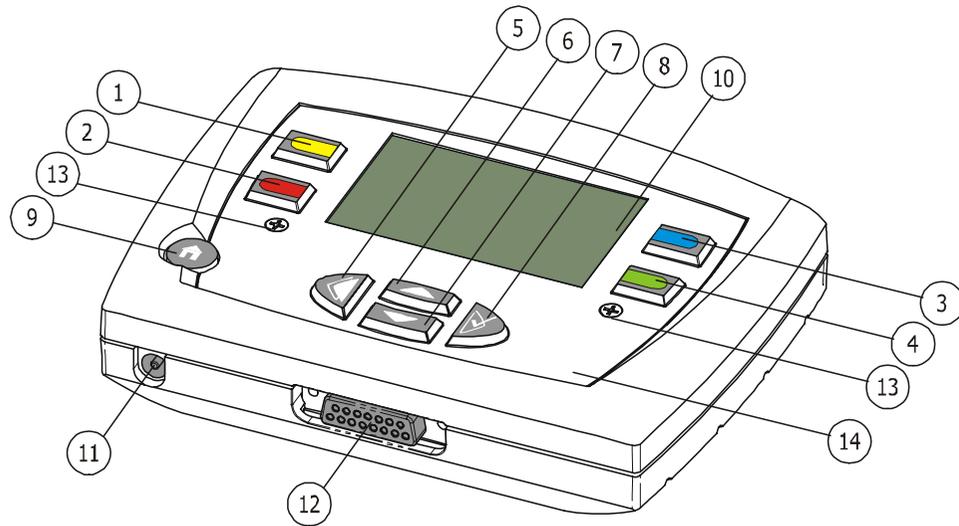


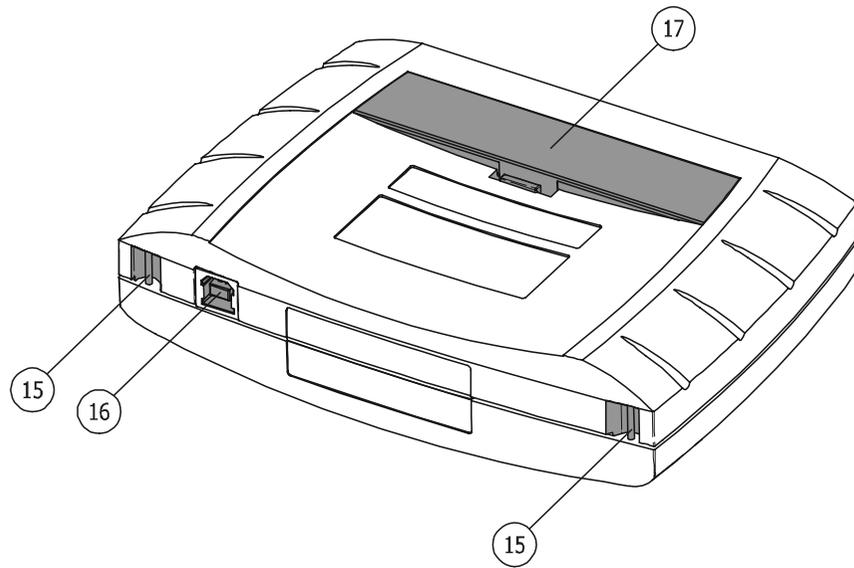
# BENZING M1 Club Manual







- ① ... Menu Key "Yellow"
- ② ... Menu Key "Red"
- ③ ... Menu Key "Blue"
- ④ ... Menu Key "Green"
- ⑤ ... Cursor Key "Backwards"
- ⑥ ... Cursor Key "Up"
- ⑦ ... Cursor Key "Down"
- ⑧ ... Cursor Key "Forwards" resp. "OK"
- ⑨ ... Function Key "Start"
- ⑩ ... Display
- ⑪ ... Electrical Socket
- ⑫ ... Antenna Connection
- ⑬ ... Allen Screws
- ⑭ ... Front Panel and Foil
- ⑮ ... Belt Fastener
- ⑯ ... USB interface
- ⑰ ... Battery Case





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**Trade mark:** Attention is drawn at this point to markings and registered trade marks used in this manual.



**Important:** before commencing installation, commissioning, putting into service and before any maintenance work is carried out, it is essential that the relevant warning and safety instructions in this manual are read!





## General warning and safety instructions

Dear customer,

We congratulate you on having selected a product of GANTNER Pigeon Systems GmbH. So that our product functions in your installation with safety and to your complete satisfaction, we take this opportunity to familiarise you with the following ground rules:

1. Installation, commissioning, operation and maintenance of the product purchased must be carried out in accordance with instructions, i.e. in accordance with the technical conditions of operation, as described in the corresponding product documentation.
2. Before either installation, commissioning, operation or maintenance it is therefore essential that you read the corresponding chapter of this manual and observe its instructions.
3. If there are still some points on which you are not entirely clear, please do not take a chance, but ask the customer adviser responsible for you.
4. Where not otherwise specifically laid down, appropriate installation, commissioning, operation and maintenance of the product is the customer's responsibility.
5. Directly on receipt of the goods, inspect both the packaging and the device itself for any signs of damage. Also check that the delivery is complete (-> accessories, documentation, auxiliary devices, etc.).
6. If the packaging has been damaged in transport or should you suspect that the product has been damaged or that it may have a fault, the product must not be put into service. In this case, contact your customer advisor. He will make every effort to resolve the problem as quickly as possible.
7. Servicing of our product must only be carried out by suitably trained personnel. Here, the appropriate installation provisions in accordance with the relative national Electrical Engineers construction regulations (e.g. ÖVE, [Austrian] VDE, [German]...) must be observed.
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9. It is prohibited to make alterations to the appliances.

10. Do not attempt yourself to repair an appliance after a defect, failure or damage, or to put it back into operation again. In such cases, it is essential you contact your customer adviser. We will make every effort to resolve the problem as quickly as possible.
11. GANTNER Pigeon Systems GmbH accepts no responsibility for any injuries or damage caused as a result of improper use of the product.
12. Although every care is taken and we are continuously aiming for improvement, we cannot exclude completely the possibility of errors appearing in our documentation. GANTNER Pigeon Systems GmbH therefore accepts no responsibility for the completeness or the accuracy of this manual. The right is reserved to make alterations, and we may carry out alterations at any time without giving prior notice.
13. Should you discover any fault with the product or in its accompanying documentation, or have any suggestions for improvement, you may confidently approach either your customer adviser or GANTNER Pigeon Systems GmbH directly.
14. However, even if you just want to tell us that everything has functioned perfectly, we still look forward to hearing from you.

We wish you a successful application of our product. We will be pleased to welcome you as a customer again soon.

Contact address / Manufacturer:

**GANTNER Pigeon Systems GmbH**  
Montafonerstrasse 8  
A - 6780 Schruns/Austria

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# 1. INTRODUCTION

## Dear Customer

By purchasing this electronic registration device BENZING M1 you have chosen a reliable and high-quality system, offering considerable advantages in the practice of and sport of racing pigeons.

After unpacking the different components it is of utmost importance that you read this manual carefully. It contains important information on how the BENZING M1 is used at your club. We ask you to observe in particular the general advice and safety instructions on pages 3 and 4.

## 1.1 Protection Against Manipulation

The device BENZING M1 offers various technical precautions and protective measures against manipulation.

- Safety label (hologram). When attempting to remove the safety label or open the case the safety label is destroyed.
- When trying to open the BENZING M1 visible damage is done to the case. This does not apply if the front foil has to be exchanged (see Fancier Manual).
- Important electronic components in the BENZING M1 are cast and are thus either not accessible or cannot be manipulated.



Despite all possible precautions manipulation can never be entirely ruled out. It is explicitly stated here that the manufacturer cannot guarantee complete protection against manipulation.

## 1.2 No Liability for Device Failures

For device failures which occur due to improperly use of the BENZING M1 no liability will be assumed by GANTNER Pigeon Systems GmbH. See chapter 6 - Guarantee and Liability.

## 2. SYSTEM

### 2.1 System Components

To operate the device BENZING M1 at the club the following components are available.

- a) BENZING M1
- b) BENZING ClubSystem
- c) Power Supply Unit
- d) BENZING M1 Club Cable
- e) Basketing Card
- f) Evaluation Card
- g) Pigeon Rings

a)



b)



c)



d)



e)



f)



g)



## 2.2 BENZING M1



The BENZING M1 is the main device (the clock) of the complete system. All data that is entered or electronically registered is saved internally by the BENZING M1. When basketing a pigeon all data like ring number, secret number etc is saved in what is like a 'data safe'. This data remains stored until the race has been evaluated. During races or training sessions the arrival times of the pigeons in the loft are measured and saved in the BENZING M1.

## 2.3 BENZING ClubSystem



The new BENZING ClubSystem combines the functionalities of both units CAN and clubPOINT. All of the tasks within the club have now become easier and more user friendly.

- Facts:**
- Large time and date display
  - Design with CAN and clubPOINT in a single unit
  - Support for a radio clock and GPS clock
  - Manually set the date and time
  - USB port for the PC
  - Loud acoustic signals
  - Accessible connections
  - Faster reading/writing of the electronic chip rings
  - Easy software download
  - Support for almost every existing chip ring including the new HITAG-S chip ring

## 2.4 Power Supply Unit



The power supply unit is used to supply the BENZING ClubSystem with power. It is connected with the corresponding socket on the rear side (see also 3.2).

## 2.5 BENZING M1 Club Cable



With this cable the BENZING M1 is connected to the ClubSystem by using the corresponding connection socket <sup>(12)</sup>.

## 2.6 Basketing Card and Evaluation Card



These are special cards used at the club to release protected operations with the BENZING M1.

## 2.7 Pigeon Rings



The BENZING M1 supports all conventional pigeon rings. For reasons of utmost registration safety we recommend to use the BR-chip-code ring.

The BR-chip-code ring contains an electronic chip provided with a code number and is used to identify the pigeons. The ring is not provided with a battery and is only activated if it is located within reach of the Club Antenna respectively the loft antenna.

The ring features a snap lock and can be used for old pigeons as well as young ones. It is attached around the leg of the pigeon which is not ringed. The ring is locked by pressing the snap lock together- flat pliers might be useful- until it engages with a click.

The BR-chip-code ring is available in three different colours (red, green and blue).

## 3. INSTALLATION AND OPERATION

### 3.1 Conditions of Use

The BENZING M1 and all BENZING equipment are electronic devices running at low voltage. They should only be used inside and direct contact with water (drops or splashes of water, stagnant water etc), dirt, and when in operation also with direct sunlight is to be avoided.

During operation the surrounding temperature for all devices has to be between 0°C and +60°C (+32°F and +140°F). If the temperature drops down to less than 0°C (+32°F) (which means that possibly condensed water is formed) the equipment has to brought to dry for approx 1 hour at a room temperature of approx. +20°C (+68°F). Afterwards all devices can be used again without further problems. The storage temperature ranges between -25°C and +70°C (-13°F and 158°F).

### 3.2 Installation of the system at the club

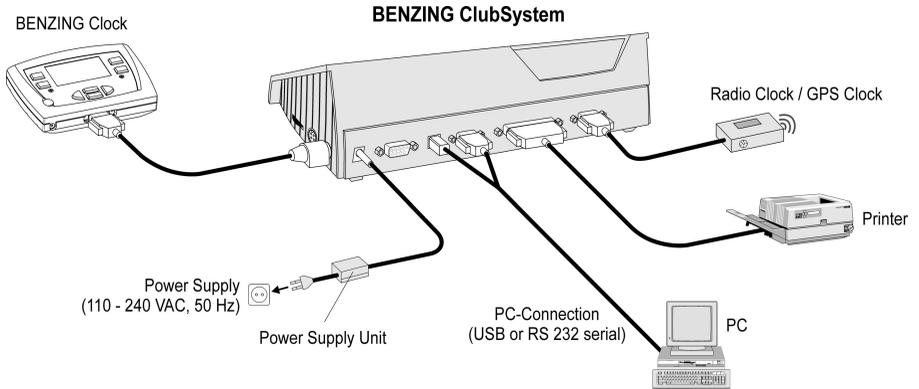
At the club the BENZING M1 of a fancier is connected to a BENZING ClubSystem or clubPOINT (previous system) using the enclosed BENZING M1 club cable. Subsequently, other devices like the power supply unit or the printer etc. are connected to the BENZING ClubSystem. After having connected all parts of the system the power supply unit is connected to the mains.

Power supply of the BENZING M1 at the club is always provided with the BENZING M1 club cable.

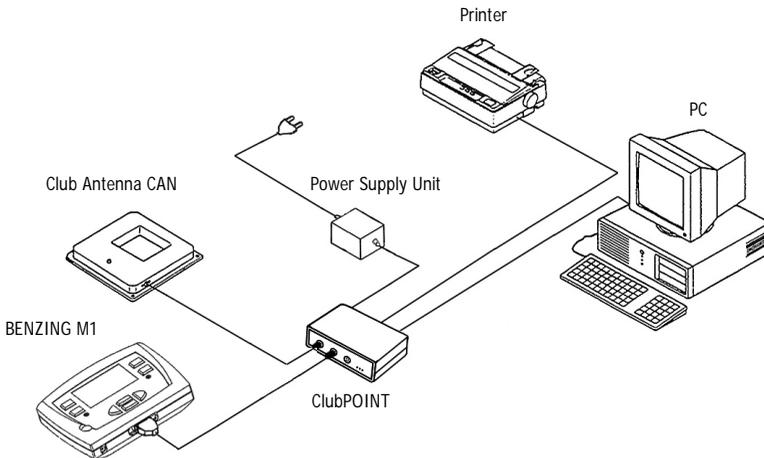


When installing the system it is of utmost importance that you also observe the indications of the enclosed package leaflets which come with the corresponding system components.

The way the system is installed at the club is displayed in figure 3.1, which shows how to use the BENZING ClubSystem. Installation by using these older devices is possible as well and is explained in figure 3.2. No system set-up is possible in combination with the club Cobox!



**Figure 3.1** - Club System using the BENZING M1 and BENZING ClubSystem



**Figure 3.2** - Fancier System BENZING M1 and the Connection Device clubPOINT (previous system)



**When installing the device the following points have to be observed:**

- At the club the power supply unit is to be always connected to the corresponding plug of the clubPOINT respectively to the network node CNN (see figure 3.1 or 3.2). The socket <sup>11</sup> at the BENZING M1 may not be used in this case as thus, power supply of the Club Antenna CAN is impossible.
- For the provision of power the enclosed power supply unit should always be used or a similar power supply unit of an equivalent type.
- Before plugging in the power supply unit, check if the installation corresponds to the figure 3.1 or 3.2. Make sure that before connecting the BENZING M1 to the mains humidity has not found its way into the case of the BENZING M1 and that the device is being operated according to the conditions of use mentioned in 3.1.
- When operated in the battery mode the BENZING M1 cannot be used in the club as the power supply for the antenna in the BENZING ClubSystem would not be sufficient.
- The plugs of the connection cables have to be fitted tightly into the sockets. If interferences with the antennas occur then check these connections!

### 3.3 Initial Operation of the BENZING M1

When operating the BENZING M1 with the connected Club Antenna CAN for the first time these steps have to be followed:

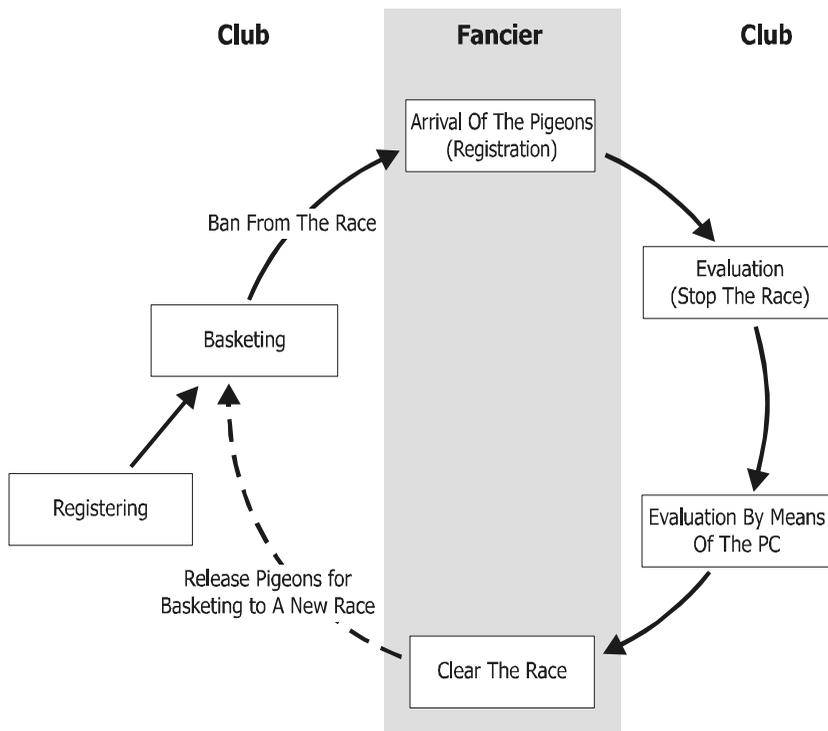
- Make sure that all cables are connected correctly.
- Connect the power supply unit to the power plug.
- The BENZING M1 starts up. The display <sup>10</sup> shows the BENZING logo and a start-up display with information of the device and versions.
- After approx 10 seconds the start-up procedure is finished and the BENZING M1 is in the initial state, i.e. the club menu (initial menu for the club) is displayed.
- The BENZING M1 recognizes automatically the connected system components of the club system when being turned on.

## 4. OPERATION

### 4.1 Procedure

The BENZING M1 is the main component during a race, from registering and basketing the pigeons to evaluating and releasing (discharging) them for a new race. For this procedure the BENZING M1 is used in the loft of the fancier as well as in the club. Therefore, the BENZING M1 switches between operation in the fancier mode (see Fancier Manual) and the club mode (EST mode). The latter is described in this manual.

The following figure depicts the procedure of a race.



*Figure 4.1 - Procedure of a Race*

The pigeons are registered at the club according to their pigeon rings. As an option a season map can be generated and loaded into BENZING M1. To start a race the pigeons are basketed for the race. Then the fancier takes the BENZING M1 to his loft where he registers the arriving pigeons. The evaluation takes place at the club. The fancier clears the race so that he can reuse the basketed pigeons for another race.

#### **4.1.1 Registering**

The registration and coupling of an electronic ring number with the corresponding pigeon data can be made with the club software on a PC and saved in the BENZING M1. Or the pigeons can only be registered in the BENZING M1 and then a ring is coupled with the pigeon data at the club using the Club Antenna CAN.

##### *Training*

If a training starts, all pigeons are automatically basketed for this training, except for those that have been basketed for a race, that were nominated or that bets have been placed on.

#### **4.1.2 Basketing**

Before loading the pigeons into the transporter they have to be basketed for a race. Changes concerning the data of the basketed pigeons can only be made after a particular race has finished.

When basketing the pigeon the secret number is saved on the ring as well as in the BENZING M1. When evaluating the race, the stored secret numbers are compared and the result is shown in the evaluation of the race. Thus, several methods of manipulation are ruled out.

#### **4.1.3 Arrival of the Pigeons in the Loft (Registration)**

As soon as the fancier has connected his BENZING M1 in the loft with the loft antennas to the power mains after basketing, the device is ready to register the arriving pigeons. If a pigeon lands on the loft antenna, the pigeon number and the secret number are read and saved in the BENZING M1 together with the exact time of arrival. The list of the arrived and missing pigeons can be recalled on the display any time.

##### *Enter Distance*

By entering the distance and release time the BENZING M1 is able to calculate the average velocity of each pigeon automatically.

#### **4.1.4 Evaluation at the Club**

Evaluation at the club takes place in three steps:

1. The race is stopped:
  - comparison of the clocks
  - pigeons arriving later are marked as 'not evaluated' pigeons
2. The race data is printed out on the printer
3. The race data is read by the PC and then converted by the software (such as WINSPEED in such a way that the prize lists can be generated by a computer centre.

At any time it is possible to print a stopped (not cleared) race later or read the race data on the PC later on.

#### **4.1.5 Clear a Race (Release Pigeons for a New Race)**

The basketed pigeons can only be basketed for a new race after they have finished the previous one. It is possible to clear (finish) a race either in the fancier's mode or in the club before basketing anew. In the club the evaluation must be finished too.

## **4.2 Multi-Fancier Mode**

This manual describes the operation of the BENZING M1 as a device for one fancier. Also available is the BENZING M1 multi-fancier device. It features the option of saving up to four fanciers. Thus, several fanciers who share one loft are able to carry out races with the same BENZING M1. The menu guide of the multi-fancier function varies only in a few steps from that of the device for one fancier.

When operating a multi-fancier device a differentiation is required between the individual fancier, that's why a menu for the selection of the fancier will be displayed. All the following menus will indicate the respective active fancier using a number (1-4) on the display at the above left. Each finished procedure corresponds only to the active fancier and has no influence whatsoever on the other fanciers.

***Selection of the fancier has to take place at the following:***

- *Registering pigeons*

[REGISTER]

When registering with the PC (sub-menu [PC COM] – see chapter 5.2.1) the pigeons of the respective active fancier are registered and coupled. The club software is able to recognize the selected fancier and switch to another active fancier (e.g. PideXX Vers.: 2).

When coupling pigeons with the BENZING M1 (sub-menu [COUPLE] - see chapter 5.2.2) the list of pigeons only shows the registered pigeons of the respective active fancier.

When writing fancier data onto a pigeon ring the data of the active fancier will be written (menu [RING] - see chapter 5.2.3).

- *Coupling during basketing (see chapter 5.3.2)*

[BASKET] -> [SERVICE] -> [RE-REG]

The display only shows the registered pigeons of the respective active fancier for 'post-registration'.

- *Evaluation with the PC (see chapter 5.4.2)*

[EVALUA] -> [PC COM]

The evaluation software contains the information about the respective active fancier.

***Selection of the fancier is not required with the following steps:***

- *Basketing (see chapter 5.3)*

After having selected the race the pigeons of **all** fanciers will be basketed on this race. The BENZING M1 recognizes automatically to whom the pigeon belongs and baskets the pigeon for the corresponding fancier. For each fancier an individual basketing list is printed.

**Note:** Basketing is only to be finished after all fanciers have basketed their pigeons. After the basketing is finished it is impossible to basket any other pigeon on this race (ban from the race).

- *Clearing a race (see chapter 5.3.4)*

All pigeons basketed on the race of **all** fanciers are released.

- *Evaluation (see chapter 5.4)*

After the race has stopped an individual evaluation list is printed for **all** fanciers who have basketed pigeons.

## 4.3 Display

The BENZING M1 is provided with a spacious display <sup>⑩</sup> which depicts all the information for the user. The functions of the BENZING M1 are selected by means of a menu. The respective menu items are shown on the left and the right of the display and correspond to the 4 menu keys.

## 4.4 Keys

### 4.4.1 Menu Keys

The 'menu keys' <sup>①</sup> <sup>②</sup> <sup>③</sup> <sup>④</sup> are the 4 coloured keys on the left and the right side of the display.

Within the menu all functions of the BENZING M1 can be selected with the 4 coloured menu keys. The functions of the menu keys change according to their current position within the menu and are shown on the display with a text in clear.

### 4.4.2 General Keys

In addition to the 4 menu keys next to the display the BENZING M1 is provided with further general keys <sup>⑤</sup> <sup>⑥</sup> <sup>⑦</sup> <sup>⑧</sup> <sup>⑨</sup>.

 ..... This key takes you from wherever you are within the menu back to the initial status.

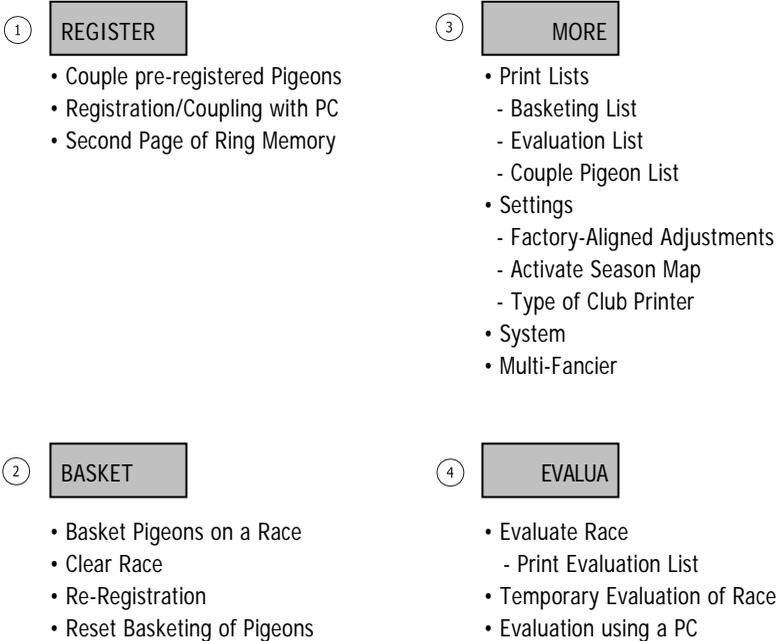
 ..... The cursor keys let you leaf through a list or when entering a name or a number the required letters, numbers and symbols can be selected.

 ..... With the 'Backwards' key you keep going backwards one level within the menu. At the same time changed settings are cancelled.  
If data has to be entered, the cursor used for entering can be moved one step back (to the left) with this key.

 ..... The 'OK' key is used to confirm selections or inputs.  
If data has to be entered, the cursor used for entering can be moved one step ahead (to the right) with this key.

## 4.5 Menu Structure

The following flow chart shows the build-up of the BENZING M1 menu in the club mode:



### [REGISTER]

- ↳ [COUPLE] ..... Register coupled pigeons (without a PC)
- ↳ [RING] ..... Write and read second page of ring memory
- ↳ [PC COM] ..... Communication mode with the PC (for reasons of registration)

### [MORE]

- ↳ [PRINT] ..... Print lists
  - ↳ [BASKETING] ..... Basketing list
  - ↳ [EVALUAT] ..... Evaluation list
  - ↳ [COUPLE LI] ..... registration list
- ↳ [SETTINGS] ..... Adjustments
  - ↳ [FACTORY!!!] ..... Factory-Aligned Adjustments
  - ↳ [SEASON] ..... Activate season map
  - ↳ [PRINTER] ..... Selection of the type of printer at the club

- ↳[SYSTEM] ..... Hardware information
  - ↳[CAN] ..... Information about the connected Club Antenna CAN
  - ↳[NODE] ..... Information about the connected nodes (CPN, clubPoint, ..)
- ↳[MULTI-FAN] ..... Switch between single and multi-fancier function

**[EVALUAT]**

- ↳[EVAL] ..... Stop the race, print evaluation list
- ↳[TMP EVAL] ..... Intermediate stop (without stopping the race)
- ↳[PC COM] ..... Communication mode with the PC (to evaluate by means of PC)

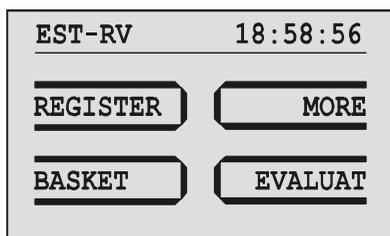
**[BASKET]**

- ↳[BASKET] ..... Basket pigeons on a race
- ↳[CLEAR] ..... Discharging pigeons (finish the race)
- ↳[BASKET]
  - ↳[SERVICE]
    - ↳[RE-REG] ..... Post-Registration
- ↳[BASKET]
  - ↳[SERVICE]
    - ↳[BASK OUT] ..... Reset Basketing

## 5. MENU FUNCTIONS

In this chapter the individual functions of the menus are described. First, the function is portrayed. Then the steps of how to select the function are described, listing the keys to be pressed in square brackets [...] in their order of appearance. The colours of the corresponding keys are indicated directly after the brackets. Important symbols and displays are also depicted accordingly.

After the BENZING M1 has been started up at the club, it is in the initial state. The display of the BENZING M1 shows the club menu (initial menu).



*Figure 5.1 – Club Menu (Initial Menu)*

### 5.1 Symbols Showing the State of the Races

During one season several races take place. The list of races clearly depicts all races. Next to the races various symbols are displayed which refer to the state of the races:

(empty) .. Race has not been selected (no pigeon has been basketed on this race)

 ... Race is active (basketed pigeons are registered when arriving).

 ..... Basketing is not finished (basketed pigeons are **not** registered when arriving).



..... Race is stopped/evaluated. Basketed pigeons, which have not been registered at the time the race is stopped, are marked as 'not evaluated pigeons' (symbol Ø).



..... Race is cleared (the pigeons have been released and can thus be basketed again).

If a season map is active, no more basketing is possible for this cleared race. First the season map has to be deactivated.

## 5.2 Registering

### 5.2.1 Registering of Pigeons by using PC (Communication Mode with the PC)

Using the registration software (e.g. PideXX) data of pigeons can be registered, coupled with the pigeon rings and saved into the BENZING M1. For further information please see the instructions of the registration software.

① [REGISTER] (yellow)



② [PC COM] (red)



... Communication with the PC is active



② [QUIT] (red) - Turn off communication with the PC and go backwards one menu level

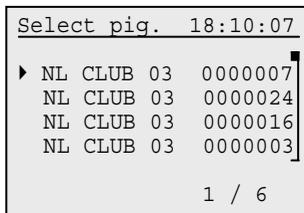
### 5.2.2 Coupling of Registered Pigeons (Without a PC)

Using the registering software (e.g. PideXX) the data of pigeons can be registered in the BENZING M1 even without an electronic ring number. Then this data can be coupled with the pigeon rings without a PC.

① [REGISTER] (yellow)



③ [COUPLE] (blue)



... All saved and registered pigeons are displayed

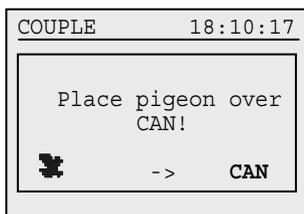


⑥ ⑦ [▲] or [▼] - Select pigeon

**Note:** the blue and green keys are used to leaf forwards and backwards through 5 pigeons each time



⑧ [✓] - Confirm selected pigeon



... Request to read the pigeon ring



Hold the pigeon ring over the BENZING ClubSystem antenna.



↓

```
REGISTER      18:10:27
-----
pigeon has been
registered!
fancier data
is correct!
```

... Confirmation that the pigeon has been coupled and the data of the fancier found on the pigeon ring has been checked

↓

```
Select pig.  18:10:37
-----
▶ NL CLUB 03  0000007
  NL CLUB 03  0000024
  NL CLUB 03  0000016
  NL CLUB 03  0000003
-----
                        1 / 6
```

↓  
Select next pigeon for coupling or go back with [◀ ]

Pigeons coupled with the BENZING M1 are saved in a modification list and printed automatically according to the basketing list. If the pigeons are transferred to the PC, the modification list is deleted. Thus, it is guaranteed that the data of the pigeons on the PC and in the BENZING M1 are identical.

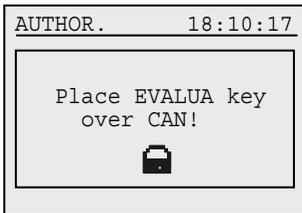
### 5.2.3 Writing Fancier Data on a Pigeon Ring

Data of fanciers can be stored on pigeon rings.

① [REGISTER] (yellow)



① [RING] (yellow)



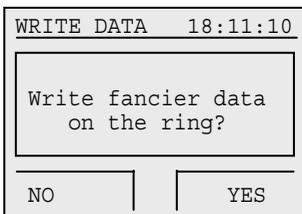
... Request to hold the evaluation card over the BENZING ClubSystem antenna



Hold the evaluation card over the BENZING ClubSystem antenna.



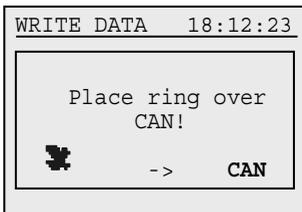
③ [WRITE] (blue)



... Information display



④ [YES] (green)

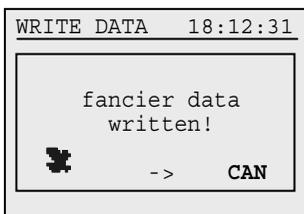


... Request to hold the pigeon ring over the BENZING ClubSystem antenna



Hold the pigeon ring over the BENZING ClubSystem antenna.





... Confirmation of the writing procedure

If an error occurs during writing, a corresponding error message is displayed. Possible errors are e.g.:

- Error in writing/reading data of fancier
- No BENZING ClubSystem antenna found
- The pigeon ring is not provided with a fancier memory

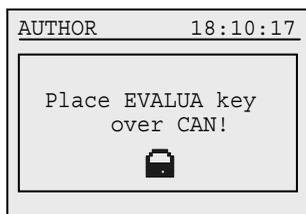
### 5.2.4 Reading Fancier Data From a Pigeon Ring

To read the data which is saved on an electronic pigeon ring follow these instructions.

① [REGISTER] (yellow)



① [RING] (yellow)



... Request to hold the evaluation card over the BENZING ClubSystem antenna



Hold the evaluation card over the BENZING ClubSystem antenna.



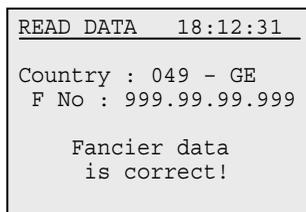
① [READ] (yellow)



... Request to hold the pigeon ring over the BENZING ClubSystem antenna



Hold the pigeon ring over the BENZING ClubSystem antenna.



... Confirmation of reading procedure

If an error occurs during reading, a corresponding error message is displayed. Possible errors are e.g.:

- Error in writing/reading data of fancier
- No data or unknown format
- Data of fancier is incorrect
- No BENZING ClubSystem antenna found
- The pigeon ring is not provided with a fancier memory

## 5.3 Basketing

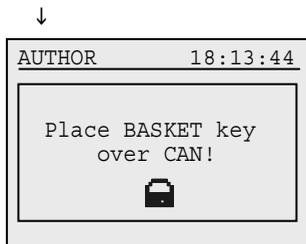
Basketing has to be released by using the basketing badge (E). Afterwards, these steps have to be followed:

- The clock of the BENZING M1 is synchronized with a radio clock (respectively with the clock which is integrated in the BENZING ClubSystem antenna). Yet, this is only the case if there are no 'active' or 'stopped' races to be found in the BENZING M1.
- If there are one or several 'active' or 'stopped' races in the BENZING M1, the difference between the radio or the BENZING ClubSystem clock and the clock in the BENZING M1 will be indicated and saved.
- A secret number is written on each pigeon ring of a pigeon that has been basketed and the same number is saved in the BENZING M1 as well. When evaluation takes place the ring numbers and the numbers in the BENZING M1 are compared.
- After basketing has been finished
  - it is impossible to change date and time of the BENZING M1.
  - pigeons that have been basketed are banned from other races and training races.
  - pigeons that have been basketed cannot be deleted.
  - pigeons that have been basketed cannot be nominated.
  - all other pigeons are banned from basketing to this race (=ban from the race).

### 5.3.1 *Basketing Pigeons for a Race*

When basketing follow these instructions.

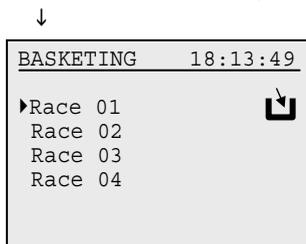
② [BASKET] (red)



... Request to hold the basketing card over the BENZING ClubSystem antenna

↓  
Hold the basketing key over the BENZING ClubSystem antenna.

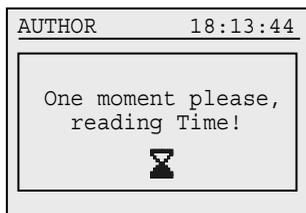
① [BASKET] (yellow)



... Only races that have not been selected or races where basketing has not yet been finished are displayed

⑥ ⑦ [▲] or [▼] - Select race

⑧ [✓]



... A short waiting period to read the time

↓

READ TIME	18:14:17
Time read!	
01.01.05 18:14:13 +004 Sek Next?	
NO	YES

... if time read from radio clock

READ TIME	18:14:17
Time read!	
<b>CAN</b> 01.01.05 18:14:13 +004 Sek Next?	
NO	YES

... if time read from BENZING ClubSystem antenna

④ [YES] (green)

If an error occurs during reading of the time, a corresponding error message is displayed.

Possible errors are e.g.:

- Error in reading the time
- No BENZING ClubSystem antenna found
- No radio clock found
- Radio clock is without reception

↓

Race 01	18:14:19
Place pigeon over CAN?	
0	
PRINT	SERVICE

... Request to hold the pigeon to be basketed over the BENZING ClubSystem antenna

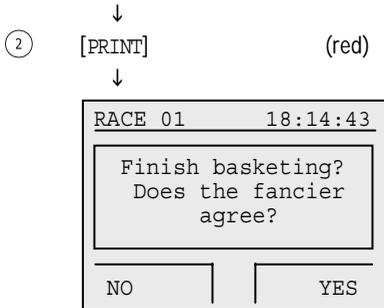
Hold the pigeon to be basketed over the BENZING ClubSystem antenna.

↓

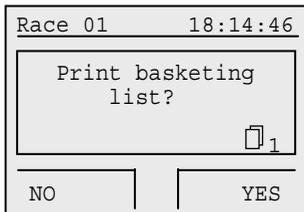
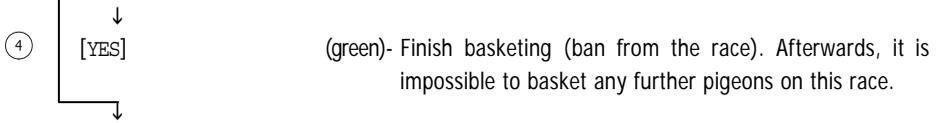
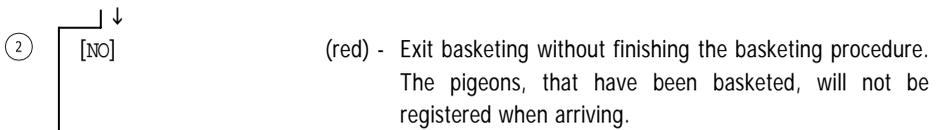
Race 01	18:14:30
AU CLUB 03 0000002f Maier H. Bask. time:18:14:24	
1	
PRINT	SERVICE

... Information about the recently basketed pigeon

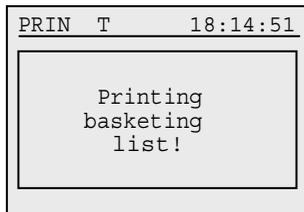
If you would like to basket another pigeon, then hold this pigeon over the BENZING ClubSystem antenna. The last two steps will then be repeated.



... Question if basketing is to be finished



... Question if basketing list is to be printed



... Basketing list is printed

↓  
Back to the club menu.

### 5.3.2 Coupling during the BASKETING Procedure

If a pigeon ring results to be defective when basketing the pigeon data can be coupled to a new ring. For this procedure apply the instructions of the previous point 'Basketing pigeons for a race' until you get the following display and follow these steps:

↓

Race 01	18:14:19
Place pigeon over CAN?	
0	
PRINT	SERVICE

... Request to hold the pigeon to be basketed over the BENZING ClubSystem antenna

↓

④ [SERVICE] (green)

↓

① [RE-REG] (yellow)

↓

POST-REG	18:14:26
▶ NL CLUB 03 0000007 NL CLUB 03 0000024 NL CLUB 03 0000016 NL CLUB 03 0000003	
1 / 6	

... Display of all pigeons that have not been selected

↓

⑥ ⑦ [▲] or [▼] - Select pigeon

**Note:** the blue and green keys are used to leaf forwards and backwards through 5 pigeons each time

↓

⑧ [✓] - Confirm selected pigeon

↓

↓

POST-REG	18:14:29
Pigeon NL CLUB 03 0000007f couple new?	
NO	YES

... Request if the pigeon is to be coupled to a new pigeon ring

④ [YES] (green)

↓

POST-REG	18:14:36
Place ring over CAN!	
	-> CAN

... Request to hold the new pigeon ring over the BENZING ClubSystem antenna

↓  
Hold the pigeon ring over the BENZING ClubSystem antenna

↓

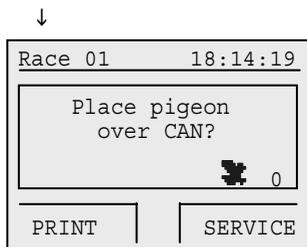
POST-REG	18:14:38
Pigeon coupled! Fancier data is correct!	

... Confirmation of the new coupling

↓  
Back to the basketing menu.

### 5.3.3 Reset Basketing of Individual Pigeons

In case a wrong pigeon has been basketed by mistake, then basketing can be cancelled. For this procedure apply the steps of the previous point 'Basketing pigeons for a race' until you get the following display and follow these steps:



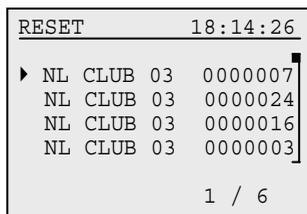
... Request to hold the pigeon to be basketed over the BENZING ClubSystem antenna

↓

④ [SERVICE] (green)

↓

③ [BASK OUT] (blue)



... Display of all pigeons that have been basketed

↓

⑥ ⑦ [▲] or [▼]

- Select pigeon

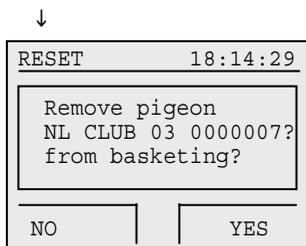
**Note:** The blue and green keys are used to leaf forwards and backwards through 5 pigeons each time

↓

⑧ [✓]

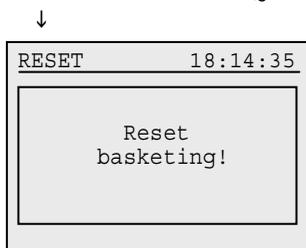
↓

- Confirm selected pigeon



... Request if pigeon is to be reset

④ [YES] (green)



... Confirmation of reset

↓  
Back to the basketing menu

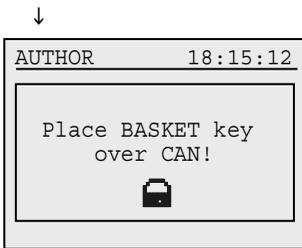
### 5.3.4 Clear Race (Release Pigeons)

Before a pigeon that has been basketed for a race or a training race can be basketed for another race (or a training race) it has to be released first.

To release a pigeon the race for which it has been basketed has to be cleared. Only stopped races can be cleared.

Pigeons can be released either in the fancier mode or in the club mode before basketing.

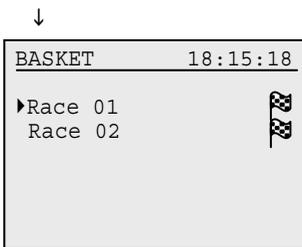
② [BASKET] (red)



... Request to hold the basketing key over the BENZING ClubSystem antenna

↓  
Hold the basketing key over the BENZING ClubSystem antenna.

③ [CLEAR] (blue)



... Only 'stopped' races are displayed

⑥ ⑦ [▲] or [▼] - Select race

⑧ [✓]

↓

Race 01	18:15:21
Clear race 01 and release pigeons?	
NO	YES

... Request if race is to be cleared

④ [YES] (green)

↓

Race 01	18:15:24
Pigeons have been released!	

↓  
Back to selection [BASKET] or [RELEASE].

## 5.4 Evaluating

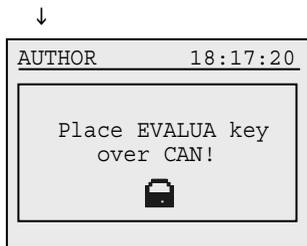
The evaluation procedure has to be released with the evaluation key (A). Then these steps have to be followed:

- The difference between the radio respectively the BENZING ClubSystem clock and the clock in the BENZING M1 is measured and saved.
- The race is stopped. Thus,
  - pigeons arriving later are marked as 'not evaluated'.
  - pigeons that have been basketed can be discharged (by finishing the race).
  - the evaluation list can be printed.

### 5.4.1 Evaluating the Race

A race is stopped so that it can be subsequently evaluated and the pigeons that have been basketed on that race can be used again.

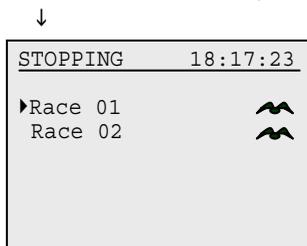
④ [EVALUA] (green)



... Request to hold the evaluation key over the BENZING ClubSystem antenna

↓  
Hold the evaluation key over the BENZING ClubSystem antenna.

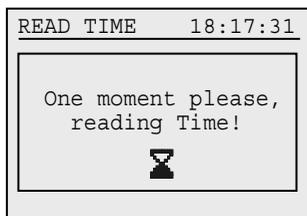
① [STOP] (yellow)



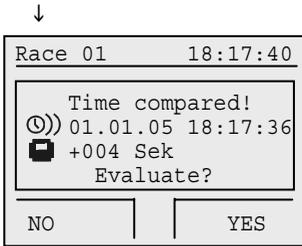
... Only 'active' races are displayed

⑥ ⑦ [▲] or [▼] - Select race

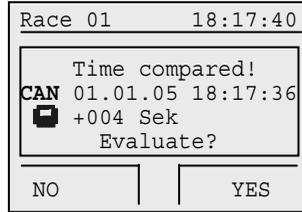
⑧ [✓]



... A short waiting period to read

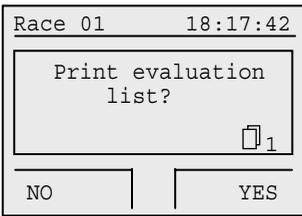


... Time read from radio clock



... Time read from BENZING ClubSystem antenna

④ [YES] (green)



... Request if the evaluation list is to be printed. It is also possible to print it later on.

④ [YES] (green)



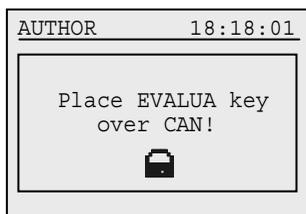
... Evaluation list is printed.

↓  
Back to the club menu.

### 5.4.2 Communication Mode Using the PC (for Evaluation by Means of the PC)

It is possible to connect the BENZING M1 to a PC, providing thus the possibility to carry out evaluations by means of the PC. To do so the BENZING M1 has to be set in the communication mode.

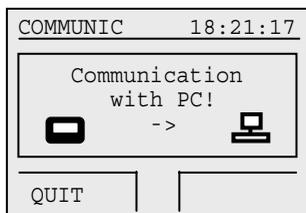
④ [EVALUA] (green)  
↓



... Request to hold the evaluation card over the BENZING ClubSystem antenna

↓  
Hold the evaluation key over the BENZING ClubSystem antenna.

② [PC COM] (red)  
↓



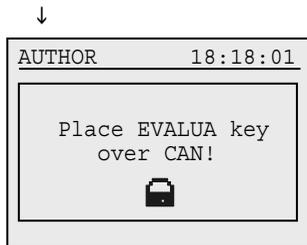
... Communication with the PC is active

↓  
② [QUIT] (red) - Turn off communication with the PC and go backwards one menu level

### 5.4.3 Temporary Evaluation (No Final Stop of the Race)

This function enables an temporary evaluation during the period a race takes place. The race remains 'active'. This function is mostly used if in the interim period a module constantly registering arriving pigeons in the loft saves further arriving pigeons.

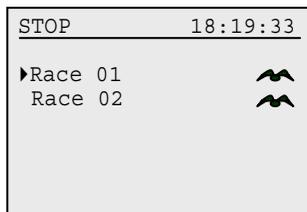
④ [EVALUA] (green)



... Request to hold the evaluation key over the BENZING ClubSystem antenna

↓  
Hold the evaluation key over the BENZING ClubSystem antenna.

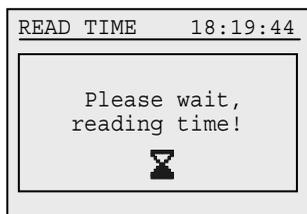
③ [TEMP EVAL] (blue)



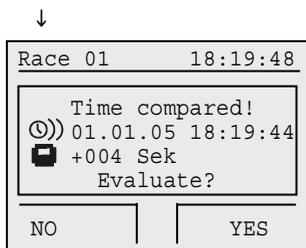
... Only 'active' races are displayed

⑥ ⑦ [▲] or [▼] - select race

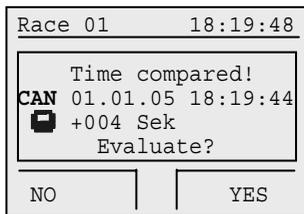
⑧ [✓]



... A short waiting period to read the time



... Time read from radio clock



... Time read from BENZING ClubSystem antenna

④ [YES] (green)

↓  
An intermediate evaluation list is printed without stopping the race.

## 5.5 Miscellaneous

### 5.5.1 Print Basketing List

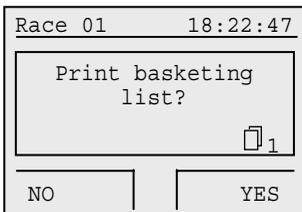
If the basketing list is not printed after basketing or if the print-out contains errors, the printing procedure can be repeated.

- ③ [MORE] (blue)  
↓
- ③ [PRINT] (blue)  
↓
- ① [BASKET] (yellow)  
↓



... Only 'active' or 'stopped' races are displayed.

- ↓
- ⑥ ⑦ [▲] or [▼] - Select race  
↓
- ⑧ [☑]   
↓



... Request if the basketing list is to be printed. The number of print-outs is indicated in the corner at the bottom right (here '1').

- ↓
- ⑥ ⑦ [▲] or [▼] - Increase or diminish the number of print-outs  
↓
- ④ [YES] (green)  
↓

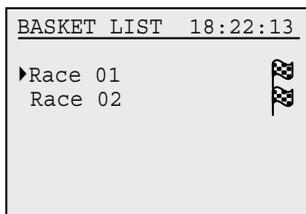


↓  
Back to selection of races

### 5.5.2 Print Evaluation List

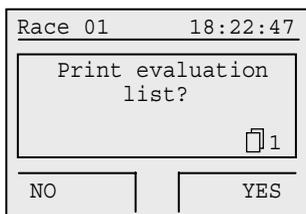
If the evaluation list is not printed after evaluating or if the print-out contains errors, the printing process can be repeated.

- ③ [MORE] (blue)
- ↓
- ③ [PRINT] (blue)
- ↓
- ③ [EVALUA] (blue)
- ↓



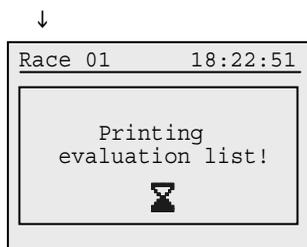
... Only 'stopped' races are displayed

- ↓
- ⑥ ⑦ [▲] or [▼] - Select race
- ↓
- ⑧ [✓] (with a small box icon)
- ↓



... Request if the basketing list is to be printed. The number of print-outs is indicated in the corner at the bottom right (here '1').

- ↓
- ⑥ ⑦ [▲] or [▼] - Increase or diminish the number of print-outs
- ↓
- ④ [YES] (green)
- ↓



↓  
Back to selection of races

### 5.5.3 *Print Coupled Pigeon List*

The coupled pigeon list contains all pigeons saved in the BENZING M1 including the coupled pigeons that have not yet been provided with an electronic ring number.

③ [MORE] (blue)



③ [PRINT] (blue)



④ [COUPLE LI] (red)



Race 01	18:24:01
Print coupled pigeon list?	
NO	YES

... Request if the coupled pigeon list is to be printed



④ [YES] (green)



Race 01	18:24:21
Printing coupled pigeon list!	
	

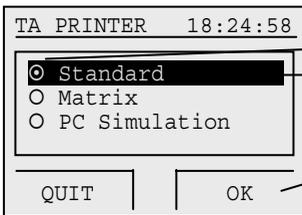


Back to selection menu 'Print'

### 5.5.4 Set the Type of Printer at the Club

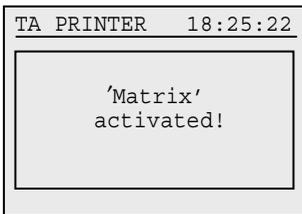
Within this menu the type of printer which is used in the club to produce the print-outs is selected. Possible types are a printer which only prints font (ASCII) ("Standard"), a dot matrix printer with continuous paper ("Matrix") or a "PC Simulation". With the selection "PC Simulation" you have the possibility to display the print-out on a connected PC before it is printed. Therefore the software "PrtSim.exe" has to be installed and started on the PC. If you then print with the BENZING M1, the print-out will be shown on the PC screen. From the PC you can then send the print-out to a printer that is connected to the PC.

- ③ [MISCELLA] (blue)
- ↓
- ② [ADJUST] (red)
- ↓
- ② [PRINTER] (red)
- ↓



Selected printer  
 Cursor mark  
 [OK] is only displayed after a new printer has been selected.

- ⑥ ⑦ [▲] or [▼] - Move line marker (dark bar) up / down
- ↓
- ⑧ [☑] - Select type of printer -> marker 'O' is set.
- ↓
- ④ [OK] (green) - Confirmation of the selected type of printer. **Only after this step the printer selection will be saved!**
- ↓



... Confirmation of selection of printer is displayed

Back to selection menu 'Adjust'

### 5.5.5 (De)activate Season Map

A season map (season plan) contains all races for a season. Season maps can be generated and edited with the PideXX software from GANTNER Pigeon Systems GmbH and loaded into the BENZING M1.

Depending on whether a season map is active or inactive, the races will be treated accordingly.

- Season map is activated:
  - After a race has been stopped it will be banned for the rest of the season.
  - The next race contained in the season map that can be selected is used for basketing.
  - By deleting the season map or loading a new season map on the PC the banned races are released again.
- Season map is deactivated:
  - By finishing a race it is released.
  - The same race can be reused for further basketing.

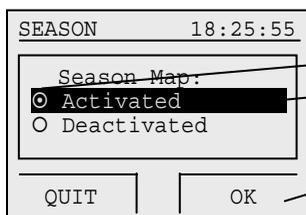
③ [MORE] (blue)



② [SETTINGS] (red)



③ [SEASON] (blue)



Selected option

Cursor mark

[OK] is only displayed after a new printer has been selected.



⑥ ⑦ [▲] or [▼]

- Move line marker (dark bar) up / down



⑧ [✓]

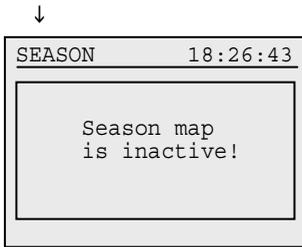
- Select marked option -> marker 'O' is set.



④ [OK]

(green)- Confirmation of the selected option. **Only after this step the season map is activated / deactivated!**





... Display shows confirmation that the season map is now inactive (or the corresponding confirmation for an active season map).

↓  
Back to selection menu 'Settings

### 5.5.6 Multi-Fancier Mode

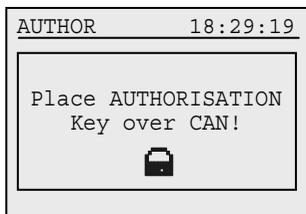
This manual describes the operation of the BENZING M1 as a device for one fancier. Also available is the BENZING M1 multi-fancier device. It features the option of saving up to four fanciers. Thus, several fanciers who share one loft are able to carry out races with the same BENZING M1. The menu guide of the multi-fancier function varies only in a few steps from that of the device for one fancier.



If the type of fancier mode is changed (i.e. multi-fancier mode activated or deactivated), the BENZING M1 must be reset to factory settings (see paragraph 5.5.9 – Reset the BENZING M1 to Factory-Aligned adjustments). With this procedure all pigeon data in the BENZING M1 will be deleted!

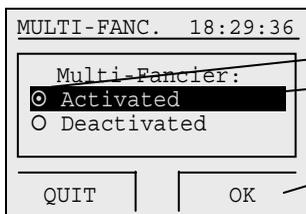
The multi-fancier mode of the BENZING M1 can be activated or deactivated as follows:

- ③ [MORE] (blue)
- ↓
- ② [SETTINGS] (red)
- ↓
- ④ [MULTI-FAN] (red)
- ↓



... Request for holding the authorisation card over the BENZING ClubSystem antenna

↓  
Hold the authorisation card over the BENZING ClubSystem antenna.



Selected option

Cursor mark

[OK] is only displayed after a new printer has been selected.

⑥ ⑦ [▲] or [▼]

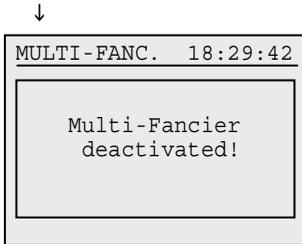
- Move line marker (dark bar) up / down

↓  
⑧ [O]

- Select marked option -> marker 'O' is set.

↓  
④ [OK]

(green)- Confirmation of the selected option. **Only after this step the multi-fancier mode is activated / deactivated!**



... Display shows confirmation that the multi-fancier mode is now activated (or the corresponding confirmation for deactivation).

↓  
Back to the menu "Adjust"

### 5.5.7 *Reset the BENZING M1 to factory Settings*

If the BENZING M1 is reset to factory settings, all specific adjustments made on the BENZING M1 are lost. The same values are generated for the adjustments that were provided for the BENZING M1 at the point of delivery.

**Note:** If the BENZING M1 is reset to factory settings, all pigeons saved in the device are deleted as well!

- ③ [MORE] (blue)  
↓
- ② [SETTINGS] (red)  
↓
- ① [FACTORY!!!] (yellow)  
↓

FACTORY ADJ. 18:27:26	
Delete data and reset device to factory settings ?	
NO	YES

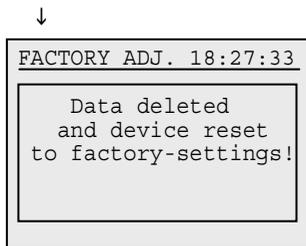
... Request if factory settings are to be set.

- ④ [YES] (green)  
↓

FACTORY ADJ. 18:27:26	
Sure to reset the device to factory settings?	
NO	YES

... Re-request if factory settings are to be set.

- ④ [YES] (green)  
↓



... Display shows confirmation that the BENZING M1 is now adjusted to the factory settings.

## 6. GUARANTEE AND LIABILITY

For the BENZING M1 we provide

### **a two-year limited warranty**

concerning perfect material and performance. This means that all parts which prove to be useless or defective during this period of time as a result of defective material or poor workmanship will be exchanged or replaced free of charge.

The warranty does neither include the fees charged for the delivery of the exchanged or replaced parts, nor wear and tear, nor damages that have been generated by careless and improper use.

The warranty does not apply if components of the system are opened by persons who are not explicitly authorized by us, except for the removal of the front panel and the exchange of the front foil as described in the Fancier Manual corresponding to the BENZING M1.

It is of utmost importance that only the battery types indicated in this manual are used. Make sure to use leakage-free batteries. The warranty does not apply to damages that are caused by leaking batteries.

The operating instructions are to be followed carefully. No guarantee or liability whatsoever will be provided regarding safety against manipulation, loss and correctness of the displayed, printed or transferred data and results.

All relevant system components of the BENZING M1 were examined according to the CE regulations, certified according to EN 60950 (IEC 950) and correspond to the DIN/VDE 0850 guidelines. In addition, the BENZING M1 system meets the requirements set up by the ETSI (European Telecommunication Standard Institute).

GANTNER Pigeon Systems GmbH checks all devices thoroughly due to hardware or software failures. But failures can never be entirely excluded and will be corrected or repaired according to the guarantee definitions. GANTNER Pigeon Systems GmbH cannot be called to account for damages or disadvantages (e.g. profit loss from bets) which occur due to those failures.

## 7. FREQUENTLY ASKED QUESTIONS (FAQ)

This part deals with several important as well as frequently asked questions concerning the BENZING M1. In case you still have questions on the operation or function of the BENZING M1 after having read this manual, and cannot find an answer to your question in the following, please contact your sales agent.

- **I would like to basket pigeons for a race. BENZING M1 shows the display 'Pigeon has been basketed.'**
  - The pigeons have been basketed for a race that is not finished yet.
- **The BENZING M1 clock is not synchronized when basketing and has a difference compared with the radio clock (resp. the internal clock of the CAN).**
  - Not all races or training races have been finished.
- **I cannot find the menu 'Date / Time'.**
  - Not all races or training races have been finished. Date/Time cannot be modified.
- **'Delete all pigeons' by means of the PC does not work.**
  - Not all races or training races have been finished. Date/Time cannot be modified.
- **Nomination: 'Pigeon list empty' or pigeons are missing.**
  - Not all races or training races have been finished.
- **During the training race not all arriving pigeons have been registered.**
  - The training race started before the pigeons had been registered.
  - Pigeons will not be basketed as bets have been placed on them.

## 8. TECHNICAL DATA

### 8.1 Power Supply

Voltage Supplied By

- The Power Supply Unit: 10 to 15 VDC (plus pole on the inside)
- Battery: 2 x 1.5 V / type AA - LR16 (alkaline batteries)

Current of the BENZING M1: Typically maximum of 100/130 mA at 12 VDC

### 8.2 Internal Clock

Real-Time-Clock (RTC):

Quartz operated

Precision:

< ±0.25 seconds per day at +25°C (+77°F)

### 8.3 Memory

Program Memory:

2 MByte Flash

Pigeon Memory:

256 kByte Flash for 1000 pigeons

Memory:

16 MByte SDRAM

### 8.4 Operating Tools

Keys:

4 function keys with a description of the function on the display with a text in clear

2 cursor keys

1 key 'Start'

1 key 'OK'

1 key 'Backwards'

Display:

Monochrome LED display with graphics capabilities and background lighting, 128 x 64 pixel

Acoustic Signal:

Built-in beep

### 8.5 Interface

USB Interface:

Standard 1.1, plug type B to connect to a PC

DB-15 Interface:

RS 485 to connect to antennas (loft or club) and to connect to a docking station

## 8.6 Case

Material:	Plastic
Dimensions (L x W x H):	150 x 104 x 34 mm
Protective System:	IP 50
Weight:	260 g

## 8.7 Conditions of Surroundings

Operating Temperature:	0 to +60°C (+32°F to +140°F)
Storage Temperature:	-25°C to +70°C (-13°F to +158°F)
Relative Humidity:	0 to 90% at +25°C (+77°F), not condensing

## 8.8 Power Supply Unit

Primary Voltage:	230 VAC, 50 Hz
Primary Output:	22 VA
Secondary Rated Voltage:	12 VDC
Secondary Current:	Max. 1500 mA

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### Note:

This manual is valid as of March 19<sup>th</sup>, 2007. It is subject to change, amendments and changes can be made without prior notice at any time.



Part No.: 251980

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