
Chronos for Android 2014



Engineers' Manual

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1. System Requirements

Hardware / Software

Chronos Mobile works on Android devices with version 2.2 or later. It also works on tablet version 3.0 and above, though the screens are not optimised for those devices.

Devices should have :

- Screens of at least 480 x 800 pixels
- SD Card (Required to hold the Chronos database and diagrams).

Further Information / Technical Support

Further information on Chronos Desktop can be obtained from GK Consulting Ltd.

1. Introduction

Chronos is a fully integrated suite of applications that enables you to manage the gas installation, repair and servicing requirements of landlords.

This manual explains the functions of the Android portion for engineer use.

How to Use This Manual

This documentation is written for those who will use the Chronos Desktop system. It assumes a basic knowledge of the Android Operating System.

2. Get used to your Android device

Hardware

Android devices should have hardware or software buttons for **Back** and **Menu** at the minimum. These are usually on the base of the device, so refer to the documentation that came with your device.

Whenever the **Back** or **Menu** button is referred to in this menu, it means the above buttons.

While using the Chronos application, you can use the **Back** button to move back to the previous screen. There may be times when this is disabled, but you will be notified if that is the case.

3. Installing / Updating Chronos Mobile

Google Play

The app is installed from Google Play (formerly known as the Android Market). There are other support files that need to be installed on your device, so your device will have been supplied pre-configured.

Whenever a new version of the app is released your Android device will notify you and ask if you want to update it. The pace of development at present means that it's likely that you will receive fairly frequent updates. The updating process is automated and none of your data will be changed. You cannot use Chronos while the update process is in progress.

To setup a new Android device :

- Launch the Google Play store by clicking the icon. On older versions of Android, this was called the **Market**, so if you cannot find the Play Store icon use the Market one.



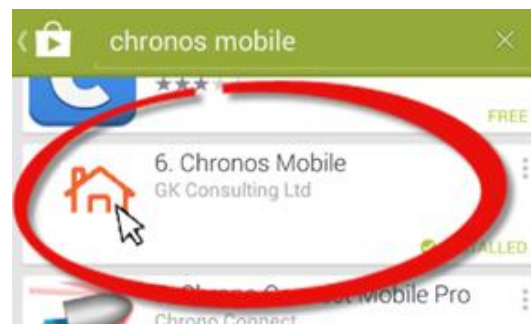
1 Launching the Play Store

- Search for Chronos Mobile by clicking the



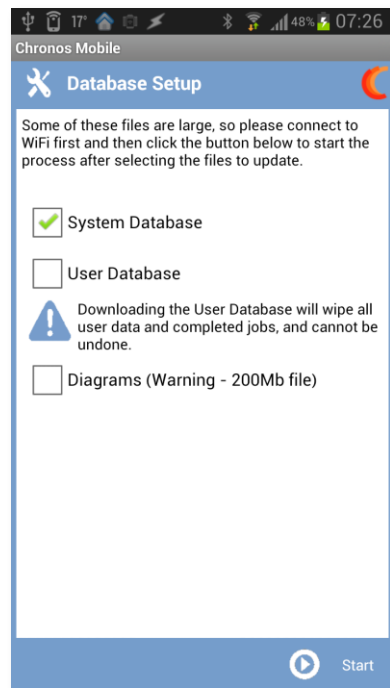
2 Searching for Chronos Mobile

- From the list that's displayed, select it and on the next screen, click the **Install** button.



3 Selecting Chronos Mobile

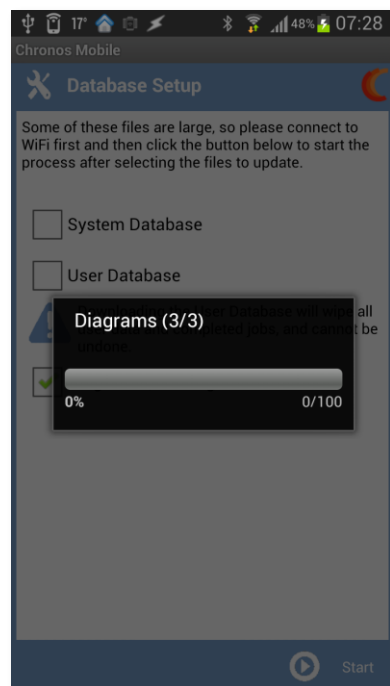
After it's installed, the first time you run it you'll see figure 4, asking you to download the initial databases.



4 Downloading System Files

Select System Database and User Database as a minimum. If you want to install the diagrams, select the **Install Diagrams** option (this isn't mandatory), but if you do this you should only download via WiFi as the file is over 200Mb in size.

While the files are downloading, you'll see the progress screen in figure 5.



5 Downloading System Files Progress

When the download has completed, you will see the preferences screen in figure 6. If Chronos closes after downloading the system files, you'll need to manually restart it.

When you restart, the next step is to login and go to the **Management Options** screen. When prompted for the code, enter the code you have provided with. Then select **System** followed by **System Settings** to get to the preferences screen.

The screenshot shows the 'Settings' app on a mobile device. At the top, the status bar shows various icons and the time 07:29. The app title is 'Chronos Mobile'. Below the title is a blue header with a white 'X' icon and the word 'Settings'. The first section is 'Authentication Code' with a text input field labeled 'Code'. The second section is 'Backup' with two rows: 'Backup Every' with a value of 7 and unit 'Days', and 'Purge After' with a value of 30 and unit 'Days'. The third section is 'GPS Tracking' with a checked checkbox for 'Enable Tracking', and two rows for frequency: 'Every 20 Metres, or' and '15 Minutes'. A 'Save' button with a play icon is at the bottom right.

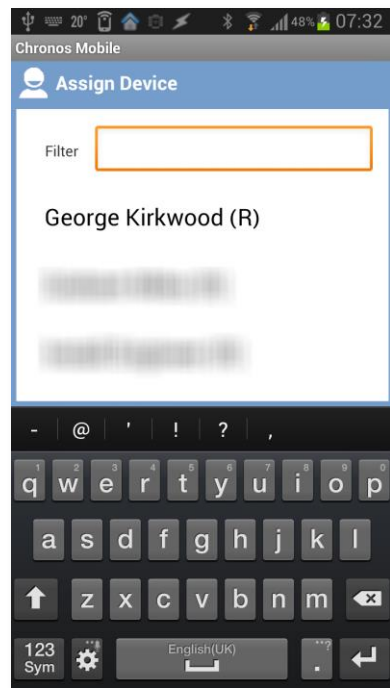
6 Setup Preferences

The first thing to do is enter the connection details for your server. In the **Code** text box, enter the setup code you are provided with (this is sent in a separate email). This will then automatically setup the server details.

Chronos automatically backs up device data and purges any old items after a set period – usually 7 days for backup and 30 days for purge. However, you can set these to shorter or longer if required.

If you don't want this device to be tracked, you can also set the **GPS Tracking** options at the bottom of the screen (you may need to scroll down to see this in some devices).

When you're done, press the **Save** button and you'll go to the **Assign Device**. Select the user from the list that appears - you'll be asked to confirm this, and when that's done you'll be logged out of Chronos and the device is now set and assigned.



7 *Assigning a Device to a User*

4. Starting Chronos Mobile

Launching Chronos Mobile

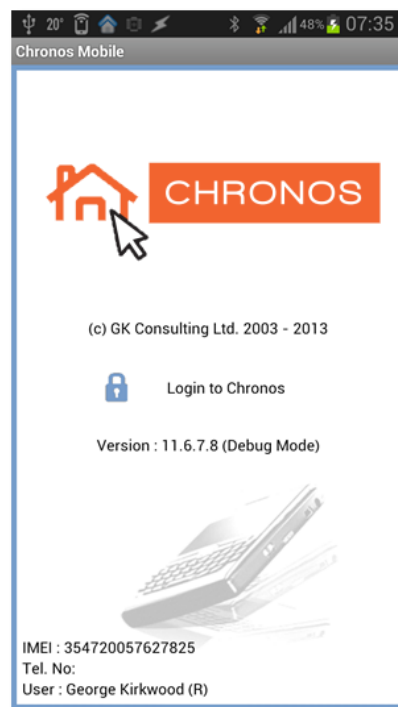
Now Chronos is installed, find the **Chronos Mobile** icon on your phone, then press it to launch the application.



8 Chronos Mobile Icon

If you can't see the icon, click the **Apps** button and scroll through the list until you find it.

You will see the login screen in figure 9. This screen shows your IMEI details, phone number and if the phone is assigned to a Chronos user the name of the user.



9 Chronos Login Screen

This screen also shows the version you are running. Press the **Login to Chronos** button to login.

5. Vehicle Check

Overview

Each day that engineers log in to Chronos for the first time, engineers are required to complete a vehicle check. This ensures that they are not driving vehicles that are not roadworthy, and ensures that management are warned of any potential issues.

Engineers are not able to proceed further into Chronos until this report is completed.

Page 1/2

These pages display the vehicle details and the last recorded mileage of the vehicle. Engineers need to tick a box if the item is OK or leave it unchecked if it is not.

Chronos Mobile

Vehicle Details (1 of 3)

Model: Kia Sportage KX-3
Reg. No.: BT12 DKA
Last Mileage: 8016
Mileage Now: 8017

☒ Tyre Condition and Pressure
☒ Brakes ☐ Lights ☒ Horn
☒ Doors ☐ Seat Belts
☐ Windscreen Condition and Clean
☐ Windscreen Wipers
☐ First Aid Kit Present and Stocked
☐ Roof Rack / Rails

Next

Chronos Mobile

Vehicle Details (2 of 3)

☒ Engine Oil ☒ Radiator Level
☒ Windscreen Washer
☐ Brake Fluid ☐ Power Steering
☒ Road Tax Valid and Present
☒ Drivers Licence Still Valid

Notes about the Vehicle
Steering is a bit vague.

Next

10 Vehicle Check Screens 1 and 2

Page 3


When the engineer has completed his vehicle checks, the last thing to do is to tick the box to indicate that they feel the vehicle is safe to use, then sign the box.

They cannot continue to Chronos until they have ticked and signed the box. Otherwise, they are not able to use the vehicle and will have to contact the office for advice before proceeding.

To reset the signature, press the button below the signature box.


Chronos Mobile


Vehicle Details (3 of 3)


 **Under NO circumstances should a vehicle be used if it is found to be in an unsafe condition !**

☒ I understand the above and I am happy that my vehicle is safe to use today.

Please Sign Below



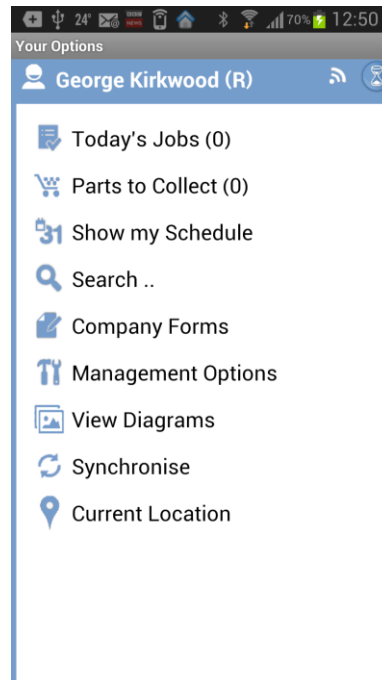


 Next

6. Chronos Home Screen

Overview

Once logged in, you will see your home screen (figure 12). This screen lists the number of jobs you have outstanding (1 in this case). A similar number will appear after the **Parts to Collect** option if there are any parts to be collected.



12 Home Screen

To scroll through the options, just use your finger to move the list.

Once you see the option you want, press it with your finger to launch it.

The options are discussed later in this section.

At the top there is also a status icon. In this case it's white, indicating that we are connected to the Internet. If this is blue, you will not be able to send and receive data. However, this will not affect your ability to complete jobs that are already synchronised to your device.

Any completed jobs or other details will be queued until the device can connect to the Internet, and there is no need for you to do anything.

Home Screen Options

At the top right of the screen is the "Break" button. Engineers use this to take a break. This then sends the details back to the office, so they're aware of which engineers are available.

Each of these options are discussed in their own section later. This is an overview of the function of each option.

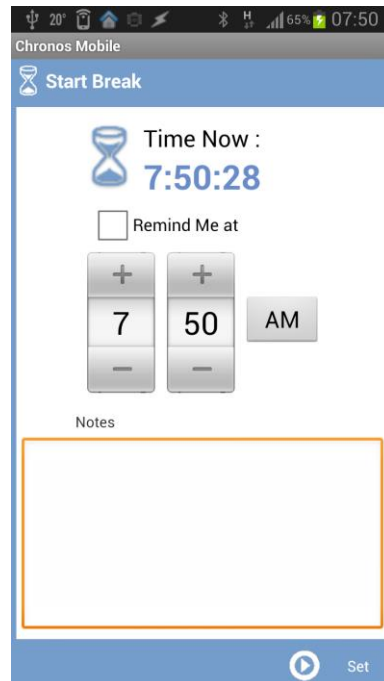
- **Today's Jobs** – The number in brackets indicates how many jobs you have outstanding. Click this to view and start your jobs.
- **Parts to Collect** – Click to view any parts you need to collect.
- **Show My Schedule** – View your schedule for past / future days.
- **New Document** – Create a manual job voucher or document. This list will expand over time to include other forms.
- **Company Forms** – This option will be expanded over time, but it is expected to be able to provide access to forms such as time sheets, holiday requests etc.
- **Management Options** – Various options for managing your device and for company managers to view performance and other details.
- **View Diagrams** – Allows you to view exploded parts diagrams for a range of appliances and identify parts on them.
- **Synchronise with Server** - Although Chronos generally sends and receives data in the background, you can use this option to force the device to synchronise its data.
- **Current Location** – Shows your current GPS location on a map.

7. Taking a Break

Overview

Engineers are entitled to statutory breaks, in addition to other times when an emergency break may be applicable. Chronos will record these details and send them to the server.

Breaks can only be taken when the engineer is not currently carrying out a job. For this reason, the break button is only visible on the home screen.



13 Starting a Break

Pressing the Break button on the home page displays the break dialogue above. If the engineer would like a reminder, they need to set the reminder time and tick the **Remind Me** tick box.

Optionally, some text can be entered in the box at the bottom of the screen to notify the office of the reason for the break.

These details are then sent back to the office, where staff will see at a glance in the Chronos Desktop software that they are on a break.



14 Break timer

While a break is active, a timer screen will be displayed on the PDA. This will also automatically display again if they log out of Chronos, or on a new PDA if they are issued with one while they are on a break.

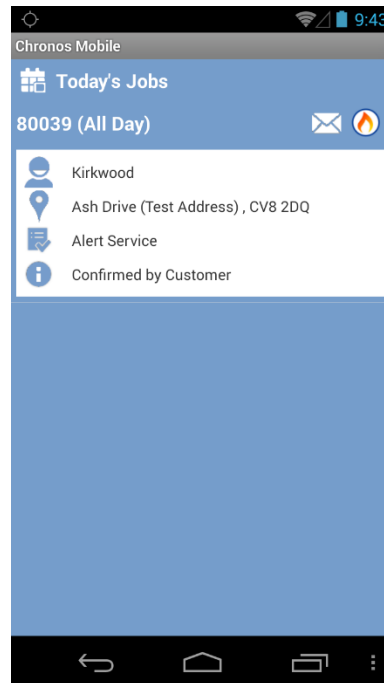
If a timer has been set, the PDA will play the default ring tone at the appropriate time.

The break can be cancelled at any time by pressing the **Cancel** button.

8. Today's Jobs

View/Start a job

Click the **Today's Jobs** option and you will see a scrollable list of the jobs you have outstanding.



15 Your Job List

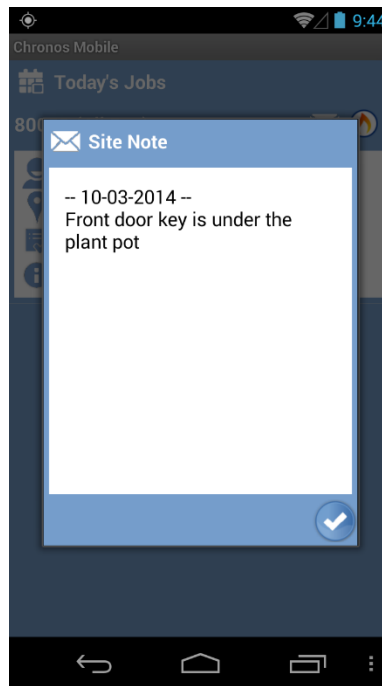
At the top right of the screen there is a white circle icon. This indicates the type of job. You can see that this is a gas job, but this could be an oil (OFTEC) job, electrical or anything else in future. In this instance, it's a gas voucher.

At the top left is the job number and the allocated time.

Below that there are the details of the job. These include the tenant's name, property address, job type and the job status.

There is also a small note icon next to the voucher type. This indicates that there is a note on Chronos that has been marked as visible to the engineer. If there is a note, this will be visible and will flash to notify you. Clicking it will bring up the note where you can view it and dismiss it.

There can be more than one note for the job or site, in which case they are shown with the date first.

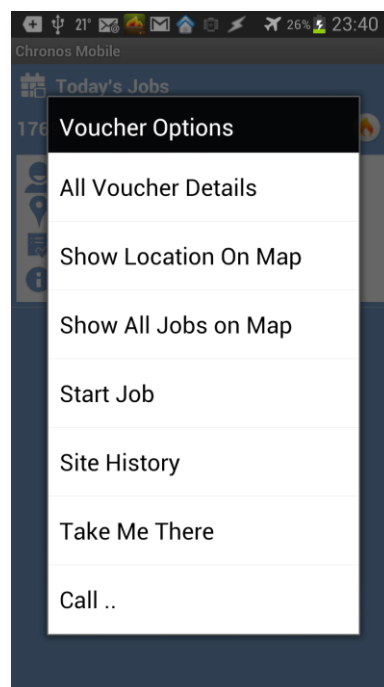


16 Site / Voucher Note

Clicking the job card brings up a menu of the options available to you for this voucher.

To close the menu, either select an option or press the phone's hardware "back" button.

The options are listed in figure 17, and the next page shows the relevant screens.



17 Voucher Options

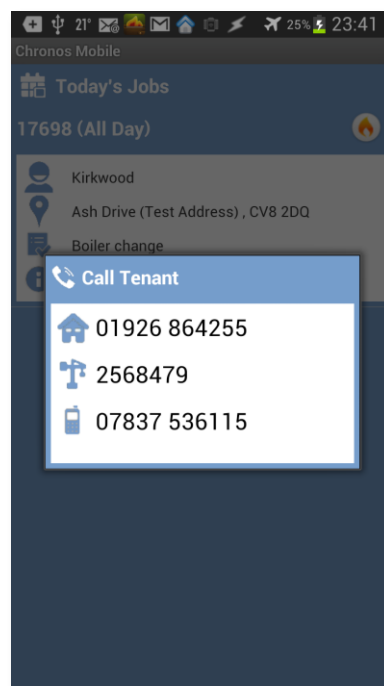
- **All Voucher Details** – This gives you a more in-depth version of the job voucher. On this screen you can see the details you would normally see on the printed voucher.
- **Show Location on Map** – Shows the property on a Google Maps page. This is detailed in more depth in the **Maps** section.
- **Show All Jobs on Map** – As above, but shows every job for today on a map.
- **Start Job** – Takes you to the first page of the mobile job voucher.
- **Site History** - This displays a list of the last 10 visits to the property with the status. As with your own vouchers, you can drill down on these to see further details.
- **Take Me There** – Uses the phone's built-in Google Navigation app to give you turn by turn directions to the property.

Calling Tenants

You can call tenants directly from Chronos. When in the job card screen, clicking the card to bring up the options menu now displays an extra item at the bottom – **Call ..**

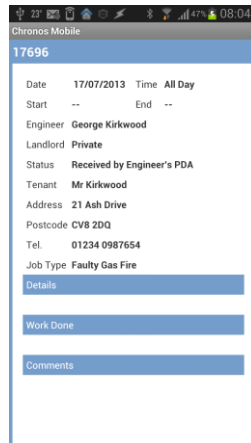
Clicking this menu item displays the screen in figure 18. This displays the home number, work number and finally the mobile number (denoted by the different icons). This layout may be different for each job, as if there is no number for the type it will just not be displayed.

Similarly, if there are no numbers you will receive a message telling you so.

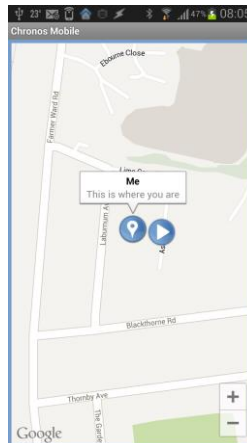


Pressing one of these items will start the phone's dialler and call the appropriate number.

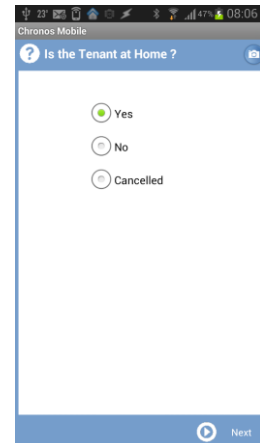
Other sample screens are shown below.



All Voucher Details



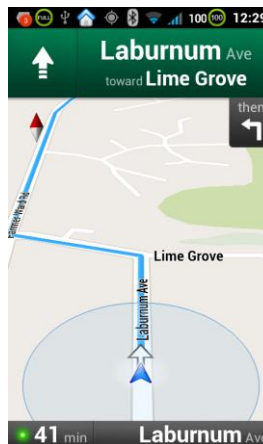
Show Location on Map



Start Job – First page



Site History



Navigation

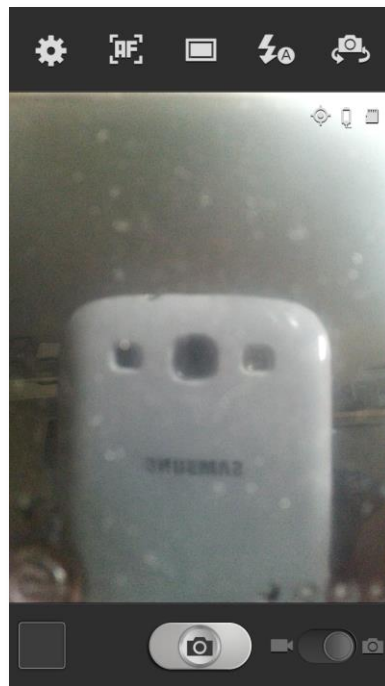
Starting a Job

When you start a job, you step through the job voucher one page at a time. Screens have been designed to allow the boxes you must complete to fit on one screen in portrait mode. When you fill in more text than the default, these will just resize and you might need to scroll up / down to see the other boxes.

At the bottom of each screen is a **Next** button. When all mandatory boxes have been completed, you can click this to go to the next page of the voucher. If there are any boxes that haven't been completed, you will receive a message asking you to correct it before proceeding.

Taking Pictures

Chronos now provides the facility to take pictures at any stage of the job and send these back to the office. At the top right of each job screen there is a camera button. Clicking this will bring up the device's standard camera app.



19 Taking a Picture

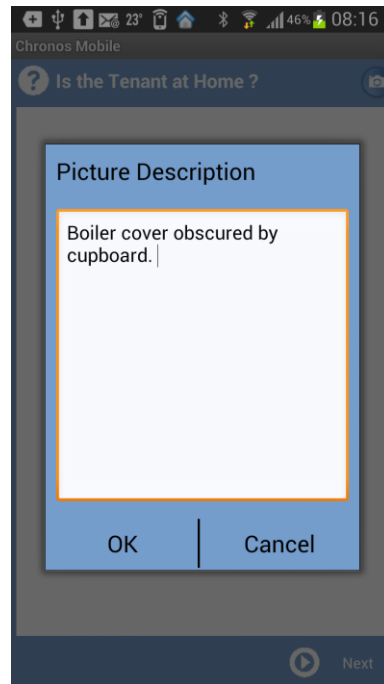
When you have taken your picture, the bottom of the screen will show 2 new buttons to save or discard the image.



20 Image Options

If you discard the image, you will be returned to the camera where you can take another picture. If you have changed your mind, press your device's back button to return to Chronos.

When you're happy with the picture, press the **Save** button and you will be asked to provide a description for the image.



21 Image Description

Starting a Job

The first screen asks you to confirm whether the tenant is at home. Select the correct option and click the **Next** button.

If you selected **Yes**, you will go to the next page of the voucher.

Chronos Mobile

? Is the Tenant at Home ?

☒ Yes

☐ No

☐ Cancelled

Next

22 Starting a Job

Cancelled Voucher

If you select **Cancelled**, you will be asked to provide the reason for the cancellation. You can type directly into this box or, wherever you see the magnifying glass button, you can select from a pre-determined list.

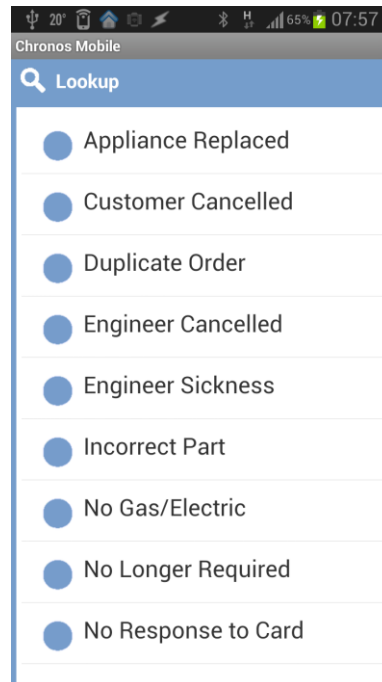
Chronos Mobile

? Why is the Job Cancelled ?

Next

23 Why has the Job been Cancelled ?

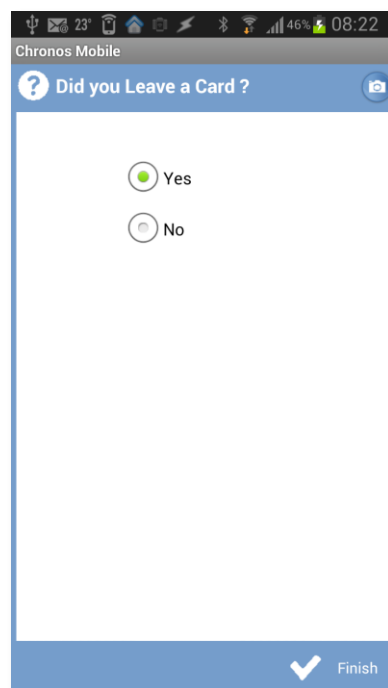
To select an item from this list, just select it and you will automatically be returned to the previous screen where the text will be inserted in the correct box.



24 Standard Cancellation Entries

You can then amend the text if you wish after selecting a standard item.

Once you have entered the reason for the cancellation, click the **Next** button and you will be asked if you left a card to notify the tenant.

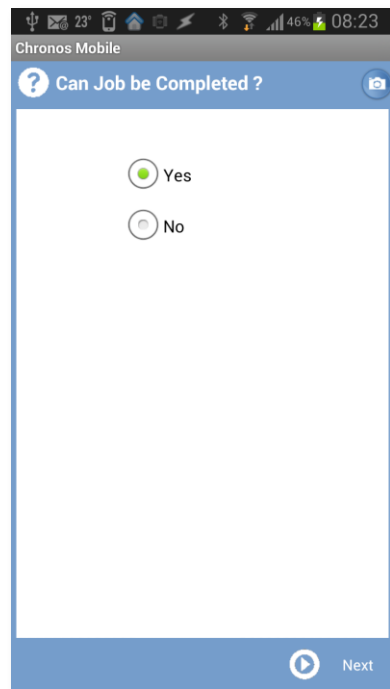


25 Was a Card Left ?

Select **Yes** or **No** and click the **Next** button, then the cancellation details will be sent back to the office

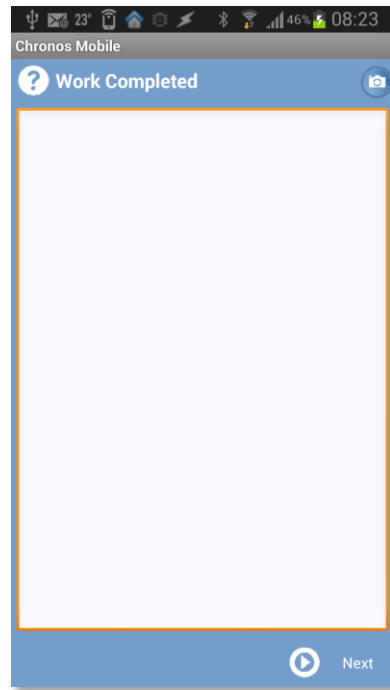
Tenant not at Home

If the tenant is not at home, you need to decide whether the job can still be completed without them. If you select **No** you will be asked if you left a card just as in the **Cancelled Voucher** section.

A screenshot of a mobile application interface. At the top, a status bar shows various icons and the time 08:23. Below this, a header bar contains the text 'Chronos Mobile' and a question mark icon followed by the title 'Can Job be Completed?'. The main area of the screen features two radio button options: 'Yes' (which is selected, indicated by a green dot) and 'No'. At the bottom right, there is a blue button with a right-pointing arrow and the text 'Next'.

26 *Can Job be Completed ?*

If you are able to complete the job without the tenant at home, click the **Yes** option, then you will be asked to complete the details of the work you've carried out.



27 *Job Can be Completed without Tenant*

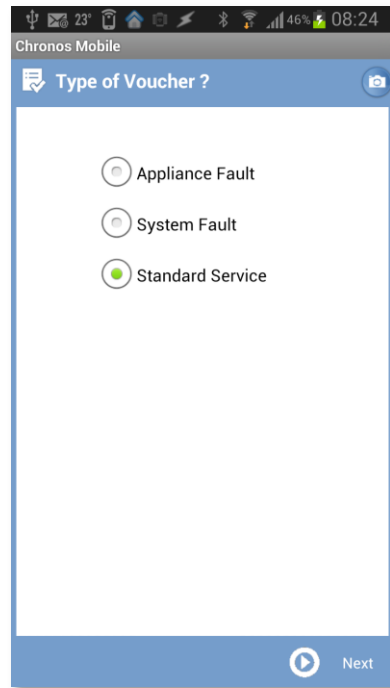
Once again, you will be asked if you left a card for the tenant.

Tenant is at home

If the tenant is at home, the next screen asks you what type of voucher you are completing. These are:

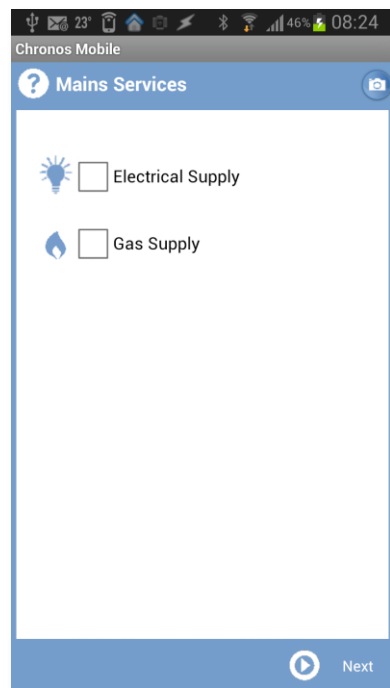
- Appliance Fault
- System Fault
- Standard Service

Select the type of Voucher and press **Next**.



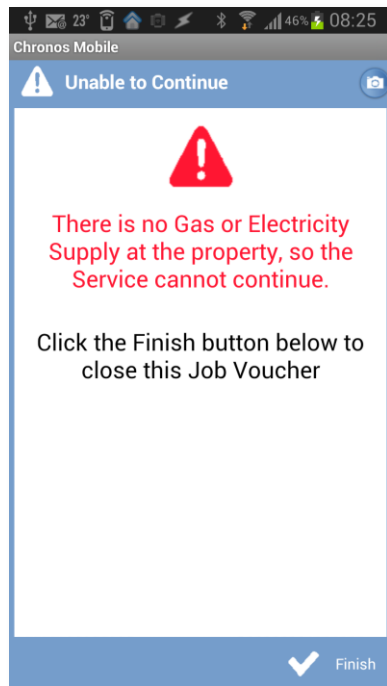
28 *Selecting Voucher Type*

The next screen asks you to check that there is a Gas and Electrical supply in the property before proceeding.



29 *Does the Property have the Required Services ?*

If either of these is not ticked, you will not be able to proceed with the service and will instead see the warning screen. In this instance, you will need to press the **Finish** button to complete the voucher.



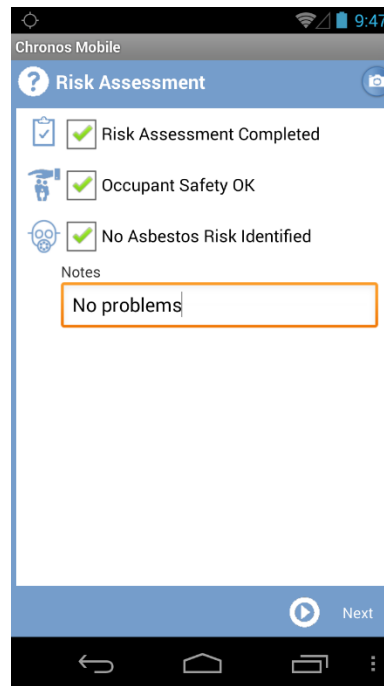
30 Cannot Continue

If the tenant is at home and there is both Gas and Electricity in the property, you can proceed with the job.

Risk Assessment

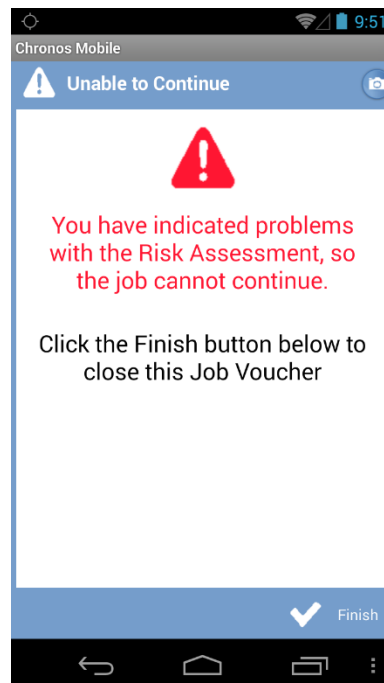
The next step on a job is to make a Risk Assessment., Employees will need to ensure that they have carried out all elements required by the company, that they have checked that Occupant's safety is OK and that no Asbestos Risk was identified.

If there are any issues, they can be entered in the box as shown in figure 31.



31 Risk Assessment Declaration

If any of the Risk Assessment items are not checked, the job cannot continue and you will see the screen in figure 32.



32 Cannot continue

Initial Gas Tightness Test

The first part of the service is to take the initial Gas Tightness test. On this screen you complete the details required. If no test is required, tick the box and the other items will be disabled, allowing you to proceed to the next page.

Chronos Mobile

Gas Tightness Test

No Gas Tightness Test Required ☐

Initial Pressure 20

Pressure After Test 19

Pressure Drop -1

Next

33 Initial Pressure Test

Site Appliances

No matter what type of job was selected, Chronos always requests that you add at least one appliance for each property.

Initially, this screen is blank as shown. To add an appliance, click the **Add Appliance** button, and you will see the first appliance screen.

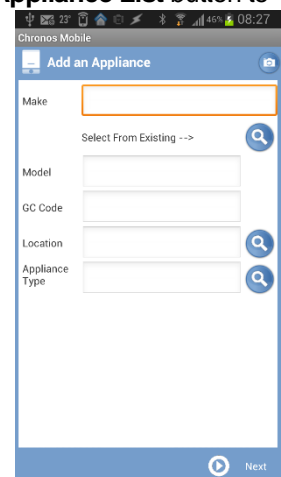


As with before, you can select from a pre-determined lookup list for the **Location** and **Appliance Type** boxes by clicking the button.

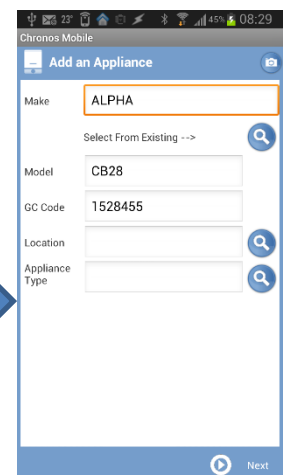
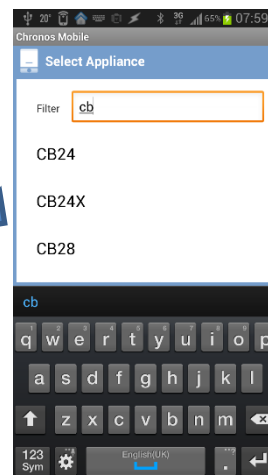
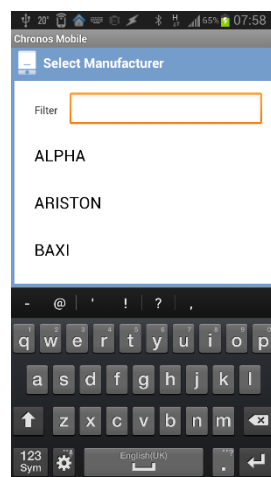
In addition, on this screen you can use the standard set of manufacturers and appliances to select from.

Click the **Select from Existing Appliance List** button to see the list displayed below

This list is also used to select diagrams later, but for now just click the name of the manufacturer. To see more, use your finger to scroll up or down the list until you find the one you are looking for.



When you select a manufacturer, the list then changes to display the appliances for that manufacturer. Select one and the details will automatically be added to the appliance details screen, saving you from some manual typing.



On the next page of the appliances screen, you set the owner and various other values. Click the arrow at the right of each drop down list for a list of the possible values, then click to select one.

When the page is completed, you can click the **Next** button to move on.

Complete the next screen as before and again click the **Next** button to carry on.

When you have completed all of the screens for an appliance, you'll be returned to the **Site Appliances** screen. From here you can add further appliances, delete or edit existing appliances.

To Add an appliance, click the **Add Appliance** button. To edit or delete an existing appliance, press appliance card for a pop up menu.

When you have added all of the appliances for this property, click the **Next** button to continue with the service.

Next, complete the final Gas Tightness Test.

The screenshot shows a mobile application interface for a 'Final Gas Tightness Test'. The status bar at the top indicates a temperature of 24°, 47% battery, and the time 08:59. The app header is 'Chronos Mobile'. The form contains the following fields and controls:

- No Gas Tightness Test Required:** A checkbox that is currently unchecked.
- Initial Pressure:** A text input field.
- Pressure After Test:** A text input field.
- Pressure Drop:** A text input field, which is highlighted with an orange border.
- Gas Pipework Satisfactory:** A dropdown menu.
- Emergency Control Accessible:** A dropdown menu.
- Emergency Control Position:** A dropdown menu.

At the bottom right of the form is a 'Next' button with a play icon.

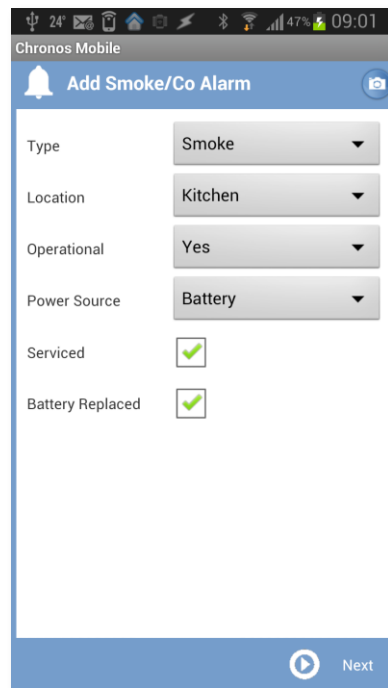
34 *Final Gas Tightness Test*

When this is done, you will see the Smoke/CO2 Alarms list.

The screenshot shows a mobile application interface for 'Smoke/Co Alarms on Site'. The status bar at the top indicates a temperature of 24°, 47% battery, and the time 09:00. The app header is 'Chronos Mobile'. The screen is mostly blank with a blue background. At the bottom, there is an 'Add Alarm' button with a plus icon and a 'Next' button with a play icon.

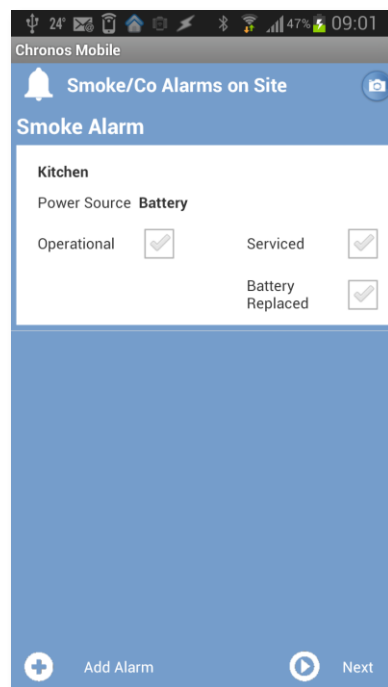
35 *Smoke Alarms List*

Add the details for the smoke alarm (figure 36).



36 Adding a Smoke Alarm

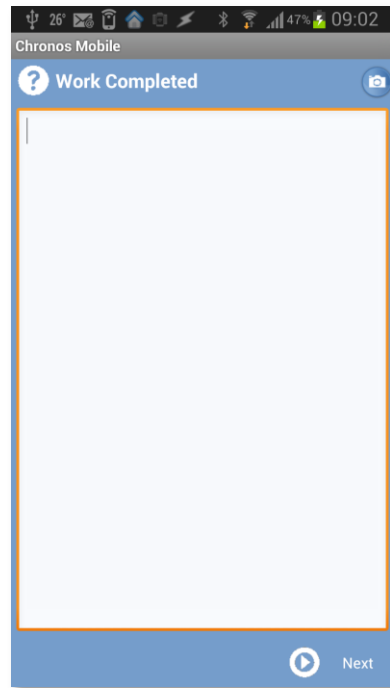
When you've added the alarm, it will appear in the list.



37 Smoke Alarm Added

The pop up menu gives just one option here- **Delete Alarm**.

After you've added all the Smoke/CO2 alarms in the property, you will be asked to provide details of the work completed.



38 *Work Completed*

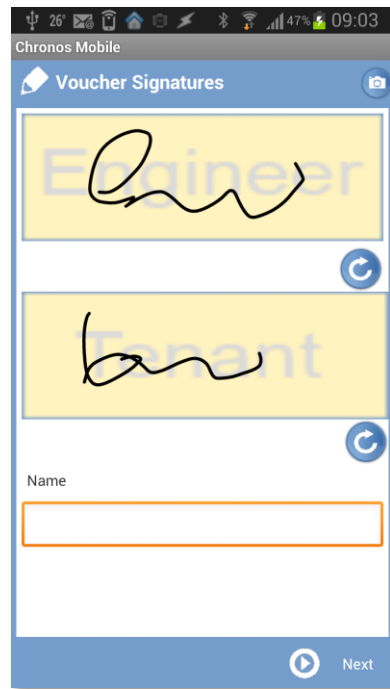
This is a free-form text box, where you just enter a description of the work you've completed. The next screen is similar and requests any other details that may be relevant.

After that, the next screen allows you to capture up to date contact details from the tenant. These details are not mandatory, and will be useful in future.

39 *Tenant Contact Details*

When these details are sent back to the office, the tenant's contact details will be updated.

The final step is to sign the voucher and then hand the device to the tenant to sign.



40 Voucher Signatures Screen

Signatures should be kept within the dotted border. If a mistake has been made, press the **Reset** button and the signature will be erased. When complete, click the **Next** button to proceed.

The name is not mandatory, and is just used to identify the signatory in future.

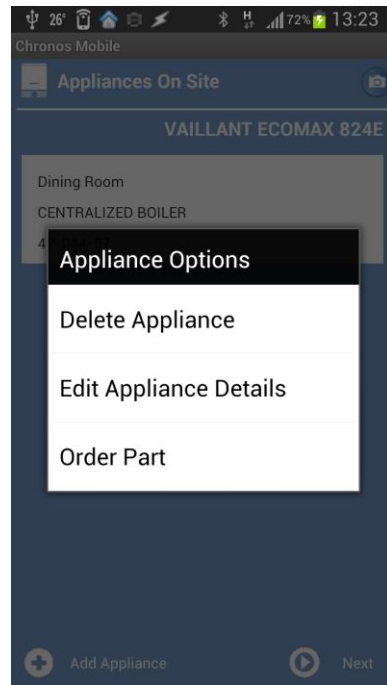
When both signatures have been entered, the job voucher is complete and you will be returned to your home screen. You will be asked to confirm that the job voucher has been completed before it is sent.

Chronos will send the details to the server in the background. If there is no Internet connection, the details will be queued until they can be sent. This process continues even if Chronos is closed.

9. Ordering Parts for an Appliance

Overview

In the appliances screen, you can order parts for the selected appliance easily.

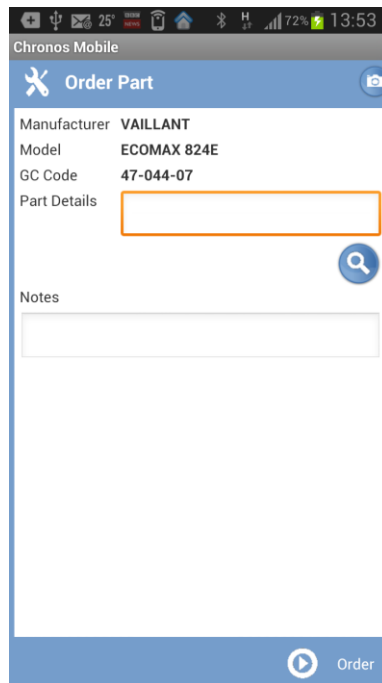


41 Appliance Menu

Press the appliance to see the pop up menu, then select **Order Part**. This will display the screen in figure 42.

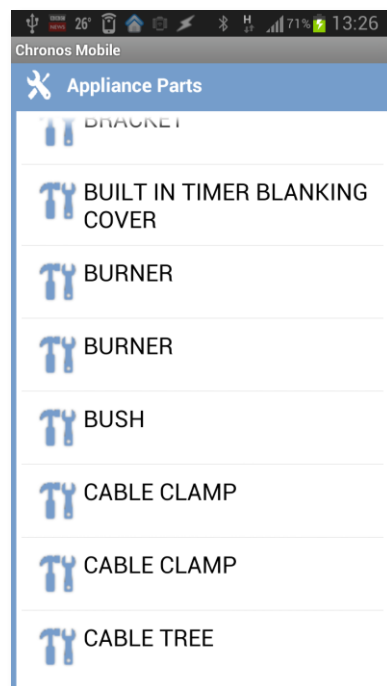
From this screen you can manually enter a part, or click the **Lookup** button to see a list of parts that Chronos knows about.

Note that on the Order Parts screen, you can also take pictures – so you could for example send back a picture of the part too.



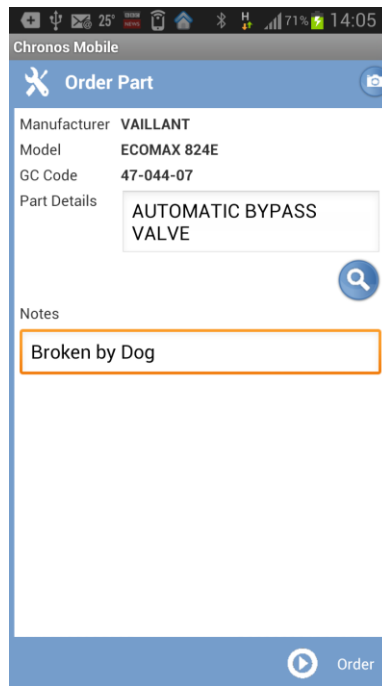
42 Ordering Parts

If there are any parts in the Chronos database, they will be displayed for you to press one to select it.



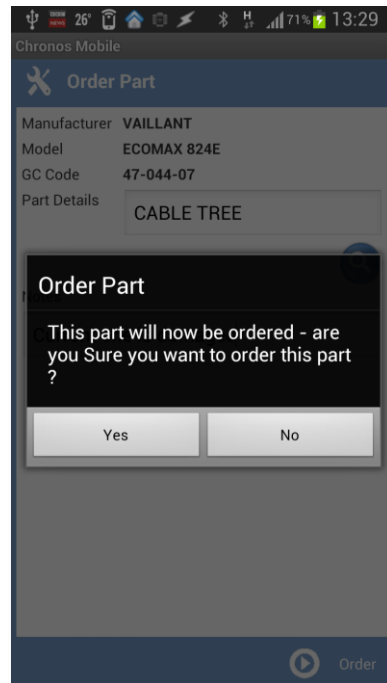
43 Selecting a Part

When you have selected one, you will be returned to the previous screen. If you don't want to select an item, press the back button on your PDA.



44 Part Details Completed

You can also enter some extra text here – anything you need to record or let the office know about this part. When you are happy with the part you are ordering, press the **Order** button. You will be asked to confirm this, then the part will be ordered and you will be returned to the appliances screen.



45 Part Order Confirmation

10. General / Electrical Vouchers

Overview

As of March 2014, Chronos is now able to carry out vouchers for general works / electrical works. The workflow for both is the same, only the rates catalogue selected is different.

The voucher type icon denotes the type :

General



Electrical



Viewing the Voucher Details

When you view the voucher details for this type of voucher, you'll see the screen in figure46.



46 General / Electrical Voucher

This shows the items on the voucher, the quantity and on the bottom line any notes the office have provided.

Starting the Job

General / Electrical vouchers follow the same pattern as other vouchers initially. First, confirm if the tenant is at home and if not whether the job can be completed.

Next, complete the standard Risk Assessment questions and assuming all is OK, you will see the screen in figure 47.

Chronos Mobile

General Voucher

These are the items on this voucher. When you've completed these items, click the Next button to continue.

| Qty | Item |
|--------------|---|
| 15.0 Metre | 1 Brick wall 2m High <i>In kitchen</i> |
| Qty Supplied | 16.6 |
| Notes | It was more than expected |
| 15.0 Metre | Skim wall <i>Plaster brick wall</i> |
| Qty Supplied | 0.0 |
| Notes | |

Next

47 General / Electrical Voucher Completion

Complete the quantity supplied, used or provided in the Qty Supplied box. Optionally enter any notes that need to go back with the voucher.

Do this for each item, and when completed press the **Next** button.

You will then be asked to complete the **Work Completed** and **Other Details** sections, as per all other job vouchers. Lastly, take any up to date contact details and then sign the voucher.

The details will then be sent back to the office.

11. Parts to Collect

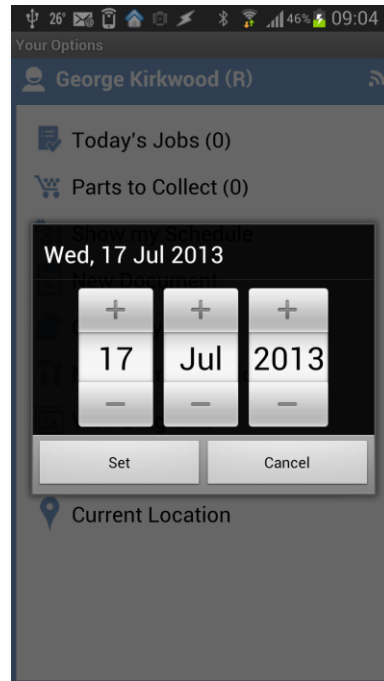
Overview

This functionality is not yet active.

12. My Schedule

Overview

The **My Schedule** option allows you to view your schedule for any past or future date. When you select it, you see the calendar selection dialogue shown below.



48 *Your Schedule*

Use the arrows to change the date, then click the **Set** button to select the date.

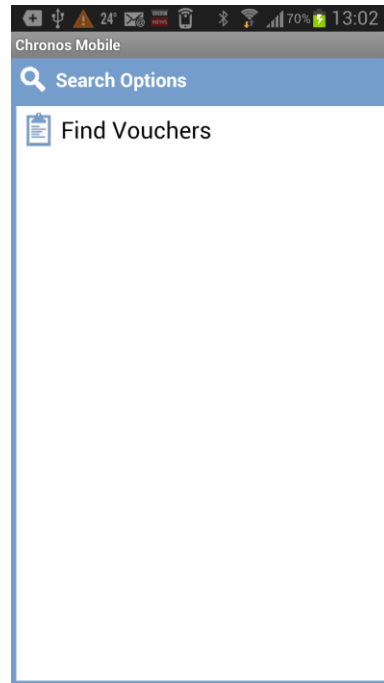
If you have no jobs for the selected date, you will be notified. Otherwise the job list will be displayed allowing you to view further details of jobs.

13. Searching Chronos

Overview

Chronos currently allows you to search and retrieve job voucher details. In future the search facility will be expanded to include other information

Press the Search option and you will see a second screen showing which items you can search. At present, this is just Vouchers :



49 Find Vouchers Option

The search vouchers screen is shown in figure 50. This replicates much of the functionality of the desktop version, allowing you to search for vouchers during a specific time period (which could be in the future, to show planned jobs), engineers / customer and other parameters.

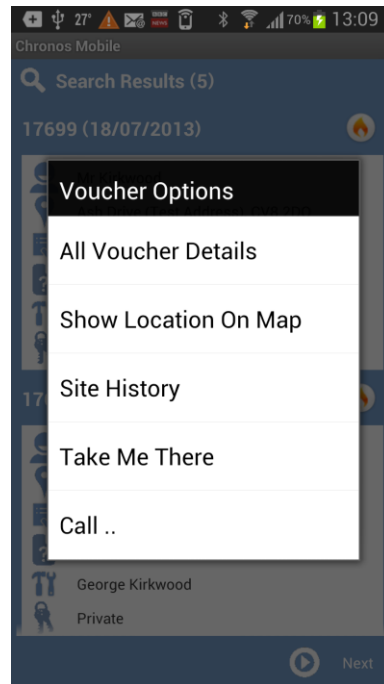
50 Search Vouchers Screen

Complete the search details and click the **Find** button. To reduce the amount of data transferred between the PDA and the server, a maximum of 50 results can be retrieved. If there are no search results or more than 50, you will be asked to refine your search.

51 Search Results

If there are matching vouchers, they will be displayed in the results screen. The number in brackets at the top indicates the number of vouchers that were found.

From this screen, you can then access several functions by pressing the job card. These are displayed in a pop up menu, as shown in figure 52.



52 Search Pop Up Options

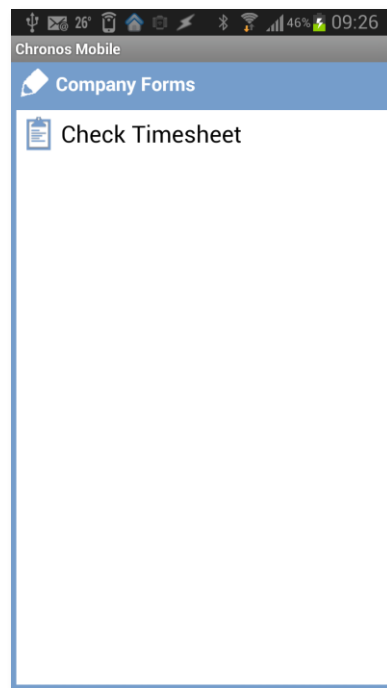
14. Company Forms

Overview

The Company Forms will be expanded in future releases, and will display a list of forms that an engineer can complete from a PDA.

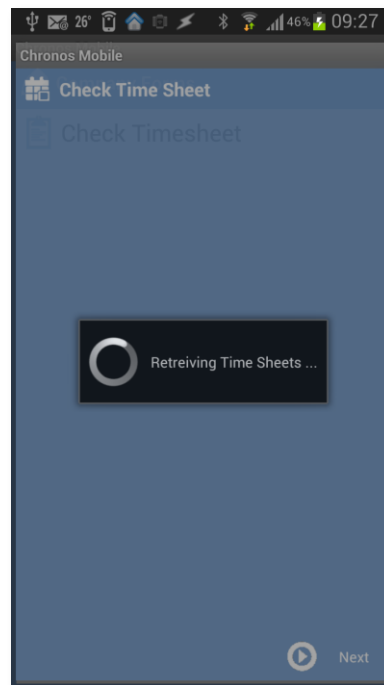
Checking Timesheets

Engineers can check their time sheets from their PDA. To do this, select the **Check Timesheet** option.



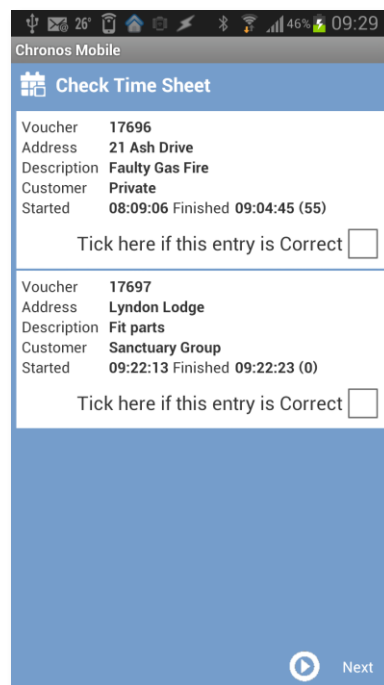
53 Check Timesheet Option

Chronos will then contact the server to retrieve details of the engineer's time sheet. If no information is available, or the server cannot be contacted, an error message will be displayed.



54 Retrieving Time Sheet entries

When time sheet data is received, it will be displayed as in figure 55



55 Time Sheet Entries

Each entry shows the voucher number, address / description and customer. In addition it shows the started and finished times, taken from the PDA. The number in brackets is the total number of minutes spent at the property.

Engineers should scroll down through this list, ticking the box if they agree that the entry is correct.

When finished, clicking the **Next** button displays the signature screen, where they sign the time sheet. There is also the option to add notes, which is where the engineer can inform the office of anything that isn't on the time sheet.



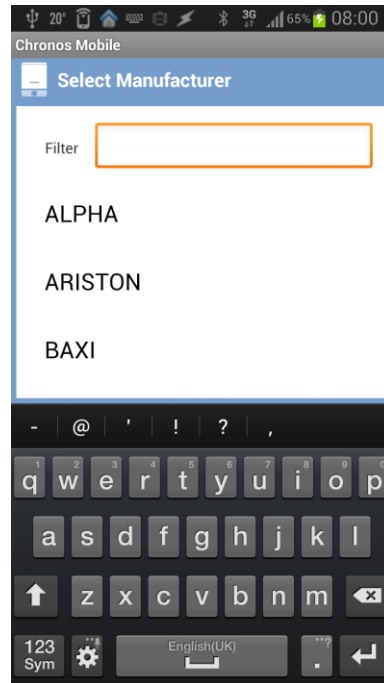
The screenshot shows a mobile application interface for signing a time sheet. The title bar at the top is blue and contains the text 'Chronos Mobile' and a calendar icon. Below the title bar is a blue header with the text 'Signature and Notes'. The main content area has a yellow background for the signature section, where a black signature is written over the word 'Engineer' in large, light blue letters. Below the signature section is a 'Notes' section with a large white box and an orange border. At the bottom right of the screen is a blue button with a play icon and the text 'Submit'. The top status bar shows various icons and the time '09:33'.

15. View Diagrams

Overview

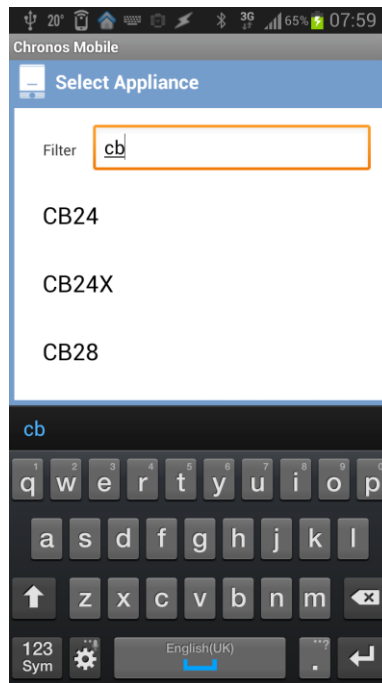
Chronos Mobile includes nearly 7,000 appliance images and exploded parts diagrams. These are on the SD card.

This option allows you to view these diagrams and identify parts. These diagrams will be updated in future versions.



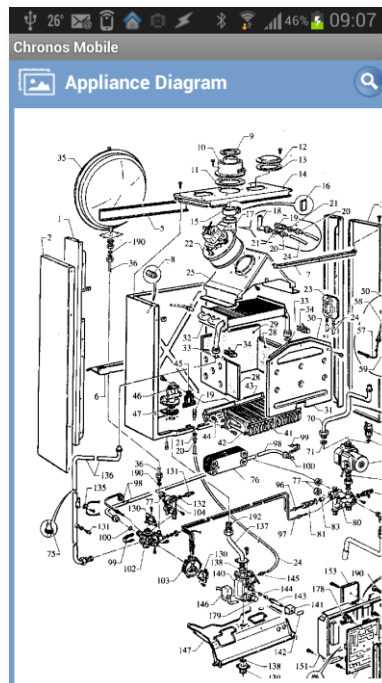
57 *Selecting a Manufacturer*

To view a diagram, use the Manufacturer / Appliance selection screens detailed in previous sections. The main difference is that there is another screen allowing you to select individual diagrams. For some there may just be appliance details. For others there may be exploded views and even fault finding charts. Select one and it will be displayed.



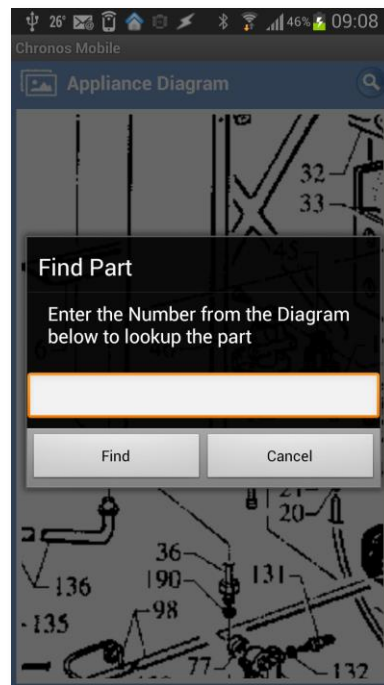
58 Selecting an Image to View

You can use the standard Android pinch to zoom and pan functions to move around the picture or further identify parts.

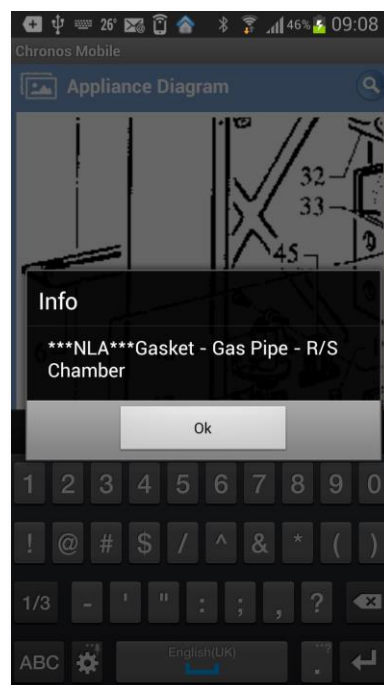


59 Viewing a Parts Diagram

Press the **Lookup** button on the title bar to pop up a menu with a **Find Part** option. Enter the number from the diagram and Chronos will display the information for the part.



60 Finding a Part from the Diagram



61 Part Details

Future versions of Chronos will allow you to order parts directly from the device.

16. Synchronise with Server

Overview

Chronos automatically synchronises its data with the server in the background. This process continues even when Chronos is closed, ensuring that all information is returned to the server as quickly and efficiently as possible.

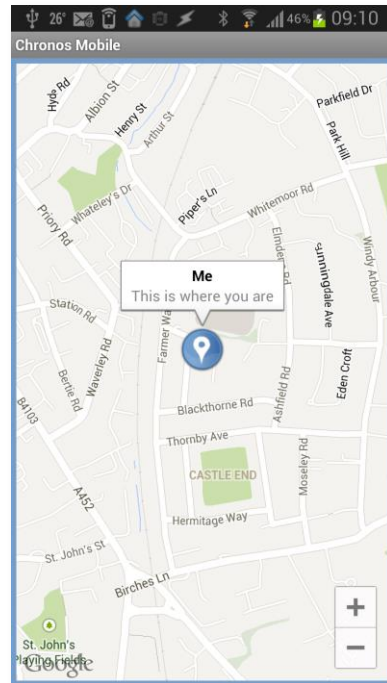
New jobs are received using “push” notifications. The device doesn’t need to stay connected to the server, and Chronos doesn’t even need to be running for new jobs to be received. When requested by the server, Chronos will wake and synchronise.

Push notifications are sent by the server whenever a new job is allocated to the user, when a job is modified (such as being cancelled) or when a synchronisation is overdue – usually every two hours.

17. Current Location

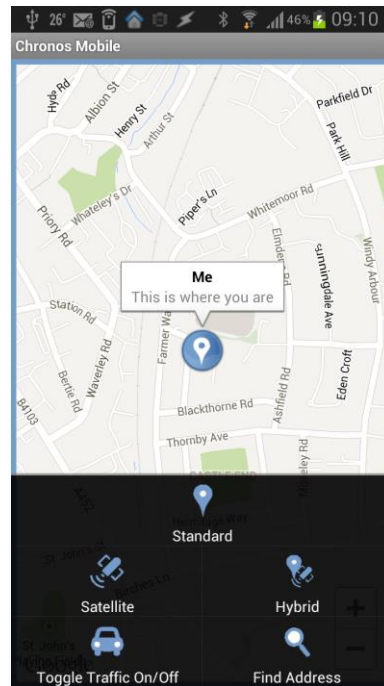
Overview

The current location shows where you are according to your GPS receiver. See the mapping section for more details on using the map.



18. Mapping

Overview



63 Mapping Menu

The mapping functionality in Chronos uses the built in Google Maps application. The initial display in a map screen is the standard map. Press the menu key on your device to see the pop up menu displayed in figure 63.

Press one of the options or press the hardware “Back” key to close the menu. The options are :

- **Standard** – Standard map view.
- **Toggle Traffic On/Off** – Overlays coloured lines on the map to show current traffic information.
- **Satellite** – Overlays photographic information on the map.
- **Hybrid** – Displays both the satellite map and standard map at the same time.
- **Find Address** – This displays a screen where you can type an address or postcode to find.

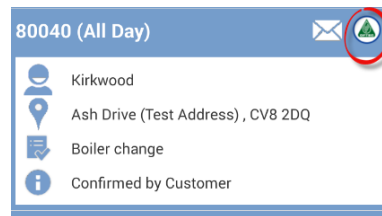
You can use the normal Android gestures to interact with the map – pinch to zoom in/out, pan around etc.

19. OFTEC Forms

Overview

Chronos can carry out oil servicing and installation, and completes the standard CD10/CD111 forms.

Oil forms are denoted by the OFTEC log in the jobs list :



64 OFTEC Jobs icon

The first steps are the same as for gas, with the exception that the **Mains Services** screen displays the word "Oil Supply" instead of "Gas".

CD10 (Installation)

The screens follow the CD10 layout closely. The details and information required are exactly the same, but the screens have been designed to be usable on a small PDA.

The screens are all shown on the next couple of pages.

Two side-by-side screenshots of the Chronos Mobile app. The left screen is titled '1. Oil storage details' and contains fields for 'TI/133 Risk Assessment Completed' (checked), 'Tank Type' (Bunded), 'Capacity' (1200 Litres), 'OFCERT Licence No.' (0556699), 'Make' (Carberry), 'Remote Fill system fitted and pressure tested' (checked), 'Overfill alarm facility provided' (checked), and 'Serial No.' (CB78445/98). The right screen is titled '2. Oil supply system' and contains fields for 'Oil supply line OD' (30 mm), 'Metal' (dropdown), 'Pressure tested' (checked), 'OFTEC Oil Pipe Installation Guidance complied with' (checked), and 'Remote sensing fire valve fitted' (checked). Both screens have a 'Next' button at the bottom.

65 CD10 Oil Storage Details / Oil Supply System

Chronos Mobile

3. Appliance Details

Appliance Type: Wall Mounted

Boiler: Condensing

Appliance Make: Thermosaver

Model: Grandee

Serial No.: TS445667-677-89

SEDBUK Efficiency: 89 %

Burner Make: Riello

Model: 2.2

Burner Type: Vaporising Sleeve

Next

Chronos Mobile

4. Flueing Arrangements

Flue Type: Low level

Termination to BS5410: Part 1 & Manufacturers installation instructions: ☒

Stainless steel liner fitted: ☒

Location and type of conventional flue installed: Through wall

Diameter: 100 mm

Location of Approved Notice Plate: On Wall

Number of bends at 45°: 6

Number of Access doors fitted: 2

Flueing arrangements suitable for: Oil

Next

66 Appliance Details / Flueing Arrangements

Chronos Mobile

5/6. Air / Electrical details

5. Air supply details

Combustion: 200 mm²

Ventilation: 360 mm²

If extract fan has been fitted, has OFTEC guidance been complied with? ☒

6. Electrical safety details

Electrical minor works certificate issued (e.g. CD/20) to BS 7671 ☒

Electrical installation certificate issued (e.g. CD/21) to BS 7671 ☒

Next

Chronos Mobile

7. Control details

Independent time and temperature control to: CH ☒ DHW ☐

Controls fitted: Programmer ☒

Room thermostat (programmable) ☐

Cylinder thermostat ☒

TRVs ☒

No. of Zones: Heating 3, DHW 2

Automatic bypass ☒

Boiler and system wired to prevent short cycling ☒

Next

67 Air / Electrical and Control Details

Chronos Mobile

8. System details

Preparation - was the existing system flushed and cleansed ? ☒

Completion - has the completed system been flushed and cleansed ? ☒

Has a suitable inhibitor been added ? ☒

For combi boilers, has a suitable cold water treatment system been fitted ? ☒

Measurements : Differential across appliances flow and return 12 °C

Sealed system pressure set to 2.1 bar

Cold water temp 13 °C

DHW Temp 67 °C

Flow Rate 14 ltrs/min

Next

Chronos Mobile

9. Commissioning

The correct completion of this report confirms details regarding the installation of equipment and does not negate the need for the appliance to be commissioned to achieve compliance with the Building Regulations and achieve peak efficiency and performance.

Confirmation of commissioning should be declared on a separate certificate (e.g. OFTEC CD/11).

Commission arranged by installer ☒

OR Commission to be arranged by

Next

68 System Details / Commissioning

Once all the details are complete, the vouchers must be signed just as with Gas vouchers.

CD11 (Service)

Again, CD11 forms follow the same starting pattern as gas / CD10. i.e. Confirm the tenant is at home / the job can be completed, a Risk assessment is OK and that there is electricity / oil at the premises.

From then on, again the screens follow the CD11 form as closely as possible. The screens are shown over the next couple of pages.

Chronos Mobile

CD/11 Report (1)

Pre-commissioning Checks/Legislation (Tick as appropriate)

1. If completing commissioning works, is there a completed CD/10 (or equivalent) for the installation works? ☒
2. If the installation has been completed by a Non-Competent Person, is there a building control notice? ☒

Building Control Ref. No.

BCR56566

Next

Chronos Mobile

CD/11 Report - Appliance

Appliance Make Firebird

Appliance Model Enviromax

Serial No. FB2008/a/445

Burner Make Riello

Burner Model Rdb 4.2

Burner Type Vaporising Sleeve

Tank Type Bunded

Flue Room sealed balanced

Fuel Type Class D gas oil

Next

69 CD11 Checks / Appliance

Chronos Mobile

CD/11 Report - Call Type

Service

Commission

Breakdown

Manufacturer's Warranty

Return Visit

Next

Chronos Mobile

CD/11 Schedule (1-7)

| Item | Pass | Parts / Observations |
|----------------------|-------------------------------------|----------------------|
| 1.Oil Storage | <input checked="" type="checkbox"/> | None |
| 2.Oil Supply System | <input checked="" type="checkbox"/> | |
| 3.Air Supply | <input checked="" type="checkbox"/> | |
| 4.Chimney/Flue | <input checked="" type="checkbox"/> | |
| 5.Electrical Safety | <input checked="" type="checkbox"/> | |
| 6.Heat Exchanger | <input checked="" type="checkbox"/> | |
| 7.Combustion Chamber | <input checked="" type="checkbox"/> | |

Next

70 CD11 Call Type / Schedule 1-7

Chronos Mobile

CD/11 Schedule (8-14)

| Item | Pass | Parts / Observations |
|-----------------------------------|-------------------------------------|----------------------|
| 8. Pressure jet burner | <input checked="" type="checkbox"/> | |
| 9. Vaporising and wallflame | <input checked="" type="checkbox"/> | |
| 10. Wallflame burner | <input type="checkbox"/> | Not fitted |
| 11. Appliance safety controls | <input checked="" type="checkbox"/> | |
| 12. Controls check | <input checked="" type="checkbox"/> | |
| 13. System check - Hot water type | <input checked="" type="checkbox"/> | |
| 14. System check - Warm air type | <input checked="" type="checkbox"/> | |

Next

Chronos Mobile

CD11 Important Comments

The comments may include advice on remedial work necessary to enable the installation to comply with the requirements of the Building Regulations, Control of Pollution and British standards.

No comments

Next

71 CD11 Schedule 8-14 / Comments

Chronos Mobile

CD/11 Test Results

It is important to keep a record of the combustion analysis results - if they have been carried out electronically a copy of the printout should be attached to all copies of the service schedule and report.

☒ Print Out Taken

Pump Pressure: 2.5 Bar

Efficiency Nett: 88 %

Efficiency Gross: 87 %

Pump Vacuum: 3 Bar

Next

Chronos Mobile

CD/11 Test Results (2)

Smoke No. SN86668

CO: 2 ppm

Excess Air: 67 %

Draught: 3 inWG

CO₂: 6 %

Flue Gas Temp: 77 °C

Next

72 CD11 Test Results

Chronos Mobile

CD/11 Test Results (3)

Nozzle

Size 22

Angle 45

Pattern Splayed

Flow Rate (oil)

Low 12 cc/min.

High 30 cc/min.

Flow Rate (DHW)

Hot 14 l/min.

Cold 23 l/min.

Next

73 Test results page 3

When the service screens are completed, the job must be signed by the engineer and the tenant.

20. Survey Report

Overview

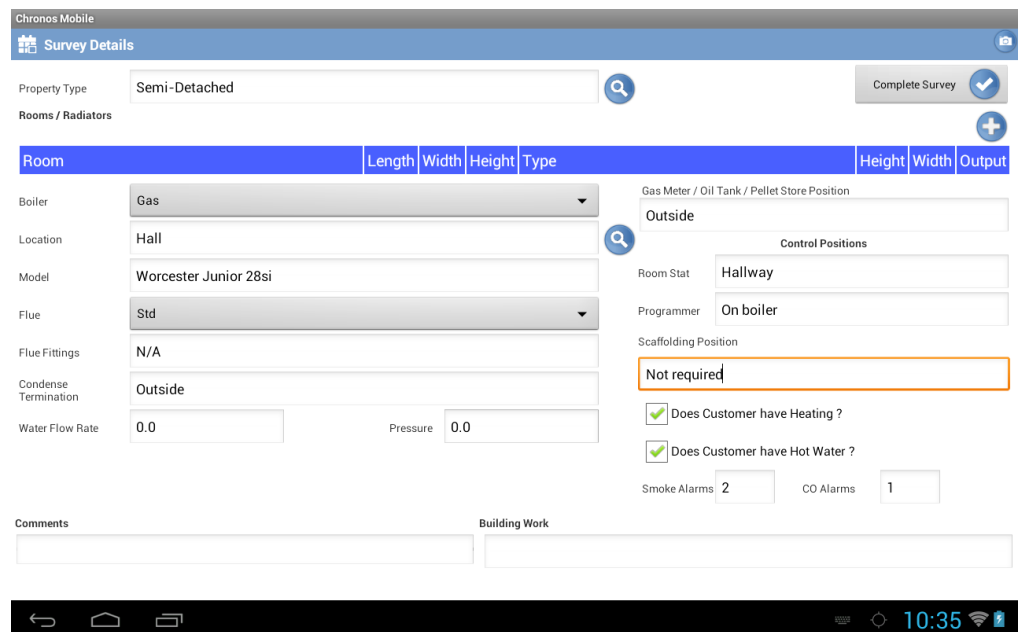
Chronos can carry out survey reports on tablet devices only. Attempting to carry out a survey on a small screen PDA will display a message alerting the user instead.

Surveys are displayed in the jobs screen with a tape measure icon :



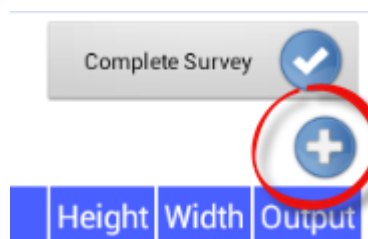
74 Survey job icon

The first screen displays information about the property and boiler.



75 Survey property / boiler information

Next, you can add details for individual rooms. To add a room, press the button below the **Complete Survey** button.



76 Adding a room

77 Room details

First, enter the dimensions of the room. As you do this, the details below the room dimensions are updated to show the area and the required BTU / Kw for the radiator.


The BTU / Kw calculations are also affected by the number of outside walls and the height, which adds a weighing for rooms with ceilings above 3 metres tall.

Chronos maintains a central list of radiator suppliers, which will be added to over time. These are used to suggest radiators that will be suitable for the room. To use this facility, you should have entered the room dimensions first so that Chronos knows the BTU / Kw requirements.

To find a radiator, press the button to the right of the Proposed Radiator type :

78 Selecting a Standard Radiator

This will display the screen in figure 79.

| Find Radiators | | | | | | |
|---|-----------------------------|--------|-------|------|------|--|
| BTU Tolerance (2100.38) - 100 + 100  | | | | | | |
| Supplier | Description | Height | Width | BTU | Kw | |
| Quinn Radiators | Compla Single Convactor | 600 | 600 | 2008 | 0.59 | |
| Quinn Radiators | Round Top Double panel Plus | 300 | 700 | 2024 | 0.59 | |
| Quinn Radiators | Compla Double Panel Plus | 400 | 600 | 2029 | 0.6 | |
| Quinn Radiators | LST Double Panel Plus | 570 | 900 | 2051 | 0.6 | |
| Quinn Radiators | LST Single Convactor | 570 | 1300 | 2061 | 0.6 | |
| Quinn Radiators | Compla Double Panel Plus | 700 | 400 | 2079 | 0.61 | |
| Quinn Radiators | Compact Single Convactor | 600 | 600 | 2111 | 0.62 | |
| Quinn Radiators | Compact Single Convactor | 500 | 700 | 2114 | 0.62 | |
| Quinn Radiators | Compact Double Panel Plus | 500 | 500 | 2114 | 0.62 | |

79 Standard Radiator List

The top of the screen shows the required BTU, and in the next two boxes you can enter the tolerance you are able to allow. In the screen shown, we have allowed a tolerance of 100 BTU below and 100 BTU above our requirements.

If you change the tolerances, you will then need to press the button to refresh the list.

If you want to select one of the proposed radiators, press it and the details will automatically be added to the room.

When you are happy with the details for this room, press the **Save** button at the bottom of the screen and you will be returned to the main survey screen.

The new room will be displayed in the list, and you can continue adding more rooms as required.

Chronos Mobile

Survey Details

Property Type: Complete Survey

Rooms / Radiators +

| Room | Length | Width | Height | Type | Height | Width | Output |
|-------------|--------|-------|--------|--------------------------|--------|-------|--------|
| Dining Room | 2600 | 2200 | 2400 | Compla Double Panel Plus | 700 | 400 | 0.61 |

Boiler:

Location:

Model:

Flue:

Flue Fittings:

Condense Termination:

Water Flow Rate: Pressure:

Gas Meter / Oil Tank / Pellet Store Position:

Control Positions

Room Stat:

Programmer:

Scaffolding Position:

☒ Does Customer have Heating ?

☒ Does Customer have Hot Water ?

Smoke Alarms: CO Alarms:

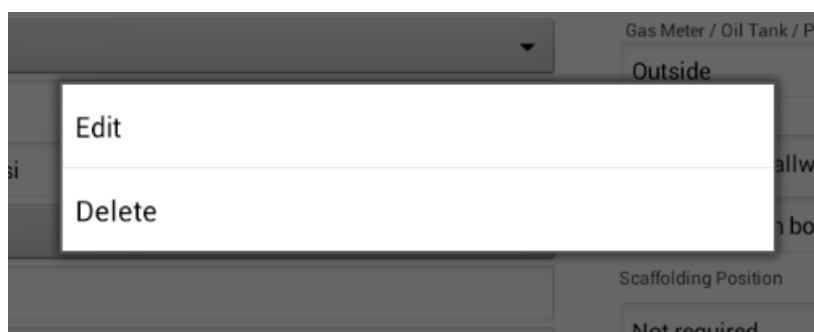
Comments:

Building Work:

10:48

80 Survey screen with room added

To edit or delete a room from the survey, press and hold your finger on the required room, and a popup menu will appear.



81 Editing / Deleting a room

Select the appropriate option – editing will take you to the screen in figure 77, where you can amend the details.

When you have completed the survey, press the **Complete Survey** button. You will be asked to confirm, after which the survey will be returned to the office.