

### General

We congratulate you on the purchase of the BENZING Station. It is the ideal partner for the BENZING M1 which allows the fancier to maximize the M1 system's full range of clocking abilities. Within this innovative system lies a wealth of useful functions, such as:

Allowance for direct connections to the PLB and SAN antennae, thereby making additional connection interfaces superfluous.

Allows for direct connectivity to conventional matrix or laser printers.

Allows pigeon arrival information to be sent to a connected mobile telephone or modem, by SMS.

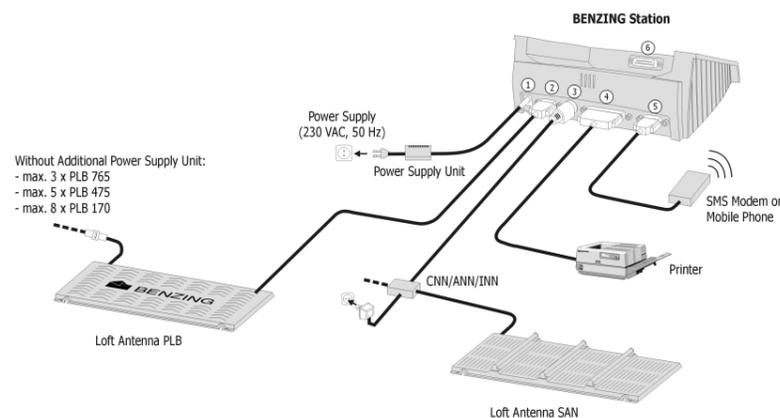
Allows integrated continuous clocking which can handle up to 1,000 pigeons and communicate with 32 PLB or 8 SAN antennae. Thus the fancier always has the information on all arrived pigeons, even while he or she is away from the loft with the BENZING M1.

Provides the security of a second clock whereby all flight data is stored in the internal memory of the BENZING Station, thus complete backup data is always available. Backup data can be downloaded at the club.

A new and very loud integrated beeper gives broad notice of the arrival of pigeons, detectable even from great distances.

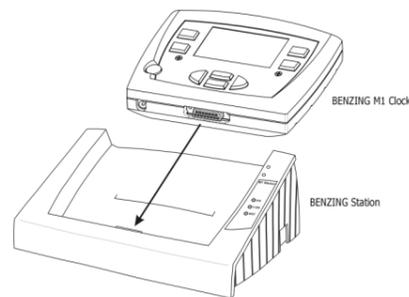
### 1. Connection

All the connections to the BENZING Station are done at the backside of the housing:



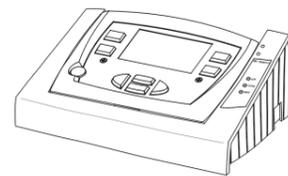
As soon as the BENZING Station is connected to power it will start and beep 3 short times, signaling that the BENZING Station is operational.

Now connect the BENZING M1 clock to the BENZING Station. To do this simply place the BENZING M1 clock in the dish portion of the BENZING Station and slide it downward until the BENZING M1 fully connects to the DB-25 plug.



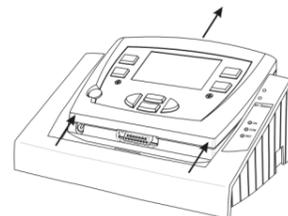
It is necessary to make certain that the BENZING M1 is securely plugged into the BENZING Station.

- ① Additional power plug (though it is recommended that the power supply be as close to the antennae as possible)
- ② DB 9 socket for the connection of the PLB antennae
- ③ PMDIN socket for existing components (SAN, INN, CNN, ANN etc.)
- ④ Parallel printer output to connect conventional printers
- ⑤ DB 9 plug for connection to a mobile telephone or modem
- ⑥ DB 25 plug to connect the BENZING M1



After the BENZING M1 boots up, it becomes operational and the next step is to put it into operation.

 Caution must be taken in unplugging the BENZING M1 so as not to damage the DB 25 plug. To do this properly, press with both thumbs on the underside of the BENZING M1 and slide it upward out of the BENZING Station.



### 2. First Putting Into Operation

When first connecting the BENZING M1 to the BENZING Station the alert "Wrong BENZING Station" appears on the display of the BENZING M1. To use the BENZING M1 with the BENZING station, both pieces of equipment must be linked.

To accomplish this, follow these steps:

1. Open the menu of the BENZING M1 with the green button "MENU".
2. Press the red button "SYSTEM" to open the system menu.



3. Choose the command in the system menu "Link STATION". And confirm it with the button corresponding to "YES."

The BENZING M1 and the BENZING Station are now linked. Now the signal "STA" is displayed on the BENZING M1 as soon as it is plugged into the BENZING Station.



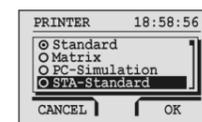
 Linking the BENZING M1 with the BENZING Station is only possible if no training or race is in progress.

### 3. Printing

#### Manual Printout of the Fancier's Pigeons and Race Data

At the parallel port ④ the fancier can attach a conventional printer (matrix, laser). It is then possible to print the fancier's pigeons and race or training data through this interface. Printing is carried out as described in the manual of the BENZING M1. First, the corresponding printer must be chosen in the system menu:

1. Open the menu of the BENZING M1 with the green button "MENU".
2. Press the red button "SYSTEM" to open the system menu.
3. Choose the menu point "Printer" in the system menu. The following will be displayed:



4. Move the black bar with the cursor buttons (▲ ▼) to choose the printer type, noting that the ones marked ("STA Standard" or "STA Matrix") are the ones attached to the BENZING station.
5. Mark the printer with the button ☒. The selection on the display will change from "O" to "O".
6. Press the button "OK" for the confirmation of the choice.



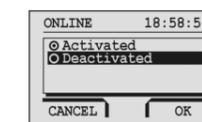
The printer is select now and all following printouts will be printed with the printer connected to the BENZING Station.

#### Automatic Online Printing

The BENZING Station also offers the possibility for single line printing on the arrival of each pigeon. Therefore, if a pigeon is timed at any connected antenna, a single line is printed automatically with the arrival data of the pigeon. For this function at least one PLB antenna and a printer must be attached to the BENZING Station.

To execute this function you must activate it in the menu of the BENZING M1:

1. Open the menu of the BENZING M1 with the green button "MENU".
2. Press the red button "SYSTEM" to open the system menu.
3. Choose the menu point "Online Print" in the system menu. The following will be displayed:



4. Move the black bar with the cursor buttons (▲ ▼) to "activate" or "deactivate" the online printing function.
5. Mark the function with the button ☒. The selection on the display will change from "O" to "O".
6. Press the button "OK" for the confirmation of the choice.



### 4. Through Clocking

In case the BENZING M1 is removed from the BENZING Station, the Station will take over the communication with the connected antennae. The arrival times of all pigeons will be stored in the internal memory of the BENZING Station. As soon as the BENZING M1 is plugged again into the BENZING Station all the information will be exchanged.

The BENZING Station manages up to 1,000 pigeons and can communicate with up to 32 PLB antennae and/or 8 SAN antennae.



To activate the through clocking of a flight the BENZING M1 has to be plugged into the BENZING Station for one time right after the basketing to that flight.

### 5. Notification via SMS

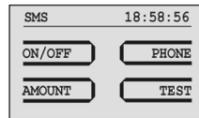
A modem or mobile phone can be attached to the BENZING Station (Plug ⑤). It is thus possible to send at the arrival of a pigeon a short message (SMS) to your mobile phone. This way you are always informed about the arrivals of your most important pigeons even if your not at home.



This function is only available if your phone provider supports this service and if your mobile phone has a serial RS 232 interface for connection to the BENZING Station as well as an integrated modem.

After connection the modem or mobile phone (see point 1) you have to carry out the following configurations in the BENZING M1:

1. Open the menu of the BENZING M1 with the green button "MENU".
2. Press the red button "SYSTEM" to open the system menu.
3. Choose the menu point "Sms Settings" in the system menu. The following will be displayed:



The following points can be done in this menu:

#### SMS Function On/Off

In order to use the SMS feature it has to be activated first. This is possible to activate or deactivate for trainings and race flights separately:

1. Press the yellow button "ON/OFF". Another menu will be shown on the display.
2. From the appearing menu choose "Training" or "Race", depending on where you want to use this feature.
3. Mark the function with the button . The selection on the display will change from "O" to "O".
4. Press the button "OK" for the confirmation of the choice.

#### Entering Phone Number

The phone number to where the SMS should be send has to be entered into the BENZING M1. Every fancier can have his own number.

1. Press the blue button "PHONE".
2. Push the button for the desired fancier. The display will change so that you can enter the phone number.
3. To change the number on the cursor position you can use the cursor buttons (▲▼). To change the cursor position use the cursor buttons ◀▶ and to move it left or right.
4. Press the green button "OK" to confirm the entered number.



The mobile number must be entered with the country code and network identification number. BUT without any leading spaces or zeros (e.g.: "441704729992").

#### Changing the number of pigeons to be send

By default the first 5 pigeons which arrive will generate a message which will be send by modem. This number can be changed (beware to not set this number too high to save telephone costs).

1. In the SMS menu press the red button "AMOUNT". The display will change to edit the number of SMS to be sent.
2. Enter the number of sms with the cursor buttons.
3. Press the button "OK" for the confirmation of the input.

The counter of the sent SMS restarts after you have activated the SMS function and at each power up of the BENZING M1.

#### Testing the SMS service

You can easily test if your modem or mobile phone is connected correctly and working by sending a test SMS with the menu point "TEST" in the SMS menu.

### 6. Backup

The flight data (of all four fanciers) of the linked BENZING M1 and up to 1,000 pigeons are stored encoded in the BENZING Station. In rare case the BENZING M1 fails to operate, all data are still existing in the BENZING Station and can be used for evaluation.

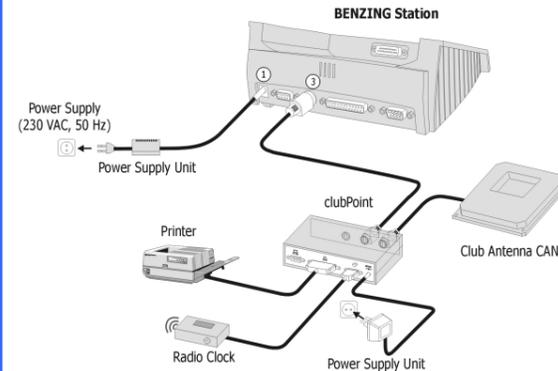


During a running race the BENZING M1 and the BENZING Station may be never linked again because otherwise all stored race data in the BENZING Station are lost.

The backup race data stay in the BENZING Station until that race is finished in the BENZING M1 and a new race is started.

#### Connection of the BENZING Station to the Club System

To evaluate the backup races in the BENZING Station, the station is connected to the club system with the PMDIN plug ⑩.



#### Printout of the Evaluation List

After power is applied the BENZING Station will check for connected devices and the LED of the CAN will light up if all is connected properly.

Now hold the evaluation key over the CAN antenna. If the key is valid, all open races will be printed out to the printer connected to the club system (not the BENZING Station).

| BENZING - EVALUATION REPORT      |             |                                  |              |                                     |                |                                   |          |                                     |  |
|----------------------------------|-------------|----------------------------------|--------------|-------------------------------------|----------------|-----------------------------------|----------|-------------------------------------|--|
|                                  |             |                                  |              |                                     |                |                                   |          | From : 22.04.2005 12:42:56          |  |
| Race : 01.Race ①                 |             | Fancier No. : 00815 004711 ②     |              | Fancier Name : John ③               |                |                                   |          |                                     |  |
| Master Clock : 22.04.05 12:39:18 |             | Pigeon Clock : 22.04.05 12:41:12 |              | Station Clock : 22.04.05 12:41:12 ④ |                | Synchronisat. : 22.04.05 12:39:18 |          | Synchronisat. : 22.04.05 12:41:12 ⑤ |  |
| Master Clock : 22.04.05 12:42:56 |             | Pigeon Clock : 22.04.05 12:42:56 |              | Station Clock : 22.04.05 12:42:56 ⑥ |                |                                   |          |                                     |  |
| No.                              | Ring Number | Electr.                          | Arrived Time | Ring No.                            | Date Time      | Sec                               | Antenna  | Notes                               |  |
| ⑦                                | 001         | DE 0815 04                       | 2            | CB02107                             | 22.04 12:41:26 | OK                                | 54621321 |                                     |  |
|                                  | 002         | DE 0815 04                       | 5            | CB332521                            | 22.04 12:41:33 | OK                                | 54621321 |                                     |  |
|                                  | 003         | DE 0815 04                       | 9            | 14048698                            | 22.04 12:41:43 | OK                                | 54621321 | STA                                 |  |
|                                  | 004         | DE 0815 04                       | 13           | 14048698                            | 22.04 12:41:50 | OK                                | 54621321 | STA                                 |  |
| Signatures:                      |             | Fancier                          |              | Control Commission                  |                | Clock Commission                  |          |                                     |  |
| Club Antenna : 00293640          |             | Race Number : 055261             |              | Authorization : 90002098            |                | BENZING M1                        |          | BENZING M1                          |  |
| SW Version : 01.00b ⑪            |             | Serial Number : 500001 ⑫         |              | SW Version : 02.00a                 |                | Serial Number : 100480            |          |                                     |  |
| !!!! BACKUP PRINT !!!!!          |             |                                  |              |                                     |                |                                   |          |                                     |  |
| ***** BENZING STATION *****      |             |                                  |              |                                     |                |                                   |          |                                     |  |

- ① Race name
- ② Fancier number
- ③ Fancier name
- ④ Synchronisation time between the master clock (radio clock or CAN) and BENZING M1
- ⑤ Synchronization time between BENZING M1 and BENZING Station
- ⑥ Comparison times between BENZING Station and master clock (radio clock or CAN)
- ⑦ Arrival information of the pigeons
- ⑧ Serial number of the Club Antenna CAN
- ⑨ Race number
- ⑩ Number of the authorization key
- ⑪ Software version and serial number of the BENZING Station
- ⑫ Software version and serial number of the BENZING M1

With these printout together with the basketing list all the information is available to provide a valid evaluation of the race.

### Important Notices



In case of a "Communication Error with the BENZING Station" please check a proper power supply and re-plug the BENZING M1 into the BENZING Station. If this error keeps to be shown please contact your local BENZING service.



During a running race the BENZING M1 and the BENZING Station may be never linked again because otherwise all stored race data in the BENZING Station are lost.



The backup race data stay in the BENZING Station until that race is finished in the BENZING M1 and a new race is started.



The SMS function is only available if your phone provider supports this service and if your mobile phone has a serial RS 232 interface for connection to the BENZING Station as well as an integrated modem.

#### LED Display and Beep Tones

The BENZING Station has a built-in beeper and 3 LED on the front to give additional information:

##### LED:

- "ON": This signals the power supply of the BENZING Station
- "COM": This displays communication of the BENZING Station with BENZING M1 or the antennae (e.g. backup of the data, print outs, through clocking etc.).
- "MST": This displays when the BENZING M1 is in the BENZING Station and working correctly (e.g. timing of the pigeons).

##### Beeper:

Three short beep tones after connecting the BENZING Station to the power signal, that everything is ok and operational. A five seconds lasting peep tone indicates a problem (e.g. number of antennae changed, no connection with the printer in the subsystem).