

ETIPES

ETIPES

**Race Office Unit
Manual**

Pigeon identification and racing real time system

TIPES

Congratulations ! TIPES® is a modern electronic identification system that guarantees a fast and reliable registration of pigeons. The race office unit is another high quality component of the TIPES® product range.

You should handle and operate the race office unit according to the instructions of this manual.

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1 Introduction

TIPES® is based on modern radio and computer technology developments and offers a variety of advantages for you as well as for your pigeon club:

- automatic pigeon identification
- printout of racing result / ranking list on serial printer
- automatic satellite or radio signal based clock setting
- dual 12-volts power supply input for accu or power supply
- optical indication of successful registration
- optional access authorization sequence (contact your distributor for more information).

1.1 Safety instructions and precautions

The manufacturer cannot be held responsible for any damage which is incurred by not using the TIPES® race office unit in compliance with the following safety instructions.

- First check if your mains supply voltage conforms to the values called-out at the bottom of the power supply.
- The race office unit does not contain any parts that can be repaired by the user. Any attempt to open the TIPES® race office unit is made visible as the unit is sealed. The units may only be opened by authorized TIPES® service personnel.



To switch off the TIPES^a race office unit completely you must disconnect the power supply from the mains as well as the accu pack from the race office unit.

- Protect the race office unit and especially its connectors from rain and moisture.



Never plug the small 12-V-output connector of the power supply into the mains wall socket !

- Do not place the race office unit close to sources of heat such as radiators etc.
- The race office unit should only be used inside a building. Do not use this unit immediately after moving it from a cold to a warm location. Before power on allow at least 30 minutes to acclimatize.
- Any change or modification of the TIPES® system or a component of this system requires explicit written approval of the manufacturer. Unauthorized modification does abolish the general operating permission.



Use the race office unit only with a class 2 power supply rated 12 volts dc, 800 mA or a usual 12-volts accumulator.

1.2 The TIPES® race office

Let's have a closer look at the TIPES® race office now. A short overview will give you information concerning the purpose of each individual unit so that you can easily understand the way the race office unit works.

1.2.1 The TIPES® ring

In addition to the usual association ring each pigeon that shall be detected and identified by TIPES® needs to wear a TIPES® ring. This very light plastic ring carries an electronic identification circuit that transmits its electronic ring number to the electronic trap (arrival antenna). This electronic ring number enables the TIPES® system to identify each individual pigeon passing the electronic trap. The manufacturer guarantees that each electronic ring has a unique number, worldwide.

In addition the TIPES® ring features a new anti-deception circuit. Before each race, when the pigeons are basketed with the race office unit, the ring electronics will generate a random number which is stored in the ring and in the fancier's control unit. TIPES® automatically compares these numbers when the arriving pigeon is detected by the electronic trap.

1.2.2 The race office unit

The race office unit is designed to support the allocation and the basketing procedure. Allocation is required to fill a cross reference table with the electronic ring number and the matching association (or birth number) of each pigeon. A normal IBM compatible personal computer has to be connected to the race office unit so that the allocation table can be generated in this PC. After allocation this table has to be transferred to the fancier's control unit via the race office unit.

Before each race the pigeons have to be registered by the race office unit during basketing so that the connected control unit „knows“ that the pigeons are on race.

1.2.3 The PC and printer

The PC handles the basic pigeon data and supports the arrival data transfer for further processing or storage. The TIPES® administration software manages all required data transfer.

The race office unit also provides a serial printer interface so that race entry forms and clock rolls can be printed.

2 Let's setup the TIPES^a race office equipment

Select a suitable place for the race office unit observing the recommendations of chapter 1.1.



Every metal material within a range of 20 centimeters below the bottom of the race office unit will have a negative impact on the detection quality.

- If you want to use a 12-volts battery or an accumulator then the matching black cable provided with the basic system or the 12-V-accu set must be attached to the (square) 12-volts input connector on the rear of the race office unit.
- If you are going to use the 12-volts power supply input then connect the power supply to the 220-volts mains and the 12-volts output of this power supply to the circular 12-volts input connector on the rear of the race office unit.
- The race office unit turns active as soon as a supply voltage is applied, see pages 5 and 6 for detailed information.

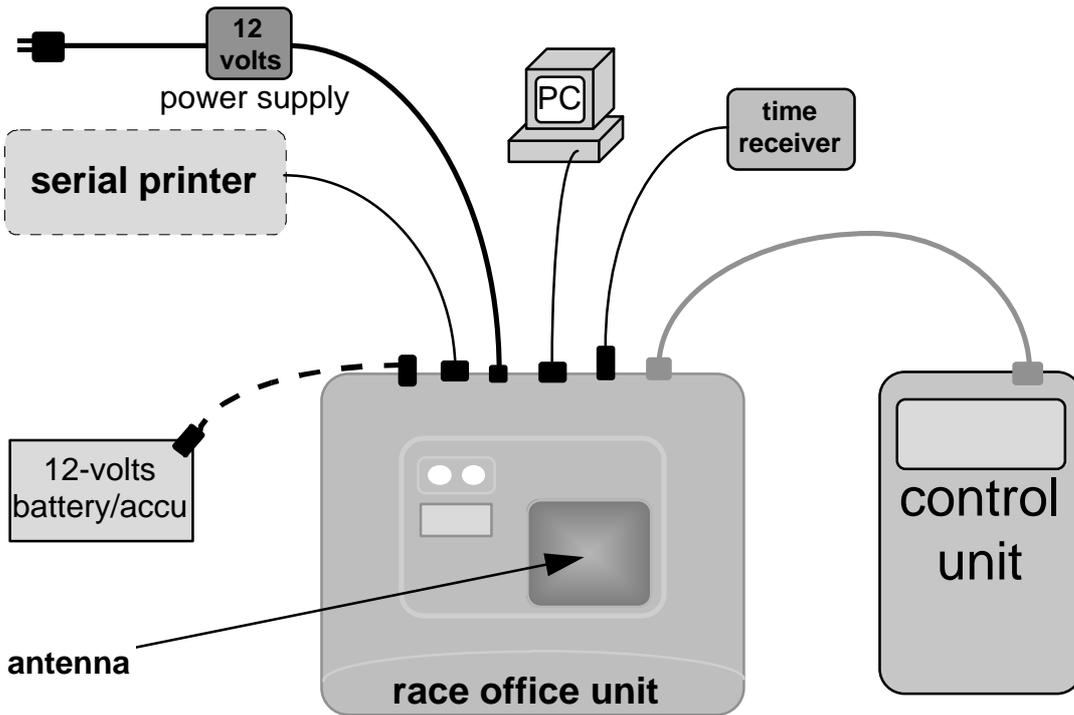


If you use a 12-volts accu as well as the 12-volts power supply connected to 220-volts mains then TIPES^a will run on the power supply unless it is forced to switch to the 12-volts accu source in case of mains power interruption.

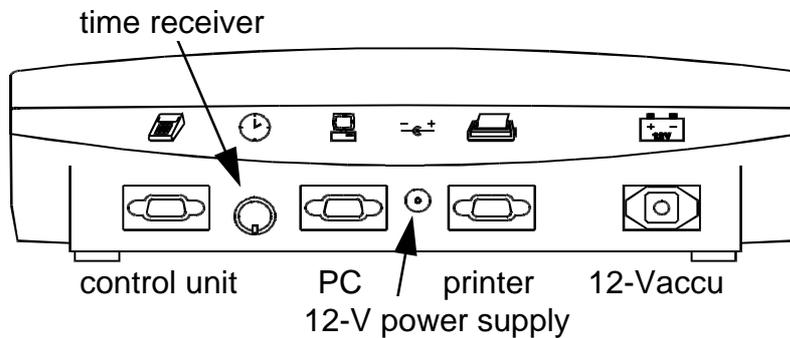
- For allocation or transfer of race result data to a computer file you have to connect a PC to the race office unit. Use a serial interface (RS232) of the PC and connect this interface to the PC communication port of your race office unit with the serial PC interconnection cable. The matching connector on the race office unit is marked with a computer symbol.
- To print race entry forms or race result lists you have to connect a printer with serial interface (RS232) to the race office unit. Connect the printer to the matching connector on the rear of the race office unit marked with a printer symbol.
- For basketball and print of race results a time receiver has to be connected to the race office unit. Use the time receiver provided by your TIPES[®] distributor. Connect this unit to the matching circular connector marked with a clock symbol on the rear of the race office unit.



Each connector except the 12-volts input power and the circular time receiver connector are provided with attachment screws. Turn these screws clockwise to fasten the connectors. This will avoid damage to the connectors and ensure optimum operating conditions.

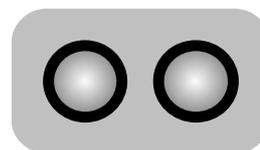


Interconnection diagram



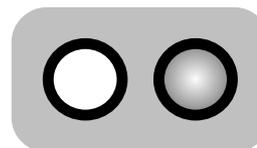
Rear of the race office unit

- When the supply voltage is connected to the race office unit the red and green indicators are illuminated while the race office unit performs its selftest. The selftest only takes about one second.



both indicators on
SELFTEST

- The red indicator remaining on indicates detection of a failure during selftest. Disconnect the race office in this case from the supply voltage and start the selftest again by reconnecting the supply voltage. Contact your distributor or an authorized TIPES® service partner for assistance if the 2nd selftest is unsuccessful.



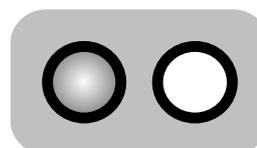
red indicator on
FAIL

- If **no** control unit is connected the race office unit checks after the selftest for the presence of a time receiver. In this case, the internal clock will **always** be immediately synchronized by the time receiver. During operation time synchronisation will automatically be requested if more than 24 hours have been passed since the last time synchronisation.



Time synchronisation will automatically be requested if necessary when you select the BASKETING or PRINT mode.

- During time synchronization **with a GPS time receiver** the green indicator will flash. You can recall the number of detected satellites from the flashing:



green indicator flashing
TIME SIGNAL SEARCH

number of repeated flashes	number of detected satellites
1	1
2	2
3	3
4	4

It can take a few minutes until the GPS system has detected the required number of 4 satellites. If there is no progress visible within a couple of minutes you should move the GPS receiver until the number of detected satellites rises.

- Time synchronization **with a radio-controlled time receiver** just takes parts of a second.



Time synchronization will be skipped by the race office unit when no time receiver is connected!

ETIPES

2.1 Allocation

The fancier's control unit needs to „know“ the electronic number of each TIPES® ring that is attached to your pigeons. So the control unit requires a cross reference table with all pigeon association numbers and the matching electronic numbers of the TIPES® rings. This table enables TIPES® to display always the association numbers the fancier is familiar with.

Now let's see how your control unit „learns“ all those numbers:

- Make sure that the race office unit is connected to the race office PC.
- Run the administration software and select the allocation mode. Please refer to the administration software manual.
- Connect the fancier's control unit to the race office unit.

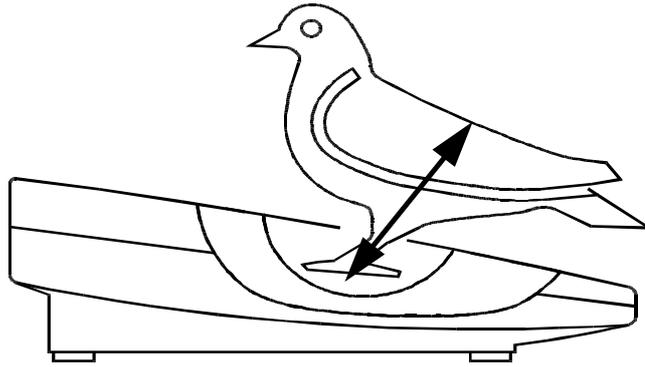
Instantly, the control unit will beep and after a few seconds the main menu appears:

- 1
- | | |
|------------------|-----------|
| ***** MENU ***** | |
| REGISTR. | PRINT/PC |
| BASKETING | DELETE |
| >ALLOCATE | SELFTTEST |
- Move the arrow to ALLOCATE using the ▲▼ (up/down) keys
 - Press the ⏏ (enter) key
- 2
- | |
|----------------------|
| ***** ALLOCATE ***** |
| READY! |
- The race office antenna is active now, the „READY!“ message will disappear after 2 seconds

Select the proper fancier file with the administration software and enter the association numbers to be allocated. Attach TIPES® rings to the pigeons leg and dip the attached ring into the detection hollow of the race office unit.

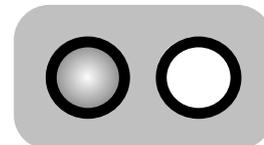


If both indicators on the race office unit are off then the race office unit is ready !



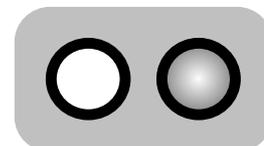
Every registered pigeon will now be displayed with its electronic ring number:

- Flashing of the green indicator indicates successful transfer of a ring number!



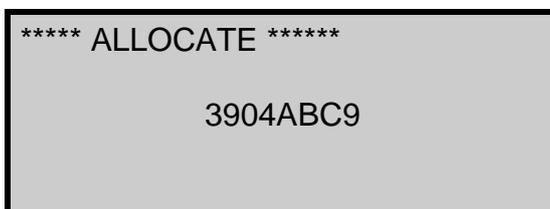
green lamp on
O.K.

- The red indicator will flash if a registration didn't work ! In this case try again and use a new ring if the problem persists.



red lamp on
FAIL

3



- Select ALLOCATE on the PC.

The electronic number will instantly „vanish“ into the personal computer, where it appears in the cross reference table placed to the association number preselected by the PC operator.

- Get all the fancier's pigeons registered and allocated.
- When all pigeons have been allocated disconnect the control unit to reset the control unit's software.

- To transfer the cross reference table into the control unit just reconnect the control unit and select the PC-Communication mode as described in chapter 2.4.



A new allocation table can only be stored in your control unit when all race data has been deleted !

In case you want to transfer additional data refer to chapter 2.4. and to your TIPES® manual.

2.2 Basketing

Before you can start basketing, the internal clock of the corresponding fancier's control unit has to be adjusted. This is done automatically when the basketing mode is selected on the connected control unit.

- Make sure that a time receiver is connected to the race office unit unless time synchronization has been performed within the last 12 hours
- Connect the control unit to the race office unit and turn on the race office unit.

4

```
***** MENU *****
REGISTR.          PRINT/PC
>BASKETING        DELETE
ALLOCATE          SELFTEST
```

- Move the arrow to BASKETING using the ▲▼ (up/down) keys
- Press the ⊕ (enter) key



Time synchronization at this point is not required if the internal clock of your race office unit has been synchronized on the same day already (see page 6).

5

```
**** BASKETING ****
INITIALIZATION OF
TIME RECEIVER IS OK!
WAITING FOR DATE/TIME
```

- The synchronization process is now starting.
- If the time adjustment has been performed the same day already the the control unit will go on with step 7.

6

```
**** BASKETING ****
TIME SIGNAL
DETECTION QUALITY
NO. OF SAT.: (2)
```

- TIPES® is now searching for the satellite signals. Four satellites are required. Please wait a few minutes.



Move the GPS antenna if the number of 4 satellites is not reached within a couple of minutes.



If you use a radio controlled clock for time synchronisation the steps 5 and 6 will not be displayed.

-

```
**** BASKETING ****

ERROR: NO ANSWER FROM
TIME RECEIVER
```



Time setting was not successful. Make sure that a time receiver is connected to the race office unit. Turn off the race office unit and start with step 4 again.

7

```
**** BASKETING ****  
Sidney      Amsterdam  
>Le Mans    Berlin  
-PLEASE SELECT-
```

- Use the ▲▼ (up/down) keys to move the arrow to the desired race
- Press the ⏎ (enter) key



Press the ⇧ (shift) and the ▲▼ (up/down) keys at the same time to select further races.

6

```
**** BASKETING ****  
07/20/1995  18:25:35  
  
Le Mans
```

- The race office unit is still active
- Now what about getting pigeons basketed by registering them one by one !

7

```
**** BASKETING ****  
07/20/1995  18:25:35  
NR007       B93.4572609  
Le Mans     20/18:25:35
```

basketing day/time ⇧

- Pigeon B93.4572609 has been registered for the Le Mans race. It is the seventh pigeon for this particular race.
- When all pigeons are basketed disconnect the control unit or press the # (escape) key to select another race.

In case of problems please refer to your TIPES® manual.

2.3 Printing of race entry forms or race results

TIPES® can generate printouts of basketed pigeons after basketing or of registered pigeons after a training flight or a race.

- Make sure that the time receiver is connected to the rear of the race office unit .
- Connect your control unit to the race office unit.
- A serial printer (RS 232 interface) has to be connected to the printer connector on the rear of the race office unit. The printer has to be online; please refer to printer manual. Presettings for the printer are:

transfer rate: 9600 baud
data size: 8 bit, 1 stop bit
parity: odd, no handshake

8

```
***** MENU *****  
REGISTR.      >PRINT/PC  
BASKETING     DELETE  
ALLOCATE      SELFTEST
```

- Move the arrow to PRINT/PC with the ▲▼ (up/down) keys
- Press the ⊕ (enter) key

9

```
* PRINT/PC-COMMUNIC. *  
>PRINT  
PC-COMMUNICATION  
- PLEASE SELECT -
```

- Move the arrow to PRINT with the ▲▼ (up/down) keys
- Press the ⊕ (enter) key



If PRINT is activated after a race or training flight then the control unit will first require a time update from the race office unit. If the internal clock of the race office unit has not been synchronized on the same day the race office unit will start time synchronization now! A time receiver has to be connected (see page 9 !).

10

```
***** PRINTING *****  
>ALL RACES  
CERTAIN RACE  
-PLEASE SELECT-
```

- Move the arrow to CERTAIN RACE using the ▲▼ (up/down) keys, if you just want to generate the print out for one race
- Press the ⊕ (enter) key

If PRINT is activated after basketing then the control unit will instantly start to transfer the list of basketed pigeons to the printer.

If PRINT is activated after pigeons have been clocked the the control unit will transfer the clock roll to the printer.

You can quit the printing mode with the # (escape) key.

Timesynchronisation -Protocol:

knockoff: 06/26/1995 18:49:58 06/26/1995 18:50:00 Paris

closing knockoff:06/27/1995 20:25:02 06/27/1995 20:25:00 Paris

Time difference to UTC: 1:54

Winter/Summer time: 03/21/02:00

Summer/Winter time: 09/21/02:00

2.4 PC-Communication

TIPES® requires PC communication during the allocation of pigeons as described in chapter 2.1 and for transferring race results to the administration software.

- Connect a control unit to the race office unit.
- The personal computer has to be connected to the PC connector on the rear of the race office unit.

- 11
- | |
|--------------------|
| ***** MENU ***** |
| REGISTR. >PRINT/PC |
| BASKETING DELETE |
| ALLOCATE SELFTEST |
- Move the arrow to PRINT/PC using the ▲▼ (up/down) keys
 - Press the Ⓜ (enter) key
- 12
- | |
|------------------------|
| * PRINT/PC-COMMUNIC. * |
| PRINT |
| >PC-COMMUNICATION |
| - PLEASE SELECT - |
- Move the arrow to PC-COMMUNICATION with the ▲▼ (up/down) keys
 - Press the Ⓜ (enter) key
- 13
- | |
|----------------------|
| * PC-COMMUNICATION * |
| READY! |
- Make the administration software start the race data transfer, refer to the administration software manual.

You can quit the PC-communication mode by pressing the # (escape) key **twice**.

3 Doctor TIPES®

TIPES® is a very reliable system but nevertheless. However there may be a situation requiring trouble shooting. With Dr. TIPES you are able to solve most problems within a few minutes.

If you are not successful then contact your distributor for support.



Problem	Possible cause
Time receiver (GPS type) does not receive time signal.	<ul style="list-style-type: none"> • The time receiver requires proper radio signals from at least four satellites. Signals may be disturbed by big buildings and concrete walls. Make sure that the time receiver antenna is placed at an unobstructed location in the open. If necessary use an extension cable.
Your printout shows gaps	<ul style="list-style-type: none"> • Your printer is too slow so that the printer buffer can't keep all data. Select „DRAFT“ mode on printer. This mode is much faster than „LETTER QUALITY“
Your printout produces blank pages	<ul style="list-style-type: none"> • Turn „AUTO FORM FEED“ to the OFF position on the printer. The form feed command is generated by the control unit automatically. • Compare your paper length (normally 11 or 12 inches) with the printer presettings and make sure that the matching size is selected.
No printout possible	<ul style="list-style-type: none"> • Your printer cable might have wrong interconnections. The proper pin setting is: <ul style="list-style-type: none"> RxD-signal - pin 2 TxD-signal - pin 3 GND - pin 5 • Make sure that the printer is properly connected to the race office unit; Connector with printer symbol • Contact your distributor for further information.
Refer to the printer manual also!	
The control unit's display shows „reading unit not OK“	<ul style="list-style-type: none"> • Turn off the race office unit by disconnecting the supply voltage(s). The software of the race office unit is resetted now and you can reconnect the supply voltage. The ERROR message should no longer appear.
The PC shows „No connection to TIPES“	<ul style="list-style-type: none"> • Make sure that a control unit is connected • Check the proper connection of the PC to the race office unit; connector with PC symbol

4 Technical data

Voltage • 12 volts dc

Current load • max. 0.8 A

Operating temperature range • - 5° C to + 70° C

Storage temperature • - 40° C to + 85° C

Size • l = 280 mm, w = 320 mm, h = 92 mm

Weight • 1.27 kg

Accessories • power supply with interconnecting cables
• printer cable
• PC cable
• cable reading unit - control unit
• accu cable

5 Guarantee Conditions

The manufacturer, DIEHL Ident Germany, offers the following guarantee to the first purchaser of this TIPES® race office unit:

1. The guarantee is valid for 12 months commencing when the unit is handed over to the purchaser which must be verified by purchaser invoice or similar documentation.
2. The guarantee covers all parts or components which fail due to faulty workmanship or faulty material. The guarantee does not cover TIPES® components where defects or poor performance are due to misuse, faults in the building wire, accidental damage, neglect, faulty installation, unauthorized modification or attempted repair or failure to use the unit in accordance with the operating instructions.
3. Should guarantee repairs be necessary the purchaser must inform the nearest customer service (distributor or authorized service partner).
4. The guarantee or free replacement includes both labor and materials.
5. Repairs carried out under guarantee do not extend the guarantee period. Parts removed during guarantee repairs become the property of DIEHL Ident.

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