



# EXPRESS Club System



USER MANUAL

VERSION 1.23

ENGLISH



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This user manual does not claim to be complete nor to be free from mistakes, errors or omissions. Neither is it a general instruction for the pigeon sport, but it describes exclusively the general handling of the EXPRESS system.



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## 1. INTRODUCTION

### 1.1. Preface

Dear customer,

By purchasing our club system EXPRESS you have made your choice of a reliable high-quality system, offering you considerable advantages in the practice of racing pigeons.

After unpacking the different components we would kindly ask you to read this manual carefully, as it contains important information on how to install and operate the complete club system EXPRESS quickly, safely and efficiently.

## 2. SYSTEM

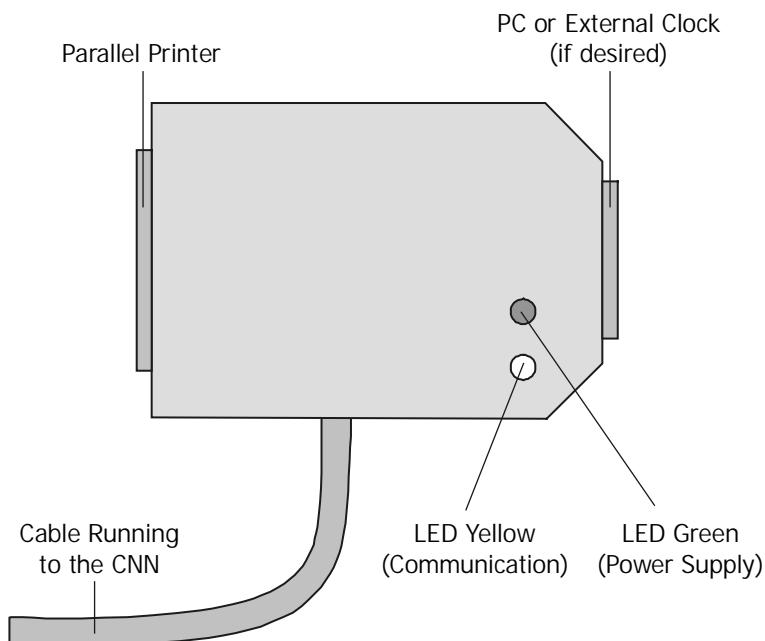
### 2.1. System Components at the Club: EXPRESS

- CAN (with internal Clock)
- CPN (printer node equipped with serial and parallel interface)
- CNN
- ATIS Power Supply unit to be plugged in ( only when delivered, not when exchanged)
- red badge (registration)
- orange badge (basketing)
- green badge (evaluation)
- connection power cable EXPRESS  $\beta$  à CNN
- connection power cable CPN  $\beta$  à PC (small plug DB-9 to small plug DB-9)

Before you assemble your new club system please check the complete existence of all components.

#### **Club Printer Node - CPN**

The CPN is equipped with a DB 25 plug used to connect a parallel printer, disposes of a DB 9 plug used to connect a PC respectively an external clock as well as a fixed cable to connect the CNN:



**Bild 1.1 – Connections at the CNN**

### **Clock**

The clock is an important part of the club system. The internal clock of the CAN is standard equipment. If desired an external clock can be delivered (a radio clock, a Masterclock or a GPS clock).

If an external clock is used the CAN clock is automatically turned off.

### **Internal Antenna**

If no CAN (external clock) is used the pigeons have to be registered and basketed with the internal antenna of the EXPRESS.

Make sure that the EXPRESS is not installed above a compact metal surface as this can influence the correct performance of the internal antenna. Therefore a minimum distance of 6 centimeters (2.4 inches) should be kept between the EXPRESS and the metal surface. No particular distance however is required between small metal parts like screws, nails or metal bars and the EXPRESS.

Advice: The distance between a PC screen and the EXPRESS has to be at least 50 centimeters (19.7 inches).

### **ATIS Power Supply Unit**

The ATIS Power Supply Unit is connected with the mains (110/230 volt) and supplies the CPN, the CNN, the EXPRESS and the club antenna (CAN) with the necessary low voltage (direct current of about 12 volt).

Advice: Only use a power supply unit recommended by your ATIS supplying agent!

### **Red Badge**

This badge enables the user to authorize the registration of the pigeons. The person in charge of the registration is also in possession of the red badge.

### **Orange Badge**

This badge enables the user to basket the pigeons at a race. It is in possession of the race secretary who is also responsible for the correct operation.

### **Green Badge**

This badge enables the printing of the evaluation list. It is left in the custody of the race secretary who is also in charge of the correct operation.

### **Printer**

The EXPRESS cannot be used with every printer. The following printers guarantee for a correct performance:

- Canon BJC 240
- Epson LX 300
- Epson Stylus Color P2
- HP Laser Jet IIP
- HP Desk Jet 500

If you use another printer than those mentioned above, try its performance or contact your delivering agent.

## 3. OPERATING INSTRUCTIONS

### 3.1. General Information

There are two types of club systems. The club either uses only the EXPRESS or the EXPRESS and the ATIS TOP together. The latter will be described in part 2 of the user manual. As standard equipment a CAN is used with an internal clock, thus turning off automatically the internal antenna of the EXPRESS.

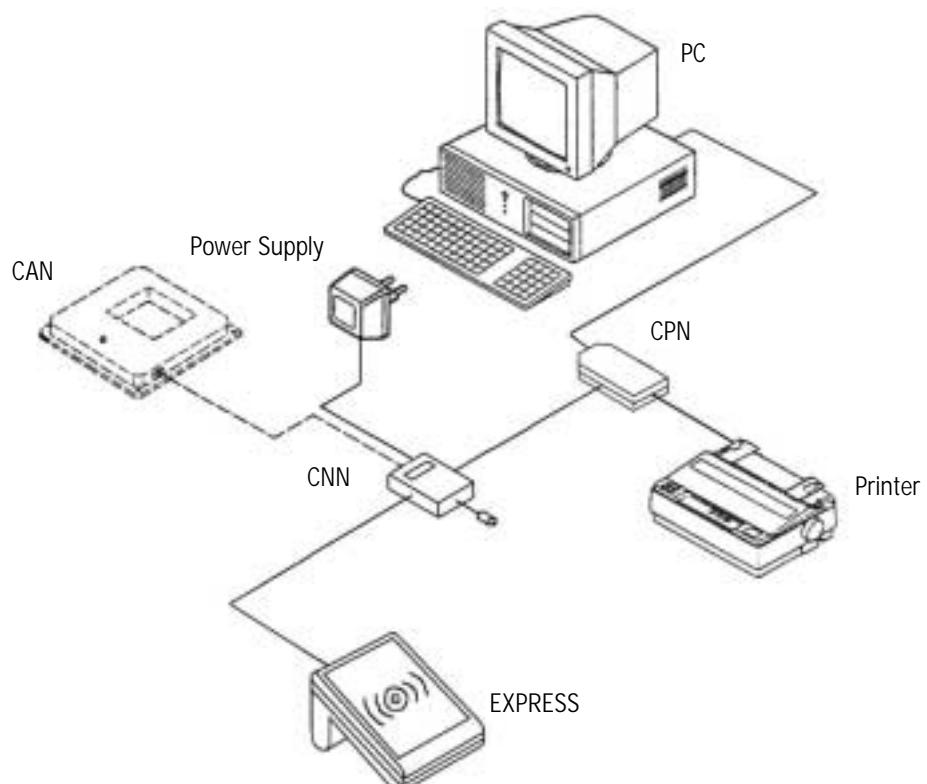
If no CAN is connected the internal antenna of the EXPRESS has to be used.

Important Advice: All components of the system have to be connected first before plugging it in. After having plugged in the power supply unit the system is started.

### 3.2. Registration

#### ***EXPRESS at the Club***

To register the pigeons at the club (before the race season starts):



Picture 3.1. - **Register Pigeons at the Club**

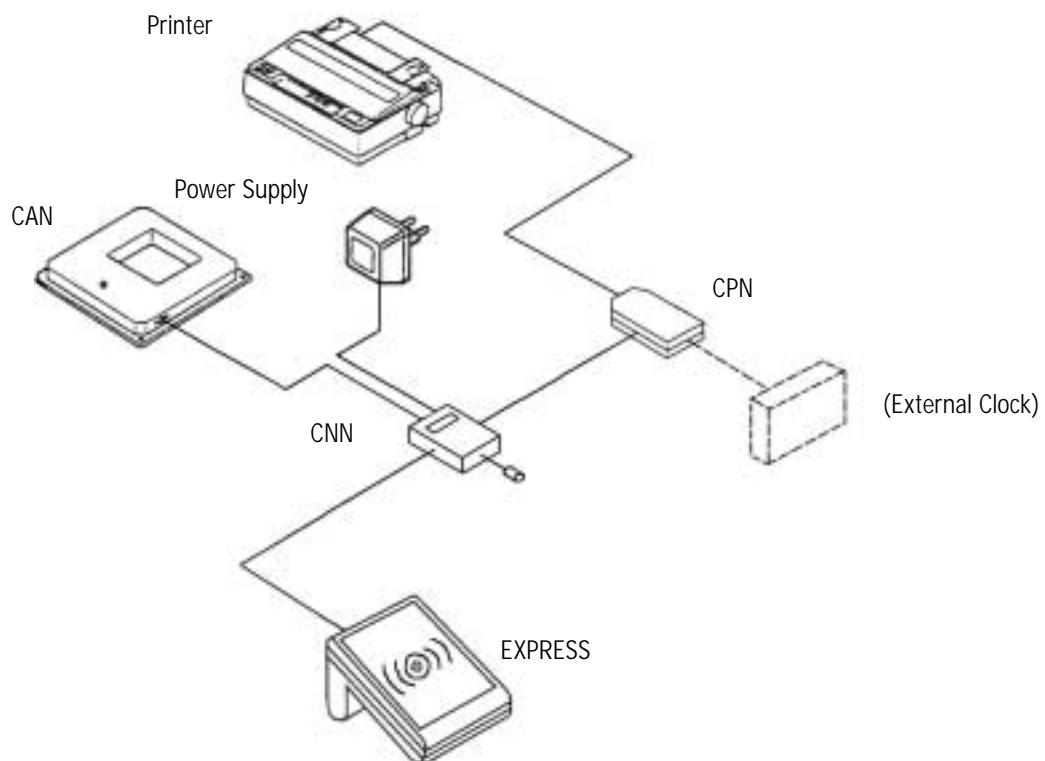
250 pigeons can be displayed  
250 pigeons can be set for the races

1. The fancier takes his pigeons and EXPRESS to the club.
2. The EXPRESS is connected with the club system like shown in picture 3.1. The functions are then released with the red badge (registration).
3. The ring numbers are typed into the EXPRESS via PC.
4. The ring numbers are written on the chip code rings.
5. You can keep track of possible errors on the PC screen.
6. All details of club members and registered pigeons will be printed in full.

### 3.3. Baskets

#### ***EXPRESS at the Club***

Baskets of the pigeons at the club.



*Picture 3.2. - Baskets at the Club*

Normally the internal clock of the CAN is used. Yet if desired an external clock (a radio clock, a Masterclock or a GPS clock ) can be used.

When connecting the first EXPRESS with the club system the internal clock has to be set (see instructions on page 14).

No changes in the list of pigeons can be made unless you delete the race first.

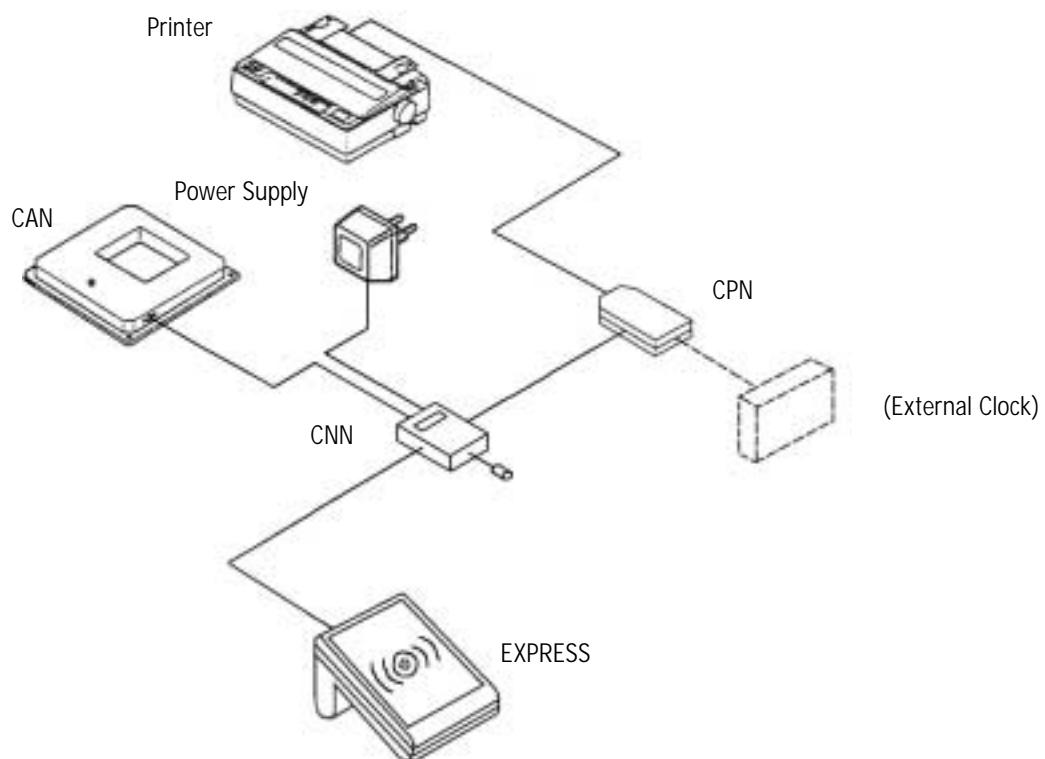
The security code cannot be set nor be displayed. The number is shown only on the race evaluation.

1. The fancier takes his pigeons and EXPRESS to the club and connects the EXPRESS with the club system. The functions are released with the orange badge (basketing).
2. The pigeon is held over the CAN (or the internal antenna if an external ring clock is used), the secret number is written on the chip code ring and the number is shown on the EXPRESS display.
3. The EXPRESS is automatically synchronized with the internal clock of the CAN and then runs precisely via an internal quartz (an external clock is available only if desired). Possible differences of the clock will be considered in the calculations when evaluating the race. The advantage of this procedure is the fact that the clock is under constant surveillance of the race secretary during the whole race.
4. The race is activated as soon as the first pigeon is basketed. While the race is activated ...
  - the date and time is locked
  - pigeons cannot be deleted
  - pigeons can only be basketed for one race.
5. The EXPRESS is handed back to the fancier.

### 3.4. Evaluation

#### ***EXPRESS at the Club***

To print and delete the race evaluation



*Picture 3.3. – Evaluation of races*

If desired the internal clock can be reset here when connecting the first EXPRESS to the club system (see page 14 – basketing).

1. The fancier takes his EXPRESS to the club and connects it with the club system. The functions are then released with the green badge (evaluation).
2. Now the race can be chosen and the corresponding race evaluation is printed.
3. After the race evaluation has been printed it can be deleted.

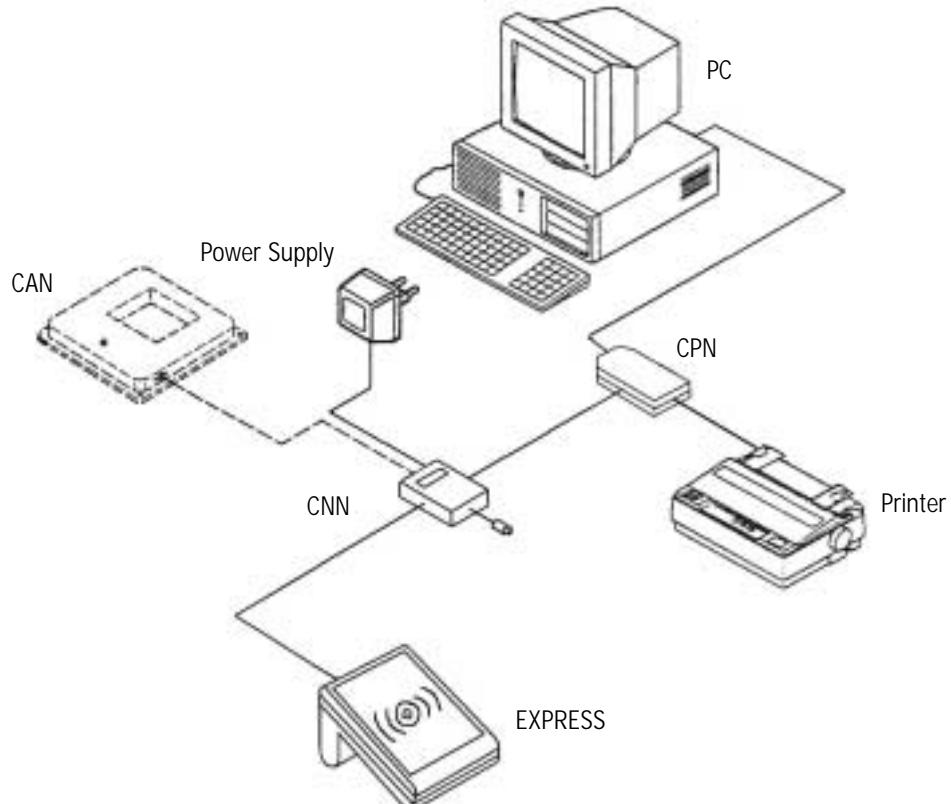
## 4. APPLICATIONS

The club system enables you to register and basket the pigeons, to print evaluations and to update the EXPRESS with a new software - download (see chapter 4, pages 22-24).

### 4.1. Registration

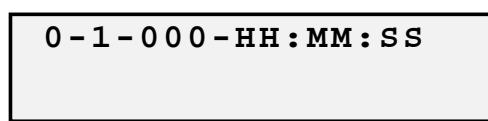
For registration the following parts are needed:

- CPN (printer node) and CNN (network node)
- Connection power cable EXPRESS  $\beta$  à CNN
- PC with the software of the club and a connection power cable
- EXPRESS
- Red badge
- Printer
- Parallel Printer Cable



*Picture 4.1. - Registering Pigeons at the Club*

1. Connect the EXPRESS with the club system (CNN).



2. Hold the red badge (registration) over the internal antenna (or CAN). A short beep will tell you that the badge has been recognized.



Position <1> flashes as long as the communication with the PC is on.



3. Boot the PC and start the software of your club.
4. From now on you will be working on your PC.
5. If you keep the "OK" key pressed for more than 5 seconds you will start the printer which then prints out the list of registered pigeons.

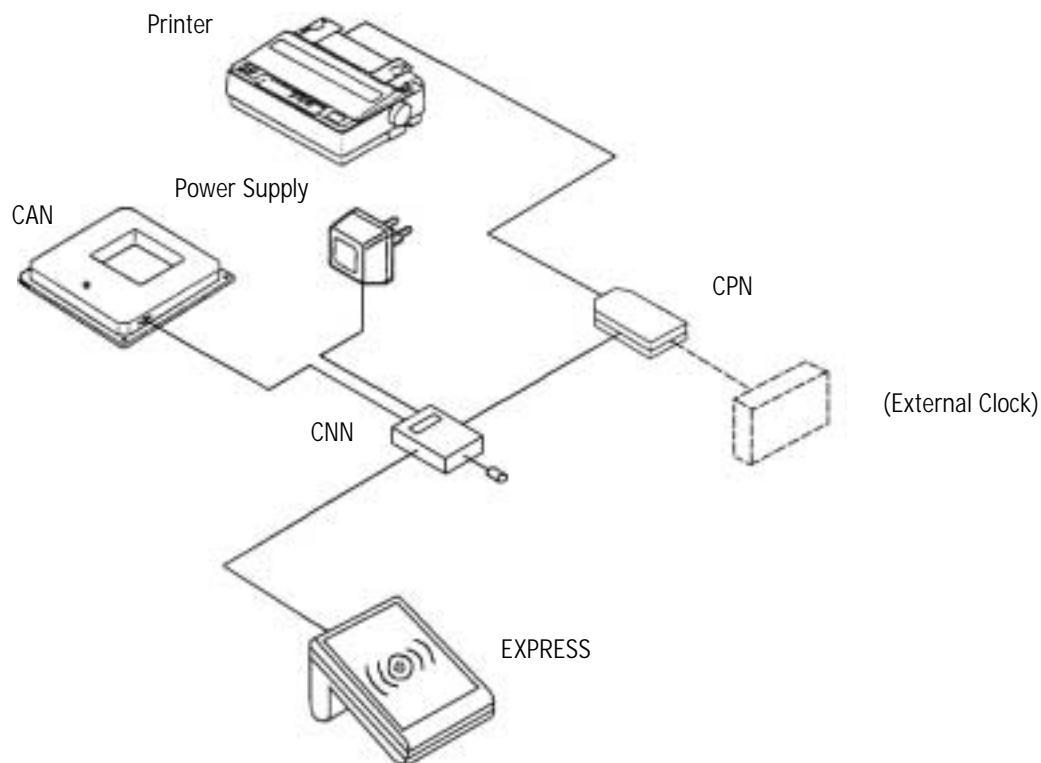


## 4.2. Baskets

For registration the following parts are needed:

- CPN (printer node) and CNN (network node)
- Connection power cable EXPRESS  $\beta$   $\rightarrow$  CNN
- EXPRESS
- Orange badge
- Printer
- Parallel printer cable
- CAN (internal clock)

If desired an external clock (a radio clock, a Masterclock or a GPS clock) can be used instead of the CAN.



*Picture 4.2. – Basketing Pigeons At The Club*

1. Connect the EXPRESS with the club system (CNN). After a short system check the following appears on the display.



2. Keep the "OK" and "Break" key pressed for 5 seconds (only if using the internal clock of the CAN) and you will get into the configuration mode "9". Here you have to select position "04" with the "Cursor" keys and then press the "OK" key in order to set the internal clock of the CAN.

The cursor is moved with the "OK" key and you can increase and decrease the corresponding numbers with the "Cursor" keys. If you confirm the inserted data it will be stored.

By using the "Break" key the procedure can be interrupted. The EXPRESS will get back into the loft mode.

3. Hold the orange badge over the internal (or CAN) antenna. A short beep will tell you that the badge has been recognized. The orange LED and position <2> are flashing at the same time and the following appears on the display:



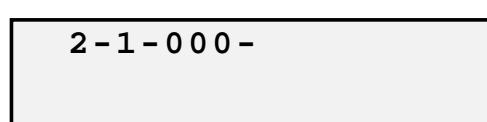
4. The two keys showing arrow up/down enable you to choose the race number which is used to basket the pigeon.



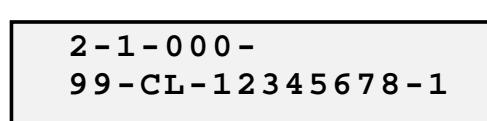
5. Choose the race number and then press the "OK" key. Position <2> stops blinking.



Notice: The number of races is limited to 3.



6. If a pigeon is hold over the CAN (or internal antenna) the following appears on the display:



Now all pigeons that are not set for a race can be basketed.

7. If you keep the "OK" key pressed for more than five seconds you will start the printer which then prints out the list of pigeons basketed.



Now the orange LED is permanently on which tells you that the race has been started. The light will continue to be on until the race has been deleted.

2 - 1 - 0 0 0 -  
9 9 - CL - 1 2 3 4 5 6 7 8 - 1



If you want to print out the race, you have to choose the same race number again.

Error: If the printer is not connected correctly or off, or if there is no paper in the printer, the following appears on the display after about 10 seconds:

ERROR  
301



Please check if the printer is correctly connected or if there is enough paper in the printer

By pressing the function key "OK" you continue printing.

Notice: If you have forgotten to basket a pigeon for a race you can basket the pigeon later at any time chosen.

### ***Registration While Basketing***

If a chip code ring is not recognized while basketing, it is possible to use a new ring.

1. Hold the red badge over the CAN (or the internal antenna) and the following appears on the display:

5 - 0 1 - 0 0 1  
9 9 - CL - 1 2 3 4 5 6 7 8 - 1



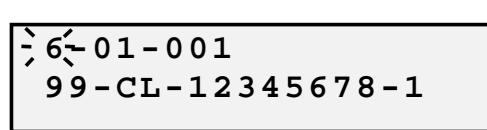
2. By using the two keys showing arrow up/down you choose the pigeon with the faulty chip code ring on the list of the registered pigeons



3. Press the "OK" key and hold the new chip code ring over the CAN (or the internal antenna).



The new ring number appears on the display:



The pigeon ring is written again and you can continue basketing.

By using the function key "Break" you can continue basketing without writing the new ring.

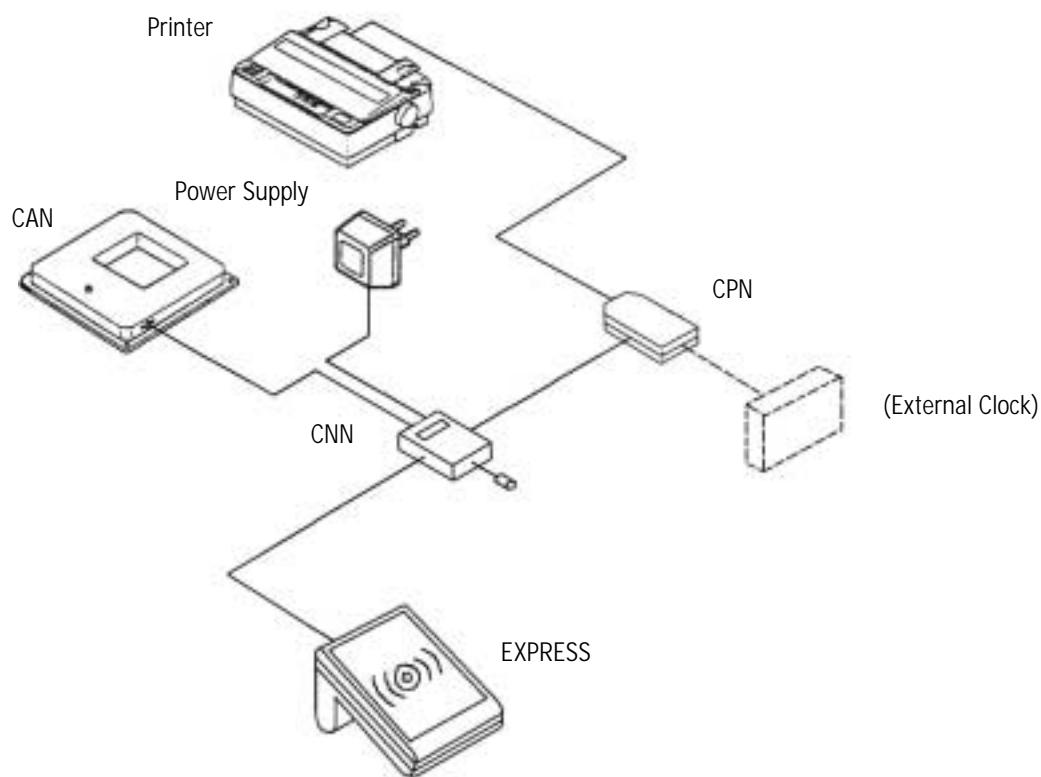


#### 4.3. Evaluation

In order to print and delete a race the following parts are needed:

- CPN (printer node) and CNN (network node)
- Connection power cable EXPRESS  $\beta$  à CNN
- EXPRESS
- Green badge
- Printer
- Parallel printer cable
- CAN (internal clock)
- External clock (only if desired)

An external clock (radio clock, Masterclock or a GPS clock) can be used instead of the CAN.

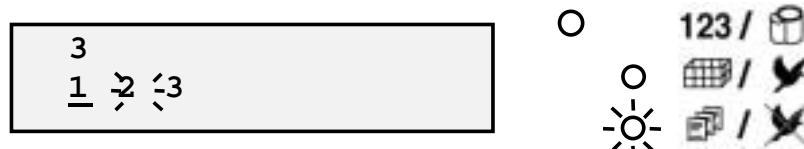


Picture 4.3. – **Evaluating Races At The Club**

1. Connect the EXPRESS with the club system (CNN).



2. If desired the internal clock of the CAN can be read out (9-03) or it can be set (9-04) before the evaluation (see Page 14 - Setting).
3. Hold the green badge over the CAN (or the internal antenna). A short bleep will tell you that the badge has been recognized. The green LED and position <3> are flashing and the following appears on the display:



Notice: Only those races that can be printed will be shown on the second line of the display.

4. You can choose the races by using the keys showing arrow up/down. The race number chosen for the time being is flashing and underlined.



5. Choose the race number by pressing the "OK" key.



Now position <3> stops blinking and the evaluation mode appears on the display.



6. If you keep the "OK" key pressed for 5 seconds, the evaluation list will be printed in full.



The green LED is constantly on until the race has been deleted.



Error: If the printer is not correctly connected or off, or if there is no paper in the printer, the following appears on the display after about 10 seconds:

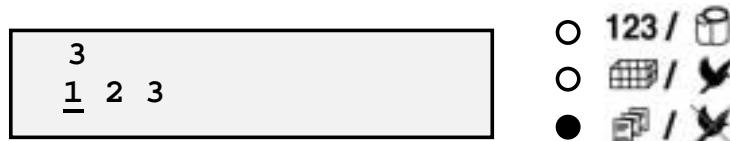


Please check if the printer is correctly connected or if there is enough paper in the printer.

By pressing the function key "OK" you continue printing.



After printing you get to the evaluation menu, which can also be chosen with the green badge.



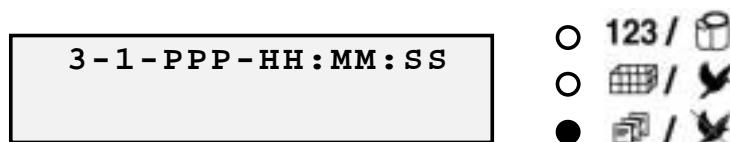
1. You can choose the races by using the keys showing arrows up/down. The race number chosen for the time being is flashing and underlined.



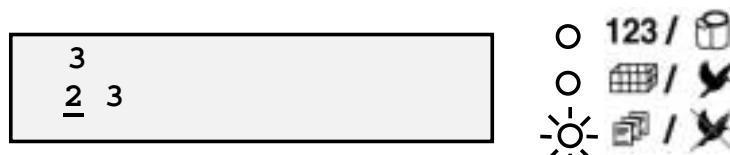
2. Choose the race number by pressing the "OK" key.



Now position <3> stops blinking and the evaluation mode appears on the display. The green LED is constantly on if the chosen race has already been printed.



3. If you keep the function key "Break" pressed for ca. 5 to 7 seconds, the chosen race is deleted.



All LEDs will be turned off if all races have been deleted.



- 123 /
- /
- /

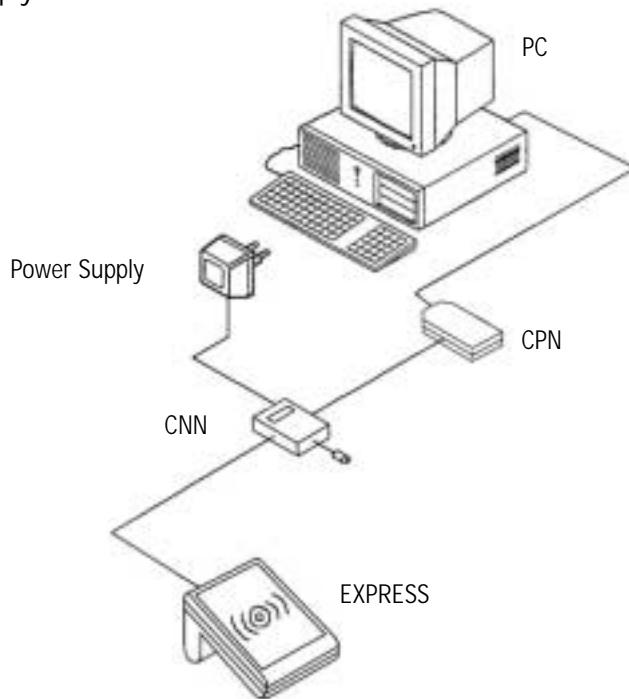
#### 4.4. Download

If a new software for the EXPRESS is available it can be loaded into the EXPRESS at the club.

The list of registered pigeons will not be influenced by this download!

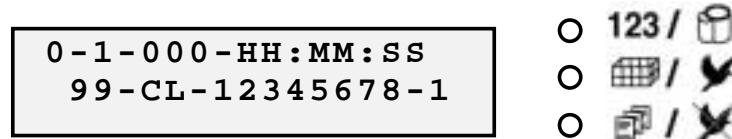
For a software update the following ports are needed:

- CPN (printer node) and CNN (network node)
- Connection power cable EXPRESS  $\beta$  à CNN
- PC with a download software and a connection power cable
- EXPRESS
- Power supply



Picture 4.4. – Download of new Software into EXPRESS

1. Connect the EXPRESS with the club system (CNN). After a short system check the following appears on the display:



2. Boot the PC.
3. Insert the disk into the 3.5 inch disk drive and change the drive:  
e.g. A: <ENTER>
4. Start the download software. To communicate with the EXPRESS the serial interface COM1 or COM2 can be used. If COM1 is used:  
DOWN <ENTER>  
If COM2 is used:  
DOWN 2 <ENTER>
5. The progression of the download appears on the screen. First information about the connected device will be shown, e.g.:  
Device info: Type: EXPRESS  
Serial number=001234  
HWV=01.00 BTV=01.00 SWV=01.00

Then information about the new software version follows on the screen, e.g.:

Program File: EXP0102.GEF  
Program Info: Type: EXPRESS  
HWV=01.00 BTV=01.00 SWV=01.02

On the display of the EXPRESS the following appears:



6. After a successful download the following text appears on the screen:  
Download Progress: 100%  
SUCCESS: Programming over  
Disconnect device.

The download can take some time, as it depends on how fast the computer performs and may never be interrupted.

If the download is finished there will be a short bleep from the EXPRESS and the fancier mode is started.

7. If you want to load several EXPRESS devices, start again at stage 5 and follow the instructions from there one by one.
8. After having finished loading the last device, disconnect the cable between CPN and CNN and reconnect it.

The download software is available for WIN 3.11, WIN 95, and WIN 98. Ask your delivering agent or contact GANTNER ELECTRONIC GMBH.

## 5. GENERAL INSTRUCTIONS

- Please check the correct position of the plugs on the CPN, CNN and the CAN and mount the indicated plugs by using screws. Always pay attention to the correct direction when plugging in and out.
- Before the first start check the correct setting of the internal clock of the CAN or that the external clock (if used) receives the correct signal.
- Please make sure that the printer of your EXPRESS or ATIS TOP is correctly set. This setting has to correspond with the type of printer connected at your club. If using the CPN always choose the parallel printer.
- If the CPN is in operation the green LED is always on.

## 6. SAFETY INSTRUCTIONS

- After unpacking check the components immediately on possible damage.
- Do by no means connect a damaged set to the mains or start using it. Report to your authorized dealer immediately.
- The components are to be opened and repaired only by the manufacturing firm or an authorized service center. Unauthorized handling will lead to the loss of any warranty claims whatsoever.
- Never disconnect the power supply unit by pulling its cord. Instead get hold of its case and gently pull it out.
- The temperature surrounding the EXPRESS and the ATIS TOP should not drop down under 0 °C (+32 °F) nor exceed +45 °C (+113 °F). It may reach a temperature of +70 °C (+158 °F) for the club antenna. If the temperature has fallen below 0 °C (+32 °F) - which means that condensed water is possibly formed - take the EXPRESS to a place with a room temperature of about +20 °C (+68 °F) and let it dry there for more or less one hour. Afterwards the equipment can be used without further problems. The storage temperature for the winter season ranges between -25 °C (-77 °F) and +70 °C (+158 °F) for the EXPRESS and may drop to -20 °C (-68 °F) for the club antenna.
- While in use, the EXPRESS should neither be exposed to rain nor to direct sunshine.

## 7. TECHNICAL DATA

### **CPN**

Voltage:	9 to 20 VDC, regular 12 VDC
Current:	a maximum of 150 mA, regular 50 mA (without external equipment)
Interface:	RS 232C, RS 485, CENTRONICS
Display:	2 LEDs
Case:	plastic ABS
Dimensions:	92 x 55 x 21 mm (L x B x H)
Weight:	approx. 0.25 kgs
Operating Temp.:	0 °C (+32 °F) to +50 °C (+122 °F)
Storage Temp.:	-25 °C (-77 °F) to +70 °C (+158 °F)

### ***Power Supply Unit to be Plugged In***

Mains Voltage:	210 to 230 V 50/60 Hz
Output Voltage:	13 VDC
Power Consumption:	11 W

### **CNN**

Voltage:	8 to 20 VDC
Current:	approx. 20 mA
Interface:	RS 485
Display:	2 LEDs (little signal lamps)

### ***Club Antenna (CAN)***

Ring types:	VR 1, UCR 2
Voltage:	9 to 20 VDC, regular 12 VDC
Current:	0.25 A
Interface:	RS 485
Display:	1 LED
Case:	plastic
Dimensions:	210 x 210 x 31 (L x B x H)
Weight:	0.38 kgs
Operating Temp.:	0 °C (+32 °F) to +45 °C (+113 °F)
Storage Temp.:	-20 °C (-68 °F) to +70 °C (+158 °F)
Protection class:	IP 52

## 8. GUARANTEE AND LIABILITY

For the EXPRESS we provide a

one-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 stemming from careless and improper use.

The warranty will not apply if parts of the system are opened by someone who is not explicitly authorized by us to do so.

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

A type-specific general authorization for the EXPRESS system has been issued by the BAPT (Bundesamt für Post und Telekommunikation – Federal Bureau for Postal Services and Telecommunication). This means that no licence is required and it may be operated free of charge. All relevant parts of the EXPRESS system were examined according to the CE regulations, were certified according to the EN 60950 (IEC 950) and meet the DIN/VDE 0850 guidelines. In addition the EXPRESS system already meets the requirements set up by the ETSI (European Telecommunication Standard Institute).



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