

# K-Mobile User Manual

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# Contents

<b>Chapter One</b> .....	<b>Error! Bookmark not defined.</b>
Installation and Setup .....	1
Installing K-Mobile – Windows Mobile Device Application .....	2
For VRS users .....	2
For RTX users .....	2
Starting K-Mobile .....	3
First time start up .....	3
The Main Menu.....	4
Check for updates.....	5
Settings Menu.....	24
Return to Windows Mobile .....	5
Powering off the Device outside of K-Mobile.....	6
Job Manager.....	7
GNSS Status Bar.....	20
GNSS Settings – TSIP.....	21
Real Time Settings .....	21
VRS Settings .....	22
RTX Settings .....	22
Co-ordinate System .....	23
<b>Chapter Two</b> .....	<b>Error! Bookmark not defined.</b>
Recording Data.....	10
Recording features in K-Mobile.....	11
Add more features to the Current collection schema.....	11
Recording features using GNSS - Points .....	12
Recording Position using the Background Map.....	12
Recording linear / area features.....	14
Toolbox within the Map Screen.....	15
Reviewing data using Data View.....	16
Reviewing data using the Map View .....	16
Navigating around the Map.....	17
Map Manager .....	17
Taking Photos.....	18
<b>Chapter Three</b> .....	<b>20</b>

Syncing data with the office wirelessly .....	28
Syncing data via a cable .....	28
<b>Chapter Four .....</b>	<b>Error! Bookmark not defined.</b>
Advanced Functionality .....	29
Advanced Workflow options – Drainage Surveys .....	30
Using a Laser Rangefinder and a Trimble Geo7X .....	33
To offset a GNSS Position using a Laser Rangefinder .....	33
Using the Rangefinder to fill in the data form .....	34
Worked Example for 2 Shot Height .....	35
<b>Chapter Five .....</b>	<b>37</b>
Troubleshooting & Bugs .....	38
Common Error messages .....	39
Errors on Start up .....	39
Error when pressing the Map Manager button .....	41
<b>Appendix .....</b>	<b>42</b>
Activating RTX on a Geo7X .....	43

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# Installation and Setup

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## Installing K-Mobile – Windows Mobile Device Application

The preferred way of installing the mobile application is by visiting:- <http://m.k-matic.com> directly on your device. From there you will be able to click on the link, and automatically download and install the application

Alternatively you can visit the support pages of <http://k-matic.com> and download the K-Mobile application CAB file, which can be manually copied onto the device via a USB cable or SD Card. Then using the 'File Explorer' on the device, browse to the location of the CAB file, and tap on it.

When the process is complete you will be presented with an 'Installation Successful' message.

*NOTE: The K-Mobile application is intended for use on Trimble Mobile devices such as the Juno / GeoExplorer & Nomad series devices.*

Both the mobile and desktop websites have links to 'Sample Data' sets containing a Sample Job along with the corresponding mapping that can be downloaded and installed on your device.



### For VRS users

Please make sure that the extra "Trimble GPS drivers 1.4" are installed, and if working in the UK then the high accuracy "United Kingdom Projection" co-ordinate system should be installed. This is available from the same website as before under "Additional Utilities".

You can also access this once you have the software installed by pressing "About > Check for Updates".

Please see *GNSS settings* for where to enter your VRS Username and Password.

### For RTX users

Please make sure that the extra "Trimble GPS drivers 1.6" are installed, and if working in the UK then the high accuracy "United Kingdom Projection" co-ordinate system should be installed. This is available from the same website as before under "Additional Utilities"

You can also access this once you have the software installed by pressing "About > Check for Updates"

## Starting K-Mobile

After installation, tap on the Windows icon on the lower left of the screen and find the K-Mobile icon  at the bottom on the windows programs page.

*NOTE: You can 'Tap and Hold' on an icon in order to drag it to a more convenient location at the top of the page.*



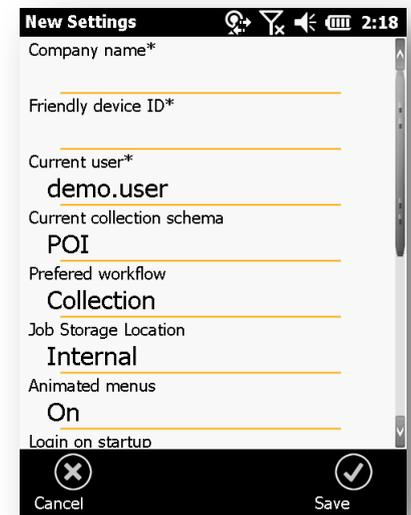
## First time start up

When starting K-Mobile for the first time, you will be prompted to enter a 'Company name' and 'Friendly device ID'.

Your company name should be specified on your delivery documents, and is important as it is used in Cloud transfer and the live metrics collection process. In order to trial the somewhere before purchase, you can use the company name 'Demo Company'

The 'Friendly device ID', is how this device will appear on device based reports. You are free to choose your own naming convention but we recommend using a notation that specifies the DEVICE rather than the user (e.g. G6-001 for the first Geo6000 device).

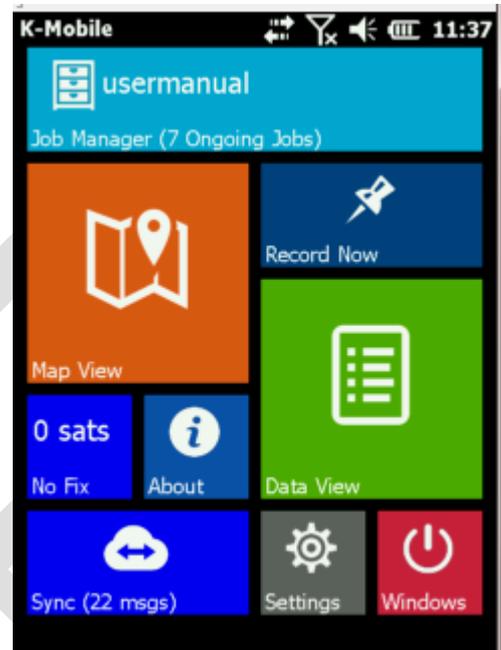
User names can also be specified on this page. We expect the username to change as the device is operated over time by different people, but the DeviceID should remain unchanged.



## The Main Menu

Once the initial start-up process has been completed (and after any subsequent restart) you will be presented with the main menu screen. From here you can access the

- **Job Manager** – for switching / creating / finishing and deleting jobs.
- **Map View** - for reviewing job data against a map back ground data with options for editing / deleting / recording / navigating by tapping on features from the map.
- **Data View** – for reviewing job data in a textual list format, with options for editing / deleting / navigating to features from a list.
- **GPS status** – for reviewing current Easting/Northing & Latitude/Longitude data and setting GPS settings such as coordinate systems and Com Ports.
- **About** – displays current version, and update options.
- **Record Now** – displays the list of collection options
- **Sync** – For sending / receiving data via the cloud or cable
- **Settings** – for reviewing/setting all major application options.
- **Windows** – for exiting the K-Mobile application and returning to the windows operating system

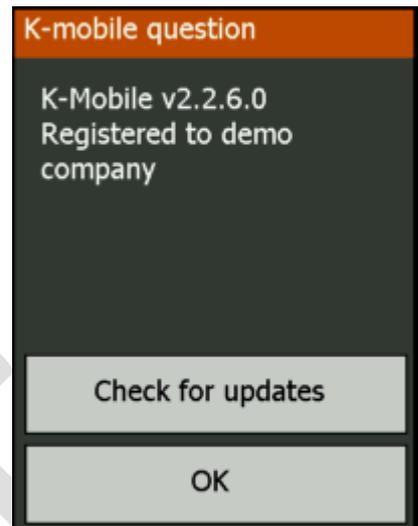


## About & Check for updates

From the main menu if you press the About button.

This then allows you to find out what version of the software is running. *(There will be newer versions than this image)*

The Check for updates button then takes you to the K-Matic homepage where the latest release and pre-release versions are available.



## Exit K-Mobile & Returning to Windows Mobile

Press the Windows logo in the bottom right of the screen to close the program and return to the main menu. Alternatively pick the powerdown option to completely shutdown the device.



## Powering off the Device outside of K-Mobile

Depending on the Device being used, the power menu is usual found by holding down the power button for a few seconds.

On the Geo7X you will need to use the Green power button to the home screen and then use the power menu from there.

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# Job Management

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## Job Manager

This is accessed via the top button from the Main menu screen.

This is where you manage all of your jobs. The jobs are where the data is stored when you press Record. Nothing is stored in the form file (\*.JSON). These are just templates for what is recorded.

There is a summary on the right on the current status of the jobs currently on the device.

There are three statuses displayed:-

- New
- Ongoing
- Finished

To leave the Job manager screen you must use the **Open** button

### Job manager toolbox

Using the toolbox icon in the bottom left of the screen you should get three options, which you can use to tidy up your list of jobs if it is becoming unmanageable.

- **Show All/Hide Finished**

This switches between hiding and showing the data. By default all the finished jobs are hidden.

- **Delete Job**

This deletes the selected Job from your device.

**Note: Please make sure you have finished with data as there is no recovery available.**

- **Delete All Finished**

This deletes all the data with the *Finished* status from your device.

You can resume a finished job by selecting it from the list and pressing open. Its status will be changed back to *Ongoing*.

Job Name	Status
08May-1059	Ongoing
CapitaOffice	Ongoing
11Apr-1309	Ongoing
11Apr-1145	Ongoing
SampleJob	New
11Apr-1109	Finished
My First Job	Finished

Select Function
Show All/Hide Finished
Delete Job
Delete All Finished

## Creating a New Job

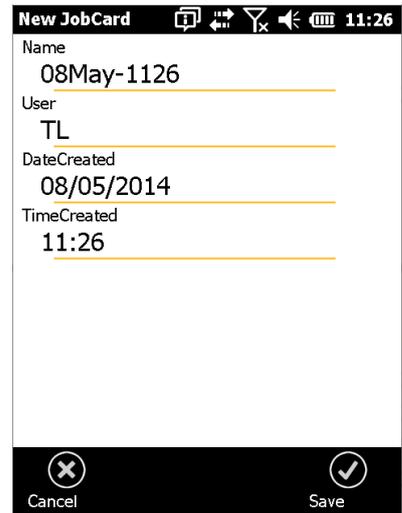
Press the new job button.

This will bring up the *New Job Card*.

The options here are controlled via the jobcard.jsn, if you want extra fields please enter them there.

By default it will use the date followed by time and minute. This is the time of the clock of the device.

Once you have created a new job it will take you back to the main screen.



New JobCard

Name  
08May-1126

User  
TL

DateCreated  
08/05/2014

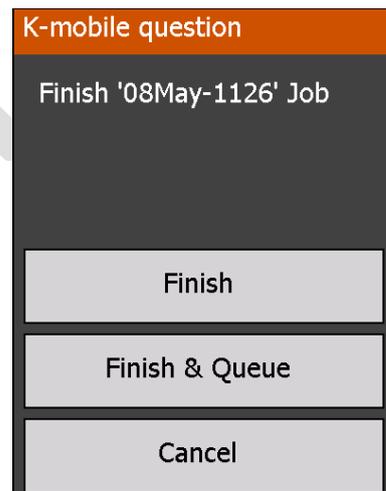
TimeCreated  
11:26

Cancel Save

## Finishing a job

When you click **Finish** on a selected job from the list, you will be given three options:

- Finish
- Finish & Queue
- Cancel



K-mobile question

Finish '08May-1126' Job

Finish

Finish & Queue

Cancel

# Recording Data

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## Recording features in K-Mobile

Once the K-Mobile application has been started, the GPS will be activated and process of acquiring a position will begin automatically.

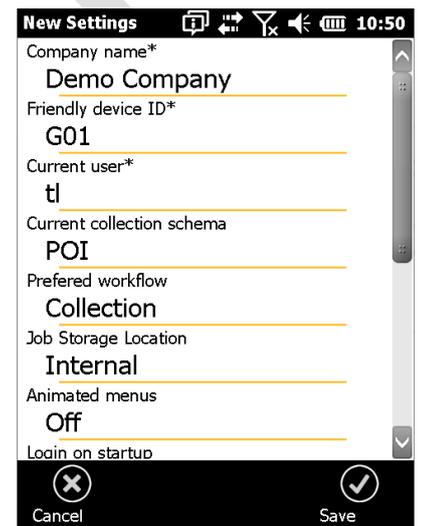
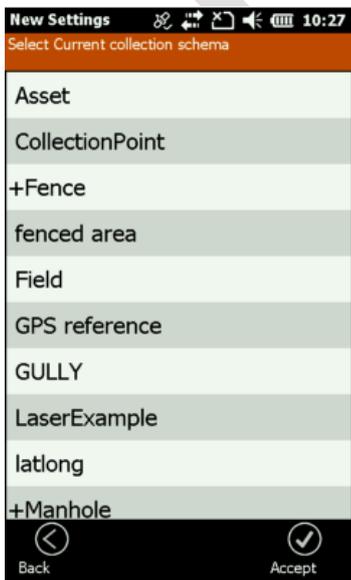
Once a GPS position has been acquired the number of satellites used for that position, will be displayed within the GPS tile on the main menu.

In order to record a feature, all the user needs to do is click 'Record Now' from the main menu. Record Now can also be selected from the Map View.

If more than one feature type is currently active then the user will be asked to select what type of feature they wish to record. It will display the feature style next to the name of the Feature.

## Add more features to the Current collection schema

In the **Settings** menu from the main menu, it will load all the available settings for you while you are in the field with K-Mobile. Select the Current collection schema by clicking on the field name.

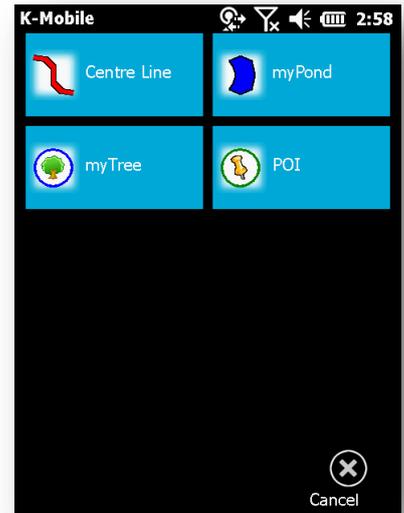


You can then pick which Forms you would like to use during this particular recording session. These can be changed at any point; they are not tied to any job.

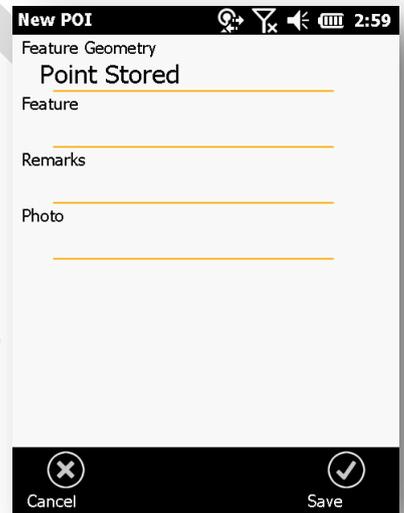
If an option is selected then there will be a "+" next to name of the Feature selected on the list.

## Recording features using GNSS - Points

When a point is selected from list, a predefined attribute form will appear. Feature Geometry will show "Point Stored" if there is a GNSS position. Simply click on the first field in the form you will then be led through each question on the form, automatically.



If there is no GNSS position simply click on the first field in the form which states "Point required". See *Below for Manual recording*.



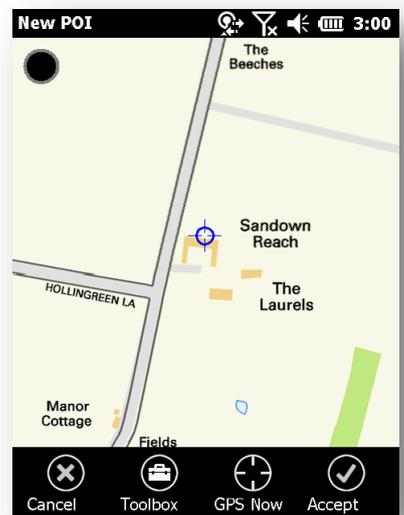
Once all questions have been answered, the completed form will be displayed to the user for final review.

## Recording Position using the Background Map

If there is no GNSS location available, or you wish to move the feature to a new location.

Simply click on the Feature Geometry field of the attribute form. This will load the Map screen.

Tap on the screen to select a location manually, or if the GPS has returned click the GPS Now button to take your CURRENT location.



Press *Accept* to return to the data entry form.

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## Recording linear / area features

Once a Linear or Area feature type has been selected from the feature selection screen, then a predefined attribute form will appear. Simply click on the first field in the form, and you will then be led through each question on the data entry form.

There are two options *Accept* and *Next*.

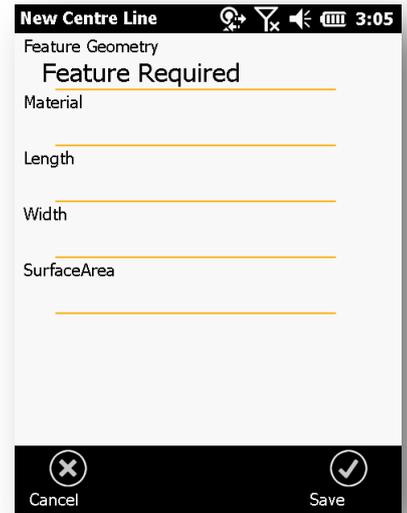
- *Accept* goes back to the form view.
- *Next* moves on to the next field, unless it is the last field and then it will take you to the form view.

**Note:** The Feature Geometry field for linear and area features **IS NOT** automatically completed. The user must tap on the geometry field in order to go to the geometry collection screen.

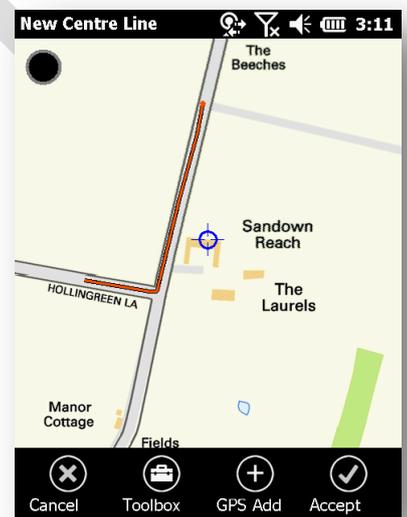
Geometry collection can take place either before or after the attributes data has been entered.

The Geometry collection screen allows individual nodes to be added using the 'GPS Add' button or created manually by tapping within the map area.

Auto Recording which will take the GNSS positions automatically as the device moves. The rate (distance/time) at which the points are recorded can be controlled in the settings.



The screenshot shows a mobile application interface titled "New Centre Line". Below the title, it says "Feature Geometry" and "Feature Required". There are four input fields: "Material", "Length", "Width", and "SurfaceArea". Each field has a yellow underline. At the bottom of the screen, there are two buttons: "Cancel" (with a red 'X' icon) and "Save" (with a checkmark icon).



## Toolbox within the Map Screen

The Linear collection toolbox contains options for Auto recording nodes, undoing individual nodes and for suspending linear capture so that capture of other features can be completed.

Once on the Map View when recording data there are extra functions available from the Toolbox. These can vary whether a Point or Area/Linear features are being recorded.

**Undo Node** – Removes the last node recorded. This can be repeated to remove multiple nodes. There is no re-do if a position has been removed.

**Discard All** – Removes all of the recorded positions.

**Suspend Feature** – If Auto-record is in process, then it is paused.

**Segmentate** – This stops the current feature and starts a new feature in the same place. This is used for pipework where a feature is continuous but needs to be split for a reason. Can also be used to place items exactly on the feature.

**Join Segments** – You can join features together, **\*\*Note: PLEASE do not try this unless the device has been explicitly setup to do this function otherwise the unit will crash!\*\***

**Cancel Capture** – This cancels the feature.

Select Function
Undo Node
Discard All
Suspend feature
Segmentate
Join Segments
Cancel capture

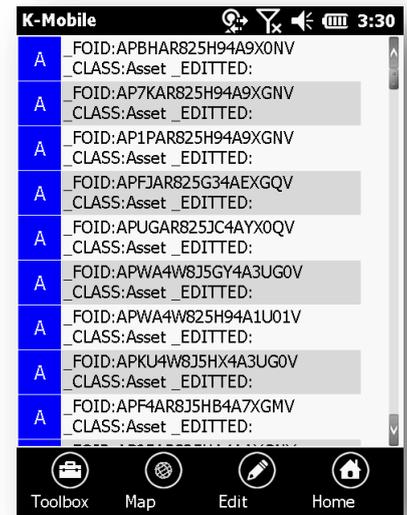
## Reviewing data using Data View

The Data View button from the main menu, displays a list of all the features in the currently active job.

The user has the ability to highlight an individual feature and either Zoom to it using the Map button, or update its attributes (and optional location) using the Edit Button.

The Toolbox gives further options for Deleting, Navigating back to a feature, using a compass arrow and filtering the data so that only certain feature types are listed.

Features with no position are viewable here.



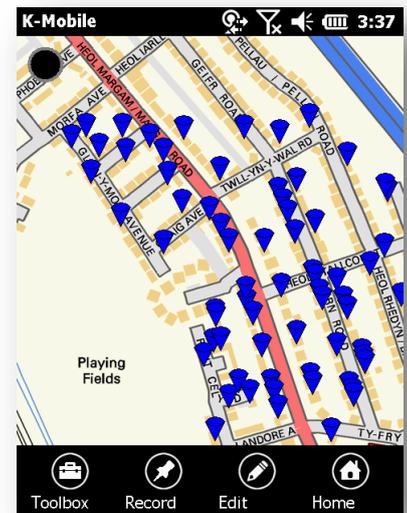
## Reviewing data using the Map View

The Map button from the main menu, displays all the features in the currently active job against a map background.

The user has the ability to highlight an individual feature and by tapping on the map icon, and then use the Edit button to update its attributes (and optional location).

New Features can be recorded directly from the Map View by tapping the Record button which displays the Feature election list, in the same way as recording from the Main Menu.

The Map Toolbox gives further options for Deleting features and Navigating back to features, using the compass arrow.



## Navigating around the Map

The Map View will generally automatically centre on the users current GPS location. The user can pan around the map to review the surrounding area, by simply dragging the map in the required direction.

*Note: Panning the map will turn of the automatic GPS centring (as will Zooming to a feature from the Data View)*

Additional map navigation options are available by tapping the circular button in the top left of the map screen, this gives access to the:-

- Zoom In / Zoom Out controls
- Zoom to Job extents
- Resume GPS centring
- Full Screen Portrait / Full Screen Landscape options
- Map Manager



## Map Manager

This screen selected from the Map view decides when each layer is going to appear. The supplied UK mapping comes in three zoom levels:-

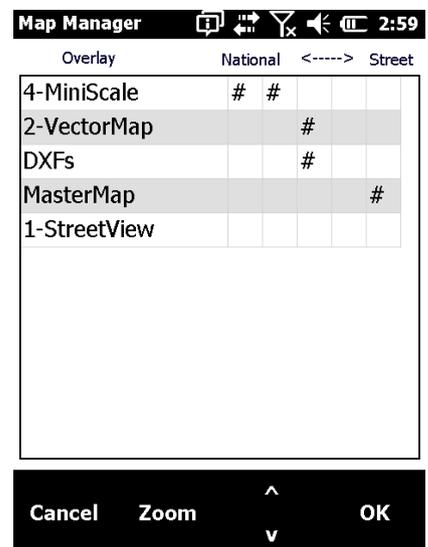
- Miniscale UK overview
- VectorMap Town/City Level
- Streetview Street level detail of mapping

If you have your own Mastermap or vector mapping then these can be placed in the OS Data folder on the SD card which are then displayed by K-Mobile.

*Note: Mastermap data needs to be in a folder called Mastermap as there is extra functionality on how the data is drawn to speed up the process.*

Select from the list where each layer will appear from. Use the arrows at the bottom of the screen move the overlay in the hierarchy.

Zoom to an overlay, for example a DXF you've imported.



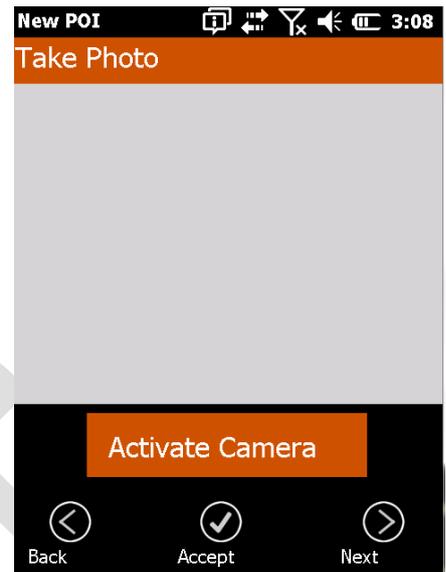
## Taking Photos

If you have a compatible device, i.e. one with a camera and the Form is setup correctly in K-Console, then when you press on the photo field or have finished the previous field then you get the option to activate the camera.

The reason it doesn't automatically activate, is if there is already a photo/image, and then this can be reviewed.

The photo will be named in relation to the Form selected and deviceID plus the number in the sequence.

For example *POI-Geo7x-4-photo.JPG*



*Note: If the photo is set to a high resolution it may display "Too big to preview".*

## Marking up Photos

Once you have taken a photo or you are reviewing a photo in the top right of the screen there is 'Markup'.

This allows you to sketch on the photo you have taken, to highlight something which may require further investigation when back in the office. There is currently only the one colour available.

*Note: You can only CLEAR data that hasn't been saved yet, as the edits are written to the image.*



# GPS/GNSS Setup

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## GNSS Status Bar

To display the GNSS settings please press the GPS button on the main menu. What screen you see depends on what GPS driver you have selected in the settings menu NMEA or TSIP.

If the device is receiving a signal then it will display:-

- The number of Satellites
- Easting and Northing
- Estimated Accuracy
- Speed and Bearing
- Number of bytes received (Used when connecting via internet to VRS/RTX, can be restarted by tapping on the number).



Sats	4	Auto	31m
E:N	374836.2:395051.9		
Speed:Brg	141.2°	0.1m/s	0b

Swipe the status bar to the left on to reveal more information.

This screen displays:-

- Latitude and Longitude
- GPS Time
- Quality – in HDOP



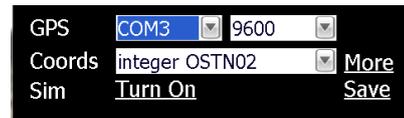
Lng:Lng	53.451597:-2.380420		
GPS Time	08/05/2014 13:14:53		
Quality	2.2hdop		

Swipe the status bar to the left to reveal more information, the final status bar depends on GPS driver chosen.

## NMEA GNSS settings options

There are basic controls in the NMEA version of K-Mobile. If the COM Port is left blank then it should auto-detect the GPS COM port. Leaving it blank on the Trimble Juno 5 Series gets the best performance.

- COM Port
- Baud Rate
- Coordinate System
- Simulate



GPS	COM3	9600	
Coords	integer OSTN02	More	
Sim	Turn On	Save	

COM ports for devices

- Juno 3 Series = COM4
- Juno 5 Series = COM3
- Geo7X = COM3

## GNSS Settings – TSIP

The three options are:-

- Adjust GPS Settings (See below for more)
- Coordinate Systems (See below for more)
- Simulation – Simulates the GPS signal for testing

[Adjust GPS Settings](#)

[Coordinate Systems](#)

[Simulation](#)

If you are not connected to the GPS you can alter which COM port the program will use.

**N.B.** COM ports vary on different Trimble devices.

It is recommended that the Smart settings are used. These are the best settings for the different masks you can set in terms of signal strength, satellite elevation and DOP of satellites.

K-Mobile 2:23

### GNSS Settings

Port: COM3

Use Smart Settings

Masks

DOP Type: PDOP

Max. PDOP: 99

Max. HDOP: 4

Min. Elevation: 5°

Min. SNR: 12

General Real-time

OK

## Real Time Settings

You can pick your Real time source on this Tab.

For VRS setup please pick type **Internet** and press the spanner icon. (See next page for full setup).

For devices with low grade antennas you can pick SBAS as the main option. This is the generic name for EGNOS, which (depending on device) can allow for up to 0.5m real time accuracy.

K-Mobile 2:28

### GNSS Settings

Source Type: Internet

Secondary Source: SBAS

Position Mode: Best Available

Age Limit: 50 seconds

General Real-time

OK

## VRS Settings

In the United Kingdom the settings are :-

(if outside please contact your salesman)

Address: [www.vrsnow.co.uk](http://www.vrsnow.co.uk)

Port: **2101** (High accuracy GPS i.e. R8) **2160** (H-Star)

Server Type: **NTRIP**

K-Mobile 2:35

Base Type: VRS  
Address: www.vrsnow.co.uk  
Port: 2101  
Server Type: NTRIP  
Source: TVN\_RTCM\_31  
User Name: Demo  
Password: \*\*\*\*\*  
Station ID: Any

OK Cancel

Source: Pick one from the list displayed.

N.B. DGPS has a 0.4m accuracy maximum

*Station\_KIRW and Station\_LERW are test streams - DO NOT PICK!*

K-Mobile 2:34

Server	Name	Country
TVN_RTCM_31	TVN_RTCM_31	GBR
TVN_RTCM_23	TVN_RTCM_23	GBR
TVN_RTCM_3...	TVN_RTCM_31_G...	GBR
TVN_CMR_PLUS	TVN_CMR_PLUS	GBR
TVN_CMR_X	TVN_CMR_X	GBR
TVN_DGPS	TVN_DGPS	GBR
Station_KIRW	Station_KIRW	GBR
Station_LERW	Station_LERW	GBR

OK Cancel

**Username:-** *Please contact your dealer if you do not know you VRS Username*

**Password:-** *Please contact your dealer if you do not know you VRS password*

## RTX Settings

RTX is controlled outside of K-Mobile in the System Information with the Settings of Windows Mobile.

To active RTX on a Geo7X please see full explanation in the Appendix.

RTX on the Trimble R1 is controlled by the GNSS Status Utility.

## Co-ordinate System

This screen allows you to pick any co-ordinate system from the list of available ones.

Please note if you have installed the OSTN02 high accuracy for use with VRS please make sure it is selected from the list.

You can also change Ellipsoidal height to Mean Sea Level height. This is crucial if the height is being tied to OS datum at Newlyn.

K-Mobile 2:44

Select By:  System and Zone  Site

System: United Kingdom

Zone: OS National Grid (OSTN02)

Datum: Ordnance Survey

Coordinate Units: Meters

Altitude Units: Meters

Altitude Measured From: Height Above Ellipsoid (HAE)

Geoid Model

Defined (OSGM02 (United)  Other

Geoid: OSGM02 (United Kingdom)

Windows Keyboard OK

# K-Mobile Setting

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## Settings Menu

This is displayed when you select Settings from the main menu. All of these settings relate to the fields in the *Settings.JSON*. Note: *Some may need the software to be restarted to take effect.*

Please note that there are many fields which are for a specific use and therefore may be completely irrelevant to you. In K-Mobile version 2 or later some of the settings are split into relevant sections.

There is no need to fill in every setting only the relevant ones.

There are currently four sections:-

- Admin
- GPS
- Photo
- Advanced

The standard settings are:-

- Company Name
- Friendly Device ID
- Current User
- GPS Antenna Height (Th) – For high accuracy Z positions this must be completed.
- Current collection schema (See explanation below on page 12)
- Preferred Workflow – *Collection or Inspection*

### Admin Section

- Password required for Setting Entry *Password must be entered to see settings screen*
- Login on startup *Make the user login every time software starts, PIN codes are set in K-Console.*
- Job Storage Location *Internal or SD Card*
- Office Sync method *Via Cloud or Direct, also Complete job or changes only*
- Outbox Filename Convention *Normal, Append Device ID, Suffix Device ID*
- Tracking server *Where the data will be sent to*
- Tracking Interval *How long between location pings to the server, turn off if you don't use a SIM card.*
- Lone Worker Checkin *On or Off*
- Lone Worker email Recipient *Recipient of email alert*
- Lone Worker SMS Recipient *Recipient of SMS alert*
- Export in Lat Lng *True or False*
- Export Sync Format *Standard or CSV*
- Prevent user deleting records *Yes or No*

- Custom Cloud Server *Leave blank on standard setups*
- Cloud UserName *Leave blank on standard setups*
- Cloud Password *Leave blank on standard setups*

### GPS Section

- GPS Driver *NMEA or TSIP (See GNSS settings for full explanation) or Precision (this is for use with Total Stations)*
- Capture data for post processing *Only use with Post Processing in K-Console*
- GPS Marker Style *Standard or fullscreen*
- Target GPS Accuracy *Numerical entry i.e. 0.1 for 10cm*
- GPS Beeps *Four options, No beeps, In Tolerance, Out of Tolerance, Both*
- Always return last GPS position *Yes or No*
- Delay GPS capture on certain features *True or False*

### Photo Section

- Specify field name for Photo prefix *Use a specific field to name your photos.*
- Transmit Thumbnail Photos *Send a reduced image size*
- Select Camera Mode *Internal or External options*
- External Photo Folder and wildcard *Warning folder must be empty*
- Maintain local copy of images *Deletes the images after sending*

### Advanced Section

- Laser Com Port *If the device has one or has a Bluetooth laser connected, Geo7X internal is **COM6**.*
- Animated Menus *Buttons will "Fly" in and out*
- External Bluetooth device COM Port *if you are using an external receiver i.e. Trimble R1*
- Min distance between Autorecorded nodes
- Individual Map Sync Folder
- Minimum RD8000 Depth *For special setup with a RD8000*
- Always record from Map *Map view will always appear after feature has been selected from the feature list*
- Manual Attribute Repeat *Active or Inactive*
- Display Features as List *No icons used when feature list is displayed*
- Navigate in 3D
- Return to Feature Selection screen after recording
- Enable Fall Detection (Juno 5 only) *Uses the accelerometer, user must respond after certain movements*
- Allow extra close map zoom *Three options False, True and Very Close (36m screen zoom)*

# Transferring Data to PC

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## Syncing data with the office wirelessly

In the Settings > Admin Section > Office sync method

There are two options to be able to send via the cloud.

- Via Cloud-Complete Job
- Via Cloud-Change Only

Once your Job is complete (or optionally at the end of the day), your Job can be sent wirelessly back to the office using the Sync button from the Main Menu.

Tapping the Sync button will start the office syncing process.

The currently active Job (together with any Photos / Sketches / Signatures not previously synced) will be sent to your company's cloud storage area.

All Forms definitions will be checked against the versions published in your Company's cloud area to ensure they are up to date.

Any Job assignments sent to the Cloud storage from your office will be downloaded directly to the mobile device.

Job syncing can take place over any internet connection – (cellular 3G network or Home / Office / Public WIFI hotspot)

## Syncing data via a cable

To use this method have the Settings > Admin Section > Office sync method set to either:-

- Direct-Complete Job
- Direct-Change Only

Use the Sync button to copy the JFL to the correct folder. A message stating "Copied to outbox" will appear.

Plug in your device via a USB cable to your PC.

The retrieve data is done via K-Console, nothing is pressed on the unit.



# Advanced Functionality

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## Advanced Workflow options – Drainage Surveys

### Background

Within K-Mobile there is now a workflow which allows the user to record a manholes and pipes and link them together. Firstly record a Manhole point feature, then record a Pipe feature that is linked by a parent ID to the Manhole. The pipe can be connected to another manhole with that parent ID also being recorded in the pipe form. Invert levels can also automatically updated to the Pipe's attributes when the Pipe is linked to the Manhole.

### Step by step instructions (Background maps removed for clarity)

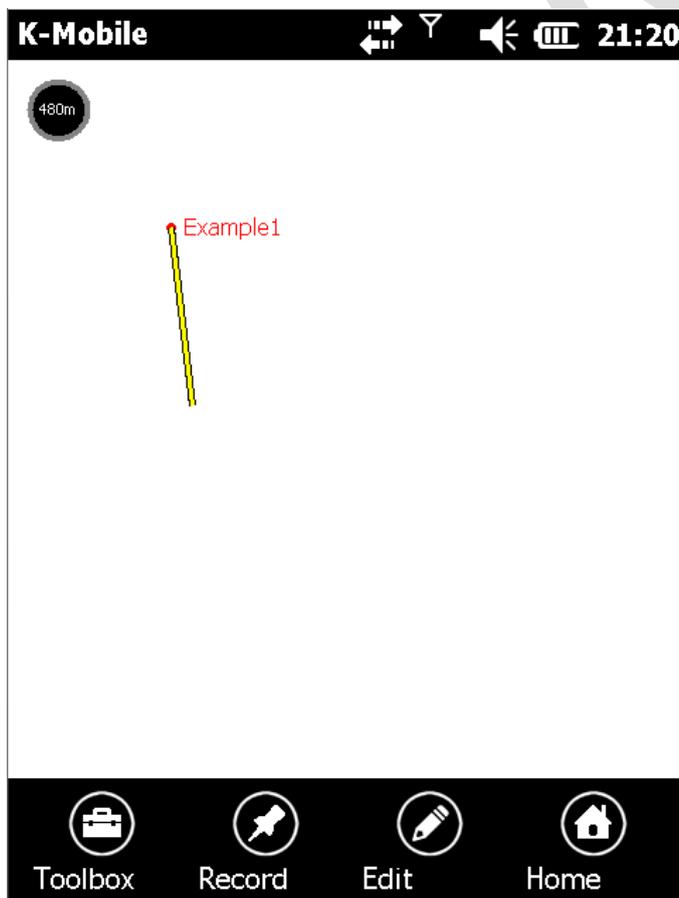
Create a point feature i.e. Manhole

Create a line feature i.e. Pipe

Recommended setup above is to link the manhole to the pipe as parent/child. This allows the pipe to be linked directly. *Note: It is recommended to make the pipe a child of itself. This allows multiple pipes to be entered from one manhole.*

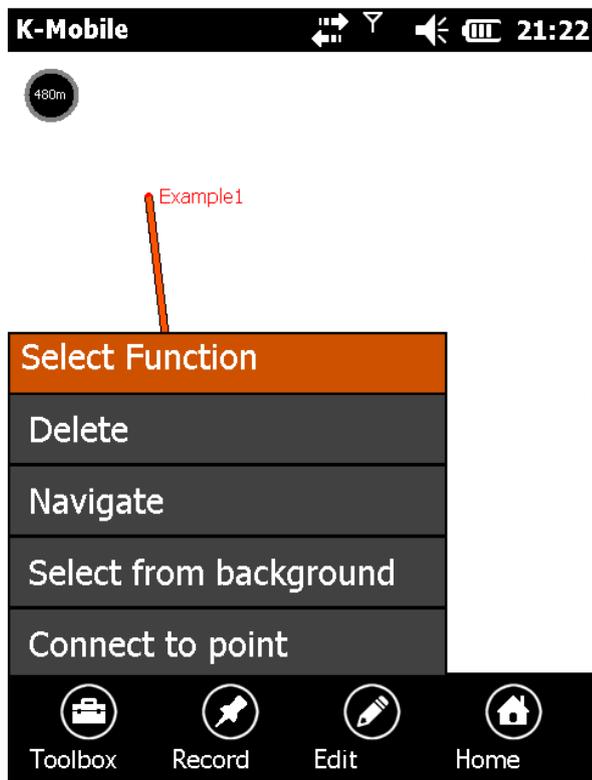
Record a Manhole, and fill in the form, press Save.

Then record at least one pipe. It should look something like this:-

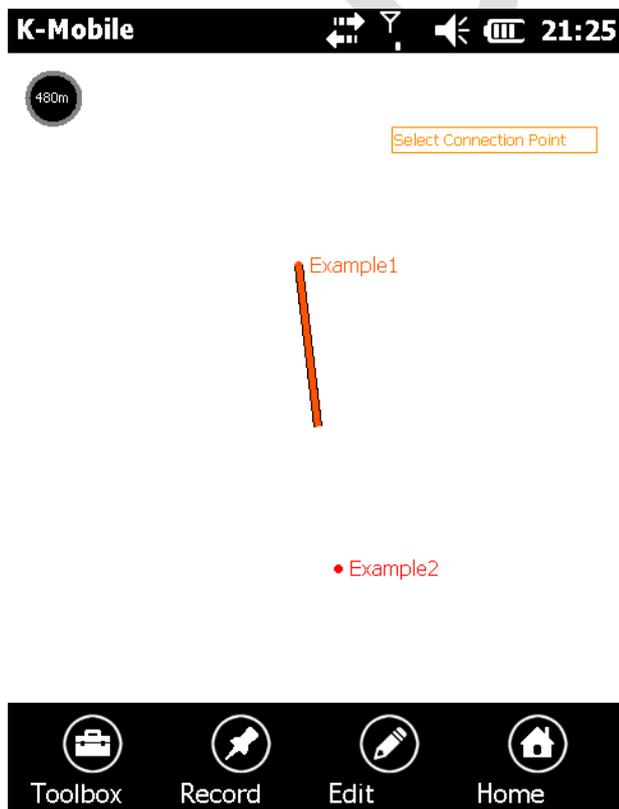


Record a second Manhole point.

Select the pipe and click on Toolbox, there should now be an additional function called “Connect to point”.



“Select Connection Point” should appear in the top right of the screen.

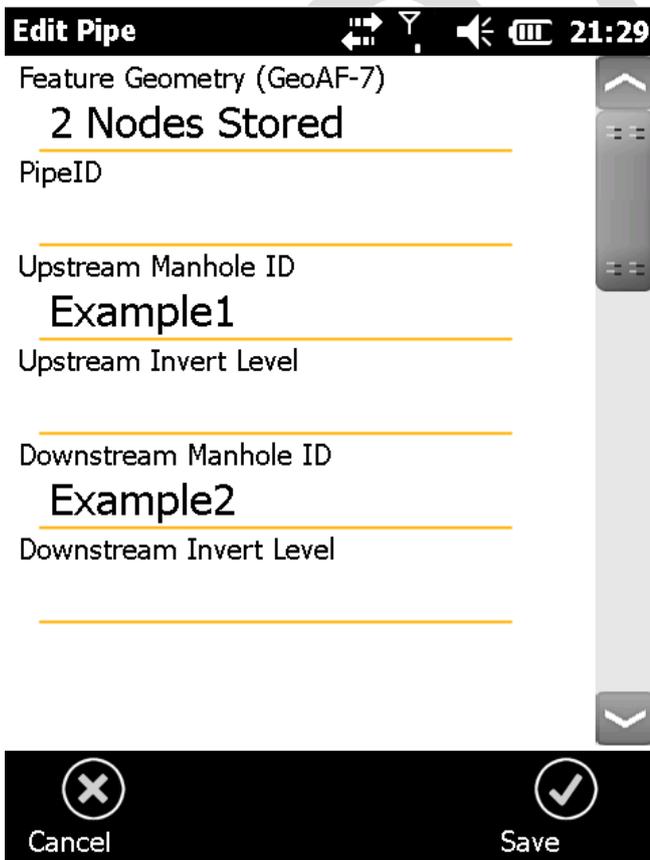


Select the second point, a 'Connectivity Join' message should appear, select Yes



• Example2

It should then fill in the fields of the pipe form, linking the Manholes together.



## Using a Laser Rangefinder and a Trimble Geo7X

If a Trimble Geo7X has a Laser Rangefinder then there is an easy way of linking the data from the rangefinder to a data form.

1) Check that the Laser Rangefinder has been installed and has been run for the first time. When this happens it should ask whether the “Target” button should be assigned to the Rangefinder program. This will allow the program to be easily recalled within K-Mobile.

If this hasn't already been set then it can be easily within Settings > Personal > Buttons.



2) Check in the settings file that the COM port is set to COM6.



There are two options to use the Laser Rangefinder:-

- To offset a GNSS location
- To fill in the Height/Width in a data entry form.

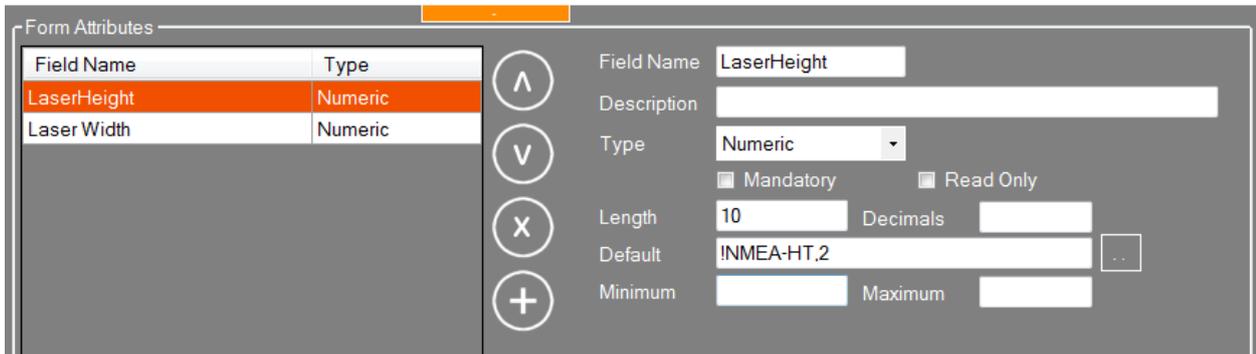
### To offset a GNSS Position using a Laser Rangefinder

- From the map screen press the Target button to call up the Laser Rangefinder.
- Fire the Laser to record an offset distance.
- Press the tick in the bottom right.
- Select the feature from the list to record. If the list doesn't appear, go back to step 2.
- The feature geometry should say “Point Stored”
- Fill in the rest of the data form.

## Using the Rangefinder to fill in the data form

This requires a setup in K-Console to create a form that has the required fields. Using the latest version of K-Console in a Numerical field there are two options for Laser Height and Laser Width.

This will change the “Default” field accordingly.



Field Name	Type
LaserHeight	Numeric
Laser Width	Numeric

Field Name: LaserHeight  
Description:   
Type: Numeric  
 Mandatory  Read Only  
Length: 10 Decimals:   
Default: !NMEA-HT.2  
Minimum:  Maximum:

In this worked example there is a field for Height and a field for Width. The Point has been recorded with GNSS, and the data form is displayed. The laser will only work from this view not when viewing a field.



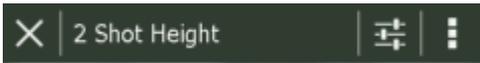
New LaserExample 12:09  
Feature Geometry (t-192)  
Point Stored  
LaserHeight  
Laser Width  
Cancel Save

Press the Laser Rangefinder button.

Check what mode the Rangefinder is in.

It will be displayed at the top of the screen.

## Worked Example for 2 Shot Height



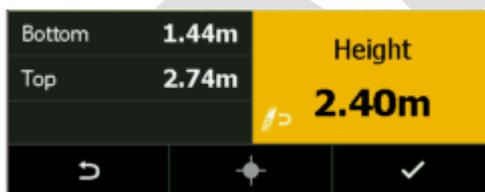
To change this press the three dots in a row when in the Laser rangefinder view 

This will bring up the “Workflows” Screen.

Select an appropriate Height option, this example will use *2 Shot Height*.



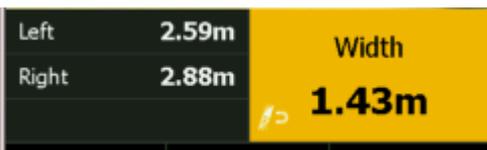
Shoot the bottom and top of the object. Press the tick to return to K-Mobile. If the sounds are on then a confirmation sound will be made.



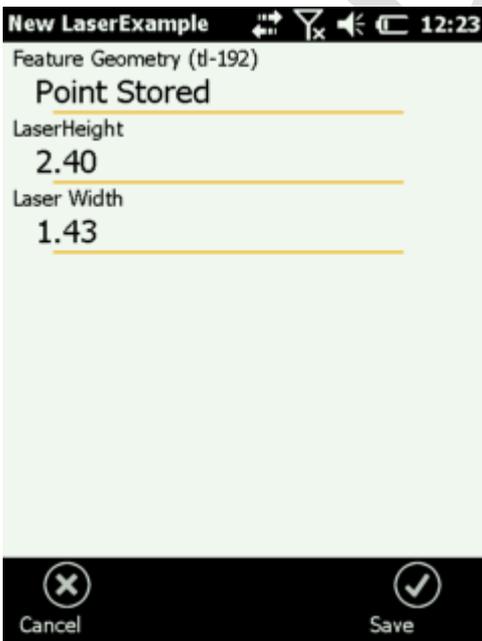
This will then fill in the Laser Height field with the correct information.



To fill in the Laser Width field press the Laser Rangefinder button again. This time change the Workflow to *2 Shot Width*. Start from the Left to Right of the object.



Press the tick to return to K-Mobile. If the sounds are on then a confirmation sound will be made. The Laser Width field should now contain the data from the Laser Rangefinder.



# Troubleshooting

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## Troubleshooting & Bugs

If you are having any issues with the software please perform a soft reset on the device. This is normally achieved by holding down the power button. This can often solve issues where the data connection is an issue. This might be sending/receiving data or using a Real-Time field solution like Trimble VRS or Trimble RTX.

If this does not resolve the issue please contact [support@korecgroup.com](mailto:support@korecgroup.com) or call 0151-931-6700

If you wish to report a bug please email [support@korecgroup.com](mailto:support@korecgroup.com) , we welcome any report of issues and we will try are hardest to resolve them.

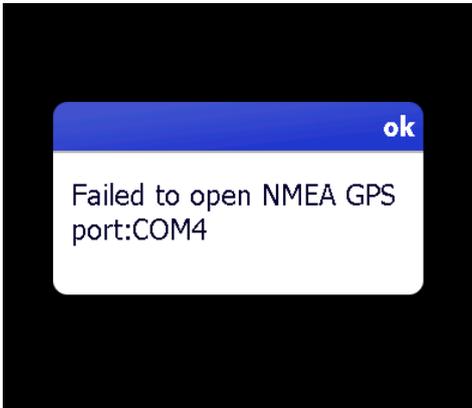
You may be asked to update your software as bug fixes are released periodically for the software.

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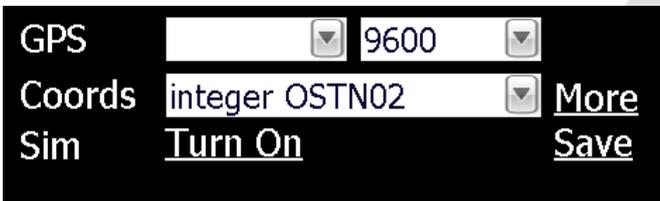


## Failed to open NMEA GPS port: COM

When starting K-Mobile, with GPS driver set to NMEA this message appears:-



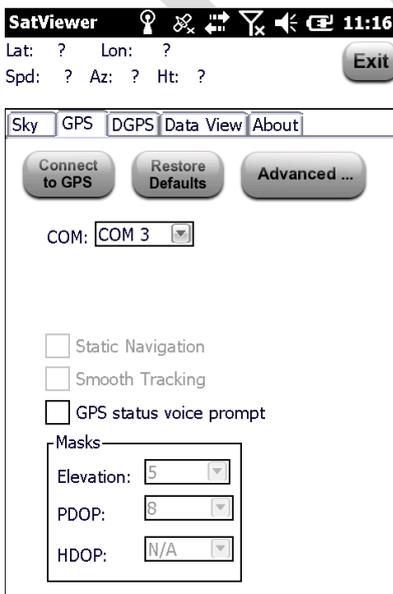
In K-Mobile by default the COM port in the NMEA settings will be blank.



This means the software will auto detect what GPS signals are coming over all the COM ports. Sometimes the COM port has been set to an exact COM port. i.e. COM3

If there is a COM port set on a Juno T41/5 it may be set to either COM2 or COM3. Sometimes if an error has occurred within the software the COM port is locked and a simple soft reset will resolve the issue.

A solution (on the Trimble Juno 5 only) is to reset the default settings via Sat Viewer, please note this is outside K-Mobile. In the GPS tab



Click on the Advanced button > Return to Default Settings

**SatViewer**

COM settings here are for connecting only and do not change the settings on the receiver chip.

[Return to Default Settings](#)

COM	COM 3	NMEA Msg.	
Baud	38400	Freq. in Sec.	
Bits	8	GGA	1
Flow	None	GSA	1
Parity	None	GLL	off
Stop	1	VTG	1
		GSV	1
		RMC	1

Then reset the device.

Restart K-Mobile. It should then display 1 sats. This shows that it is receiving data from the COM port and just needs to be outside to calculate a position.



### Error when pressing the Map Manager button

This message appears when the location that K-Mobile is looking for the mapping doesn't hold a folder. This location is controlled by the K-Overlay.txt file which is located in the My Documents > K-Matic Folder on the device.

Check that the location is correct. A common issue is if the unit calls the SD card something other than "Storage Card". This can be checked in the file explorer by navigating to the SD card and seeing what it is called.

# Appendix

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## Activating RTX on a Geo7X

In order to get the RTX license unlocked, please copy the appropriate unlock file (make sure the size doesn't change and it stays 32 bytes) onto an SD-card and insert this card in the Geo 7X receiver. If you haven't received this then please request this.

Next, unlock RTX by:

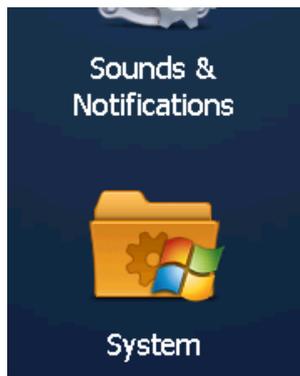
1. Tapping the Windows button.



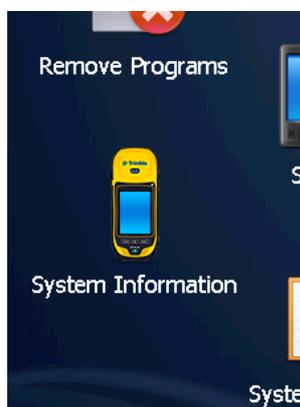
2. Scroll down and tap "Settings".



3. Tap "System".



4. Scroll down and tap "System Information".



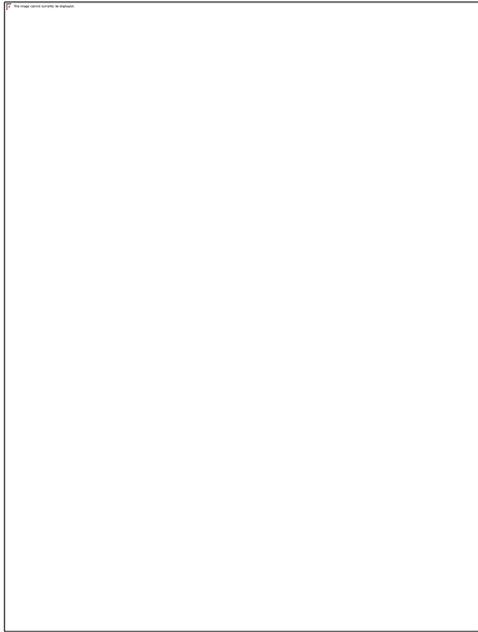
5. Tap ">" three times to show "RTX".



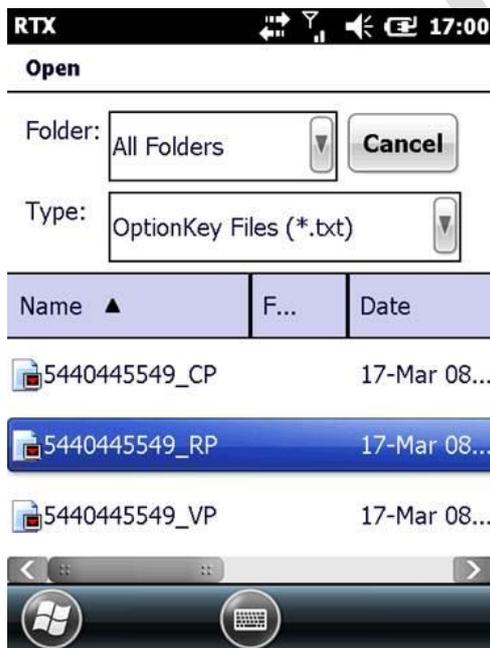
6. Tap "Manage RTX subscriptions".



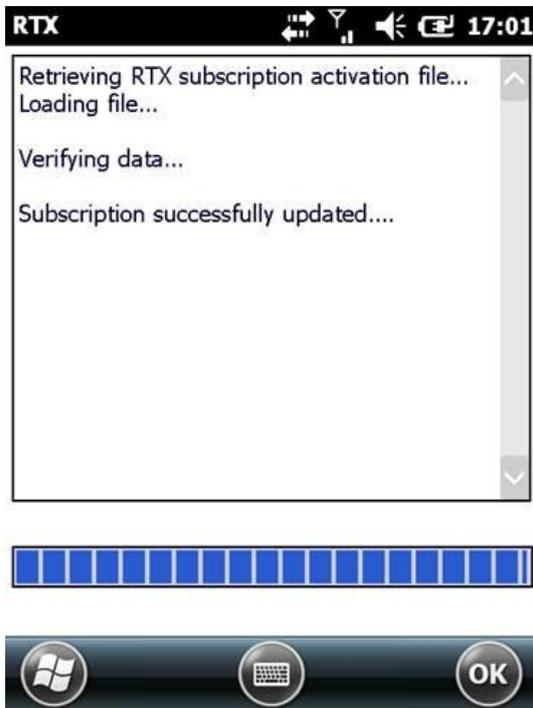
7. Select "Manual RTX activation", then tap "Activate".



8. Search for and tap the option key file you just copied to the memory card.



- The receiver will process the selected file and should tell you that the activation file has been loaded and the subscription has been successfully updated.



- Tap "OK" to confirm and verify the subscription end date:

**RangePoint RTX: Activated**  
 Start date ..... Tuesday, 17 March, 2015  
 End date ..... Tuesday, 30 June, 2015

*Note: That RangePoint requires both the Floodlight and H-Star options to be activated, so please verify those options have indeed been activated for your receivers:*

