

## 1. Introduction

The Masterscorer is a scoreboard that's been specially developed for the sport of darts. The scoreboard takes the place of writing on a blackboard or scraps of paper and so avoids the usual masses of calculation work or possible confusion/mistakes.

But the Masterscorer scoreboard offers other features as well - such as automatic calculation of the thrown average and advice during particular games. Another very welcome feature is the Trainer. You can use the Trainer to play an entire match against the computer, with the scoreboard acting as your opponent. The standard of your opponent when playing against the scoreboard can be set at one of 9 different levels.

A minimum of 1 and a maximum of 4 players can play simultaneously.

For a full match a value can be set for legs and sets.

While the match is in progress the computer shows the current and immediately previous scores.

Corrections can be made up to 10 steps back.

This manual explains in step-by-step fashion how the system can be pre-set for the various games and how the score is kept. It also gives concise explanations of the rules of each game.

If you fold out the inside of the cover of the manual you'll be able to see exactly where each part is located while you're reading the manual. All the parts to be found in this overview are printed in the manual in *italics*.

**IMPORTANT:** to prevent damage to the unit, please read this manual through completely and carefully before starting to use the Masterscorer.

We hope the Masterscorer gives you lots of pleasure!

Benitos Special Sports.

## 2. Description of parts

Your Masterscorer package contains the following items:

- Adapter
- Scoreboard
- Manual

The adapter is connected to the scoreboard as follows:

Insert the small plug of the mains adapter into the scoreboard. Now insert the large plug into the wall socket. The scoreboard will now come on automatically. For information on switching the unit on and off, see section 3 of this manual.

## 3. Switching on and off

You can switch the Masterscorer off in 2 different ways:

### 1. Isolating the scoreboard from the mains

To do this, pull the large plug out of the wall socket. The scoreboard is now isolated from the mains and no displays will any longer be visible.

### 2. Putting the scoreboard on 'Stand By'.

Press the Select key several times until the text "SELECT OFF" appears on the displays. Now press the Enter key.

The scoreboard is now on 'Stand By'. This does not mean that the scoreboard is isolated from the mains. The illuminated parts, apart from 1 small point, will all be off.

When the scoreboard is on 'Stand By' a minimum amount of current is used. The scoreboard can be switched on again by pressing any key.

## 4. Pre-settable games

The Masterscorer can be used to keep the score for several different types of darts games:

301, 501, 701, 901, 1001, Tac Tic, Cricket and Around the Clock.

Below we explain the various rules of each game in turn, and how they can be entered. We'll also explain the functions of the various displays and LEDs.

#### 4.1 301/501/701/901/1001

These games will be explained in the same section because the operations are the same for all of them. The only difference is the starting position. NOTE: when playing 301 you have to start with a double!

##### 4.1.1 Rules of the game

For convenience we've decided to explain the most commonly played of all these games: 501.

In 501 you always play an odd number of legs: Best of 1, Best of 3, Best of 5 and so on. So a 501 Best of 5 match, for example, means that a 501 leg is played a maximum of five times. A player who wins three legs wins the match. When 501 Best of 3 is played you have to win at least twice to win the match.

In 501 the aim is to reduce the starting number of 501 points to zero as quickly as possible. The most difficult part of this game comes right at the end, because you have to finish with a double. If, for example, there are 40 points on the scoreboard then you have to hit the narrow upper segment of the 20. If you only hit a single 20, however, then you're still 20 points short.

In the next throw you'll have to hit the outermost narrow segment of the number 10. If you throw precisely the number that's shown on the scoreboard but have not thrown a double then the game has not yet been won and the total score for the three darts will be 0. Also, if you score more than the number on the scoreboard then 0 points will be scored for all 3 darts: then we say that 'the score is bust'.

##### 4.1.2 Settings

To take the game 501 as an example, set the scoreboard as follows:

1. Switch the scoreboard on (if it's not on already).
2. Press the Select key; the scoreboard will show 'SELECT' on the red displays.
3. Press the Select key as many times as is necessary until the game you want to play appears below 'SELECT' (example: 501)
4. Confirm by pressing the Enter key
5. The scoreboard will show 'PLAYRS' on the displays. Press the Select key as many times as is necessary until the number of players you want appears below the text 'PLAYRS', or just press keys 1, 2, 3 or 4. Re-confirm with the Enter key. A minimum of 1 and a maximum of 4 players can play against the computer. NOTE: if more than 2 players are playing then step 7 cannot be pre-set! Step 6 will only be displayed when 1 player has been pre-set!
6. This step can only be used if '1' has been confirmed under PLAYRS in step 5. The computer will then automatically be pre-set to play against you as your opponent. The scoreboard will show 'LEVEL' on the displays. Press the Select key as many times as is necessary to reach the level you want, or just press keys 1, 2 or 3, etc. Level 1 is a beginner, level 9 is a professional. Find your own level between these two levels by trial and error. Confirm by pressing the Enter key.
7. This step can only be used if no more than 2 players have been pre-set in step 5. The scoreboard will show 'BESTOF' on the displays. Set here the maximum number of 'legs' that will be played per set by pressing the 'Select' key or by pressing 1, 3, 5, 7 or 9. Re-confirm by pressing 'Enter'.
8. This step is only pre-set if no more than 2 players have been pre-set at step 5. The scoreboard will now show 'SETS' on the displays. Enter here the maximum number of sets that can be played per set by pressing the 'Select' key or the keys 1, 3, 5, 7 or 9. Confirm by pressing 'Enter'.
9. Now you can start playing!

##### 4.1.3 Operation when playing with 2 players

Once the game has been pre-set you can start keeping the score. The Masterscorer always assumes that Player A is first on the oche. In the illustration you can see the data that the scoreboard is showing now.

The LED alongside A is on to indicate that it's player A's turn on the oche. At the bottom-left of the display you will see three dashes. The computer is now waiting for a throw to be entered. You can enter a throw in 3 different ways: you can enter a score per dart, per 3 darts or per the number of points remaining.

#### 1. Entering a throw per dart

To enter a throw per dart, proceed as follows: If you've thrown a 20, for example, you would enter the following: 2 - 0 - Enter. The scoreboard will now show:

The scoreboard is now waiting for the next throw. As an example we'll now enter the info that a treble 17 has been thrown (3 x 17). You would enter this as follows: 3 - \* - 1 - 7. Now confirm this with Enter. Now the computer has calculated the total itself: 51.

Let's assume that the third dart scored 19. For this, enter 1 - 9 and then press the Enter key. To change player press 'Next player'. In the illustration you can see below left what the scoreboard showed after you entered the last dart (19) and what it's showing now that you've confirmed it by pressing 'Next player'.

The LED for player A has gone out. The LED for player B has come on. This means that it's the next player's turn. You can see this from the fact that the dashes are now on the other side. On the display at bottom-left you'll see, alongside the info for player A, the total for the three darts that have been thrown. The input for player B is performed in the same way as for player A. You can always change player by pressing 'Next player'. If, after entering the info for player B, you press 'Next player' the previous score will move upwards by 1 place and the last score but one will disappear. This is clearly shown the illustration below. In this illustration we're assuming that player B has thrown a total of 45 points.

The LED for player B has gone out and the light for player A has come on. Now it's player A's turn again. The previous score for player A has now been moved 1 place upwards. A new score can once again be entered.

You can always repeat the above actions. To win you have to throw a double with your last dart. As soon as a player is in a position to 'throw out', the computer will make a recommendation. The computers shows where you should throw each dart to win the game by illuminating the lights at the bottom of the scoreboard. 1 light means a single, 2 lights mean a double and 3 lights mean a treble. The lights to the left of the printed figures are used to recommend the Bull and segments 10 to 20 inclusive. The lights to the right of the printed figures are used to recommend segments 1 to 9 inclusive. As an example, here are 3 illustrations to show what the scoreboard displays when a player is in a position to 'throw out'. Below each illustration there's a description of what has just been entered.

Player B is on the oche. He's on 111 points. The computer recommends he throws a treble 20.

If he actually does throw a treble 20 then you would enter: 3 - \* - 2 - 0 - Enter.

Now the computer recommends throwing a single 19. If the single 19 is thrown then you would enter: 1 - 9 - Enter.

Now the computer recommends throwing a double 8. If the double 8 is thrown then you would enter: 2 - \* - 1 - 6 - Enter [moet zijn 2 - \* - 8????].

Player B has won.

#### 2. Entering 3 darts simultaneously

To enter 3 darts simultaneously you follow almost the same procedure as for entering one dart - the only difference is that the Enter key is not used. As an example we'll take the same situation as we used in the explanation above: with his first dart a player throws a 20, with his second a treble 17 and with the third a 19. You then have to calculate the total yourself. You would now enter: 9 - 0 - next player.

#### 3. Entering the number of points remaining

The number of points remaining can be entered by first pressing \*. The red display will start flashing and the number of remaining points can then be entered. Confirming by pressing 'Next player' changes the player again.

#### 4.1.4 Operation when just 1 player is playing (i.e. against the computer)

If you are playing solo against the computer then the operations are almost the same as those mentioned in section 4.1.3. The only difference is that you don't need to enter a score for player B. The computer will show what this imaginary player has thrown by illuminating the LEDs alongside the printed figures. Here again the rule is: to the left of the printed figures are indicated the Bull and 10-20, while 1-9 are indicated to the right of the printed figures.

#### 4.1.4 Operation when more than 2 players are playing.

Here again the procedure corresponds to that described in section 4.1.3. When more than 2 players are playing, however, there's no room to show the score for each player's previous turn. The illustration below shows how the displays are laid out when, for example, 3 people are playing.

If 4 people are playing then the part that's not used in the illustration will also be in use. The LEDs for both player A and player B will also then not be used. This also applies to the Sets and Legs. During the match the computer will, however, give advice to each player.

#### 4.1.5 Mistakes when entering info

If you make a mistake when entering info you can usually just keep pressing the keys until the correct value appears on the display. Example: let's suppose you wanted to enter 15, but you started with a 2 by mistake. You can correct this by entering 015: so just press 0 - 1 - 5. 15 will now appear on the display and you can continue as planned.

If you enter an 'impossible' value (e.g. a value higher than 180) then the scoreboard will display 3 strange characters. These represent question marks. If this happens, just enter a different number.

## 4.2 TAC TIC

This game can only be played by 1 or 2 people. In this explanation we'll be referring regularly to section 4.1 because the data is entered in the same way.

### 4.2.1 Rules

Tac Tic is a game for everyone. In this game tactics play a big part. In Tac Tic every player must hit the numbers 10 to 20 and the bullseye at least 3 times. You can do this with one dart by hitting the treble ring. You can also do it with two darts by throwing a double and a single. When a number has been hit three times then it's 'open' for that player. Until the other player has also hit the same number three times the player who has already done so can continue to score on that number. Each dart that lands in that number will score the corresponding number of points. When a number has been hit three times by both players then it is 'removed' from the competition. The player who, at the end, has 'thrown out all the numbers' and has more points on the scoreboard than his opponent is the winner of the Tac Tic.

As the name suggests, tactics can play a large part in this game. Should you just try and imitate what your opponent is doing, or should you choose numbers of your own? The secret is to put the opponent under pressure in order to build up an advantage.

### 4.2.2 Settings

1. Switch the scoreboard on (if it's not on already).
2. Press the Select key; the scoreboard will show 'SELECT' on the red displays.
3. Press the Select key as many times as is necessary until 'TACTIC' appears below 'SELECT'.
4. Confirm by pressing the Enter key.
5. The scoreboard will show 'PLAYRS' on the displays. Press the Select key as many times as is necessary until the number of players you want appears below the text 'PLAYRS', or just press keys 1 or 2. Re-confirm with the Enter key. A minimum of 1 (playing against the computer) and a maximum of 2 players can play simultaneously.
6. This step can only be used if '1' has been confirmed under PLAYRS in step 5. The computer will then automatically be pre-set to play against you as your opponent. The scoreboard will show 'LEVEL' on the displays. Press the Select key as many times as is necessary to reach the level you want, or just press keys 1, 2 or 3, etc. Level 1 is a beginner, level 9 is a professional. Find your own level between these two levels by trial and error.

Re-confirm your choice with Enter.

7. The scoreboard will show 'BESTOF' on the displays. Set here the maximum number of 'legs' that can be played per set by pressing the 'Select' key or the keys 1, 3, 5, or 9. Re-confirm by pressing 'Enter'.

8. The scoreboard will now show 'SETS' on the displays. Set here the maximum number of sets that can be played by pressing the 'Select' key or the keys 1, 3, 5, 7 or 9.

9. Now you can start playing!

#### 4.2.3 Operation during play

Once the game has been pre-set you can start keeping the score. The Masterscorer always assumes that Player A is first on the oche. In the illustration you can see the data that the scoreboard is showing now:

The LED alongside A lights up to indicate that it's player A's turn on the oche. At the bottom-left of the display you'll see - - -. The computer is now waiting for a throw to be entered. A throw can be entered in 2 ways, as explained in section 4.1.3.

The data is also entered in the same way.

As a brief example we'll show how a single 20 and a double 19 can be entered: 1 - 2 - 0 - Enter - 2 - 1 - 9 - next player. The scoreboard will now show:

First the light for player A will go out and the light for player B will come on; now it's player B's turn on the oche. On player A's side 1 light will come on alongside 20 and 2 lights will come on alongside 19. The points total has stayed at 0 because - according to the rules - no points have been scored. If 19 had been entered 5 times then player A would have had 38 points.

For the other entries, just repeat the above steps.

### 4.3 Cricket

This game can only be played by 1 or 2 people. In this explanation we'll be referring regularly to section 4.1 because the data is entered in the same way.

#### 4.3.1 Rules

Plays A has to hit the bull, while player B must accumulate as many points as possible. Each player has five 'lives'. Each time player A hits the bullseye player B loses a life.

For the points thrower there's a handicap: only points above 41 count. So if, for example, the points thrower throws 60 points he'll score only 19 ( $60 - 41 = 19$ ). If the bullseye thrower throws outside the treble ring then the points thrower has the score added to his own score, irrespective of whether it's higher or lower than 41. When the points thrower has lost all his lives the roles are reversed. The person who has scored the most points after this second round is the winner of the game.

#### 4.3.2 Settings

1. Switch the scoreboard on (if it's not on already).
2. Press the Select key; the scoreboard will show 'SELECT' on the red displays.
3. Press the Select key as many times as is necessary until 'CRICET' appears below 'SELECT'. (It's not possible to insert the entire word 'Cricket' on the display, hence the abbreviation).
4. Confirm by pressing the Enter key.
5. The scoreboard will show 'PLAYRS' on the displays. Press the Select key as many times as is necessary until the number of players you want appears below the text 'PLAYRS', or just press keys 1 or 2. Re-confirm with the Enter key. A minimum of 1 player (playing against the computer) and a maximum of 2 players is possible.
6. This step can only be used if '1' has been confirmed under PLAYRS in step 5. In this case you would be playing against the computer. The scoreboard will show 'LEVEL' on the displays. Press the Select key as many times as is necessary to reach the level you want, or just press keys 1, 2 or 3, etc. Level 1 is a beginner, level 9 is a professional. Find your own level between these two levels by trial and error. Confirm your choice with Enter.

## 8. Now you can start playing!

The LED alongside A lights up to indicate that it's player A's turn on the oche. All the LEDs will now come on for both player A and player B. These lights indicate the number of lives remaining. Player A is the 'bullseye thrower'.

### 4.3.3 Operation during play

You must now enter what the bullseye thrower has just thrown. If, for example, player A has hit the bullseye twice then you would enter: 2 - 25 - Enter. Two LEDs will now go out for player B (the two bulls have cost player B two lives). The scoreboard will assume that all the points entered for the 'bullseye thrower' are for player B (i.e. have been thrown outside the treble ring). If, for example, 19 is now entered (1 - 9 - Enter) these points will be directly assigned to player B. Press 'Next player' to change player.

Now it's player B's turn on the oche. The scoreboard will now show:

The LED alongside A will light up to indicate that it's the turn of player B, the points thrower. 3 LEDs will still be on for player B; this is because player A has hit 2 bullseyes. The scoreboard also shows that player B has 19 points. This is because 19 has been entered for player A and the scoreboard automatically assumes that the throws were outside the treble ring and are therefore points for player B.

Now you can enter what player B has thrown. As an example, we'll assume that player B has thrown one single 20 and two single 5s. You now enter: 2 - 0 - Enter - 2 - \* - 5 - next player. The number of points thrown would now normally be 30. But only the points above 19 count, so the scoreboard will add 11 ( $30 - 19 = 11$ ) points to the existing score. The illustration below shows what the scoreboard will show now:

The LED for player A will now come on because it's player A's turn on the oche. On player B's side the scoreboard shows that 11 points have been scored (on the scoreboard these points will be displayed in green). These points have been added to the previous score of 19, so the total stands at 30. The 19 points therefore show the score during the previous turn. Player A can now start hitting the bullseye again, and so on.

## 4.4 Around the clock

This game can only be played by 1 or 2 people. In this explanation we'll be referring regularly to section 4.1 because the data is entered in the same way.

### 4.4.1 Rules

This game is designed to train people to throw doubles. The idea is to throw doubles in sequence (clockwise). You always start with a double bullseye. The doubles 20, 1, 18, 4 and so on are then thrown. The ultimate aim is to throw the double 5 as quickly as possible (sooner than your opponent). The first to throw double 5 is the winner.

### 4.4.2 Settings

1. Switch the scoreboard on (if it's not on already).
2. Press the Select key; the scoreboard will show 'SELECT' on the red displays.
3. Press the Select key as many times as is necessary until 'AROUND' appears below 'SELECT'.
4. Confirm by pressing the Enter key.
5. The scoreboard will show 'PLAYRS' on the displays. Press the Select key as many times as is necessary until the number of players you want appears below the text 'PLAYRS', or just press keys 1 or 2. Re-confirm with the Enter key. A minimum of 1 player (playing against the computer) and a maximum of 2 players is possible.
6. This step can only be used if '1' has been confirmed under PLAYRS in step 5. In this case you would be playing against the computer. The scoreboard will show 'LEVEL' on the displays. Press the

Select key as many times as is necessary to reach the level you want, or just press keys 1, 2 or 3, etc. Level 1 is a beginner, level 9 is a professional. Find your own level between these two levels by trial and error. Confirm your choice with Enter.

8. The scoreboard will show 'BESTOF' on the displays. Set here the maximum number of 'legs' than can be played by pressing the 'Select' key or the keys 1, 3, 5, 7 or 9.

9. The scoreboard will now show 'SETS' on the displays. Set here the maximum number of sets that can be played by pressing the 'Select' key or just press the keys 1, 3, 5, 7 or 9.

10. Now you can start playing!

#### 4.4.3 Operation during play

Once the game has been pre-set you can start keeping the score. Player A starts - you can see this from the fact that the LED for player A comes on.

The scoreboard will now show 'BULL' for player A. This indicates that you have to throw in the double bull. The number of times this happens is entered. As an example we'll assume that player A has hit the double bull once.

After the data has been entered the scoreboard will look like the illustration alongside.

For 1 double bull enter the following: 1 - next player.

Now the light on the scoreboard for player B comes on to indicate that it's player B's turn. From the display for player A you can see that he thrown a double bull: at the top it says '1 BULL'. The 1 indicates that one double bull has been thrown. At the bottom the LED for player B will also come on. From this you can see how much progress a player has made and how many times he has hit this number.

If you are playing against the computer a score will now automatically appear: this is what the computer has 'thrown'. If 2 players are playing then the score for player B can now be entered. Let's assume that player B did not succeed in throwing a double bull; you would then enter: next player.

The scoreboard will change player again and the score for player A can then be entered again. This procedure can now be repeated as many times as is necessary.

## 6. Trouble-shooting

If you make a mistake you can always correct it.

As explained earlier, mistakes can be made when entering data. If, for example, two 20s have been thrown but the entry for the first score has been started with a 1 by mistake then you can continue pressing the keys: just press 0 - 2 - \* - 2 - 0.

As you can see, eventually the correct point score will automatically appear on the scoreboard. Sometimes, of course, the next player may already be on the oche when a mistake is discovered in the data entry for the previous turn. In this situation, press 'Cancel'. The computer will now take a step backwards and the score can be keyed in again. After entering the correct score, press 'Enter' to confirm. Pressing this key once takes you back one turn, pressing it twice takes you back two turns, and so on. If, for example, you have gone back 3 turns and entered a new score followed by 'Enter' then the other scores will remain unaffected.

## 7. General settings

In this menu you can change various general settings: sound on/off, light intensity high/low, computer speed high/low.

You reach this general settings menu by continuing to press 'Select' until you see SETUP. Once you have reached this setup menu you can change a setting by pressing 'Select'.

Sound on/off is self-explanatory.

Light hi/lo indicates the level of light intensity.

Speed hi/lo indicates the speed of 'throwing' by the computer if you have pre-set the computer to be your opponent.