

# CCS - CENTER CONTROL SYSTEM

Operating Manual, Issue 4/1999  
CCS Version 2.0



**Bowling Marketing Service AG**

Werkstrasse 50, 8630 Rüti/ZH (Switzerland)  
Tel. ++41 251 56 00 Fax. ++41 55 251 56 09  
[www.bmsbowling.ch](http://www.bmsbowling.ch)

*TABLE OF CONTENTS*

---

<b>1) Installation of the CCS-Program.....</b>	<b>3</b>
<b>2) Center Parameters Configuration .....</b>	<b>3</b>
2.1) Setting the center name, lane number and other constants .....	4
2.2) Setting Working Days/Holidays.....	6
2.3) Setting price units, currency and rounding mode .....	7
2.4) Percentage Ball Difference .....	8
2.5) Setting Bowling Time Periods and Prices.....	8
2.6) Setting Discounts .....	10
2.7) Enable automatic Lanes scanning .....	10
2.8) Sorting order of League teams.....	11
2.9) Setting fixed amounts .....	12
2.10) Setting optional commands.....	13
2.11) Identifying the PC and setting the number of stations .....	13
<b>3) Working with the CCS.....</b>	<b>14</b>
3.1) Switch the lanes to Stand-by.....	14
3.2) Assignement of lanes.....	15
3.3) Teams Maintenance .....	19
3.4) Intermediate lane status / modify options .....	21
3.5) Closing a Lane / Billing.....	22
3.6) Remote Commands .....	26
<b>4) Custom Commands .....</b>	<b>34</b>
4.1) How to edit the custom commands file.....	34
4.2) Description of the protocol commands .....	35
4.3) Recapitulation .....	41
<b>5) The Lineage Report.....</b>	<b>42</b>
5.1) Archive Reports .....	42
5.2) Actual Stored Report.....	42
5.3) Realtime Report .....	42
5.4) Exit.....	43
<b>6) The Manager Report.....</b>	<b>43</b>

## 1) INSTALLATION OF THE CCS-PROGRAM

In case that Windows is installed on your PC: Read Chapter 7 now.

- Insert the CCS Installation Disk into drive A: and switch on the PC.
  - After few minutes the program is installed on the Hard Disk.
  - Switch off the PC, remove the floppy from the drive and switch on the PC again.
- After few seconds the Direct Access Menu screen will appear:

```

      < CCS >  MAIN MENU
      Good Morning...Please Enter Your Selection
      A) CCS-Center Control System
      B) Remote Control Scoregraphic
      C) Lineage Report
      D) Cashier Shift Change
      E) Manager Report
      F) File Utilities
      G) Change date/time
      F1 Menu Maintenance      F10 Exit To DOS
      ----- Tuesday August 2, 1998 ----- 8:49:42 am

```

- Press **A** to start the CCS; the main menu will appear:

```

      ***** <CCS> CENTER CONTROL SYSTEM *****
Working day Shift      02/08/1998  08:51:28
      F1 - 1) Bowling
      F2 - 2) Bowling DTimer
      F3 - 3) Bowling UTimer
      F4 - 4) Billard
      F5 - 5) Modify Parameters
      F6 - 6) Remote commands (bowling lanes)
      F7 - 7) Edit teams
      F8 - 8) Ende
      Select Function :      2.0 (C) EMS Ltd, Switzerland

```

If not, please see appendix "Hardware and Software requirements / Troubleshooting".

## 2) CENTER PARAMETERS CONFIGURATION

- Press function key **F5** or keys **5** and **CR** (RETURN, ENTER)

**Password:**

- Type in **B M S** and press **CR**

Fig.2 will appear on the screen:

```

      ***** EDITING SYSTEM PARAMETERS *****
      0) Center Configuration
      1) Set Working days / Holidays
      2) Set Bowling time periods and prices
      3) Set Bowling DownTime periods and prices
      4) Set Bowling UTime time periods and prices
      5) Set Billard time periods and prices
      6) Set discounts
      7) Select rates, currency and rounding
      8) Set ball difference percentage
      9) Enable automatic lanes / booking scanning
      A) Cancel allocations
      B) Set league team list sort order
      C) Set fixed amounts
      D) Set optional Command - ( )
      E) Set PC number and number of stations
      F) Exit to Main Menu (ESC)
      Select Function :

```

## 2.1) Setting the center name, lane number and other constants

- Press key **0** (zero)

Fig.3 will appear on the screen.

```
***** CENTER CONFIGURATION *****
0 - Center Name      :
1 - Bowling lanes   : N. 1
2 - Bowling DownTime : N. 1
3 - Bowling UpTime  : N. 1
4 - Billard tables  : N. 1
5 - Keyboard        : ENABLED
6 - Set password    :
7 - Bow. min counts : N. 0
8 - Ping-Pong min .. : N. 0
9 - Squash min ..   : N. 0
A - Billard min ..  : N. 0
B - Default game type: League
C - Printer         : ENABLED
D - Edit mode (S/B) : S
E - National Average : 200
F - Percentage      : 75
G - Upper Hdcp bond : 60
H - Printer linefeeds: 6
I - Opening time (hrs) : 4
J - 1=Sqsh 2=Bow 3=Cas: 1
Select Number (ESC,CR to EXIT) :
```

- Press again key **0** (zero) to select the first option.

### **Center Name:**

- Type in the **name** of the Center (or whatelse is needed to appear on the bill)
- Press **CR**

### **Address:**

- Type in the **address** (or whatelse needed)
- Press **CR**

### **City:**

- Type in the **zip code and city** (or whatelse needed, plus e.g. phone number)
- Press **CR**

- Press key **1**

### **Number:**

- Enter the total number of bowling lanes, e.g. **12**
- Press **CR**

- Press key **2 ...**

Same procedure as above

- Press key **5**

### **Keyboard (1=Enabled 2=Disabled 3=Part. Disabled)**

- Key in the number (**1 to 3**) corresponding to the desired combination: **1** frees the Scoregraphic's Keyboard, **2** locks it and **3** locks it partially (only **ERROR** works).

- Press **CR**

- Press key **6**

### **Password:**

- Type in new password (if desired)
- Press **CR**

- Press key **7**

### **Number:**

- Enter the minimum number of units to be billed. That can be X minutes or X balls (or X frames..) depending on what has been programmed in section 2.3. Usually a unit in **F1** -Bowling corresponds to a price for each frame or ball thrown.

- Press **CR**

- Press key **8 ...**

Same procedure here: Note that the billing unit in DownTime Bowling (**F2** Bowling) is price/minutes. Entering for example 5: means that at least 5 minutes would be billed.

- Press key **8** ...  
Exactly the same for UpTime Bowling (**F3** Bowling)...
  
- Press key **B**  
**Select Type:**
  - Press number (**1 to 7**) corresponding to the desired default league game mode.
- Press key **C**  
**Printer (1=Enabled 2=Disabled 3=En. League only)**
  - Press number (**1 to 3**) corresponding to the desired combination
- Press key **D**  
**Edit mode (S/B):**
  - Type **S** or **B**, corresponding to the desired listing output mode.
  - Press **CR**
- Press key **E**  
**Number:**
  - Enter number corresponding to the national average Bowlingscore
  - Press **CR**
- Press key **F**  
**Number:**
  - Enter percentage of score difference to be taken as Handicap
  - Press **CR**
- Press key **G**  
**Number:**
  - Enter maximum Handicap value
  - Press **CR**

The values entered at **E** to **G** are used by the Scoregraphic to compute automatically the Handicap. The Formula used is

$$Handicap = Percentage(F) \cdot \frac{NationalAverage(E) - OwnAverage}{100}$$

The Own Average will be entered by the player himself. The result will be forced into the range between 0 and Maximum (**G**)

- Press key **H**  
**Number:**
    - Enter number of empty lines to be printed after bill or scoresheet (for a printer with friction feeder a typical value is 6, else use a value of 20)
    - Press **CR**
  - Press key **I**  
**Number:**
    - Enter hour of start/end of business day (e.g. **4** means 4:00 am). A new journal will be created at that time.
    - press **CR**
    - Press **CR** to exit.
- Save datas on Disk ? (Y=ESC=CR/N)**

- Press key **Y**

Setting of constants is now completed. Fig.2 will appear on the screen.

```
***** EDITING SYSTEM PARAMETERS *****

0) Center Configuration
1) Set Working days / Holidays
2) Set Bowling time periods and prices
3) Set Bowling DownTime periods and prices
4) Set Bowling UTime time periods and prices
5) Set Billard time periods and prices
6) Set discounts
7) Select rates, currency and rounding
8) Set ball difference percentage
9) Enable automatic lanes / booking scanning
A) Cancel allocations
B) Set league team list sort order
C) Set fixed amounts
D) Set optional Command - ( )
E) Set PC number and number of stations
F) Exit to Main Menu (ESC)

Select Function :
```

## 2.2) Setting Working Days/Holidays

- Press key **1**

Fig.4 will appear on the screen:

```
***** SET WORKING DAYS / HOLIDAYS *****
|-----|
1 - Sunday   : Working day
2 - Monday   : Working day
3 - Tuesday  : Working day
4 - Wednesday : Working day
5 - Thursday : Working day
6 - Friday   : Working day
7 - Saturday : Working day

Select number (ESC,CR to EXIT) :
```

The list shown above gives the possibility to program working days and holidays in connection with the rates that will be charged. In the above example, all days of the week are programmed as **Working day**. Each day can be split ONCE to switch from holiday to working day rates or vice versa.

As a programming example, Saturday shall be a **Working day** from 0.00 am to 6.00 pm, then it shall become a **Holiday**

- Press key **7** (to select Saturday)

**1) Holiday 2) Working Day which ?**

- Press key **1** (to *change into* a holiday)

**Begin Holiday shift from (hours, CR all the day)**

- Type in **18** (for 6 pm as the beginning of the holiday shift; enter military time format)

- Press **CR**

**Save datas on Disk ? (Y=ESC=CR/N)**

- Press key **Y**

Back to fig.4

The programming may be repeated as needed. When finished,

- Press **CR** to exit.

Fig.2 will appear on the screen.

```

***** EDITING SYSTEM PARAMETERS *****

0) Center Configuration
1) Set Working days / Holidays
2) Set Bowling time periods and prices
3) Set Bowling DownTime periods and prices
4) Set Bowling UTime time periods and prices
5) Set Billard time periods and prices
6) Set discounts
7) Select rates, currency and rounding
8) Set ball difference percentage
9) Enable automatic lanes / booking scanning
A) Cancel allocations
B) Set league team list sort order
C) Set fixed amounts
D) Set optional Command - ( )
E) Set PC number and number of stations
F) Exit to Main Menu (ESC)

Select Function :
    
```

**2.3) Setting price units, currency and rounding mode**

Different charging units (**F1** Bowling only!), the local currency and the rounding mode may be programmed using this feature.

- Press key **7**

Fig.5 will appear on the screen.

```

----- Einheit, Währung und Rundung -----
Actual Selection : Type. = 3 Balls if mayor else Frames
Actual Selection : ccy   = $
Actual Selection : Round = 0.000
New type (1-Balls 2-Frames 3=B/F 4-Games 5-Minutes):
    
```

The following charging units may be selected according to the requirements:

- 1 = Balls**      Each thrown ball will be charged
- 2 = Frames**    Each frame will be charged
- 3 = B/F**        Combination balls/frames will be charged (see note below)
- 4 = Games**     Each game will be charged (not recommended)
- 5 = Minutes**   Each minute of operation will be charged (It would then be the same as UpTime Bowling)

- Press number according to desired selection, e.g. **3** (B/F)

**Actual Selection : Type = 3 Balls if mayor else Frames**

**Actual Selection : ccy = \$**

**Actual Selection : Round = 0.000**

**New Selection (\$,L.,FF,Fr,DM,HFL etc.) :**

- Type in the sign of the local currency (e.g. \$)

- Press **CR**

**Actual Selection : Type = 3 Balls if mayor else Frames**

**Actual Selection : Money = \$**

**Actual Selection : Round = 0.000**

**New round =**

- Enter the value to which the bills shall be rounded; e.g. **0.05** rounds to the next 5¢, **0** does NOT round at all, **0.25** rounds to the next 25¢, **2** rounds to the next 2\$ and **100** to the next 100 Won or 100 Lira. The rounding is automaitc and will be applied to ALL *final amounts* displayed on screen.

- Press **CR**

**Save datas on Disk ? (Y=ESC=CR/N)**

- Press key **Y**

Fig.2 will appear on the screen.

***THE UNIT BALLS/FRAMES:***

Both balls and frames are counted. The number of balls is then divided by two (2). If the "Percentage Ball Difference" is set to be zero, the **higher** number is charged. If a percentage is programmed (e.g.10%), the number of **frames** will be charged if the **difference** of both values lies **within** the given percentage from the number of frames counted. Else, i.e. if the difference lies **outside** the given percentage, the number of **balls** divided by 2 will be charged

Examples:

- a) Percentage=0%, 20 Frames and 42 Balls (21 Frames) counted. 21 Frames will be charged.
- b) Percentage=10%, 20 Frames and 42 Balls counted. As the value of Balls/2=21 is within the percentual difference of 10% of the number of frames (  $20 \pm 10\% = 18$  to 22 ), 20 Frames will be charged.
- c) Percentage=10%, 20 Frames and 45 Balls (23 Frames) counted. The number of Frames to be charged is 23, as the value of Balls/2=23 is not within the percentual difference of 10%.

**2.4) Percentage Ball Difference**

Explanation of this function: see note/examples in previous section.

- Press key **8**

**Percentage: 0.0**

**New Percentage: (ESC,CR to EXIT )**

- Type in desired value e.g. **10** for 10% and press **CR**

- Press **CR** again, to exit

**Save datas on Disk ? (Y=ESC=CR/N)**

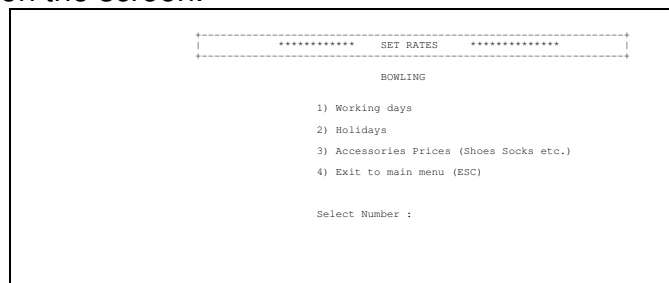
- Press key **Y**

Fig.2 will appear on the screen.

**2.5) Setting Bowling Time Periods and Prices**

- Press key **2**

Fig.6 will appear on the screen.



To set Time zones and Prices for the rates during workingdays,

- Press key **1**

Fig.7 will appear on the screen.



Bowling Marketing Service Ltd.

```

***** TIME PERIODS *****
-----
BOWLING
0 - Tariff if no specification $ 0.00
1 - from: 0.0 to: 0.0 Rates $ 0.00
2 - from: 0.0 to: 0.0 Rates $ 0.00
3 - from: 0.0 to: 0.0 Rates $ 0.00
4 - from: 0.0 to: 0.0 Rates $ 0.00
5 - from: 0.0 to: 0.0 Rates $ 0.00
6 - from: 0.0 to: 0.0 Rates $ 0.00
7 - from: 0.0 to: 0.0 Rates $ 0.00
8 - from: 0.0 to: 0.0 Rates $ 0.00
9 - from: 0.0 to: 0.0 Rates $ 0.00
10 - from: 0.0 to: 0.0 Rates $ 0.00

Select Number (ESC,CR to EXIT) :

```

- Press key **0** and press **CR**
- Rates if no specification: (\$) \* \* or the currency entered in section 2.3**
- Type desired **normal Rate**, which is valid for most of the day, or, if the rates does not change at midnight, enter the rate valid at midnight and press **CR**.
- Press **1** (to select rate no.1) and press **CR**
- From (hours) :**
- Type in the **Hours** of the beginning of timezone no.1 and press **CR**
- From (hours): 10 from (Minutes) :**
- Type in the **Minutes** of the beginning of timezone no.1 and press **CR**
- To (hours) :**
- Type in end time **Hours** of period with Rate No. 1 and press **CR**
- To (hours): 14 to (Minutes) :**
- Type in end time **Minutes** of period with Rate No. 1 and press **CR**
- Rates \$**
- Type in desired **Rate No.1** for the time period just entered and press **CR**.
- Press key **2** and **CR** to program the next time period and its rate, e.g. to program a rate of 2.50 \$ between 10am and 2.30pm, type the following sequence: **10 CR 00 CR 14 CR 30 CR 2.50 CR**
- Press key **3...** to program the remaining time periods as required.

Note: Unused time periods should be *zeroed* with the following sequence:

- Key in the **number** of the unused time period to be zeroed
- Type the following sequence: **CR 00 CR 00 CR 00 CR 00 CR 0 CR**

- Press **CR** to EXIT
- Save datas on Disk ? (Y=ESC=CR/N)**

- Press key **Y**  
Fig. 6 will appear on the screen.

Repeat procedure for the setting of RATES on HOLIDAYS, then

- Press key **3**
- Press **CR**
- Shoes rates \$ 1,50 New rates \$**
- Type in desired **Rate** for Shoes rental, e.g. **2.00**
- Press **CR**

- Acces. rates \$ 0.0 New rates \$**
- Type in desired amount or **0** if no charge
- Press **CR**
- Save datas on Disk ? (Y=ESC=CR/N)**

- Press key **Y**  
Fig.6 will appear on the screen.

- Press key **4** to EXIT to main menu

Fig.2 will appear on the screen.

Repeat this procedure with Time Periods Bowling DT (DownTime Bowling), Bowling UT (UpTime) as required.

### 2.6) Setting Discounts

- Press key **6**

Fig.8 will appear on the screen.

```

***** LIST OF DISCOUNTS *****
1 - Equivalent letter : Discount % : 0.00
2 - Equivalent letter : Discount % : 0.00
3 - Equivalent letter : Discount % : 0.00
4 - Equivalent letter : Discount % : 0.00
5 - Equivalent letter : Discount % : 0.00
6 - Equivalent letter : Discount % : 0.00
7 - Equivalent letter : Discount % : 0.00
8 - Equivalent letter : Discount % : 0.00
9 - Equivalent letter : Discount % : 0.00
10 - Equivalent letter : Discount % : 0.00

Select Number (ESC,CR to EXIT) :
    
```

Ten different discount rates may be programmed and named with a letter or a sign. E.g.: Letter **C** ( for Club members ) shall be equal to 10% , letter **J** ( for Juniors ) shall be equal to 16.52%

Hint: Prepare a table (on a paper) where these short notations are written out together with their meanings. This just to prevent confusion..

- Press key **1**

**Equivalent Letter:**

- Press key **J**

**Equivalent Letter: J Discount % :**

- Type in **16.52** ( for 16.52% **Note:** the decimal point must be entered as FULL STOP and not as comma!)

- Press **CR**

Repeat procedure for other settings. When list completed,

- Press **CR** to EXIT

**Save data on Disk ? (Y=ESC=CR/N)**

- Press key **Y**

Fig.2 will appear on the screen.

```

***** EDITING SYSTEM PARAMETERS *****

0) Center Configuration
1) Set Working days / Holidays
2) Set Bowling time periods and prices
3) Set Bowling Downtime periods and prices
4) Set Bowling UTime time periods and prices
5) Set Billard time periods and prices
6) Set discounts
7) Select rates, currency and rounding
8) Set ball difference percentage
9) Enable automatic lanes / booking scanning
A) Cancel allocations
B) Set league team list sort order
C) Set fixed amounts
D) Set optional Command = ( )
E) Set FC number and number of stations
F) Exit to Main Menu (ESC)

Select Function :
    
```

### 2.7) Enable automatic Lanes scanning

This feature allows to have a current status of each single lane on the status screen, which will be continuously updated in intervals of two minutes. When the Automatic

Scanning is active, the Bowling Lanes Status Screen (fig.10) will show additional information explained in detail in section 3.2.

- Press key **9**

**Auto scan - Actual selection : On**

**Book scan - Actual Selection : Off**

**Select auto scan 1=ON 2=OFF <ESC,CR to exit> :**

- Press key **1** to set auto-scanning of the bowling lanes **ON**, or

- Press key **2** to set auto-scanning of the bowling lanes **OFF**

**Select book scan 1=ON 2=OFF <ESC,CR to exit> :**

- Press key **1** to **enable** the external booking machine\* wait list scanning, or

- Press key **2** to **disable** this special function.

**Save data on Disk ? (Y=ESC=CR/N)**

- Press key **Y**

Fig.2 will appear on the screen.

```
***** EDITING SYSTEM PARAMETERS *****

0) Center Configuration
1) Set Working days / Holidays
2) Set Bowling time periods and prices
3) Set Bowling DOWTime periods and prices
4) Set Bowling UTime time periods and prices
5) Set Billard time periods and prices
6) Set discounts
7) Select rates, currency and rounding
8) Set ball difference percentage
9) Enable automatic lanes / booking scanning
A) Cancel allocations
B) Set league team list sort order
C) Set fixed amounts
D) Set optional Command - ( )
E) Set PC number and number of stations
F) EXIT to Main Menu (ESC)

Select Function :
```

Note: Selection **A** is for service purposes only and **MUST NOT** be selected! It does what it says, i.e. cancels all assignments, thus making it impossible for the Manager Report to reveal unbilled games.

### **2.8) Sorting order of League teams**

The sorting order of the teams in the League Team List may be chosen (out of three possibilities) on behalf of this selection. The possibilities are: alphabetical order, ordered by team name; numerical order, ordered by the internal team-number; or finally chronological, ordered by the time when the team was last modified.

- Press key **B**

**Actual Selection : 1 - Cod.num**

**Select (1=Cod.num 2=Name 3=Time <CR>=exit) :**

\* The external booking machine is an optional, which allows the public to enter their names and shoe sizes on a separate keyboard; the thus entered team will be then added automatically, by means of this programmable function, to the open team list (wait list). The operator then will have the shoe numbers of the first seven teams displayed on screen, next to the names he can send to the Scoregraphic.

- Press number **(1-3)** corresponding to the chosen sorting order: 1=Numerical, 2=Alphabetical and 3=Chronological order
- Or press **CR** to leave the selection UNCHANGED.

**Save datas on disk ? (Y=ESC=CR/N)**

- Press key **Y**

Fig.2 will appear on the screen.

```

***** EDITING SYSTEM PARAMETERS *****

0) Center Configuration
1) Set Working days / Holidays
2) Set Bowling time periods and prices
3) Set Bowling DownTime periods and prices
4) Set Bowling UTime time periods and prices
5) Set Billard time periods and prices
6) Set discounts
7) Select rates, currency and rounding
8) Set ball difference percentage
9) Enable automatic lanes / booking scanning
A) Cancel allocations
B) Set league team list sort order
C) Set fixed amounts
D) Set optional Command - ( )
E) Set FC number and number of stations
F) Exit to Main Menu (ESC)

Select Function :
    
```

### **2.9) Setting fixed amounts**

When closing a bill it is possible to add or subtract a fixed amount to/from the bill total. This list provides, in much the same way as for the discounts, up to ten amounts that can be shortened down to one letter. However, we do not recommend to take advantage of this feature, since the Manager Report considers all manual changes of a bill being *differences* and highlights them accordingly - they will also be summed up to the rounding differences so that when using the feature frequently the Manager Report printout might look a bit odd - declaring due amounts far away from the cashed amounts.

- Press key **C**

Figure 9 will appear on the screen.

```

***** FESTE BETRÄGE *****

1 - Equivalent Letter : Amount : $ 0.00
2 - Equivalent Letter : Amount : $ 0.00
3 - Equivalent Letter : Amount : $ 0.00
4 - Equivalent Letter : Amount : $ 0.00
5 - Equivalent Letter : Amount : $ 0.00
6 - Equivalent Letter : Amount : $ 0.00
7 - Equivalent Letter : Amount : $ 0.00
8 - Equivalent Letter : Amount : $ 0.00
9 - Equivalent Letter : Amount : $ 0.00
10 - Equivalent Letter : Amount : $ 0.00

Nummer wählen (ESC,CR - ENDE) :
    
```

**Select Number (CR to EXIT) :**

- Press key **1** (to choose the first entry in the list)

**Enter Equivalent Letter :**

- Press the desired **Letter** key (e.g. **S** for Sandwiches)

**Enter Equivalent Letter : S Amount (\$) :**

- Type in the desired amount to be added (without prefix or with a plus sign (+) as prefix) or subtracted (with a minus sign (-) as prefix) to/from the billed total (e.g. the price for a Sandwich be \$ **1.50**)

- Press **CR**

Repeat the procedure until all needed fixed amounts were programmed, then

- Press **CR** to exit.  
**Save datas on disk ? (Y=ESC=CR/N)**
  - Press key **Y**
- Fig.2 will appear on the screen.

```
***** EDITING SYSTEM PARAMETERS *****

0) Center Configuration
1) Set Working days / Holidays
2) Set Bowling time periods and prices
3) Set Bowling Downtime periods and prices
4) Set Bowling UTime time periods and prices
5) Set Billard time periods and prices
6) Set discounts
7) Select rates, currency and rounding
8) Set ball difference percentage
9) Enable automatic lanes / booking scanning
A) Cancel allocations
B) Set league team list sort order
C) Set fixed amounts
D) Set optional Command - ( )
E) Set PC number and number of stations
F) EXIT to Main Menu (ESC)

Select Function :
```

### **2.10) Setting optional commands**

After the closing of a lane any number of custom commands (see chapter 4) may be sent to the Scoregraphic, if programmed herein.

- Press key **D**
- A screen similar to fig.11 (containing the custom commands list) will appear.
- Enter the **numbers** of the commands to be sent after each closing of a Scoregraphic lane to the same. Separate the numbers by commata or spaces, if more than one command needs to be sent.
  - Press **CR**.

**Save datas on disk ? (Y=ESC=CR/N)**

- Press key **Y**
- Fig.2 will appear on the screen, holding the programmed commands in the parens at the end of line D).

### **2.11) Identifying the PC and setting the number of stations**

This section is only to be programmed when two or more PCs share the RS485 line that leads to the Scoregraphic tables - this is the case when the TOURNAMENT program needs to be in use at the same time that the CCS program has to access other (*not the same!!*) lanes, or in a big center with two floors and an independent cash registers for each floor, which are both active in rush hours, but of which only one is active otherwise.

- Press key **E**
- Actual selection: PC num (0=NULL 1=master) = 0**  
**Actual selection: Number of stations = 0**  
**PC num (0=NULL 1=master) =**
- Press key **0** if the master/slave system is switched **OFF**, i.e. there is **only one PC linked to the Scoregraphics**. This is usually true, otherwise
  - Press key **1** if this PC shall be the **master** - see note below.
  - Press key **2 to 9** if this PC is one of the **8 slaves**.
- Number of stations =**
- Key in the **total number of PCs linked to the Scoregraphics**, e.g. **2**, or:

- Press key **0** if this is the only PC linked to the Scoregraphics, i.e. the master/slave system is OFF.

**Save data on disk ? (Y=ESC=CR,N)**

- Press key **Y**

Fig.2 will appear on the screen.

**Note:** The said master/slave system is needed as soon as more than one PC share the communication line to the Scoregraphics. One of the PCs needs to take over the role of "master", this machine will tell the others when it's "their turn" to access the line. To do so it needs to be the most powerful machine installed - 386DX-40 or 486DX-33 are the absolute minimum, as well as 4 MB of RAM; a quick and clean memory manager and a disk cache utility must be installed, so that the master does not miss any operation on the line. The system works in such a way that a slave, when alone, will work even without the master, but as soon as two PCs are on the line, *exactly one of them* MUST be the master. The slaves must have unique PC numbers.

**Example:** In an installation with two CCS-PCs (e.g. a big center with two floors) and a TOURNAMENT PC in the back office, the master will be one of the two CCS-PCs, and it will be programmed with the two values **1** and **3** (it's the master and there are three PCs in this "network"); the other two PCs will be programmed respectively **2 - 3** and **3 - 3** ("2nd of 3 PCs" and "3rd of 3 PCs").

At this moment all the required settings are completed.

- Press key **F** to get back to the main menu.

Fig.1 will appear on the screen.

### 3) WORKING WITH THE CCS

#### 3.1) SWITCH THE LANES TO STAND-BY

If the stand-by mode (Scoregraphic screens stand-by, keyboard disabled) is desired prior to the begin of normal operation, and provided that none of the lanes is assigned (see below):

```
-----+-----
| ***** <CCS> CENTER CONTROL SYSTEM ***** |
+-----+-----
Working day Shift      02/04/1999 08:51:28

F1 - 1) Bowling
F2 - 2) Bowling DTimer
F3 - 3) Bowling UTimer
F4 - 4) Billard
F5 - 5) Modify Parameters
F6 - 6) Remote commands (bowling lanes)
F7 - 7) Edit teams
F8 - 8) Ende
                2.0 (C) BMS Ltd, Switzerland
Select Function :
```

- Press function key **F6** or keys **6** and **CR** (to select F6-6) Remote Commands)

The **Remote Commands** screen (fig.19) will appear on the screen.

- Press key **1** (to select function 1) Blackout Recover)

**Blackout Recover ? (Y/N) :**

- Press key **Y** to confirm.

The screen shows the status screen and the message **Blackout Recover**. All un-assigned lanes will automatically switch to stand-by.

After few seconds fig.19 will re-appear on the screen.

- Press key **G** to get back to the main menu.

NOTE: The other functions of the **F6** menu will be explained later on.

### 3.2) ASSIGNEMENT OF LANES

- Press function key **F1** or keys **1** and **CR**

Fig.10 will appear on the screen:

```

**** STATUS OF BOWLING LANES ****
- No status avbl.
- Initial status
-On #+Link Off
29/04/1999 08:58:59
1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0
Lane number :

2.0 (C) BMS Ltd, Switzerland
F1-Bowl F2-Bowl DT F3-Bowl UT F4-Bldr F5-Frm F6-Cmds F7-Ed.Teams F8/F9-NewTeam
    
```

The different status screens for Bowling, Bowling DownTime, Bowling UpTime can be told from each other by means of the different background colors (which in turn could be programmed in the file BCKCOLOR.DAT). The Bowling status screen will additionally show the following information if the automatic lanes scanning was activated (see section 2.7):

The color field above each lane number gives the status of the Scoregraphic of that lane:

- light green = No status available (lane not assigned / link off)
- dark green = **Initial mode** ("PRESS NEW TO START")
- red = **OPEN** game in progress
- yellow = **LEAGUE** game in progress
- light blue = **Entry mode** (The players are entering their name or making a correction)
- white = **GAME OVER**. Blinks if prepaid amount expired.
- dark grey = **Lane locked for throws**. Can be in League, before pressing the START key, or in stand-by mode.

The symbol below lane number is either:

- a smiling face (*smiley*) if the lane is assigned (in which case also the time of the assignment is visible) or:
- a blinking hash sign if the lane does not respond to the status request of auto-scanning.

#### Assign a lane:

Access the desired status screen by pressing one of the keys **F1** to **F3**.

- Type in the number of the lane to be assigned, e.g. **2**

In order to assign a lane that is supposed to be billed by the units that have been specified explicitly (balls or frames or games or balls/frames -> see section 2.3..) choose F1-Bowling.

Otherwise in case that e.g. somebody paid in advance choose F2-Bowling (=Downtime Bowling). In this mode the billing unit is time. After the prepaid timeperiod is expired the lane will close automatically, whereas in F3-Bowling (=Uptime Bowling) the billing unit is also time but there is no time limit.

Important: Assignment and closing of a lane in the same mode!!

and: In the Bowling Status Screen (**F1**) you may now press the key : (or ; if easier to reach) - this lets the program display **-league** and the lane *pair* will be assigned in one go.

- Press **CR**

**Lane free? (Y/N/S)**

- Press key **Y** or **CR** to confirm normal operation. (alternatively, press **N** to cancel the operation, if the wrong number was typed in, or **S** for a SERVICE Assignment: In this case, the only difference to normal operation is that the billed units will be totalized separately on the Manager Report.)

**Qty shoes: = 0            New Qty:**

- Type in quantity of shoe pairs hired out to the bowlers and press **CR** (or just **CR** if no shoes were rented). Or again:

- Press **ESC** to jump over all further questions and assign the lane immediately.

**This is possible through all questions of the assignment procedure!**

**Qty acces.: = 0            New Qty:**

- Type in quantity of secondary accessories hired out / sold to the bowlers and press **CR** (again, just CR if none).

**Options (Y/N) :**

- Press key **Y** if any of the following options is required, or **N** to skip *all of* the options and jump to the selection of the game type.

**Prepaid ---> = 0.00    New Setting:**

- Type in the prepaid amount, e.g. **10** for 10 \$, if required.
- Press **CR**

If an amount was entered,

**1=Accessories 2/CR=norm. :**

- Press key **1** if the amount is intended as prepayment of *accessories*, or
- Press key **2** or **CR** if the amount is an actual prepayment for the *game*.

Note: If the automatic lanes scanning is active, and provided the prepayment has been declared to be a *game prepayment*, as soon as this amount is expired the color field on the status screen starts blinking white.

- Press **CR**

**Keyboard(1/2/3) = 1    New Setting:**

- Press **CR** (or key **2** or **3** and **CR** to disable or partially disable Keyboard)

**Printer(1/2/3) = 1    New Setting:**

- Press **CR** (or key **2** or **3** and **CR** to disable or enable printer league only)



If previous option was set to **3 - Printer enabled league only:**

**Edit mode (S/B) = S    New Setting:**

- Press key **S** or **B** as required.

The command list window will appear on the screen:

```

----->>> CUSTOM COMMANDS LIST <<<-----
| 1 DEPCOL 9 RESET 17 ZOOM5 25 POWERUP 33 WINCOL |
| 2 OPENCOL1 10 CLEARSCREE 18 ZOOM10 26 ALARM 34 WINDEF |
| 3 OPENCOL2 11 START 19 MONITOFF 27 PRINTOFF 35 BINGO |
| 4 OPENCOL3 12 DEFTCH 20 MONITON 28 PRINTON 36 LIN |
| 5 OPENCOL4 13 ITALIANO 21 REPEATOFF 29 PRINTOUT 37 BINGONUMS |
| 6 LEAGCOL1 14 FRANCAIS 22 REPEATON 30 WINDOWOFF 38 BINGODEF |
| 7 LEAGCOL2 15 ENGLISH 23 KEYBOFF 31 LOGOCOL 39 LINNUMS |
| 8 LEAGCOL3 16 REPEAT 24 KEYBON 32 LOGODEF 40 LUNDEF |
-----
Lane number : 1

Lane free? (Y/N/S) Y
Qty shoes - 0 New Qty : 2
Qty Acces. - 0 New Qty : 2
Prepaid ----> - 0.00 New setting : 100 1-Accessories 2/CR-Norm: 2
Keyboard (1/2/3) - 1 New setting : 1
Printer (1/2/3) - 1 New setting : 1
Command set # (eg.1,4,6.):
F1-Bowl F2-Bowl DT F3-Bowl UT F4-Bldr F5-Prm F6-Cmds F7-Ed.Teams F8/F9-NewTeam
    
```

**Command set # (eg.1, 4, 6) :**

- Press **CR** to exit (or enter one or more numbers of commands, e.g. to change the screen colors, and then press **CR** twice)

The OPEN team list window will appear on the screen, along with a list of possible Open type games (in **LEAGUE ASSIGNEMENT MODE** the LEAGUE team list is displayed and the possible games are league and tournament games) and the message:

**Select Type :**

- Press **CR** or type the number of the selected game

**Note:** The above step (the list of games) can be disabled by clearing the "enquiry game type" flag in the ESCFLAGS.DAT file.

**Name of Bowler 1:**

If a number out of the OPEN teams list is typed here, the corresponding team will be picked out of the list and displayed. If instead the **SPACE** key, followed by **CR** is pressed, no bowler names will be transmitted to the Scoregraphic (The bowlers will have to enter their names by themselves, so the keyboard must not be locked). Else, the bowler's names can be entered as follows:

- Type in the **NAME** of Bowler No.1, then **CR** (CAPITAL LETTERS!)
- Type in the **NAME** of Bowler No.2, then **CR**, etc.

When the name list is complete,

- Press **CR** once more.

Once the full team has been entered (name by name or by number), or the CCS program decides you entered enough names (depending on the selected game type up to 12 in straight and No-Tap Open, up to 6 in Multi-Open, 5 in standard and european League, less for other games):

**OK ? (Y/N)**

- Press key **Y** (by pressing key **N** the program restarts from the question **Select Type:** or, if the step is disabled from **Name of Bowler 1:** )

Fig.13 will appear on the screen. The requested lane (in this example No.2) has been assigned at the time displayed under the smiley.

```

          ***** STATUS OF BOWLING LANES *****
  [ ]-No status avbl.      [ ]-Game Over
  [ ]-Initial status      [ ]-Open
  [ ]-On #Link Off       [ ]-League
                        [ ]-Closed
                        [ ]-Entry Mode
  29/04/1999  09:02:12
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
  1 2 3 4 5 6 7 8 9 1 1 1 1 1 1 1 2
    0 1 2 3 4 5 6 7 8 9 0
  0
  9
  :
  0
  1
  Lane number :

                                2.0 (C) RMS Ltd, Switzerland
  F1-Bowl F2-BowlDT F3-BowlUT F4-Blrd F5-Prm F6-Cmds F7-Ed.Teams F8/F9-NewTeam
  
```

**Notes:**

In League mode (pressing : or ;), the program asks for a team name prior to the first bowler's name.

The program checks on a valid number of bowlers - so it is not allowed to enter more than two bowlers per lane if a single tournament was chosen, whereas up to 12 bowlers may be playing on the same lane in straight Open bowling.

When assigning a pair of lanes (in League mode), the program asks for BOTH team names. **WATCH OUT!** If you want to send the BLIND TEAM (team name 0000 = four times zero), this team must be sent off the League Team List. If you type 0000 as team name, the program will look for a team #0 in the team list and find none! So: prepare a team with the name 0000 and type the *corresponding number* every time you need a blind lane in league mode.

In League Mode you may also enter a *LIST OF TEAM NUMBERS* to build the team at the moment of the assignment - you then enter e.g. **2,5,8** and the team sent to the Scoregraphic will be built by joining the single players of team #2, #5 and #8; the limit will be kept automatically, so that no more than max. 5 players are sent, or no more than 2 players in the individual tournament modes, but setting up single-player teams helps you to handle quite easily even the least disciplined leagues.

Even though the program switches on both lanes, the accessories and options in League Mode are set only for the lane the number of which was entered at the beginning of the assignment. The other lane (the pairs are always low odd - high even, i.e. 1-2, 3-4 etc.) will have NO accessories assigned.

**SHORTCUT MODE:** The key **ESC** allows you to skip entry steps. It leaves out any entry or question until the end of the assignment or until a set flag in ESCFLAGS.DAT is encountered. These flags allow to stop the shortcut mode at three places:

**Assignment Notes:**

First at the question "lane free? (Y/N/S)"

Second at the entry of accessories and options, and

Third at the entry of game type and player names.

So the shortest assignment is <LANE NUMBER> **ESC**.

- Keyboard lock: If the keyboard is locked, even if there's no set flag, the program will stop at the point of asking for bowler names. Here you can either enter the names, so the keyboard lock will be kept in place, or then you press **ESC**: no names will be sent: since in this case the players need to enter their names by themselves, the keyboard will be unlocked.

Team lists: once a team has been assigned off the OPEN team list, it will be removed from the list - the Open team list is a queue. This however does not happen with the League team list - a team (or a single bowler) keeps showing up in the list until it is intentionally removed.

Another short-cut feature can be applied in F2-Bowling mode (Downtime Bowling):

In order to assign lanes 1 to e.g. 10 in this mode simply enter **1-10** and press **<ENTER>** to enter the desired time limit, then **<ENTER>** to enter the total number of shoes, then again **<ENTER>** to enter the total number of accessories, then again **<ENTER>** to enter the options and finally **<ESC>**: All lanes will be assigned at the same time (in one turn).

### 3.3) TEAMS MAINTENANCE

There are two different ways of adding teams to the archives - when you're in any of the three status screens (**F1** to **F3**), you can access the team editor directly by pressing **F8** or **F9** (remember that **F8** is used to leave the program in the other screens!) respectively for the LEAGUE TEAM LIST or for the OPEN TEAM LIST. Or you may enter the teams archive menu:

- Press Function key **F7**

- 1) Open teams
- 2) League teams

Enter number :

- Press key **1** for OPEN teams (waiting queue), or
- Press key **2** for LEAGUE teams

Fig.15 will appear on the screen:

```

***** >>> TEAMS ARCHIVES <<< *****
OPEN Teams      Number of records : 0
F1-Bowling      1) New team
F2-Bowling DT   2) Edit team
F3-Bowling UT   3) Swgp bowlers
F4-Billard      4) Delete all records
F5-Parameters   5) Team List
F6-Remote commands 6) Bowler List
F7-Teams editor 7) Delete one team
F8-Quit         8) Master menu
                Select number:
    
```

- Press key **1** to **ADD A NEW TEAM**

Fig.15a will appear on screen:

```

***** >>> TEAMS ARCHIVES <<< *****
OPEN Team
Team number : 2          Active : 12
Mannschaftsname:         Tst.   Team Hdcp
                        0       0
N. Bowler Name          Hdcp   Serie
1
2
3
4
5
6
7
8
9
10
11
12
<ESC> to quit   <PgUp> next team   <Home> prev. team
    
```

**Note:** The keys **F8** and **F9** will lead you directly to the team editor screen (Fig.15a). All these functions add a new empty record at the end of the team list file (even though there may be 100% empty records *before* the end of file); to use the space efficiently, we suggest you use the function **F7-2** (edit team) and browse through the list before inserting a new team at the end. This of course is limited to the league list; the open list may be deleted as frequently as you wish - we suggest daily.

- If the team name is needed, press key **CURSOR-UP** (arrow up)
- Type in the **TEAM NAME** and press **CR**
- Type in the **TEAM TOTAL SCORE** (including all handicaps) and press **CR** (or just **CR** to skip)
- Type in the **TEAM HANDICAP** and press **CR** (or **CR** to skip)

Then, proceed with entering Bowler data:

- Type in the **BOWLER NAME N.1** and press **CR**
  - Type in the **BOWLER HANDICAP** and press **CR** (or just **CR** to skip)
  - Type in the **BOWLER SERIES SCRATCH TOTAL** and press **CR** (**CR** to skip)
- repeat the entries for the next bowler until the name list for this teams is complete.

To go on:

- Press key **PgUp** to advance the team number by one (thus getting to the next team or to an empty name list), or
- Press key **Home** to retreat the team number by one (thus getting to the latest entered team), or finally
- Press key **ESC** to exit

Upon ESC the computer will ask:

**Save datas on Disk ? (Y/N)**

- Press key **Y**

The program returns to where the editor has been called from - either to the **F7** menu or to any of the **F1** to **F4** status screens.

The other menu options of **F7 - Edit teams** will be explained shortly:

## **2 - Edit team**

- Press key **2**

**Number of records : n**

**Team number :**

- Enter the number of the team you want to modify and press **CR**.

This feature leads you to the team editor. When leaving the team editor you'll get back to the **F7** menu.

## **3 - Swap bowlers**

- Press key **3**

**Number of records : n**

**Team number :**

- Enter the number of the team you want to modify and press **CR**.

The team is displayed along with the question

**swap position :**

- Enter the number of the first of two positions to swap and press **CR**

**with position :**

- Enter the second position number and press **CR**.

The two positions will be swapped and the first question returns (so you can do many swaps at a time). When finished,

- Press **CR**.

## **4 - Delete all records**

This function is used to clear the team list you're currently working with - choose it and there will be no way back!

- Press key **4**

**Are you sure? (Y/N)**

- Press key **N** to abort the function (and keep the teams), or
- Press key **Y** to really do it: *clear all teams*.

**5 - Team List**

- Press key **5**

**Output to screen or printer? (S/P)**

- Press key **S** to have the listing scroll over the screen, or
- Press key **P** to have a printout of all *team names* with their numbers.

**6 - Bowler List**

- Press key **6**

**Output to screen or printer? (S/P)**

- Press key **S** to see the listing on screen, or:
- Press key **P** to have a *complete printout of all team members of all teams*.

**7 - Delete one team**

- Press key **7**

**Number of records : n**

**Team number :**

- Enter the number of the team you want to delete and press **CR**.

The team will be displayed and followed by the question:

**Delete team? (Y/N)**

- Press key **Y** to confirm and remove that team from the team list, or:
- Press key **N** to go back to the **F7** menu without deleting the team.

A technical word about the OPEN Teams List: This list behaves like a waiting list; the first seven team names will be shown on a small window in the bowling status screen. At the same time, the full names (along with the total number of teams on waiting list and the daily total of registered teams) will be sent using the following format to any display terminal linked to the serial port COM2: <FF><CR><LF> "(number of teams)" <CR> <LF> "1. (First Team)" <CR> <LF> "2. (Second Team)" <CR> <LF> etc. until the 24th team is sent. The codes <CR> (Carriage Return, 13=0x0d), <LF> (Line Feed, 10=0x0a) and <FF> (Form Feed, 12=0x0c) are ASCII control codes. The com link parameters are **9600** baud, **8** bit, **1** stop, **No** parity, no handshake (neither DTR nor XON/XOFF). The transmission is repeated when entering the program and any time one of the first 24 teams has changed.

### ***3.4 INTERMEDIATE LANE STATUS / MODIFY OPTIONS***

Following functions can be performed without leaving the status screen: check the status of a bowling lane, change the number of accessories or the options settings, send custom commands, and get the actual subtotal. All these operations require the lane to be assigned.

- Enter the **lane number** and press **CR**

**F6.....) Custom Commands**

**F7 or CR) Close / Bill**

**F8.....) Modify accessoires**

**F9.....) Game status and subtotal**

**F10.....) Exit**

**Selection:**

Custom Commands:

- Press function key **F6**

The custom commands list is displayed.

**Command set # (eg 1,4,6..):**

- Type in a list of command numbers (or just one), separated by commas
- Press **CR** (again to exit)

Game status of a bowling lane: (only available for bowling)

- Press function key **F9**

**Subtotal or Game status ? (S/G)**

- Press key **G** to select the game status

Fig.21 will appear on the screen. (see section 3.6-9)

- Stop with key **ESC**.

Subtotal: (automatically selected upon F9 if not in bowling)

- Press function key **F9**

**Subtotal or Game status ? (S/G)**

- Press key **S** to select the subtotal

A list of billing units and the appropriate rates appears; If the chosen billing unit for bowling was No. 4 (Games), it won't be possible to ask a subtotal; upon F9 the program will show automatically the game status.

- Press **CR** to exit

Change the options/accessories settings:

- Press function key **F8**

**Qty shoes (balls, cues) := 2\* New Qty :** (\* number given at assignment time)

- Enter the **new quantity** of shoes (balls / cues)
- Press **CR**

Repeat until all accessory values have been changed or confirmed (by just pressing **CR**)

In Bowling the options settings will follow:

**Options (Y/N)**

Proceed as in the normal assignment procedure; **CR** will confirm the values (i.e. will not change them), another typed value will be taken over as new value.

### 3.5) CLOSING A LANE / BILLING

From any status screen,

- Enter the lane number

**Note:** You may close a pair of lanes in one go: press : or ; and, like when opening the lanes, the **-league** text will remember you that you are working on a lane pair, rather than on a single lane.

- Press **CR** - the close options list (see previous chapter) is displayed.
- Press **CR** again, or **F7** to *close the lane*.

If the LANE PAIR Close was chosen, the next question will be:

**Transfer all counts of lane : X to lane : Y ? (Y<CR>/N) :**

- Press **Y** or **CR** to perform the transfer: All billing units, along with accessories and everything will be transferred to the actual bill.
- Press **N** to reject the transfer and close the bill normally.

If Y was pressed,

**Turn OFF lane : X (Y/N/CR) ?:**

- Press **Y** to close the neighboring lane, or
- Press **N** not to close it (NOTE: The units are *already transferred!*), or
- Press **CR** to switch the lane to stand-by and the pinsetter off.

**Discount:**

For a general discount:

- Press the **letter** that corresponds to the required discount rate and press **CR**

**To Mr. :**

- Enter a **name** or a **member number** to legitimate the discount; The name or number entered here will be displayed on the Manager Report and press **CR**.

For a **detailed discount** (without resolution of timezones):

- Press key **\*** (Shift-8 or Shift-3) and press **CR**

For a **detailed discount** with resolution of timezones:

- Press key **&** (Shift-7 or Shift-6) and press **CR**

```

***** STATUS OF BOWLING LANES *****
[-]No status avbl.
[-]Initial status
  On # - link off
          29/04/1999 09:28:12
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
  1 2 3 4 5 6 7 8 9 1 1 1 1 1 1 1 1 2
          0 1 2 3 4 5 6 7 8 9 0
          0
          9
          N.Plr.
          5
1-HANS HANSEN : 10 Tot: $ 4.00 Disc. : 0.00% Tot: 4.00
2-IVAN IVANOWITZ: 10 Tot: $ 4.00 Disc. : 0.00% Tot: 4.00
3-JOERG JOERGSEN: 10 Tot: $ 4.00 Disc. : 0.00% Tot: 4.00
4-KARL DER KLEI: 10 Tot: $ 4.00 Disc. : 0.00% Tot: 4.00
5-LOUISE HANSEN: 10 Tot: $ 4.00 Disc. : 0.00% Tot: 4.00
          rate:
          0.40
          SubTotal:
          20.00
          ESC->EXIT
    
```

The units distribution (here frames/balls) will be as even as possible. The operator may now change the distribution of the units (on the center column) or give a different discount rate to each single bowler (on the right column). The displayed bowler names are those of the players who played the latest game and can be modified in the left column. It is also possible to change the number of players (or rather: of different discount rates) on the bill (above the top row: field "N.Plr.").

- Use the **CURSOR** keys to move the cursor (here a bright bar).
- Move the Cursor all the way up to enter a new number of players (max.12)
- On the middle column, type in a **new value** to change the distribution of units; the remaining number will be distributed evenly among the following bowlers
- On the right column, type the **letters** to give a discount.
- On the leftmost column, type the **name** of the bowler, or on an empty line, enter a **new name** (after having modified the number of players, if not all names were returned by the Scoregraphic).

Each movement of the cursor will have the whole table re-computed and redisplayed. When moving the cursor upwards on the middle column, the units distribution will be redone. The total number of units to be billed is constant and cannot be changed.

When finished, to proceed normally, move the cursor to the middle or right column and

- Press **ESC**
- OK? (Y/N/R/A)**

- Press key **Y** to confirm and continue, or

- Press key **N** to return to the table and make more changes, or
- Press key **R** to restart with the original values and make more changes, or
- Press key **A** to abort and close the bill WITHOUT DISCOUNT

To perform a **Partial close**, move the cursor to the left column of the player that *plays on* and

- Press **ESC**

**ESC=End 1=Player N.3 continues 2=Player continues with acc.**

- Press **ESC** again, to proceed to the normal closing, or
- Press key **1** to remove the marked player and it's units from this bill, leaving him on the lane (automatical re-assign after closing). Or then
- Press key **2** to remove the marked player, reduce the number of each accessory by 1 and automatically reassign the player with 1 accessory of each type after closing this bill

If **1** or **2** were pressed, the marked player will be removed from all detailed discount tables and his data will be stored to be re-assigned automatically at the end of the current bill.

The program goes back to the discount table which shows one player less.

#### Explanations:

Normally the procedure will be terminated with the two keys **ESC** and **Y** with the cursor positionned on the middle or right column. The so entered discounts will be printed on the bill.

If instead **ESC** was pressed by mistake, pressing **N** allows to resume the changes.

If the table came out totally wrong, the start values can be recalled with the two keys **ESC** and **R**. Then the table will have the same look it had after pressing \*.

Use the PARTIAL CLOSE feature if a group of e.g. 5 players plays 4 games each, then leaves a lane but 2 members of that group go on. The operator will be able to bill 40 frames (or the programmed unit) to the three leaving players and leave the rest (240 plus already played frames of next game) assigned on that lane for it to be closed later. To do so the easy way:

- Press **CURSOR UP** to change number of players to **2**.
- Modify the number of billing units of the first player left on screen to match the total amount of all players that are *leaving now*. The rest will be attributed automatically to player #2 by the program when pressing **CR**.
- Move the cursor to the name (left column) of the second player.
- Press **ESC 1** (**ESC 2** if the players had rental accessories) to remove the remaining billing units, then
- Move the cursor on the middle or right column and, if needed add some discount letter (perhaps you need to modify anew the number of players if not all are entitled to discounts), finally, still in the middle or right column:
- Press **ESC Y**; the billing goes on and at the end, the Scoregraphic won't be closed, but instead on the Status Screen the lane is assigned again automatically.

**Note:** once a player has been set to "*continue*", the bill cannot be cancelled any more!

If a detailed discount table *with the resolution of time zones* was invoked (key **&**), the tariffs will be processed one by one, each having its own table; the subtotal shown



bottom right is the subtotal of all net amounts *of this tariff!* When exiting a table with **ESC Y** the next table will be shown automatically.

When finished with all kind of discount:

**New Total Cash (+/-) :**

**CR/F1=Cash F2=C.Card F3=Check**

This entry has double meaning: for first the displayed bill total may be modified. You may enter an amount that is to be added (prefixed by **+**) to, or subtracted (prefixed by **-**) from, the total billed amount. You may also enter an amount without prefix, which is then taken as new bill total. The relative amounts (+ or -) can be programmed as letters (see section **B9**) which will be shown between the lines. The second meaning behind this question is to state which means of payment the customer uses - the various means of payment will then be summed up separately in the Manager Report.

- Enter the required **correction**: either a **relative value**, which can be entered either as **amount** with a **prefix (+,-)** (e.g. **+3** or **-5.20**), or as one or more **letters**. (e.g. **S,S,B** for two **S**andwiches and a **B**eer) Or then, an **absolute value**, which can only be entered as **amount without prefix**. (e.g. **0.0** or **20.00**). OR:
- Don't type anything to accept the total billed amount.

Then,

- Press **CR** or **F1** if the customer pays cash, or
- Press **F2** if the customer pays with a credit card, or
- Press **F3** if the customer pays by means of checks, or finally
- Press **F4** if the customer uses yet another means of payment, e.g. credit.

**Note:** The Manager Report does not know the fourth means of payment and totalizes it together with **F3** - Checks.

If the billed amount was changed,

**Why?**

Here the change must be legitimated in any case. Also This message will be printed on the Manager Report.

- Enter the **legitimation** and press **CR**

**Print Bill (Y/N)**

- Press key **Y** to print out a receipt (see fig.18)
- Press key **N** to proceed without printing a receipt.

**Print games from (0=running CR for none) :**

If the customers require a printout of the games they played, by

- Pressing key **0** the latest (current) game will be printed, by
- Pressing key **1** the latest scoresheet in memory and the current game will be printed, and so on.

Since a Scoregraphic-scoresheet holds six lines, up to 60 lines can be printed.

Alternatively,

- Press **CR** to go ahead without printing any game.

**Close Bill? (Y,N,CR)**

- Press key **Y** to confirm and close the bill and to switch off\* the Scoregraphic of the selected lane.

---

\* The Scoregraphic switches to stand-by mode, i.e. the monitor will go on stand-by and the keyboard will be locked. The Pinsetter may be switched on behalf of an extra circuit in the Scoregraphic, which is available as an option.

- Press key **N** to abort the billing procedure without closing the bill (NOT POSSIBLE in Bowling if the billing units are 4=Games or if a PARTIAL CLOSE has been performed)
- Press **CR** to confirm and close the bill and to switch off\* both the Scoregraphic and the pinsetter of the selected lane.

### Shortcut key **ESC**:

As when opening the lane, by pressing **ESC** the programm skips all questions until the end of the closing procedure or a set flag in the file ESCFLAGS.DAT is reached. The possible stops are:

- Options on Closing (see section **C4**)
- "Discounts" selection
- "Total cash" alteration
- "Print bill?"
- "Print games?"
- Final "Close Bill?"

Additional, by setting flags in ESCFLAGS.DAT you may select wether or not to:

- Print the bill automatically when "Print Bill?" is skipped using **ESC**.
- Switch off\* pinsetter and monitor when "Close Bill?" is skipped using **ESC**.
- Ask the legitimation for global discounts.
- Ask the legitimation for modified grand totals.
- Ask if the billing units are to be transferred across lanes when closing a pair.
- Ask if the coupled lane has to be closed when closing a pair in league mode. If the question is skipped (flag=0), the flag determining pinsetter & monitor power will be taken account of.

When closing a pair of lanes in league mode (key :), the program transfers (or asks you to) the billing units from one lane to the other; this operation is not reversible and its effects remain in place even if the bill is *not* closed.

```
BMS Bowling Marketing Service AG
Werkstrasse 50 CH-8630 Rüti/ZH
Tel. ++41/25/251 55 00 FAX ++41 55 251 56 00
19/04/1999 09:31:32 Bowling Lane : 2
Begin : 08:58 Bowler : 5
          Balls : 89
Balls/Frames : 50 @ $ 0.40 20.00
Subtotal : $ 20.00
Shoes : 1 @ $ 2.50 2.50
Total due : $ 22.50
Balance : $
Payment : Cash
```

Thank you and Good-Bye.  
Scoregraphic (C) 1998, 1999 by BMS Bowling Marketing Service AG, Werkstrasse 50  
CH-8630 Rüti/Zürich (Schweiz).

### **3.6) REMOTE COMMANDS**

- Press function key **F6** or **6** and **CR**  
Fig.19 will appear on the screen.

---

\* The Scoregraphic switches to stand-by mode, i.e. the monitor will go on stand-by and the keyboard will be locked. The Pinsetter may be switched on behalf of an extra circuit in the Scoregraphic, which is available as an option.

```
***** >> REMOTE COMMANDS << *****
F1-Bowling      1) Black out recover
F2-Bowling DTimer 2) Start League (allocated lanes only)
F3-Bowling UTimer 3) Send Teams to lanes (league only)
F4-Billard      4) Transfer Teams between lanes LEAGUE
F5-Parameters   5) Transfer Teams between lanes OPEN
F6-Remote Commands 6) Transfer League Tournament
F7-Team Editor   7) Print scoresheet
F8-Quit         8) Score correction
               9) Show lane status
               A) Send Custom Commands (Colors etc.)
               B) Reset Pinsetter
               C) Restore Scanning
               D) Edit and send Screen Text
               E) Edit and send Window Message
               F) Transfer Bingo/Lijn between lanes
               G) Master menu (ESC)
Select number:
```

All the selections on this menu are facilities to help with the communication between the PC and the Scoregraphics. To name just few examples.

### 1) Black out recover

This operation is already known from section 1.1 of this manual. It can be applied after a total mains black-out, but it's not needed if the black-out concerned just the PC, for the statusscreens are being held on Hard Disk and not in Memory.

### 2) Start league (assigned lanes only)

This operation allows a synchronous start of a tournament. To use it, the lanes must have been assigned in LEAGUE mode and a team must have been transferred or entered to each lane (perhaps on behalf of selection 3).

- Press key **2**, then confirm the question with **Y**.

The Bowling status screen will appear shortly, while each assigned lane *that was not STARTED by remote control yet*, will be STARTED (same effect as pressing the START key on the Scoregraphic keyboard).

### 3) Send teams to lane pairs (league only)

- Press key **3**

**Lane number <CR to EXIT>:**

- Type in the **lane number** of a Scoregraphic which was assigned in LEAGUE mode (the left lane number, e.g. **3**) and press **CR**

The League teams list will appear on the screen.

**Select Type:**

- Press key (**1-5**) corresponding to the required game mode, or **CR**

**Team N.1**

**Team Name :**

Like upon assignment, it is again possible to either

- Enter a **team name**, followed by **CR**, then the names of all team members will be asked, or then
- Enter the **number** of a team out of the teams list, or then again
- Enter a **list of numbers** (e.g. 4,13,2) to combine several teams into one team.
- Terminate any input sequence with **CR**

**Team N.2**

**Team Name :**

- same procedure as above.

Then the teams will be sent to the lanes without any further check.

**Lane number <CR to EXIT>:**

- if more teams need to be sent, repeat the procedure. Else,
  - Press **CR**
- Fig.19 will appear on the screen.

The next four features will be useful in case a Pinsetter breaks down: After the transfer operation the teams can go on with their game on a new lane/lane pair without having to enter the data manually into the Scoregraphic.

#### 4) Transfer league teams between lane pairs

- Press key **4**

**From Lane :**

- Type in the **left lane number** of a source lane pair, e.g. **3** and press **CR**

**To Lane :**

- Type in the **left lane number** of a free target lane pair, e.g. **7** and press **CR**

All the data from the source lane pair will now be moved to the target lane pair *without any further checks*. This procedure lasts approx 30 seconds. Then, fig.19 will appear on the screen.

#### 5) Transfer open teams between lanes

- Press key **5**

**From Lanes Numbers (eg.1,4,6..) :**

- Type in one or more **lane number(s)** of source lane(s) and press **CR**

**To Lane:**

- Type in the **lane number(s)** of the target lane(s) and press **CR**.

**Print games from (0=running CR=none) :**

- Press **CR** for NO GAMES PRINTOUT or
- Press the number of stored games to print out (**0** being the currently transferred game which will always be added to the list of stored games).

The target lane will now be checked. If there is a game in course, this message will appear at the bottom of the screen:

**Warning! GAME IN PROCESS on lane N.: ## Break ? (Y,CR/N) :**

- Press key **Y** to confirm operation and *OVERWRITE* game in process, or
- Press key **N** or **CR** to abort the operation.

Again, the data will be moved during approx. 15 seconds, then fig.19 will appear on the screen.

#### 6) Transfer single league lanes in a tournament

- Press key **6**

**From Lanes Number (ex.1,4,6..) :**

- Here as many **lane numbers** as needed for the transfer operation may be entered, e.g. to perform a rotation on a 12 lanes tournament, enter **1,2,3,4,5,6,7,8,9, 10,11,12** and press **CR**.

**NOTE:** The **quantity** of lane numbers **must be even** (2,4,6 lanes), else an error message will ask anew for the entry.

**To Lanes Numbers (ex.1,4,6..) :**

- Here the permuted sequence of **lane numbers** will be entered, i.e. the picture of how the teams will switch lanes. In our above example, to move the teams two

lane pairs to the right and switch the starting lane, enter **10,9,12,11,2,1,4,3,6,5,8,7** and press **CR**.

**Print data ? (Y/N)**

- Press key **Y** to print out the last game(s) being transferred, or
- Press key **N**

This operation takes longer, depending on the number of lanes to be transferred. Then fig.19 will appear on the screen.

### F) Transfer single bingo/lijn lanes

This function is the exact copy of the OPEN transfer function and it does move Bingo™ or Lijn™ games. It does not move, however, OPEN games.

- Press key **F**

**From Lanes Number (ex.1,4,6) :**

- Enter the **source lane number(s)** and press **CR**

**To Lanes Numbers (ex.1,4,6) :**

- Enter the **target lane number(s)** and press **CR**

The games will be moved to the target lanes and can be continued there.

The following three functions are used to print, show and modify the scoresheet.

### 7) Print score

- Press key **7**

**Lanes Number (ex.1,4,6..) :**

- Type in a **list of lane numbers** (as in selection 6) and press **CR**

The score sheets of the current games of the requested lanes will be printed out on the line printer, then fig.19 will appear on the screen.

### 8) Score Correction

- Press key **8**

**Lane number <CR to exit> :**

- Type in the **lane number** of which the score has to be corrected and press **CR**

Fig.20 will appear on the screen:

BMS Bowling Marketing Service AG											Bahn Nr. : 2	29/04/1999	09:06:07
Status : OPEN Game in Process													
Nr	Name	1	2	3	4	5	6	7	8	9	10	Tot.	
1	HANS HANSEN	X	2-									14	
		12	14										
2	IVAN IVANOWITSCH	8/	32									18	
		13	18										
3	JOERG JOERGENSEN	X										0	
4	KARL DER KLEINE	81										9	
		9											
5	LOUISE HANSEN	X										0	
Enter Player number (<CR>=Exit) :													

**Enter Player number (<CR>=Exit) :**

- Type in the **number** of the player with the faulty score (e.g. **7**) and press **CR**

**LATE? (Y/N=<CR>) :**

- Press **Y** if the player is to be set late (will be executed *IMMEDIATELY!*) Or
- Press **N** or **CR** to go on.

If instead the player was already LATE,

**PLAY? (Y/N=<CR>) :**

- Press **Y** to make the player catch up. (will be executed *IMMEDIATELY*; NOTE: Only ONE PLAYER AT A TIME may be in Catch-up mode!) Or
- Press **N** or **CR** to go on.

**Player Name (<ESC> to abort) :**

- Correct the **name** if necessary, then
- Press **CR** to acknowledge the change, or
- Press **ESC** to ignore the change

**Score (<ESC> to abort) :**

- Correct the **score** where necessary, then
- Press **CR** to acknowledge the changes, or
- Press **ESC** to ignore the changes.

**NOTE:** Both bowlers and frames may be added to the existing line. However, care should be taken not to produce impossible sequences, i.e. player number 3 never can have more frames than player 2.

Repeat procedure as needed, then:

- Press **CR** to exit.

**Send data to lane ? (Y/N=<CR>)**

- Press key **Y** to make changes effective, or
- Press key **N** or **CR** to skip changes.

Fig.19 will appear on the screen.

**9) Show lane status**

- Press key **9**

**Lane number <CR to EXIT> :**

- Type in the **lane number** of which the status is requested and press **CR**

Fig.21 will appear on the screen:

BMS Bowling Marketing Service AG		Bahn Nr. : 2		29/04/1999 09:06:07								
Status : OPEN Game in Process												
Nr	Name	1	2	3	4	5	6	7	8	9	10	Tot.
1	HANS HANSEN	X	2-									14
		12	14									
2	IVAN IVANOWITSCH	8/	32									18
		19	18									
3	JOERG JOERGENSEN	X										0
4	KARL DER KLEINE	81										9
		9										
5	LOUISE HANSEN	X										0
Press <ESC> to EXIT												

This screen will be updated continuously.

- Press **PgDn** to see players 7-12, **PgUp** to see plr. 1-6 or **ESC** to stop. Then, fig.19 will appear on the screen.

**A) Custom Commands Set (Colors etc.)**

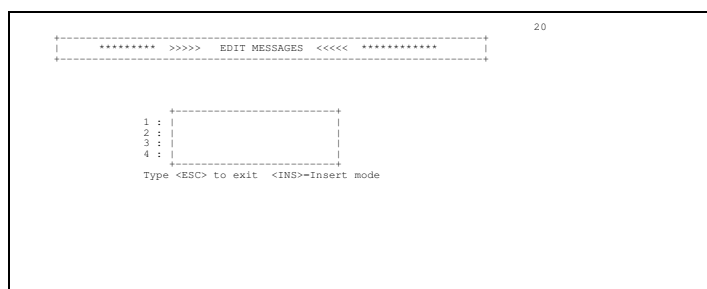
- Press key **A**

**Lanes Number (ex.1,4,6..) :**

- Enter a **list of lane numbers** and press **CR**

Fig.22 will appear on the screen.





To edit the text the following keys are active:

- The four **CURSOR** keys (←↑→↓) move the cursor in the given direction.
- The **INS**-key toggles the insert-mode on and off; this mode helps to center the text within the margins. When the line is left, the insert-mode is automatically switched off.
- The **BACKSPACE**-key (broad key with an arrow to the left) deletes the character immediately left of the cursor. And finally,
- The **ESC** key (escape), which terminates the entry.

After pressing ESC the following message appears:

**C=confirm E=edit again A=Abort ?**

- Press key **C** to confirm and send the message to the chosen lanes, or
- Press key **E** to resume the editing (if ESC was pressed by mistake), or
- Press key **A** to exit without sending the message; the program will proceed with the question "Send Message to Lanes Numbers"

After succeeded transmission:

**Add temporary message to custom commands? (Y/N)**

- Press key **N** to start over without saving the message, or
- Press key **Y** to store the message (until the CCS program is left)

**Message Name:**

- Type the message name (in the custom commands list) and
- Press **CR**

The text is now available whenever the custom commands list is on screen, until the selection F8-8 of the main menu is chosen. To leave:

- Press **CR** once more.

Fig. 19 will appear on the screen.

### **E) Edit and Send Window Messages**

The usage of this function is identical to option D). The only difference is that only one line à 75 characters may be sent at once. The hereby transmitted message stays on the Scoregraphic-screen at the position chosen during the entry until either a keyboard entry is done, or the custom command WINDOWOFF is transmitted. Useful for messages like "Please put the balls back into the racks" or "The Ferrari with the licence plate XY-123 is being towed away!"

### **F) Master Menu**

To get back to the main menu,

- Press key **F**

Fig.1 will appear on the screen.

**NOTE:** It is possible to switch **directly** to any status screen or to the various menus using the following **function keys**:



- F1 - BOWLING STATUS SCREEN**
- F2 - BOWLING DOWNTIMER STATUS SCREEN**
- F3 - BOWLING UPTIMER STATUS SCREEN**
- F4 - BILLARD STATUS SCREEN**
- F5 - CENTER CONFIGURATION**
- F6 - REMOTE COMMANDS**
- F7 - EDIT TEAMS**
- F8 - NEW LEAGUE TEAM / EXIT CCS**
- F9 - ADD TEAM TO WAITING LIST**
- F10 - MASTER MENU**

**(Note: F8 has two different meanings!)**

A complete list of the *active function keys* is displayed on the screen whenever this option is given, either on the left (in the menus) or on the bottom line of the screen (in the status screens).

## 4) CUSTOM COMMANDS

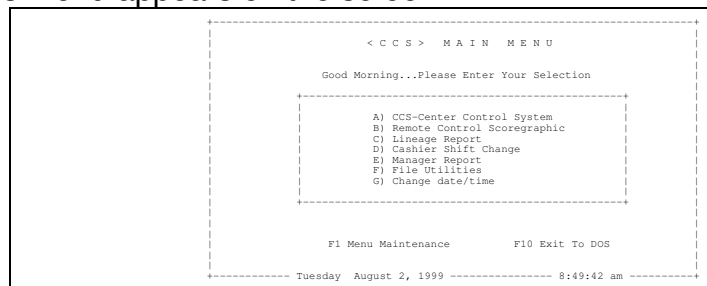
The PC is connected with all the installed Scoregraphics. In order to exchange informations between PC and the Scoregraphics a special communications protocol has been developed. The menu selection **F6 - Remote Commands / A) Custom Commands Set (Colors)** makes some of these special protocol commands available. The following list describes a subset of all Scoregraphic remote commands, since most of them will only work in conjunction with others and those soliciting an answer from the Scoregraphic cannot apply to this function.

### 4.1) How to edit the custom commands file

**WARNING:** This overview is addressed to *experienced PC users* who know their way through a file system and in or out of an editor. We encourage those not familiar with computers to skip this section; it would confuse rather than clarify.

- In the main menu, press key **F8** or keys **8** and **CR**.

The Direct Access menu appears on the screen:



- Press key **F** to select **File utilities**

**Please enter password for File utilities:**

- Key in the correct password (**B M S**) - NOTE: To prevent access to this section, we recommend that the access password to this submenu be changed - please consult the Direct Access manual enclosed.

In the appearing sub-menu, use the first option:

- Press key **A** to select **display/change files**

The LIST File Viewer screen is displayed. Please consult the LIST.DOC file for documentation about LIST.COM. The LIST.COM program is Shareware.

- To **view** a file, move the cursor over the file name and press **CR**. Press **ESC** to get back to the file list once you've seen enough.
- To **edit** a file, move the cursor over the file name and press key **E** - the DOS EDIT editor is thus invoked.

Short DOS-EDIT overview:

Basically in INSERT mode, can be toggled to OVERWRITE mode and back by pressing the **INS** key.

Pull-down menu letters are highlighted once **F10** or **ALT** are pressed.

Some WordStar™-like editing commands - like **^Y (CTRL-Y)** to clear the line.

Some Word™-like block commands (cut/copy/paste etc.) using **SHIFT, CTRL, INS** and **DEL** key combinations.

Quit by selecting the latest option in the **File** menu. Asks back if the file needs to be saved (if it was changed). No Hot-Key to Quit available.

Quit the LIST.COM program by pressing the **ESC** key - this will lead you straight back to the Direct Access menu.

#### **4.2) Description of the protocol commands**

The file COMMANDS.DAT contains one command per line with a maximum (dictated by the dimensions of the screen window) of 60 command lines. Every line holds the **DESCRIPTION** of the command, which is a sequel of letters with neither spaces nor interpunction and is delimited by **A SINGLE SPACE**. After the space comes the **COMMAND** itself, which always consists of **ONE OR MORE LETTERS** (the case [upper / lower] must be observed!) and, where needed, **ADDITIONAL DATA** which follow the letter(s) **IMMEDIATELY**. It is highly important that no invalid or syntactically wrong commands be added to the list, since then the results are unpredictable!

The commands are listed as follows: the **PURPOSE** section will tell *what* the command is about to do; the **COMMAND** section gives the *command letter(s)* (watch the case!), the **DATA** section describes --- what it says, in detail and finally the **EXAMPLE** gives a sample line for COMMANDS.DAT that can be copied as is, except for the brackets, which are iterators: [3 '%'] is to be replaced by %%% in typing.

**Purpose** : RESET DEFAULT COLORS.  
**Command** : L  
**Data** : (NONE)  
**Example** : DEFCOL L

**Purpose** : SET CUSTOMIZED COLORS.  
**Command** : L  
**Data** : 3 blocks of 5 entries with 3 numbers each.  
an **Entry** has the syntax **RR,GG,BB** where: **RR** are two digits (00 to 15) that stand for red intensity, **GG** are two digits (00 to 15) for green intensity, **BB** are two digits (00 to 15) for blue intensity.  
*Examples:* **15,15,15** is bright white, **00,00,00** is black, **00,15,15** is bright yellow, **02,00,02** is dark purple  
a **Block** holds five entries, separated by commata:  
The **first** entry defines the overall background color,  
the **second** entry defines the color of text and score,  
the **third** entry defines the color of the scoresheet background,  
the **fourth** entry defines the color of the lines and  
the **fifth** entry defines the color of the active player line.  
When programming the colors on the Scoregraphic (**CODE+PRO+C**), the blocks are named: 1=ROUND, 2=FORE, 3=BACK, 4=LINE, 5=MARK.  
The **Data** itself consists of **ONE** or **THREE** blocks, sparated by com-mata; first block = **OPEN** colors, second = **LEAGUE ODD GAMES** and third block = **LEAGUE EVEN GAMES**. Note that it is not allowed to specify just ONE League block. That's why ONE or THREE blocks.  
**Example** : OPENCOLS L00,03,00,15,07,00,05,00,00,15,15,15,00,00,00

**Purpose** : RESET ( TO INITIAL STATUS "PRESS NEW TO START")  
**Command** : R  
**Data** : (NONE)  
**Example** : RESET R

NOTE: Sending this command has the same effect as to press **EYE+START** during a game.

**Purpose** : SET ZOOM MODE ( 5 FRAMES DISPLAY )  
**Command** : **c** ( small 'C' )  
**Data** : **(NONE)**  
**Example** : ZOOM5 c

**Purpose** : RESET ZOOM MODE ( 10 FRAMES DISPLAY )  
**Command** : **d**  
**Data** : **(NONE)**  
**Example** : ZOOM10 d

**Purpose** : SWITCH OFF MONITOR SIGNAL  
**Command** : **a**  
**Data** : **(NONE)**  
**Example** : MONITOFF a

This command blanks out the Scoregraphic CRT signal. The monitor returns to its previous programming - stand-by (off) or any aerial UHF or VHF channel program. (no AV, since AV is the Scoregraphic). Thus the monitors of non-assigned lanes can be used for advertising purposes (playing video tapes). Advanced possibilities are featured by the AES™ option.

**Purpose** : SWITCH ON MONITOR SIGNAL  
**Command** : **b**  
**Data** : **(NONE)**  
**Example** : MONITON b

NOTE: This commad **MUST BE** followed by **R** (RESET) or **J** (CODENEW)

**Purpose** : SEND ADVERTISING TEXT (INITIAL STATUS SCREEN)  
**Command** : **A**  
**Data** : 4 Lines @ **25 Characters** each, separated by a STAR ( \* )  
NOTE: **ALL 100 Characters MUST BE TYPED!!**  
**Example** : CLEARSCREEN A[25 ' ']\*[25 ' ']\*[25 ' ']\*[25 ' ']  
(CLEARSCREEN A ( 1234567890123456789012345 ) \* ...)

Other example: ADVBOOZE A[25 ' ']\* ENJOY BOOZE-COLA \*[25 ' ']\*[25 ' ']

Suggestion: Use **F6-D** for frequently changing texts!

**Purpose** : SOUND BUZZER ON SCOREGRAPHIC  
**Command** : **I** ( Capital 'i' )  
**Data** : **(NONE)**  
**Example** : ALARM I

**Purpose** : BLACK OUT RECOVER  
**Command** : **J**  
**Data** : **(NONE)**  
**Example** : CODENEW J

NOTE: Sending this command has the same effect as to press the NEW key while holding down the CODE key (CODE+NEW) on the Scoregraphic

**Purpose** : START LEAGUE

**Command** : X ( Capital 'x')

**Data** : (NONE)

**Example** : START X

NOTE: Sending this command has the same effect as to press the START key on the Scoregraphic.

**Purpose** : DISABLE SOME OR ALL KEYS

**Command** : i

**Data** : xYYY or x\*

where x = 'c' for KEY without CODE or = 'C' for CODE-KEY and YYY = Decimal ASCII Code of the key:

0 = 048, 1 = 049 ... 8 = 056, 9 = 057,

A = 065, B = 066 ... Y = 089, Z = 090,

Following keys will be disabled on BOTH LANES of the Scoregraphic AT THE SAME TIME:

FOUL = 192, INHIBIT = 198, REPEAT = 196,

NEW = 197, ERROR = 195, PRINT = 202,

ENTER = 193, START = 194, DELETE = 199,

= 060, = 062.

\* means that ALL KEYS will be disabled.

NOTE: To disable the whole keyboard, two separate commands are needed: first the normal keys have to be disabled with "ic\*", then "iC\*" disables all the switched keys (CODE+key). We suggest you rely on the CCS options to lock/unlock the whole keyboard - use i / j commands for single keys only.

**Example** : CODEPOFF ic080

REPEATOFF ic196

**Purpose** : ENABLE SOME OR ALL KEYS

**Command** : j

**Data** : xYYY or x\* (exactly the same syntax as command i)

**Example** : CODEON jC\* (enables ALL previously locked CODE-keys)

**Purpose** : REPEAT GAME WITH SAME PLAYERS

**Command** : r

**Data** : (NONE)

**Example** : REPEAT r

NOTE: Sending this command has the same effect as to press the REPEAT key on the Scoregraphic.

**Purpose** : DISABLE PRINTER

**Command** : G

**Data** : (NONE)

**Example** : PRINTOFF G

Suggestion: rely on the CCS option settings to enable or disable the Scoregraphic printer.

**Purpose** : ENABLE PRINTER

**Command** : **g**

**Data** : **(NONE)**

**Example** : PRINTON g

**Purpose** : PRINTOUT REQUEST

**Command** : **M**

**Data** : **(NONE)**

**Example** : PRINT M

**Purpose** : CHANGE LANGUAGE

**Command** : **D**

**Data** : **x**

where **x** = **D** / **E** / **F** / **I** for respectively **D**eutsch (German), **E**nglish, **F**rançais (French) or **I**talian. (These are the languages supported by the Scoregraphic) Dutch instead of Italian is available on request.

**Example** : ENGLISH DE

FRENCH DF

ITALIAN DI

GERMAN DD

**Purpose** : CHANGE COLORS OF WELCOME SCREEN

**Command** : **yL**

**Data** : like command **L** for OPEN Colors

The syntax is very close to the OPEN color change command - five entries @ three values each; the values being **RR,GG,BB** and the entries referring to the five colors visible on the welcome screen.

**Example** : LOGOCOL yL02,02,08,15,15,15,04,02,02,14,14,00,00,00,00

**Purpose** : CHANGE COLORS OF MESSAGE WINDOW

**Command** : **yK**

**Data** : reduced color record (only 3 instead of 5 entries)

**Example** : WINCOL yK15,15,00,00,00,00,15,00,00

**Purpose** : SWITCH MESSAGE WINDOW OFF

**Command** : **T**

**Data** : **(NONE)**

**Example** : WINDOWOFF T

**Purpose** : START BINGO & LIJN GAMES

**Command** : **O8**

**Data** : **B** (for Bingo) or **L** (for Lijn)

**Example** : BINGO O8B

LIJN O8L

**Purpose** : CHANGE NUMBERS OF BINGO PYRAMID  
**Command** : **IBN** (small 'L', capital 'b', capital 'n')  
**Data** : **[7 n]\*[6 n]\*[5 n]\*[4 n]\*[3 n]\*[2 n]\*n\***  
where n is a digit between **0** and **9** or **X**. The values of the circles in the pyramid will be filled row by row, left to right, starting with the bottommost row. The star is a separator.  
**Example** : BINGONUMS IBN1234567\*123456\*12345\*1234\*123\*12\*X\*  
SHORTBINGO IBN0000000\*000000\*XXXXX\*XXXX\*XXX\*XX\*X\*  
(use SHORTBINGO to see who's faster at throwing 15 strikes)

**Purpose** : CHANGE NUMBERS OF LIJN GRID  
**Command** : **IAN** (first letter small 'L')  
**Data** : **[25 n]\*[25 n]\***  
where n is a digit between **0** and **9** or **X**. The values of the grid will be filled in game progress order, column by column, top to bottom, starting from the leftmost field. The last field's value of the first half (in the example a 9) **MUST BE EQUAL** to the first of the second half! Illegal characters (like '<' or '=') make the Scoregraphic take the standard values.  
**Example** : LIJNNUMBS IAN1223334444555556666777889\*9XX1112222333334444555667\*

Following commands have only effect if the optional AES-Board is installed. Else, they won't have any visible effect. Users that have an I/O-Board installed instead, are requested to use these commands, if needed, with knowledge of the effect only!

**Purpose** : SWITCH TO SCORESHEET OUTPUT  
**Command** : **yl**  
**Data** : **00**  
**Example** : SCORESHEET yI00

**Purpose** : SWITCH THE RGB-INPUT (ANIMATOR OPTION) TO MONITOR  
**Command** : **yl**  
**Data** : **20**  
**Example** : ANIMATOR yI20

**Purpose** : SWITCH CAMERA1 TO MONITOR  
**Command** : **yl**  
**Data** : **80**  
**Example** : CAMERA1 yI80

**Purpose** : SWITCH CAMERA2 TO MONITOR  
**Command** : **yl**  
**Data** : **C0**  
**Example** : CAMERA2 yIC0

**Purpose** : SWITCH COMPOSITE-INPUT (VCR OPTION) TO MONITOR  
**Command** : **yl**

**Data** : 42  
**Example** : VCR yI42

**Purpose** : SWITCH THE SCORESHEET TO AUX LINE

**Command** : yI

**Data** : 04

**Example** : TRANSMIT yI04

**NOTE:** Only ONE LANE MAY BE trasmitting on the line at a time! If more than one lane is requested to trasmit, split the line in two.

**Purpose** : SWITCH THE AUX LINE TO MONITORS

**Command** : yI

**Data** : 02

**Example** : RECEIVE yI02

**Purpose** : SWITCH OFF THE AUTOMATIC SWITCH SEQUENCE

**Command** : yG

**Data** : (NONE)

**Example** : SENSOROFF yG

**NOTE:** This is the default setting when powering up the Scoregraphic. This commands acts on BOTH lanes!

**Purpose** : SWITCH ON THE AUTOMATIC SWITCH SEQUENCE

**Command** : yF

**Data** : (NONE)

**Example** : SENSORON yF

**NOTE:** Use this command to enable the programmed automatic switch sequence (useful e.g. for instruction, when cameras & VCR are installed). This commands acts on BOTH lanes!

**Purpose** : STORE AUTO-SWITCH SEQ "CAMERA1 - CAMERA2"

**Command** : yZ

**Data** : 80C0

**Example** : PRCAM1CAM2 yZ80C0

**NOTE:** Useful for instruction; send PRCAM1CAM2, then SENSON to the lane, switch the VCR to REC and let the pupil play. After this, send the commands SENSOFF, VCR , then rewind the tape and set the VCR to PLAY to discuss the throws with the pupil.

**Purpose** : STORE AUTO-SWITCH SEQUENCE VCR

**Command** : yZ

**Data** : 4242

**Example** : PRVCR yZ4242

**NOTE:** Useful for publicity on VCR-Tape or videoclips or anything else that can be broadcast as a Composite signal on the AUX line.

**Purpose** : STORE AUTO-SWITCH SEQUENCE RGB

**Command** : yZ



**Data** : 2020

**Example** : PRANIMATOR yZ2020

**NOTE:** Useful for publicity created on a PC using the ANIMATOR software, or anything that can be broadcast as a RGB signal.

**Purpose** : STORE AUTO-SWITCH SEQUENCE SENSOROFF

**Command** : yZ

**Data** : 0000

**Example** : PRSENSOFF yZ0000

**NOTE:** Useful if only one lane wants to use the sensor but the other lane does not need it; the command SENSORON acts on both lanes, but by sending this command to one of both lanes, this lane won't switch automatically. All the PR-commands will be stored in *permanent* memory of the Scoregraphic. To switch back e.g. to Camera-Autoswitch-Sequence, just send the command PRCAM1CAM2!

The final two commands are reserved to I/O board use only. They serve to exploit the switching functions controlled by keyboard rather than by switch -

**Purpose** : SWITCH FOUL LINE RELAIS ON/OFF

**Command** : yP

**Data** : 0 or 1

**Example** : FOULON yP1  
FOULOFF yP0

**NOTE:** To function properly, EPROMS with version 5.11 or later, as well as the specially modified I/O-Board shall be installed. Foul Relais state is stored beyond power loss and automatically restored after blackout. The foul relais is shared by both lanes.

**Purpose** : SWITCH INSTRUCTION RELAIS ON/OFF

**Command** : yQ

**Data** : 0 or 1

**Example** : INSTRON yQ1  
INSTROFF yQ0

**NOTE:** See note at **yP**; the instruction relais is individual for each lane and its state is not stored once power is lost.

### **4.3) Recapitulation**

Should the case be that the COMMANDS.DAT file was badly corrupted, by deleting it (refer to the DOS manual) it will be restored to the contents listed on the last page of this manual. That listing also is meant to be an example to help understanding the various data formats.

**NOTE:** Users with an AES-System installed, should COPY the original file COMMANDS.DAT provided with the installation floppy. Refer to the DOS manual how to do so.

## 5) ***THE LINEAGE REPORT***

This feature serves to have a quick overview of the daily lineage without having to print out a manager report. In the main menu of CCS-2,

- Press function key **F8** or keys **8** and **CR**

The Direct Access menu will appear on the screen.

- Press key **C** to choose the lineage report

The lineage report main menu appears. It offers the following four options:

### **5.1) Archive Reports**

This option allows to visualize or print out reports of earlier dates.

- Press key **1**

**Enter date (dd/mm/yyyy)**

- Enter the **date** of the requested report. Note: the entry has to be done exactly as requested: for May 9th enter **09/05/1991**. The zeroes have to be entered as well as the slashes and as the four digits or the year!
- Press **CR**

Provided the file is found, an overview of the lanes is shown, with the required statistic data printed beneath the lane numbers

The daily totals have to be read vertically, top to bottom, the throws on top of the frames.

**1-Print 2-Histogram print 3-Exit :**

- Press key **1** to print out the displayed informations, along with the daily total and the average, or:
- Press key **2** to print out a histogram (a bar chart) using the displayed informations and the daily maximum, or:
- Press key **3** to get back to the lineage report main menu.

### **5.2) Actual Stored Report**

This option allows to print the actual report, and gives exactly the same output as option 1, only that the data taken is the actual working day's data, cumulated until the latest CCS-2 bill. Running games are not registered, for the counters will only be updated upon billing.

- Press key **2**

The lineage report overview will appear on screen

**1-Print 2-Histogram print 3-Exit :**

- Press key **1** to print the data, or
- Press key **2** to print a histogram of the data, or
- Press key **3** to exit without printing.

### **5.3) Realtime Report**

This option gives the most actual report, but it needs to be run on the PC that is linked directly to the Scoregraphics: before the data are displayed, all Scoregraphics are scanned and the counters are read once more to register running games.

- Press key **3**

The figure displayed now has included the status given by the scanning procedure (see sections 2.7 / 3.2 of this manual), but mainly looks like figure 28. The possible choices are again Print, Histogram Print and Exit (key **1**, **2** or **3** respectively).

**5.4) Exit**

To leave the lineage report feature,

- Press key 4

The Direct Access menu appears on screen

To get back to the CCS-2 program,

- Press key **A**

**6) THE MANAGER REPORT**

The Manager Report gives a daily or cumulated (weekly / monthly or on even wider periods) financial report of the incomes registered with the CCS-2 program. The program itself writes a compact journal file, which will then be read out, summed up and printed out by the Manager Report program. There is a choice of eight possible combinations; those containing the "CASH REPORT" give the most detailed information, inasmuch as they list up every lane and the frames played on it and all totals for each tariff. We suggest you print out all eight variants of the Manager Report to see what the differences are and then you can decide which variant fits best your purposes. When trying to print out the first journal ever (concerning the day of the installation or of a clumsy update) the journal header might not be coherent to the configuration data.

- From the CCS main menu press **F8**

The Direct Access menu appears

- Press **E** to select the Manager Report submenu

**Please enter the password for Manager Report:**

- Enter the appropriate password (**B M S**) - to change it consult the Direct Access Manual.

The Manager Report submenu appears - The selections **A** to **H** invoke one of eight variants of the Manager Report; the **I** selection prints a *CUMULATED REPORT*, i.e. sums up the results of all daily reports printed out between two dates of your choice; the **J** selection toggles on/off the banners to the various reports.

- Press any of the letters **A** to **H**, for instance **A**

**R1: Press CR or enter date dd.mm.yy and press CR**

- Press **CR** if the report to be printed is the one of the current (or just finished) business day. Or:

- Enter the **date** of the report to be printed and press **CR**.

**Press CR or enter extra option and press CR**

- Press **CR** to start the report processing without further options, or:
- Enter any of the following options and press **CR**

Opt.	Purpose	Example
-O	Redirect <b>O</b> utput	-OLPT2
-F	Change number <b>F</b> ormat (see table below)	-F0
-E	Redirect <b>E</b> rror list	-ENUL
-L	Set date format (parameter: D=european / E=english)	-LD
-R	Select the <b>R</b> esolution of the Time Report	-R9
-T	Split the day	-T00:00
-U	<b>U</b> ppdate the CFG file (only after one or more of above options)	-F2 -U

-NFF **No FormFeed** at the end of the report printout -NFF  
 -X Print **X**-tra info - internal frame and throw counter sums -X

The required report is printed out and the program returns to the Direct Access menu.

TABLE: The number formats

-F parm. value	number format	value	number format
0	123'456'789.01	5	123'456'789'012
1	123,456,789.01	6	123,456,789,012
2	123.456.789,01	7	123.456.789.012
3	123 456 789.01	8	123 456 789 012
4	123 456 789,01		

Variant: **THE CUMULATED REPORT:**

- In the Manager Report submenu, choose selection **I**.
- Enter date **dd.mm.yy** of **FIRST** day and press **CR**
- Enter the date for the **first** day to be summed up and press **CR**
- Enter date **dd.mm.yy** of **LAST** day and press **CR**
- follow the instructions.

**Press CR or enter extra option and press CR**

- Again, press **CR** for NO OPTIONS, or enter any option listed above and press **CR**.

Important: In order to be able to sum up, the journals need to have been printed at least once - when doing so a .TOT file is created which holds the daily totals for that day and which allows to print out a year's totalization within few seconds (instead of *hours* if every single journal had to be scanned again).

Variant: **THE CASHIER SHIFT CHANGE:**

When there is the need to do a shift change, the cashier that leaves counts the cash drawer contents, sums up all checks and - if possible - the shift subtotal of the credit card reader; then, she/he will press the keys **F10 F8 D**, enter the access password (which currently is **B M S**) and enter the amounts the program asks for. The program thereafter scans the journal file and prints out a balance report. The shift change is locked for two hours, once it was printed.

Messages:

**Mspool2 already installed; Purge, Disable, Enable (P/D/E)?**

- Press **CR**; this message appears when printing more than one manager report the same day.

**Runtime Error 160 At xxxx:yyyy**

- Don't care about the **x**-es and **y**s; the runtime error 160 is caused by a printer that is SWITCHED OFF or OFF LINE or that is simply not available because the cable dropped out of the socket... check and retry!

**Runtime Error with any other number**

- NOTE DOWN: the complete message (take care not to mistake a 0 for a D or an 8 for a B and vice versa - the numbers contain digits *AND* letters!); what caused the error; the program running; and REPORT TO BMS!

## **7) INSTALLATION UNDER WINDOWS**

Booting the PC with the CCS-3 disk (as described in chapter 1) will install the program. As a matter of fact this operation creates also a new autoexec.bat file which contains all startup information. This way the PC will automatically load the CCS-3 program by switching on the PC. Note that CCS-3 is an application that does not need Windows as platform therefore Windows will not be started. In case that you have already installed Windows on your PC and want to apply the CCS-3 on that Windows platform then proceed as follows:

- 1) In order to avoid the manipulation of the autoexec.bat file make a copy of the autoexec.bat file from the harddisk (or just rename it).
- 2) Then insert the CCS-3 disk and switch on the PC (see chapter 1). This will install the CCS-3.
- 3) Switch the PC OFF and turn it ON again. Quit the CCS-3 Main menu by Pressing F10 and typing "BMS" as password.
- 4) Type "WIN" to start Windows..
- 5) Replace the autoexec.bat file with your copy.
- 6) Create a Shortcut by clicking the right mouse button, then "shortcut.." and browse to the file:"c:\ccs\_bms\bms11.exe"

Done !

## THE CONTENTS OF THE FILE COMMANDS.DAT AS GENERATED AUTOMATICALLY BY THE CCS WHEN MISSING

The Character **J** at the end of the CLEARSCREE command denotes the end of that line (otherwise invisible) and *is not part of the file's contents.*

```
DEFCOL L
OPENCOL1 L00,03,00,15,07,00,05,00,00,15,15,15,00,00,00
OPENCOL2 L00,00,01,15,07,00,05,00,03,15,15,15,00,03,00
OPENCOL3 L05,00,04,15,07,00,00,00,01,15,15,15,00,03,00
OPENCOL4 L05,00,00,15,07,00,00,00,00,15,15,15,00,00,05
LEAGCOL1
L07,00,04,15,15,15,00,00,07,07,07,07,02,00,00,05,00,00,15,07,00,00,00,00,15,15,15,00,00,05,05,00,
04,15,07,00,00,00,01,15,15,15,00,03,00
LEAGCOL2
L00,11,11,00,00,00,15,15,00,00,00,07,02,00,00,07,00,04,15,15,15,00,00,07,07,07,07,02,00,00,00,00,
01,15,07,00,05,00,03,15,15,15,00,03,00
LEAGCOL3
L03,06,00,00,00,00,15,15,00,00,00,07,07,07,07,00,03,00,15,07,00,05,00,00,15,15,15,00,00,00,03,06,
00,00,00,00,15,15,00,00,00,07,07,07,07
RESET R
CLEARSCREE A * * *
J
START X
DEUTSCH DD
ITALIANO DI
FRANCAIS DF
ENGLISH DE
REPEAT r
ZOOM5 c
ZOOM10 d
MONITOFF a
MONITON b
REPEATOFF ic196
REPEATON jc196
KEYBOFF ic*
KEYBON jc*
CODENEW J
ALARM I
PRINTOFF G
PRINTON g
PRINTOUT M
WINDOWOFF T
BINGO O8B
LIJN O8L
```