Checkmate
Windows Edition

USER GUIDE

FEBRUARY 2020

CUBETAPE

Contents

Introduction

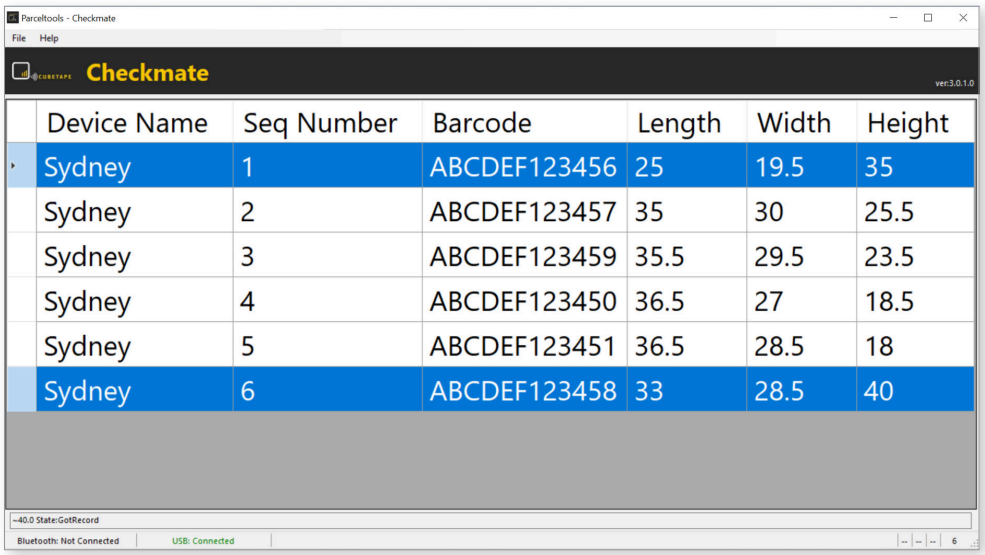
Checkmate Windows edition (Checkmate-W) is a PC data capture application designed to receive, display and record data sent from Cubetape and up to 2 supported scales. Checkmate-W has the following features:

Data capture and update methods:

- Online data transfer direct from Cubetape PRO and POS devices on a record by record basis over Bluetooth Serial connection.
- Online data transfer from Cubetape PRO and POS devices on a record by record basis via the C190DSK cradle connected in USB-VCP mode.
- Batch file transfer direct from Cubetape PRO over Bluetooth Serial connection.
- Batch file transfer direct from Cubetape PRO over USB cable.
- Batch file transfer from Cubetape via the cradle connected in USB-VCP mode.
- Optional capture and integration of weight data from 1 or 2 connected scales.

Once received data is displayed on screen in a tabular format, and the users can select which columns to display, and the order of the columns from the Grid view in Settings.

Available data items are described in Schedule 1.
Checkmate-W requires data to be transmitted in a specific format as detailed in Schedule 2.
Supported scales are listed in Schedule 3.



Data export options

Once data has been received in Checkmate-W, it can be saved to an export folder. The export folder location can be specified in Settings. Export options include:

- Manual export to csv file.
- Automatic export to csv file.
- Automatic export to a new csv file per record.

Communications

- Direct Bluetooth connections are persistent, and automatically reconnected if the connection is broken for any reason.
- Checkmate-W will automatically recognise and setup a connection to a Device or Cradle if connected over USB.

User Interface

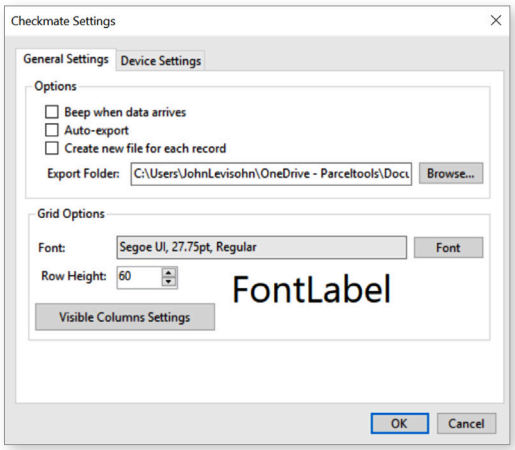
The settings menu allows control of the following:

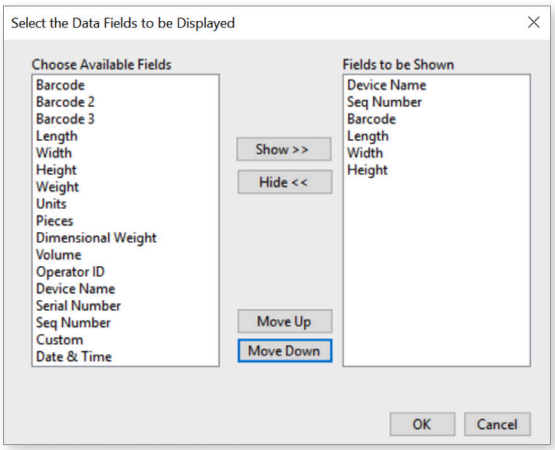
Selection of display items including: Serial Number, Barcode, Barcode2, Barcode3, Length, Width, Height, Units, Pieces, Weight, Volume, Operator ID, Date and Time, Device Name.

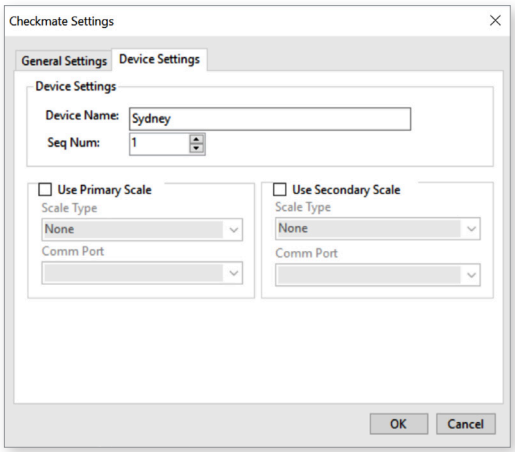
The display order of the data items can also be adjusted from the Grid View dialog.

Name and location of the data output file.

Type and connection parameters for the connected scales.



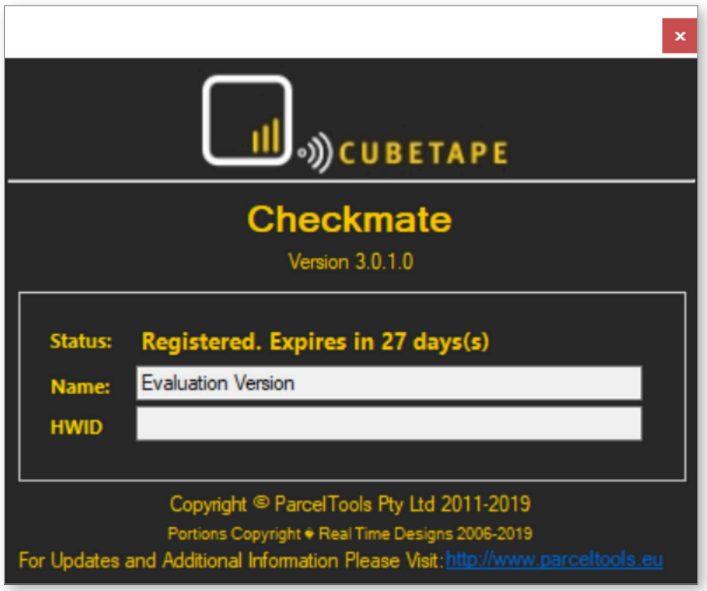




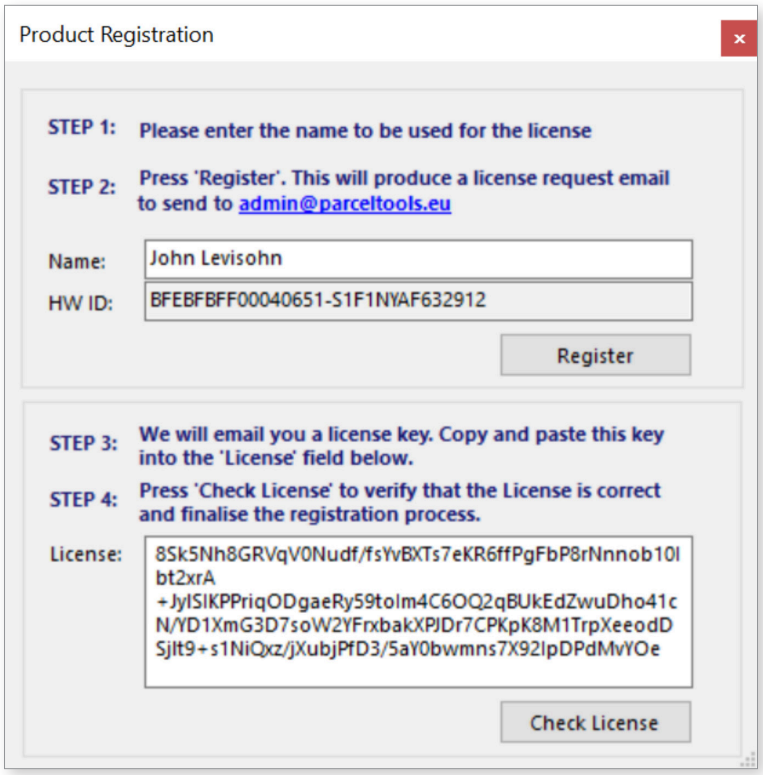
Licensing

When the application is first installed it is fully functional to allow evaluation for a 28-day period. After that time the application will need to be licensed.

Check the registration status from Help > About.



To request a license go to Help > Register and follow the instructions.



Schedule 1 - Data item descriptions

Data Item	Source	Description
Barcode	Cubetape	Unique shipment identifier (Con Note, AWB, Probill)
Barcode2	Cubetape	Additional descriptor (often product ID or location)
Barcode3	Cubetape	Additional descriptor
Pieces	Cubetape	Quantity
Length	Cubetape	Length or dimension 1
Width	Cubetape	Width or dimension 2
Height	Cubetape	Height or dimension 3
Weight	Scale Indicator	Weight from indicator
Date and Time	Cubetape/Checkmate	Date stamp either from PRO with RTC configured or from Windows System
Serial Number	Cubetape	Device serial number (PRO only)
Operator ID	Cubetape	Scanned at start of PRO session
Name	Checkmate	Descriptor from Settings area “Device Name”
Sequence Number	Checkmate	Incremental record counter
Dim Weight	Cubetape	Calculated item output from PRO
Volume	Cubetape	Calculated item output from PRO
Units	Cubetape	Fixed item output from PRO
Custom	Cubetape Spare	Custom field from PRO settings

Schedule 2 - Communications and Data Format requirements

Communications

Checkmate for Windows receives data from connected devices using serial communications protocols. All connected devices must therefore be configured to use serial communications for data to be received.

If the C190DSK cradle is in use, it must be set to USB-VCP mode by setting dipswitch 2 to the OFF position.

Cubetape POS and PRO devices can either connect directly to the Checkmate application, or can connect via the C190DSK cradle.

Scales and scale indicators also connect using Serial, USB, or Bluetooth SPP connections.

Cubetape PRO

Data received from Cubetape PRO must be formatted using the default output format:

SN=18120001,ID1=12345678,PC=1,LL=48,WW=40,HH=100<CRLF>

The PRO mandates and controls this format to ensure data integrity.

Cubetape POS

Checkmate-W buffers data items received from POS, and on receipt of a valid record displays data items and saves the record to disc. This process allows data integrity to be managed.

Valid POS formats supported are:

1DIM (where individual items are decoded then transmitted):

^Barcode<CRLF>
~Length<CRLF>
~Width<CRLF>
~Height<CRLF>

3DIM (where dimensional items are grouped in sets of three then transmitted)

^Barcode<CRLF>
~LengthxWidthxHeight<CRLF>

[Source prefixes ^ and ~ are required and identify the source of the data as either General (^) or Dimensional (~)]

[Suffix CRLF is required to identify the entries]

Schedule 3 - Supported Scales/Indicators

Manufacturer	Device/Protocol
Avery Weigh-tronix	ZP900, SMA
Mettler Toledo	SICS
Ohaus	T31P
Precia Molen	i5, SlaveA+ (ID=00)

Schedule 4 - Status information