LoftMate
Setting and Operation Guide

LoftMate is a unique new timing device designed for the pigeon fancier. No need for rough calculations on race day … LoftMate does all your interactive calculations now and informs you how your race is going as each second passes counting up your flying time, and counting down your velocity! It even takes into account night hours (hours of darkness) tolerances prevailing in the longer distance races. And, when your pigeons are safely home and clocked LoftMate will store the arrival times and calculate up to 10 precise velocities for you before you return to your Club/Clock Station to have your clock read officially. (NB LoftMate always assumes a dead clock).

LoftMate is controlled by just four keys … ▲,▼, **OK, Set** … all subsequent commands to **LoftMate** are activated by individual or combination use of one of more of these four keys.

Process Overview
1. Clock Setting (current time)
2. Race Set-up
3. Set Liberation Time
4. Unit of measurement
5. Set Race Distance
6. Set Night Hours (hours of darkness)
7. Accept race settings and start your race
8. Viewing interactive time and velocity information
9. Record arrival times; calculate and view velocities
10. Stop race

Just synchronise the clock, then input the liberation time and flying distance and you're away!

1) Clock Setting (current time)
To set the clock to the correct time press the **Set** button fractionally ahead of the ▲ button. The first hour digit will blink; use the ▲ ▼ keys to adjust it (24 hour clock) pressing the **OK** button to accept each setting and move on to the next digit, and so on. The recommended approach is to set the clock forward to a precise future minute and then press **Set** at the appropriate time (whether synchronising to TIM, CeeFax, club master timer, or personal T3 clock).
Note: this procedure cannot be completed during a race … you should only attempt this before setting up a new race.

2) Race Set-up
A race can be set up either before (if you have been advised a DEFINITE liberation time) or after its start time but the start time **must** always be in the current day. Please note that night hours (hours of darkness) will not be taken into account if the race has already started and it started in darkness, as this is not a real situation. To enter Race Set-up mode press **Set** for approximately 3 seconds until the Hours digits and the 🕮 symbol start to blink.
Note: this procedure will also clear all stored arrival times and velocities from the previous race (see 9 below).

3) Set Liberation Time
The first Hour digit will blink; use the ▲ ▼ keys to adjust (24 hour clock). Press **OK** to move on to the next Hour digit and then on to the Minutes digits. After the minutes are adjusted and **OK** is pressed, the first hour digit will blink again; change if required, otherwise if the time is correct press **Set** to accept the liberation time as displayed and move on to setting to the next stage of setting Unit of Measurement and Race Distance.
Note: the seconds of the Liberation Time are always assumed to be 00.

4) Unit of Measurement
The word **Unit.5?** (units) appears. Select unit of measurement by using the ▲ ▼ keys. If you require imperial measurements (miles and yards) ensure that the *miles* and *yds* indicators are displayed before pressing **Set**. If you require metric measurements (metres) ensure that the *m* indicator is being displayed before pressing **Set**.
Note: if the unit of measurement is changed, the race distance will be cleared to zero (for obvious reasons) because of this, this is the only point in Race Set-up where holding down **Set** does not exit from Race Set-up mode.

5) Set Race Distance
Imperial Units (miles/yards)
The **miles** indicator and the hundreds of miles digit will blink; use the ▲ ▼ keys to adjust. Press **OK** to move on to the next digit. When the units of miles digit has been adjusted and **OK** is pressed, the **yds** indicator and the thousands of yards digit will blink; use the ▲ ▼ keys to adjust. Press **OK** to move on to the next digit. When the units of yards digit has been adjusted and **OK** is pressed, the miles indicator and the hundreds of miles digit will prompt/blink again; change if required, otherwise, if the distance is correct, press **Set** to accept the distance and move on to setting the Night Hours (hours of darkness).
Metric Units (metres)
The **m** indicator and the hundreds of thousands of metres digits will blink; use the ▲ ▼ keys to adjust; *Note: this first digit can be adjusted up to 16.* Press **OK** to move on to the next digit. When the units of metres digit has been adjusted and **OK** is pressed, the m indicator and the hundreds of thousands of metres digit will blink; change if required, otherwise, if the distance is correct, press **Set** to accept the distance and move on to setting the Night Hours (hours of darkness).

6) Set Night Hours (hours of darkness)
The start and end times of night hours are automatically set to midnight when Race Set-up mode is entered. If there is no night flying involved, you can immediately press **Set** for approximately 3 seconds to skip this step, leave race set-up mode, and start your race.
Day 1 End (race stop time at end of first day)
The ☾ indicator, "**1**" in the top row of digits and the first hours digit will blink;

LoftMate's hours of darkness functionality is superb and ideal for 2+ day races including the 'Internationals'

use the ▲ ▼ keys to adjust (24 hour clock). Press **OK** to accept and move on to the next hours digit. Continue on using the ▲ ▼ keys and **OK** keys to set the minutes' digits. As soon as you are happy with the complete time you have displayed for Day 1 End then press **Set** to accept and move on to setting Day 2 Start.
Day 2 Start (race restart time on second day)
The ☀ indicator, "**2**" in the top row of digits and the first hours digit will blink; use the ▲ ▼ keys to adjust (24 hour clock). Press **OK** to accept and move on to the next hours digit. Continue on using the ▲ ▼ and **OK** keys to set the minutes' digits. As soon as you are happy with the complete time you have displayed for Day 2 Start

then press **Set** to accept and move on to setting Day 2 End (if required).

Subsequent Days
Repeat the above stages should additional Night Hours be required to be set. If there is no second night in the race, and you are happy with the liberation time and flying distance set previously, you can press **Set** for approximately 3 seconds to skip all remaining next steps, leave race set-up mode, and start your race.
Note1: Seconds for all Day Start and End times are always 00. Note2: LoftMate will only continue running for a maximum duration (after deducting Night Hours) of 99 hrs 59 mins and 59 secs. Note3: If there are no Night Hours the race will end at 12 midnight at which point the actual flying time and velocity displays will 'freeze'. Reset LoftMate as per instruction 10 below. Note4: If the race continues for more than six nights, the hours of darkness for the sixth night will be used for the seventh and any subsequent nights.

7) Accept race settings and start your race
If you complete the entire Night Hours (hours of darkness) set-up you eventually arrive back at the 'Set Liberation Time' stage. You can cycle back through the entire race set-up allowing you to change any part of the set-up, pressing **Set** to skip to each new stage. When you are completely happy with the race set-up, press **Set** for approximately 3 seconds to accept the settings and start the race timer and velocity calculations.

8) Viewing interactive time and velocity information
Once the race has been started (assuming current time > liberation time) the upper display will show the velocity achieved if

> LoftMate is programmed not to display a velocity in excess of 100mph, 3000ypm, 160km/h, or 3000mpm. Until velocity falls to these levels a line of dashes only will display on the top line

a pigeon were to arrive <u>now</u> and be clocked simultaneously. Velocity is always shown with 2 decimal places, regardless of the unit of measurement currently selected and in use. The lower display shows the actual flying time elapsed since liberation time. When actual flying time is displayed, the bird symbol is animated. Before any actual arrival times are recorded (see 9 below), pressing the ▲ ▼ keys will alternate the lower display between actual flying time and current actual time. If the current actual time is displayed, and no button is pressed for approximately 10 seconds, the display will return to the display of actual flying time and velocity.
Note: During 'Night Hours', the Actual Flying Time and Velocity will freeze, as your pigeons are of course assumed to be roosting!

9) Record arrival times; calculate and view velocities
When a pigeon returns to your loft you can record its arrival time and calculate its velocity. To record an arrival time press **Set** for approximately 2 seconds … this will freeze the current time in the lower display with only the first hours digit blinking. You can then use the ▲ ▼ and **OK** keys in sequence to adjust the displayed time to the actual arrival time before pressing **Set**. Up to 10 pigeon arrival times can be recorded in this way. Once one or more pigeons have been recorded in this fashion, pressing the ▼ key will access all arrival times and velocities in ascending order. The pigeon arrival number will be indicated by the two leftmost digits blinking intermittently on the upper display line … on alternate blinks the velocity is displayed on the same line. Press ▲ or ▼ to move to the next or previous pigeon. If no button is pressed for 10 seconds, the display will return to the normal display of velocity and actual flying time. To alter the unit of measurement of velocity, at any time, press and hold **OK** and then use ▲ ▼ keys to select the required units.

10) Stop Race
When all pigeons have returned, or you want to stop the race for any reason perhaps even to start a second race on the same day, press the **Set** button fractionally ahead of the ▼ key and keep them pressed inwards for approximately 3 seconds to stop the current race. The upper display will clear and the lower display will revert to the current time.
Note: whilst this race will stop at this point any stored flight times and velocities from the race WILL be retained until you set another race. You can access the previous race flying times and velocities by pressing the ▼ button.

11) Batteries
LoftMate's display runs off a single **CR2032** battery located centrally on the microchip. We understand that the LCD display draws very little output from the battery and the expected life of the battery is 3-5 years. Single replacement batteries can be bought from PBO Solutions **£3.50** inc VAT and p&p.

12) Troubleshooting
Should your LoftMate ever 'freeze' or malfunction you may need to remove the four screws in the back-plate, slide the battery out of its housing thus killing the power feed, before sliding the battery back into place and restoring power to the LCD display. An immediate clock reset will be required,

13) Refresher!
Most setting and operational tasks involve combination use of the four buttons on the LoftMate … here's a quick reminder guide as to what does what!

- **Set** and ▲ to initiate the clock-set procedure
- **Set** held in for approx. 3 seconds to invoke race setup procedure
- **Set** held in for approx. 3 seconds to close race setup procedure and start the race
- **Set** and ▼ for approx. 3 seconds to stop you race
- ▲ to increase, ▼ to decrease, the value of any flashing digit during
  - clock-set
  - race setup e.g Lib. Time; Miles; Yards
  - when recording arrival times.
- **OK** to accept values displayed using the ▲ and ▼ buttons
- **Set** to accept lib time, UOM, flying distance, and move to next stage of race setup. Also to accept clock times.
- **OK** and ▲ or ▼ to toggle/alternate between different velocity measurements during a race i.e. YPM; MPM; KPH; MPH

14) Pricing and Special Offers
Single Unit = **£60**
Prices includeS VAT at the standard applicable rate, and postage and packing.

15) Contact us
For further information and advice on using LoftMate:-
- Go to www.pbosolutions.co.uk then click the large LoftMate picture
- E-mail us at at poleary72@hotmail.com
- Call us ☎ 07817-776720
- All our latest contact and address details will always be found at www.pbosolutions.co.uk

16) Other products
We design and distribute two sensational software products for pigeon racing!
- **LoftOrganiser**
  - For your personal loft setup
  - Pedigrees; montages; pairings management; race management; etc. Priced at **£80**
- **SecPro**
  - For clubs and Federations
  - Members; race results; averages; diplomas; etc. Priced from **£100**

Discounts are available against both products if you have previously purchased a LoftMate from us