



# ZK Timeclocks Guide

SmoothPay Payroll provides built-in support for importing attendance files from ZKTeco's series of timeclocks (*specifically the VF380 face recognition model, and the UA300+ID fingerprint model described in this document*), however any ZK timeclock that generates standard ZK attendance files should work correctly and the processes will be similar.

These timeclocks are very cost-effective and there are many models available for use in mobile or remote areas, gate control etc.

**Installation and setup:** Please refer to the guides supplied with your timeclock for initial setup and enrolment of users (*SmoothPay has a simple setup guide for each supported model at the end of this document*), or contact your supplier (*or as a last resort our helpdesk*) if you require assistance.

**Timeclock management:** ZK timeclocks also come with additional software allowing Windows users to control one or more timeclocks. This is entirely optional (*and typically generates more work than is necessary*) and is not required in order to use a ZK timeclock with SmoothPay Payroll.

## VF380 Face Recognition/Card reader

This clock records the facial characteristics (biometrics) of each user from 3 enrolment snapshots, and can also have an RFID card assigned if preferred (*the administrator should have a card assigned so that the system can be controlled using the card when the administrator is away*).



The VF380 can hold up to 800 faces, 10000 users and 100000 transactions, and its verification time is less than 1 second.

All setting operations are easily done on the 3-inch TFT touch screen. The elegant and compact design can fit in any environment.

Incorporated relay and connections, allow the use of door lock, sensors, bell or exit button, that converts this product in a complete access control and time & attendance solution.

Attendance data is exported via the USB port, then imported into SmoothPay for payroll processing.

## UA300+ID timeclock

This clock records the fingerprint characteristics (biometrics) of each user, and can also have an RFID card assigned if preferred (*the administrator should have a card assigned so that the system can be controlled using the card when the administrator is away*).



The UA300 can hold up to 3000 fingerprints, 10000 RFID users and 100000 transactions.

All setting operations are easily done using the [M/OK] button and by selecting actions displayed on the colour screen by using the arrow keys and the [M/OK] or [ESC] buttons.

Attendance data is exported via the USB port, then imported into SmoothPay for payroll processing.

## TX628 timeclock

Similar to the UA300 clock, this clock provides automatic double-clocking prevention (*one minute must elapse before an additional clocking for the same userid can occur*).

The TX628 can hold up to 3000 fingerprints, 30000 RFID users and 120000 transactions.

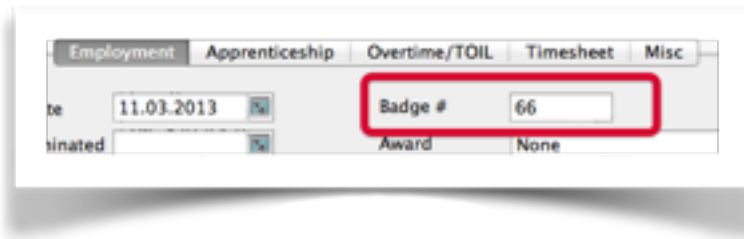
All setting operations are easily done using the [M/OK] button and by selecting actions displayed on the colour screen by using the arrow keys and the [M/OK] or [ESC] buttons.

Attendance data is exported via the USB port, then imported into SmoothPay for payroll processing.



## Employee badge and clock enrolment numbers

Each employee must be assigned a Badge # (as pictured) - this number must match the ID number used to enrol the employee on the TimeClock unit.



The screenshot shows a software interface with several tabs: 'Employment', 'Apprenticeship', 'Overtime/TOIL', 'Timesheet', and 'Misc'. The 'Employment' tab is active. Below the tabs, there are several input fields. One field contains the date '11.03.2013'. Another field, labeled 'Badge #', is highlighted with a red rectangular box and contains the number '66'. Below this, there is a field labeled 'Award' with the value 'None'.

So that SmoothPay knows who each attendance entry represents, the **employee #** used on the clock needs to be entered as the employee's **Badge #**

The time entries captured by the timeclock will now match an employee, and the TimeClock import utility will be able to process the time entries correctly.

## Clocking in and out

**WARNING:** One of the least user-friendly aspects of the ZK series of timeclocks is the requirement that the **clocking direction** be set before staff clock in or out - if it gets messed up then your clocking data will not be very useful. Staff should be trained to **CHECK CLOCKING DIRECTION** every time they use the timeclock.

However, because of the difficulty ensuring correct usage, SmoothPay provides an exclusive "**Ignore clocking direction**" option which allows clockings to work sequentially, regardless of the clock's direction setting. Note that the first clocking entry encountered for each employee within the pay period will be regarded as a Clock-In.

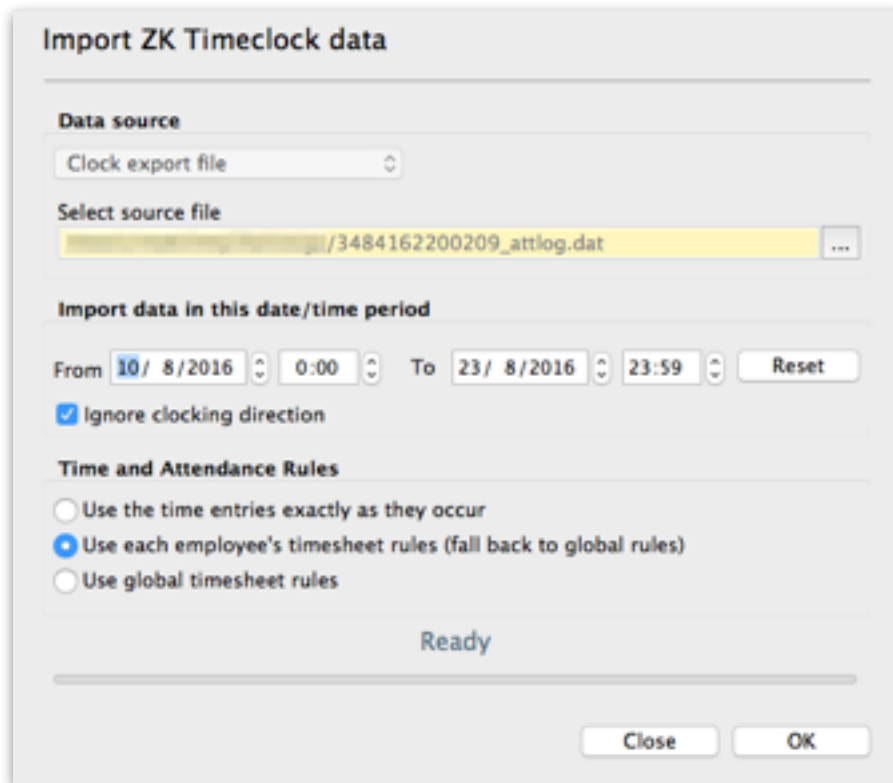
Here's how to set **clocking direction** for each of the models described (*also covered in the setup guides*):

**VF380:** Touch the [>>] symbol on the top-right of the screen, select "Check-In" or "Check-Out" as required.

**UA300 and TX628:** Use the UP or DOWN arrow to display "Check-In" or "Check-Out" as required.

## TimeClock integration

Choose *File..Import..TimeClock..ZK Timeclock*



### Data Source

This timeclock import utility provides for import from USB attendance files exported from the ZK timeclock. After plugging in the USB device used to collect the data from the timeclock, select the file it contains (e.g. *079713380001\_attlog.dat* or *1\_attlog.dat* etc depending on the clock model the filename may vary).

### Load data in this date/time period

The date and time range are set automatically to suit your usual pay cycle, however you can change these to suit any other range if you need to.

*Ignore Clocking Direction:* ZK timeclock's have a clocking direction setting (*often not used correctly*), so SmoothPay provides an exclusive feature to ignore the clock's In/Out direction recorded in the attendance data and treats the first clocking encountered for an employee as a Clock-In. In addition, if a clocking results in excessive hours (*usually due to an employee not clocking out at the end of their shift*) the clock-out time is shifted to the clock-in time so that a normal clocking pattern can be resumed (*hopefully*).

*Reset:* This option resets the date/time range to the default values established when the import utility started.

### Time and Attendance Rules

SmoothPay provides a set of basic, but effective, time and attendance rules based on timeclock entries, individual employee rules or configuration (*global*) rules.

*Use the time entries exactly as they occur:* Takes the raw time data from the clock and doesn't apply employee or global time-rounding rules.

*Use each employee's timesheet rules:* If an employee has timesheet rules enabled (*Contract..Timesheet*), then start/stop and time-rounding rules specified for that employee take effect - these are covered in more detail below. If the employee doesn't have specific rules then the global rules take effect instead.

*Use global timesheet rules:* *Configure..Timesheet* rules are used to apply start/stop and time-rounding rules to imported time entries.

## Exporting timeclock attendance to USB drive

Each of the ZK series timeclocks has a slightly different procedure for exporting data to a connected USB device:

### VF380 timeclock

Step 1	Connect your USB/flash drive (left hand side)
Step 2	Touch [MENU] and use your Administrator RFID card (or face-recognition) to access the menu
Step 3	Select [Dn/Upload] then [Download transactions]
Step 4	[Exit] back to the main screen and remove the USB device

### UA300 or TX628 timeclock

Step 1	Connect your USB/flash drive (left hand side)
Step 2	Press [M/OK] and use your Administrator RFID card (or fingerprint) to access the menu
Step 3	Select [USB Manager] then [Download] then [Attendance data]
Step 4	Select required Time Range (we recommend the ALL or User-Defined options)
Step 5	[ESC] back to the main screen and remove the USB device

## Importing time entries

Choose **OK** to collect any new data from the timeclock attendance file and process time entries into current pay input.

In all cases entries that are earlier than the period start date and time or less than three minutes apart are ignored, as are entries that repeat the clocking direction (if more than one Clock-In occurs without an intervening Clock-Out then all but the first Clock-In record is ignored), or do not have a start or stop time, or entries that cannot be matched with an employee badge number.

Entries that would exceed 13 hours are ignored.

If **meal break** rules are specified in *Configure..Timesheets*, then all entries that exceed the continuous work period will have meal-breaks deducted.

An audit report will be produced showing entries processed, the calculated elapsed time (after any rounding and meal-breaks that might need to be applied).

Error/ignored entries are reported too with an appropriate message (except entries outside the the pay period start/finish range).

**IMPORTANT: Time entries imported are ADDITIVE!** This means that repeated imports of the same data will probably duplicate entries already imported. This is by design, as timeclock entries can be imported daily if you like leaving any previous entries in-place until you complete your payroll processing for the pay period.

If you wish to re-import all time entries for a particular period, simply clear all employees from the *Who to pay* screen, then re-import your (corrected) data.

Use *Pay..Time* to manually correct or add entries as needed.

Here's an example of part of the import audit report:

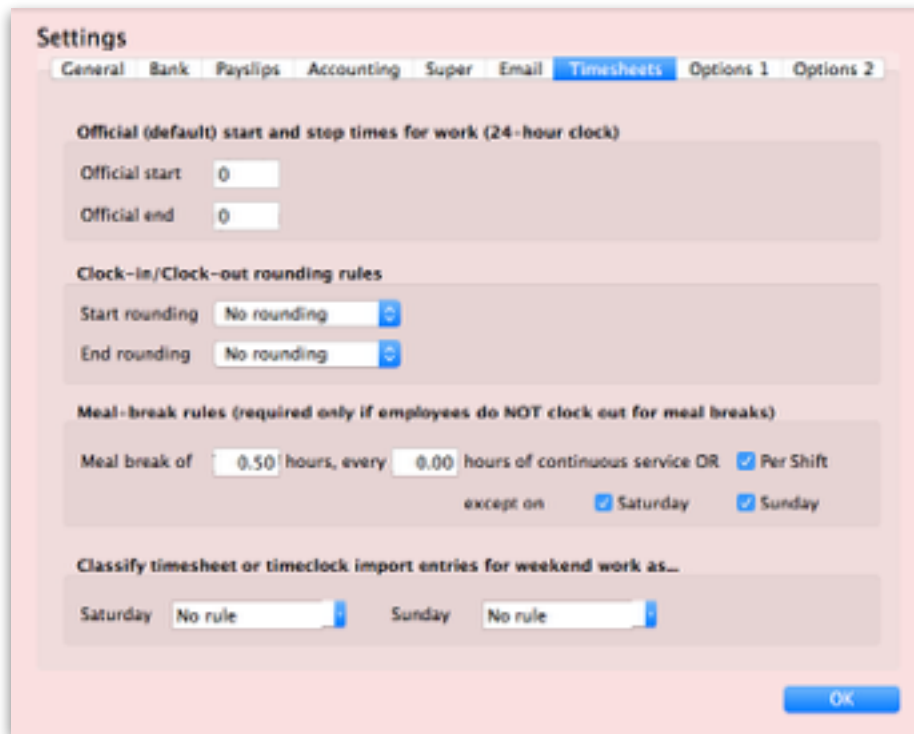
Employee	In	Out	Job	Units	Errors
1	Tue 26/08/14 10:36	Tue 26/08/14 10:40		0.066	
1	Tue 26/08/14 10:41	Tue 26/08/14 11:04		0.383	
1	Tue 26/08/14 11:18	Tue 26/08/14 13:59		2.683	
1	Tue 26/08/14 13:59	Tue 26/08/14 15:36		1.616	
1	Tue 26/08/14 15:58	Tue 26/08/14 17:53		1.916	
1	Wed 27/08/14 08:40			0.000	**NO UNITS
2	Wed 27/08/14 08:43			0.000	**TERMINATED

...and an employee's pay input screen after importing data from the TimeClock:

## Global timesheet rules (and employee default timesheet rule values)

SmoothPay implements the concept of “*inheritance*”, where global configuration or code settings are used to set the default values for new employees, pay input records etc. When used correctly this greatly simplifies your work processes, otherwise you’re faced with having to customise every entry rather than use common default values.

Choose *Configure..Timesheets* to establish global rounding rules (if you want/need to) - these also establish default rounding rule values for new employees:



The screenshot shows the 'Settings' dialog box with the 'Timesheets' tab selected. The 'Official (default) start and stop times for work (24-hour clock)' section has 'Official start' and 'Official end' both set to '0'. The 'Clock-in/Clock-out rounding rules' section has 'Start rounding' and 'End rounding' both set to 'No rounding'. The 'Meal-break rules (required only if employees do NOT clock out for meal breaks)' section has 'Meal break of' set to '0.50' hours, 'every' set to '0.00' hours of continuous service OR 'Per Shift' checked, and 'except on' checked for 'Saturday' and 'Sunday'. The 'Classify timesheet or timeclock import entries for weekend work as...' section has 'Saturday' and 'Sunday' both set to 'No rule'. An 'OK' button is at the bottom right.

**Official start/stop times** should be blank if not used - these typically only ever apply in office or retail environments where hours of work are strictly controlled.

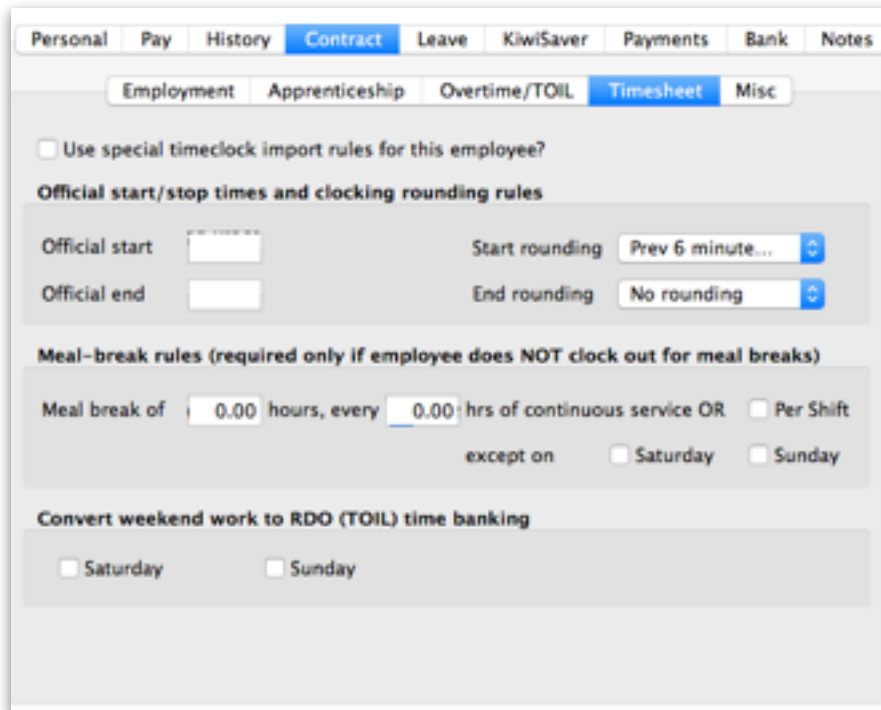
**Clock in/out rounding** rules provide for timeclock entries to be rounded by .1 hour (6 minutes) or .25 hour (15 minutes) in either direction - or not rounded at all.

**Meal-break rules** can be implemented and will apply to all entries that contain continuous service exceeding the maximum specified. *Leave these blank if not used.*

**Weekend work rules** - these are intended for use with Timesheet input rather than timeclock import.

## Employee timesheet rules

The *Staff..Contract..Timesheet* page provides for specific time rounding rules per employee:



The screenshot shows a web interface for configuring employee timesheet rules. At the top, there are tabs for 'Personal', 'Pay', 'History', 'Contract' (selected), 'Leave', 'KiwiSaver', 'Payments', 'Bank', and 'Notes'. Below these are sub-tabs for 'Employment', 'Apprenticeship', 'Overtime/TOIL', 'Timesheet' (selected), and 'Misc'. The main content area includes a checkbox for 'Use special timeclock import rules for this employee?'. Under the heading 'Official start/stop times and clocking rounding rules', there are input fields for 'Official start' and 'Official end', and dropdown menus for 'Start rounding' (set to 'Prev 6 minute...') and 'End rounding' (set to 'No rounding'). The 'Meal-break rules' section has input fields for 'Meal break of' (0.00) and 'every' (0.00) hours, with options for 'Per Shift' and 'except on' (Saturday and Sunday). The 'Convert weekend work to RDO (TOIL) time banking' section has checkboxes for Saturday and Sunday.

These rules only take effect if the *Use time import rules* option is ticked AND you choose to use those rules in the *TimeClock Import* utility screen.

## Feedback

We're always keen to do better!

Any and all feedback is appreciated and if you feel we could include better examples, provide more explanation, provide references to additional information, make a process easier to use, or you spot something that isn't working the way it's supposed to - please let us know.