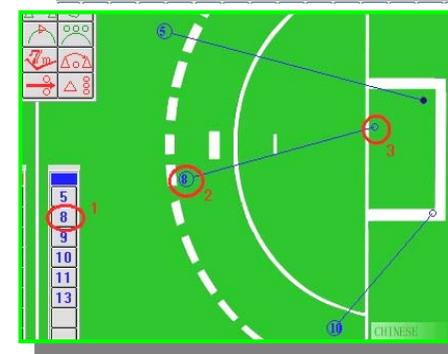
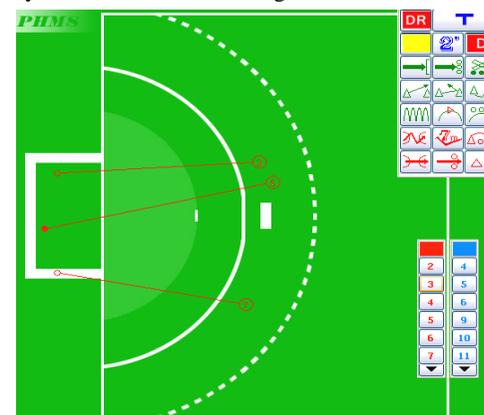
### 5.6.1 About Offensive Error

Seven types of offensive errors are displayed on the main keyboard in the middle of the Match Interface: STEPS, ENTERING THE GOAL AREA, BAD PASS, BAD RECEIVE, DRIBBLING ERROR, OFFENSIVE FOUL and OTHER ERRORS. Refer the following table for detailed concept of these offensive errors.

- F = Fast break and position should be recorded separately.

### 5.2.2 General Shots Record

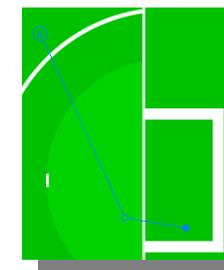
Shots are usually recorded in the following order:



a) Regular Shots (classified by computer): player's number > shooting spot of the ball > landing spot of the ball (left mouse button = score, right mouse button = no score).

The system would not allow a goal when the landing spot of the ball was on the goal post or the area outside the goal post (whether left or right mouse button was clicked).

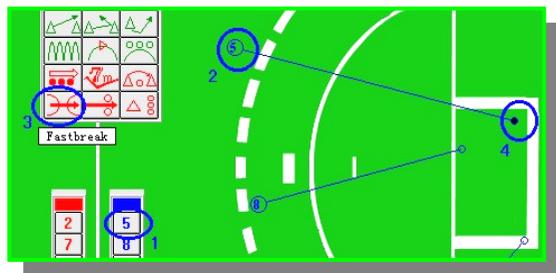
If it's a rebounding shot, the rebounding spot should be within the area of the light color as indicated in the picture.



Rebounding shot

No landing spot of the ball is allowed inside the goal area. All the landing spot must be outside the goal line.

b) Special Shots (manually classify): player's number > shooting spot > shooting technique (in the lower part of the main key panel of the Recording Interface) > landing spot (left button =score, right button = no score).



c) 7M: player's number > 7M Line > landing spot (left button = score, right button = no score). There's no line connect the shooting spot and landing spot of the ball while it's a 7M throw.

#### Remarks:

The recording order, except landing spot of the ball, which is supposed to be recorded in the end, is changeable.

### 5.2.3 How to Record Other Events

Assist: player's number > ASSIST

7M Caused: player's number > 7M CAUSED

Offensive error: player's number > type of offensive error type (if fast break: Ctrl + error type)

Punishment: number of the player > type of punishment

Team Timeout: team name > TIMEOUT

Referee's Timeout: TIMEOUT

### 5.3 Start

#### 5.3.1 Select Ends

Before starting a match recording, you should first set the ends of both teams according to the draw. In order to facilitate recording, the team, whose



### 5.4.7 Free Throws

Shot directly or shoot after only one pass from the free throws will be recorded as Free Throw.

Free throws are usually recorded in the following order: number of the player > shooting spot > FREE



Free Throw



7M-Throw

THROW > landing spot of the ball. Landing spot of the ball must be recorded in the end, and the order of the other records is changeable.

### 5.4.8 7M

The shooting spot of 7M is on the 7M-line. To record it, you only need to click the 7M-line. The recording order: number of the player > 7M-line > landing spot of the ball, with the landing spot in the end. The system only shows the landing spot of 7M shots.

### 5.4.9 Rebounding Shot

If the ball had hit the ground before landing at the frame of the goal, it's rebounding shot. All kinds of shot could be a rebounding shot at the same time. Rebounding shot are recorded in the following order: number of the player > shooting spot > rebounding spot > landing spot of the ball. The rebounding spot must be within the area of the light color inside the goal area. Landing spot of the ball must be recorded in the end.

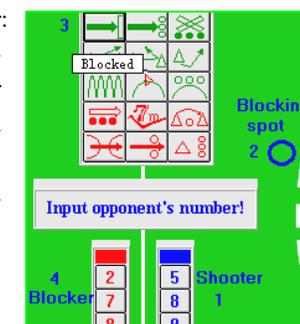


Function Key

### 5.4.10 Shots Blocked

Shots blocked refer to the shots blocked by defenders. Shots

blocked must be recorded in the following order: number of shooting player > shooting spot > BLOCKED > number of blocking player. After you click the key "BLOCKED", the system will give you a message "Input opponent's number". If you do not want to input the number, you can ignore it by clicking the message bar.



Record Sequence

Landing spot of the ball must be the last to record.

## 5.4.5 Fast Breaks

### 5.4.5.1 Brief

During counterattack, when the counterattacking team is superior in players' numbers, or when the defending team is unable to organize an effective defense formation, we call this type of counterattack "Fast Break".

Generally speaking, there are two kinds of fast breaks, Individual Fast Break and Team Fast Break.

### 5.4.5.2 Individual Fast Break

It's Individual Fast Break when there is only one pass from the start till the end of the fast break. Individual Fast breaks are usually recorded in the following order: number of the player > shooting spot > INDIVIDUAL FAST BREAK > landing spot of the ball. As a rule, landing spot of the ball must be recorded in the end, and the order of the other records is changeable.

### 5.4.5.3 Team Fast Break

It's Team Fast Break when there is more than one passes from the start till the end of the fast break. Team Fast breaks are



Function Keys



Individual FB



Team FB

usually recorded in the following order: number of the player > shooting spot > TEAM FAST BREAK > landing spot of the ball. As a rule, landing spot of the ball must be recorded in the end, and the order of the other records is changeable.

## 5.4.6 Breakthrough

When a player holding or dribbling the ball breaks through the defense line of the opposing team and shoots near the line, we call this type of attack breakthrough.



Breakthrough

Breakthrough is usually recorded in the following order: number of the player > shooting spot > BREAKTHROUGH > landing spot of the ball, with the landing spot recorded in the end.

substitution bench is to the left of the operator, must always be set on the left of the Interface window, regardless of which side the operator sits on. It is the same with the team on the right.

### Remarks:

Ends must be set before the match start, that is, before entering the first record of the match.

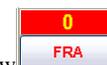
### Caution:

Please pay close attention to the difference between "Change Halves" and "Change Ends" carefully. "Change Halves" is changing the match time from first half to the second (In this case, ends will be changed automatically by system) while "Change Ends" is changing the location of the team bench without changing halves.



## 5.3.2 Select Team Uniform Color

The icon of SET COLOR is located above the team



names on the window. Click the color icon and choose the color from the panel.

## 5.3.3 Select Goalkeeper

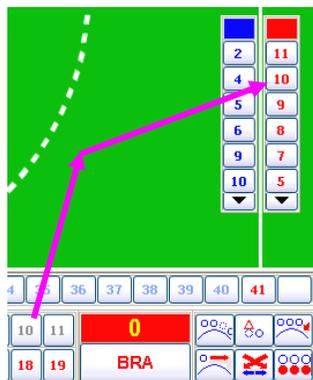
Position the pointer over the goalkeeper's number on the substitution bench, hold down the mouse button and drag the number out into the frame of the goalkeeper (it's at the end of each substitution bench, parallel to the team's own goal). As for substitution of goalkeepers, just drag the number of the new goalkeeper to the same position. The number of the goalkeeper will then appear in the frame. The system will give a message when you want to start the match without goalkeeper selected for both sides.



## 5.3.4 Select Court Players

Position the pointer over the player's number on the substitution bench, hold

down the mouse button and drag the number onto the court. The selected player's number will automatically enter the panel of the court players. If a player is to leave the court, drag the player's number out of the panel of the court players. And it can also be done by clicking the right mouse button at the player. This will make the player on the bench get on the playing court; or the player on the court to leave for the bench. The number will become grey when the player is on the court.



#### Remarks:

*Please try your best to keep the number of players as the same as that on the court 'cause the counting of playing time of each player by the system will based on this record.*

### 5.3.5 Start Timing Clock

When on-the-spot recording is started, the system will automatically prompt "Please start clock". Click the timing clock on the upper right corner of the program window, and you can see the menu including such functions as SET MINUTE, SET SECOND, START CLOCK, and 0'-30' or 30'-0'. You'd better set the system clock according to the style of the public clock in the playing hall. Set the system clock running from 0' to 30', if the public clock runs from 0' to 30', and vice versa. When the time setting is completed, click "START CLOCK" to start timing.



## 5.4 Shots Record

### 5.4.1 Shooting Player's Number

Click the shooting player's number on the panel of the court player; the system will automatically record the number. If the shooting player's number was not on the panel of the court player, click the one on the substitution bench.

### 5.4.2 Shooting spot of the Player

This is to record the position where a player shoots (or jumping). To record the

shooting spot, just click the position with the left mouse button. The system will automatically process data on the shooting spots and calculate the success rates.

### 5.4.3 Landing Spot of the Ball

Landing spot of the ball refers to the spot where the ball is in or out of the goal, or on the goal post, after an attack. Just click the spot and the system will automatically process data on the landing spots and calculate the success rates at the end of the match.

If the landing spot is out of the goal or on the goal post, the system will mark it as "Miss or Post".

If the landing spot is within the goal post frame, there will be two different results: the ball enters the goal or is saved by the goalkeeper. If it's score, click the landing spot with the left mouse button. If it's saved by goalkeeper and no score, click the landing spot with the right mouse button.

When the ball enters the goal and you click the landing spot with the left mouse button, a line will connect the shooting spot and the landing spot, with the shooting player's number on the shooting spot. The landing spot is marked with a blacked circle.

When the goalkeeper saves the ball and you click the landing spot with the right mouse button, a line will also connect the shooting spot and the landing spot, with the shooting player's number on the shooting spot. The landing spot is marked with a blank circle.

#### Remarks:

*In all the steps of shots recording, the click on the landing spot of the ball means the completion of a record. Therefore, before clicking the landing spot, you must make sure all relevant information (shooting spot, player's number, shooting technique, etc.) are correctly recorded (Please refers to "Record Modification" for modifying methods).*

### 5.4.4 Regular Shots

Regular shots refer to line shots, field shots, wing shots and 7M in the position play.

The system can automatically classify the types of regular shots. Regular shots are usually recorded in the following order: number of the player > shooting spot > landing spot of the ball.

#### Remarks: