

# MTinfo 3000 mobile app User Manual



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# 1 VERSION HISTORY

Version number	Date	Change log	Reference
1.4.0	24.08.2023	Removal: 'emergency' in contacts	
1.5.0	08.09.2023	Format changes, Disclaimer	
1.6.0	22.09.2023	Addition: Notifications	
1.6.1	26.10.2023	Modification: Notification logic diagram	
1.7.0	16.01.2024	Addition: Time zone feature (Screenshots)	
		Modification: Rebranded, Terminology (Alerts to Notifications)	
1.7.1	26.01.2024	Addition: Instruction tile improved	6
1.8.0	26.03.2024	Addition: Return via mobile application	7.5
1.8.1	08.07.2024	Modification:	7.3, list item 7, list item 10
		Screenshots on switching protection zones	
		Terminology change to MTinfo 3000 mobile app and web app	All
1.9.0	13.11.2024	Addition: SRACs, DI Technical Support	Safety Related Application Conditions, DI Technical Support
1.9.1	29.11.2024	Modification: Status page (system health)	Status page, Start screen
2.0.0	09.05.2025	Modification: Login (IDP), Company code entry, SRAC	Login, Select and switch company, Safety Related Application Conditions
2.0.1	17.06.2025	Addition: New error icon for protection zone and rail device during switching and RTS, Security Contact	Errors and warnings during switching, Real-time status, DI Security Contact  Login
		Modification: Login session duration, Status Page to 'Status page'	



Version number	Date	Change log	Reference
2.1.0	18.08.2025	Modification: New screenshots for updates to start screen, adjustment of descriptions to remove outdated features and include new features.	Start screen
2.1.1	02.09.2025	Addition: In both the MTinfo 3000 web and app, you can now expand or collapse all work zones with a single click. This is particularly useful for quickly spotting device anomalies when working on large projects with multiple work zones.	Switching
2.1.2	12.11.2025	Addition: This issue involves the integration of the RCS 3000 into the MTinfo system. It includes updates to the Realtime status, MTinfo database, and MTinfo 3000 web and mobile applications.	Real-time status
		Modification: Introduction of asynchronous switching for the RSS requires new "Safety State" field in RTS.	
2.1.3	09.12.2025	Addition: This issue contains an explanation of the in-app service messages, along with the new "what's changed" banner type.	Service messages



# **2 SAFETY RELATED APPLICATION CONDITIONS**

Safety Related Application Conditions OR SRAC(s) are essential requirements that must be fulfilled to ensure the safe use of MTinfo 3000. You will find references to SRACs throughout the User Manual.

SRAC MTI 7	Ensure your mobile device has the latest security patch installed. Use mobile devices, web browsers, and operating systems per DI policy, which is available on request via <u>DI Technical Support</u> .
SRAC MTI 16	The user (operator) must follow the real-time status (RTS) and notifications in the mobile app and respond.
SRAC MTI 17	The real-time status (RTS) information always prevails over a mobile device notification.
SRAC MTI 18	Use a mobile phone or tablet with push message functionality. Use the same phone number linked to the assigned user (for example, by using the same SIM card).
SRAC MTI 19	Use the latest mobile app of MTinfo 3000 on your mobile device.
SRAC MTI 20	Do not use mobile devices with ad blockers.
SRAC MTI 21	When the 'lock' icon appears for a project in the MTinfo app, the project has not yet been released. Tap the 'lock' icon to view the name and mobile phone number of the person responsible for releasing the project.
SRAC MTI 22	Contact IT to confirm the mobile device works correctly. Set up a procedure to ensure the correct display and interpretation of information from MTinfo 3000, including colours and text.



# **3 INTRODUCTION**

This user manual describes the process of securing protection zones via the MTinfo 3000 mobile app. Rail devices such as the ZKL 3000 RC, RDI 3000, RCS 3000 and RSS 3000 can be remote controlled via the MTinfo 3000 mobile app to secure protection zones. The app can also display the real-time status of rail devices like ZKL 3000 RC, RDI 3000, RCS 3000 and RSS 3000.

For information regarding specific rail devices, please refer to the applicable user manuals.

For information regarding managing protection zones, please refer to the user manual "MTinfo 3000 web app".



# **4 APPLICATION**

The MTinfo 3000 mobile app allows users to remotely operate one or more protection zones in a safe, effective, and efficient manner to gain safe track access. Dual Inventive's own private secured network is used to connect to rail devices such as ZKL 3000 RC, RDI 3000, RCS 3000 and RSS 3000.

# 4.1 Scope

The MTinfo 3000 mobile app allows you to:

- View the projects for which you are authorised.
- Secure and unsecure protection zones using rail devices such as the ZKL 3000 RC, RDI 3000, RCS 3000 and RSS 3000.
- View the real-time status of these rail devices.

# 4.2 Technical specifications

Using the MTinfo 3000 mobile app requires the following specifications:

- The MTinfo 3000 mobile app supports smartphones/tablets running the latest or most recent previous version of iOS or Android at the time of publication. It should be noted that Dual Inventive does not provide official support to versions older than those stated. While older versions of iOS and Android may meet the minimum installation requirements for the MTinfo 3000 mobile app in their respective app stores, Dual Inventive is not liable for any safety issues or loss of functionality caused by the user failing to update their mobile device to an officially supported version. (SRAC MTI 7)
- To install the MTinfo 3000 mobile app a minimum storage capacity of 25 MB is required.
- An internet connection is required to use the MTinfo 3000 mobile app.
- Dual Inventive recommends using a tablet to view documents using the MTinfo 3000 mobile app.
- To view uploaded documents, a separate app might be needed (e.g. Adobe Reader for PDF documents).



# 5 CONDITIONS AND INSTRUCTIONS



#### WARNING

Users should not block MTinfo 3000 push messages or SMS to prevent missing critical notifications.



#### WARNING

Please read all safety instructions carefully before using rail devices such as the ZKL 3000 RC, RDI 3000, RCS 3000 or RSS 3000. Please ensure you fully understand the system and its functions. When the correct safety measures are not followed, there is a risk of electric shock, fire or even death.

#### 5.1 Conditions for use

Only use the MTinfo 3000 mobile app when the following criteria are met:

- The user holds an in-date competency for all of the rail devices being used.
- The user has been assigned the appropriate user rights in MTinfo 3000.
- The user has been authorised to use the MTinfo 3000 mobile app.

As a competent user you are responsible for:

- Any relevant paperwork, usernames, passwords and any authorisation codes assigned to you.
- Managing your password and your PIN and never sharing this information with others.

#### 5.2 Instructions

- You will need a username, company code and password for the MTinfo 3000 mobile app.
- Additionally, you should ensure your mobile phone number is correctly entered in MTinfo 3000 with the correct country code (e.g. +44 for UK), as this is used for authorisation during the first login.
- You can change the desired language, see the user manual MTinfo 3000 web app.
- Only start using the MTinfo 3000 mobile app when your smartphone or tablet is fully charged.
- Always take care of your own safety within the railway environment according to the applicable and most up-to-date legislation.
- Issues may be encountered, which means protection zones cannot be switched. For more information about these notifications, see Chapter 0.
- Use the phone with the same phone number as registered to your personal account in MTinfo 3000 web app.
- Check whether the used rail devices have the correct certificates. Please refer to <u>Dual Inventive's website</u> for the list of required certificates.
- Use the latest app and web version of MTinfo 3000 on your mobile device. (SRAC MTI 19)
- Do not use mobile devices with ad blockers. (SRAC MTI 20)
- Contact IT to confirm the mobile device works correctly. Set up a procedure to ensure the correct display and interpretation of information from MTinfo 3000, including colours and text. (SRAC MTI 22)



# 6 START USING THE MTINFO 3000 MOBILE APP

#### 6.1 Download and installation

- 1. Go to the app store on your smartphone and search for "MTinfo 3000". If there are multiple versions, select the correct one.
- 2. Download the free MTinfo 3000 mobile app.
- 3. Accept all requests for additional permissions (like receiving notifications and using your GPS location).

# 6.2 MTinfo 3000 mobile app symbols

The MTinfo 3000 mobile app uses the following symbols.

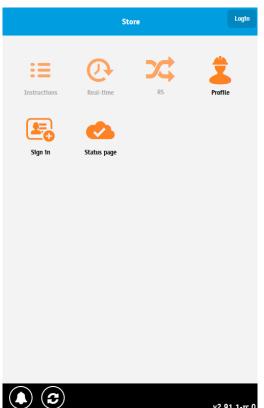
# MEANING Shows all notifications which have been sent to your device by MTinfo 3000 for the last seven days and shows banner(s). Refreshes the screen.

## 6.3 Login



#### NOTE

You can only log in with the correct user rights. Please contact your internal contact person to obtain them.



1. Open the MTinfo 3000 mobile app and select "Login" in the top right corner.

#### Note

 If you are using an outdated version of the MTinfo 3000 app, a notification will appear on startup reading: "A newer version of the MTinfo 3000 mobile app is available. Please update to get access to the latest improvements and security updates." It is recommended you update the app before continuing.



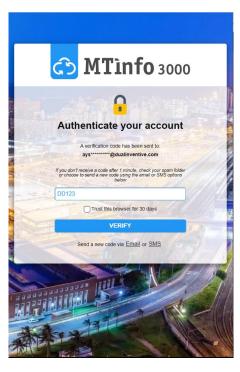


- 2. The login screen appears.
- Enter the Email or username.
- Enter the password.
- Tick the box "Accept agreement".
- Tap "Log In".
- If you want to read the Terms of Use, tap the underlined words "Accept Agreement" and you will be redirected to the 'Terms of Use of MTinfo 3000'.
- If you have forgotten your password, tap "Forgot your password" and follow the instructions.

#### Note

You will stay logged in for 7 days, unless you log out manually.

#### 6.4 Two-factor authentication



- You will receive a two-factor authentication (2FA)
   code via email. If the email is not received or the code
   has expired, you can request a new code to be sent via
   email or SMS to the phone number linked to your
   MTinfo 3000 account.
- 1. Enter the 2FA code.
- 2. Tap "Verify".

- The authorisation code will expire after 30 days. If you
  do not log into the app within a month, you will
  receive a new authorisation code the next time you
  log in.
- If you do not receive an authorisation code, please speak with your internal contact person for more information. Your phone number might have been entered incorrectly in your MTinfo 3000 account.



# 6.5 Select and switch company



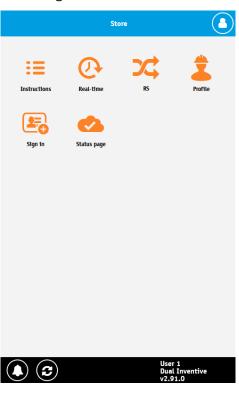
- Select company

  Please select the company you want to work on behalf of

  DUAL INVENTIVE

  ROLES T COMPANY
- 1. After you log in successfully, select your company.
- 2. To change companies after login, tap the account button and select "Change Company."

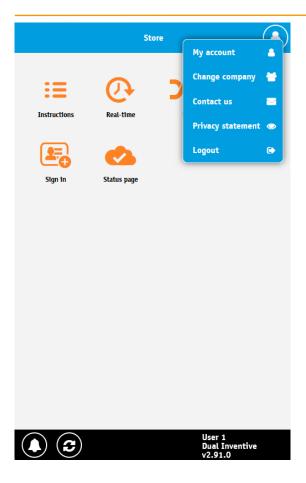
# 6.6 Logout



- 1. Tap the account button in the top right corner.
- 2. Select "Logout".

- You will be taken back to the home screen.
- When you are done using the app, you can close it.





## 6.7 GPS-location

Upon opening the real-time status tile, the MTinfo 3000 mobile app might ask you to allow the use of your phone's location. If you do not give the app permission to use the location of your phone, your location will not be linked to the MTinfo 3000 mobile app. You can always change these permissions through the settings menu on your phone.

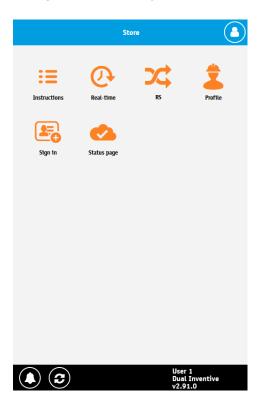
# 6.8 (Push) Notifications

The MTinfo 3000 mobile app will, upon first login, ask permission to send push notifications to your phone. You should always accept these permissions.



#### 6.9 Start screen

Once you have installed and opened the MTinfo 3000 mobile app, the start screen appears. Once logged in, the MTinfo 3000 mobile app will show you a list of all the functionalities you have access to. A light orange tile indicates that you do not have the proper rights to access the tile. If you are not able to access certain tiles, please speak with your internal contact person. A dark orange tile indicates you have the full rights to access that tile.



- The "Instructions" tile provides access to technical drawings and other information uploaded by the Project planner or Project designer in the MTinfo 3000 web app.
  - It also has an upload function, which accepts images and/or PDF files. You need to be authorised for this function.
- The "Real-time" tile provides real-time information about projects and rail devices (see Chapter 6).
- The "RS" tile is used for switching protection zones (see Chapter 7).
- The "Profile" tile offers the possibility to create a new profile or import an existing profile for the MTinfo 3000 mobile app.
- The "Sign in" tile is used for signing in or out of your account
- The "Status page" tile is used to access the MTinfo 3000 status page.



#### NOTE

Future versions of this manual will be updated to provide further details on the Instruction and Profile tiles.



## 6.10 Service messages



Selecting the bell icon will show the service message banners and all notifications sent to your device within the last 7 days. Blue messages show information messages and "what's changed" messages when there is an update. Yellow messages show incidents and maintenance warnings. Selecting a service message will show further information.



#### Maintenance Railcloud

Maintenance is scheduled from 20:00 to 22:00 on March 14th. No downtime is currently expected, but if anything changes, updates will be provided.  Maintenance and incident warnings will give the user context, such as locations and services affected, and expected downtime where applicable.



# What's changed

As of March 12th, we have added several new features to MTinfo 3000. The details can be found here.

 Information messages provide general updates to the user, such as when changes or new features are added. "What's changed" messages will include a hyperlink for the user to view further details about changes to MTinfo 3000.



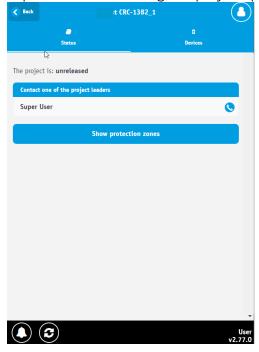
# 7 SWITCHING

# 7.1 Conditions for switching

You can switch single or multiple protection zones in one action.

Before and during switching, please be aware of the following situations:

- If a rail device needs to be moved to a different location, please contact the person with the project's right "Design" and change the design according to the process in MTinfo 3000 web app.
- Non-released projects are indicated by a *red padlock*. Selecting one of these projects will display the name and phone number of the project leader. You will not be able to switch any devices on a project until it has been released.
- When the scheduled controller responsible for switching falls ill during a shift please contact the project's person with right "Planning" and change the planning according to the process.
- When the 'lock' icon appears for a project in the MTinfo app, the project has not yet been released. Tap the 'lock' icon to view the name and mobile phone number of the person responsible for releasing the project. (SRAC MTI 21)





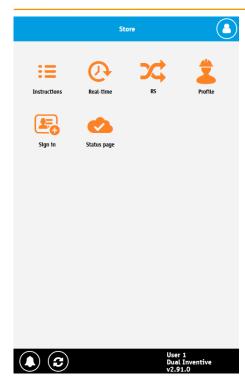
#### WARNING

In case the connection is lost with a rail device, make sure that the key to switch the device is always available for the switcher.

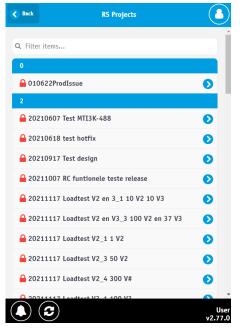
# 7.2 Switching single protection zone

One protection zone can contain one or more types of rail devices such as the ZKL 3000 RC, RDI 3000, RCS 3000 and RSS 3000 so those devices will be switched with the same action.





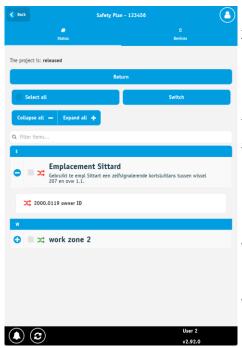
1. Tap the "RS" tile.



2. Tap the project for which you want to switch a protection zone.

- You can only switch a protection zone for released projects which are marked with a green open padlock icon.
- Unreleased projects have a red closed padlock icon.

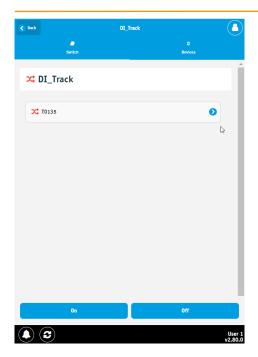




- 3. Tap the "+" icon to show the rail devices assigned to the protection zone. Tap "Expand all" to show the rail devices assigned to all protection zones in the project, or "Collapse all" to hide all the rail devices currently shown.
- 4. Tap the protection zone you want to switch.
- 5. Tap "Switch" to proceed with the switching of the selected protection zone.

- If a protection zone has no rail devices, the zone is disabled and the message "No devices assigned to protection zone" is shown
- If you are not an assigned operator for the selected protection zone, you will see the error "You are not allowed to access the page" when you tap the projection zone.
- Rail device data is updated in real-time.

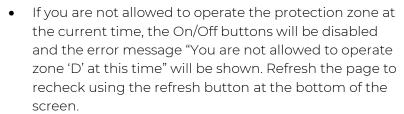




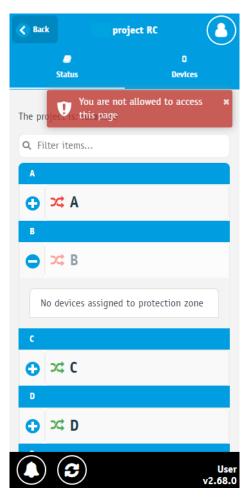
- 6. Select "On" to secure the protection zone by activating the attached rail devices.
- 7. Select "Off" to unsecure the protection zone by deactivating the attached rail devices.

#### Note

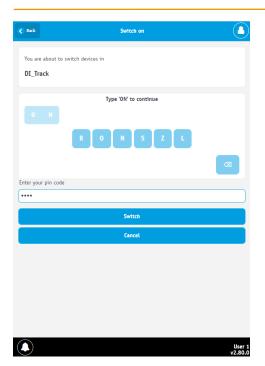
- The protection zone icon is coloured:
  - green if all rail devices within the protection zone are successfully activated.
  - orange if not all rail devices are currently activated or if a rail device is reporting problems.
  - red if all of the rail devices are currently de-activated
  - light grey if the protection zone has no rail devices or if the status is unknown.
- The latest status of all rail devices in the protection zone is indicated as follows:
  - green indicates the rail device is currently successfully activated and no problems are reported.
  - red in all other cases.
  - light grey indicates the status is unknown.



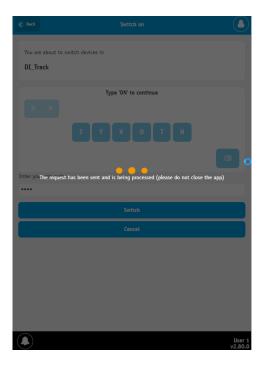
• Rail device data is updated in real-time.





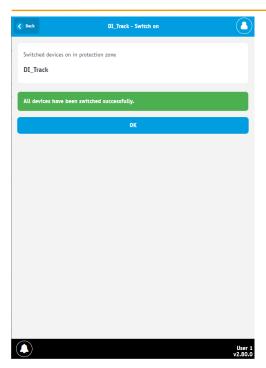


- 8. Tap the proper letters to spell "ON" or "OFF" depending on the action you chose.
- 9. Enter your pin code.



- 10. Tap "Switch" to continue or "Cancel" to abort.
- A loading screen is shown while the request is being processed.





- If the correct PIN is entered when switching 'ON', the rail device will switch to the on. Refer to the rail device manual for information about the visual indication on the rail device itself.
- If the correct PIN is entered when switching 'OFF', the rail device will switch off. Refer to the rail device manual for information about the visual indication on the rail device itself.

# 7.3 Switching multiple protection zones

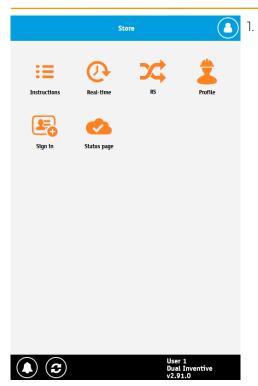


#### NOTE

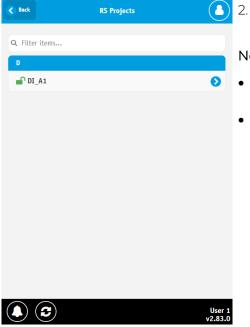
It is only possible to switch multiple protection zones at once if this setting is enabled for your company. This setting can only be changed by the MTinfo 3000 administrator of your company.

One protection zone can contain one or more types of rail devices such as the ZKL 3000 RC, RDI 3000, RCS 3000 and RSS 3000. These devices can be switched by using the same action. Multiple protection zone switching allows the creation and individual switching of protection zones. For example by creating two protection zones, one with ZKL 3000 RCs and one with RDI 3000 these protection zones can be switched separately.





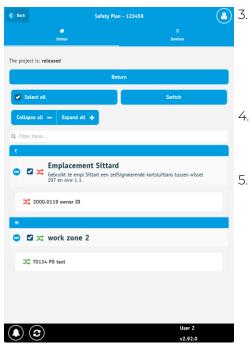
1. Tap the "RS" tile.



2. Tap the project for which you want to switch a protection zone.

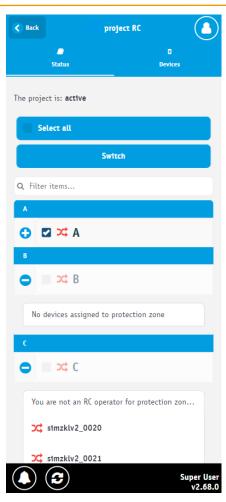
- You can only switch protection zones for a released project that is marked with a green open padlock icon.
- Unreleased projects have a red closed padlock icon.





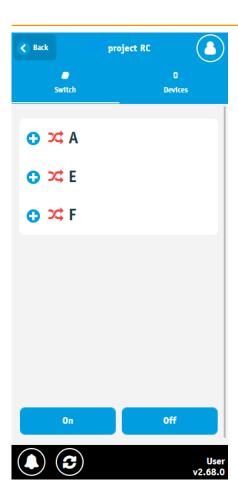
- Tap the "+" icon to show the rail devices assigned to the protection zone. Tap "Expand all" to show the rail devices assigned to all protection zones in the project, or "Collapse all" to hide all the rail devices currently shown.
- Tap one or more protection zones you want to switch or use the "select all" button to check/uncheck all protection zones.
- 5. Tap "Switch" to continue.





- If a protection zone has no rail devices, the zone is disabled and the message "No devices assigned to protection zone" is shown.
- If you are not an assigned operator of the protection zone, the zone is disabled, and you will see the message "You are not an operator for protection zone 'X".
- If you are not allowed to switch at the current time, the protection zone is disabled, and you will see the message "You are not allowed to operate protection zone 'D' at this time.".
- Rail device data is updated in real-time.

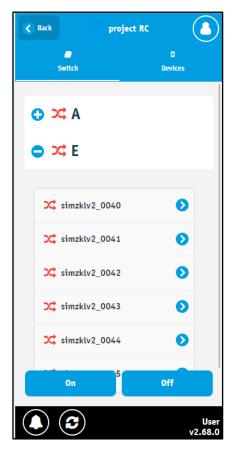




6. Tap "On" or "Off" to switch the rail devices in the selected protection zones On or Off respectively.

#### Note

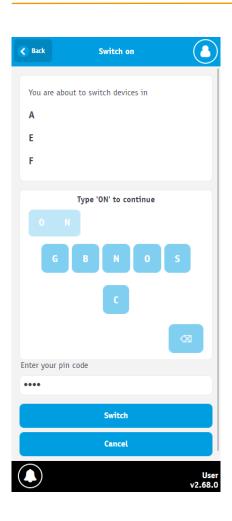
- The protection zone icon is coloured:
  - green if all rail devices within the zone are successfully activated.
  - red if all rail devices within the zone are successfully deactivated.
  - light grey if the protection zone has no rail devices or if the status is unknown.



7. Tap the "+" icon to show the rail devices assigned to the protection zone.

- The latest status of all rail devices in the protection zone is indicated as follows:
  - green indicates the rail device is currently successfully activated.
  - red indicates successfully deactivated.
  - light grey indicates the status is unknown.
- You can tap the rail devices for more details.
- Rail device data is updated in real-time.





- 8. Tap the proper letters to spell "ON" or "OFF" depending on the action you chose.
- 9. Enter your pin code.
- 10. Tap "Switch" to continue or "Cancel" to abort.



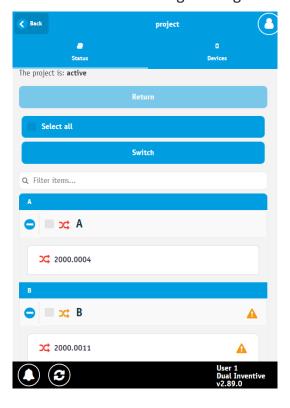
• A loading screen is shown while the request is being processed.





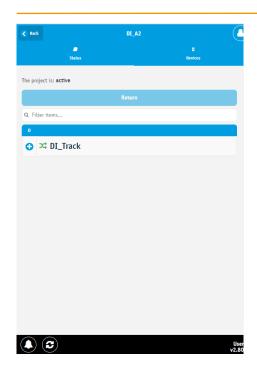
• When the request is processed successfully the result will look similar to this screen.

# 7.4 Errors and warnings during switching



- In case there are errors and/or warnings, the result will be similar to this screen.
- 2 If the switch action is not successful, *repeat* switch action.
- 3 The system groups errors and warnings by protection zone and by rail device.
  - a. If a rail device or protection zone is deactivated, it will be in red.
  - b. If a rail device or protection zone cannot be switched, or is showing a different error, the system will show the icon
- To resolve the issue, refer to the section "Troubleshooting" of the rail device's user manual. If this does not solve the problem, contact <u>DI Technical Support</u>.
- 5 Tap "OK" to return to the "Switch zone" page.

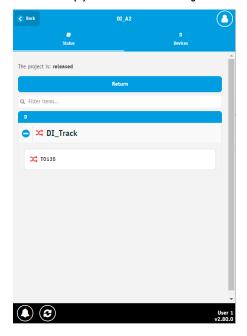




If the 'Return' button is disabled, ensure that **all** protection zones are deactivated in order to enable it.

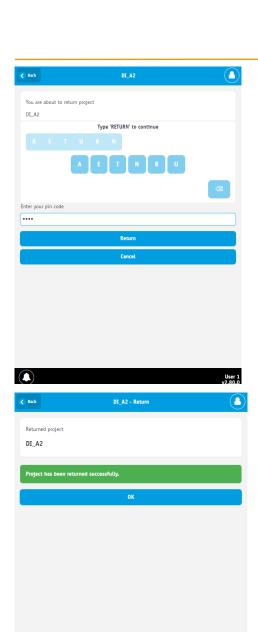
# 7.5 Return via mobile application

This feature allows **operators on site** to 'Return' a project through their mobile application once it is released. The purpose of this feature is to **free the device(s)** under the released project(s) so that the **device(s)** are immediately available for other projects.



1. Tap on 'Return'.





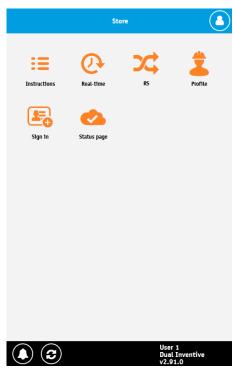
- 2. Tap the proper letters to spell "RETURN".
- Enter your pin code.
- Tap "Return" to continue or "Cancel" to abort.

3. Project is successfully returned via mobile application.

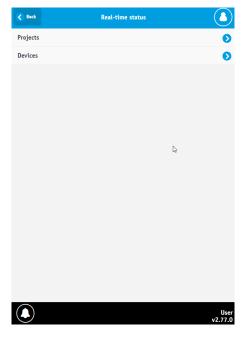


# **8 REAL-TIME STATUS**

You can view real-time status about projects and rail devices. This section explains how to receive real-time information about a rail device, for example a ZKL 3000 RC.

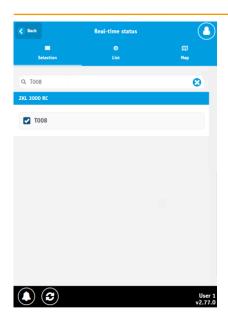


1. Tap the "Real-time" tile.

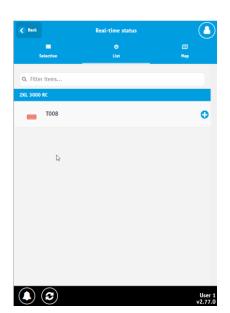


- 2. Tap "Devices".
- Optional: tap "Projects" and select the project with the rail devices you would like to see.





3. Select a rail device.



- 4. Tap "List" or "Map".
- 5. Tap the rail device.



- Real-time information of rail device appears in time zone selected by the user under 'My profile' in MTinfo 3000 web app.
- The table below explains the real-time information.



ITEM	EXPLANATION
Serial number	Serial number of the selected rail device.
Туре	Type of rail device that is being displayed, in this case a ZKL 3000 RC.
GPS position	GPS position of the selected rail device.
Device status	Status of the rail device. Online when the rail device is connected to MTinfo 3000. Offline when the device is not connected with MTinfo 3000.
Last update	Timestamp of the last received message from the rail device in user's time zone.
Switch status	Rail device is switched ON or OFF.
Detection OK	Depending on the type of rail device, shows if the detection is OK or not OK. Reference the rail device manual for additional information on detection.
Detection quality	Detection quality (%) between the rail device and the track. Anything above 0% is considered OK. The detection quality will only show as not OK when the value is exactly 0%.
Safety State	<ul> <li>Disabled</li> <li>Disabling: The device is in the process of disengaging the external relay.</li> <li>Enabling: The device is in the process of engaging the external relay.</li> <li>Enabled</li> </ul>
Key position	<ul> <li>OPERATIONAL: rail device can be switched remotely.</li> <li>ON: rail device has been switched on manually and can therefore not be operated remotely.</li> <li>OFF: rail device has been switched off manually and can therefore not be operated remotely.</li> </ul>
Battery status (backup, main)	<ul> <li>Full: sufficient power (67-100%).</li> <li>Half: adequate power (34-66%).</li> <li>Low: low power (16-33%).</li> <li>Critical: almost empty (4-15%).</li> <li>Depleted: completely empty (0-3%).</li> <li>Removed: completely empty (0%).</li> </ul>
Battery voltage (backup, main)	Shows the voltage of the batteries of the rail device.
Device state	<ul><li>Yes: The device is activated.</li><li>No: The device is not activated.</li></ul>

- a. If a rail device shows an error or warning, the RTS will show the icon  $oldsymbol{\Delta}$  over it.
- b. The real-time status (RTS) information always prevails over a mobile device notification. (SRAC MTI 17)



# 9 NOTIFICATIONS

A notification is either a message or a reminder of a message sent by MTinfo 3000 to a user's smartphone or tablet. A reminder for a critical notification is an extra service to help the user but it is explicitly not a mitigation of an identified risk.

The notification service starts as soon as the rail device has been assigned to a project and the project is released. It is the responsibility of the user to act upon these notifications.



#### **WARNING**

The user (operator) must follow the real-time status (RTS) and notifications in the mobile app and respond. (SRAC MTI 16)

Use a mobile phone or tablet with push message functionality. Use the same phone number linked to the assigned user (for example, by using the same SIM card). (SRAC MTI 18)

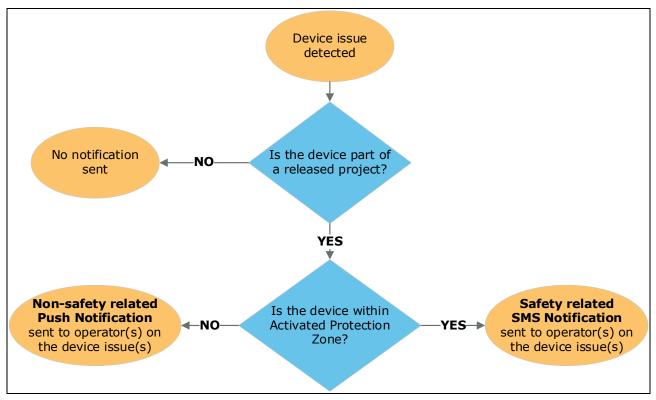


Figure 1 Notification logic diagram

#### 9.1 Push notifications

Users with switching rights on a released project will automatically receive notifications via push notifications. Note the prerequisites to receive push notifications stated below.



#### WARNING

In order to receive the non-safety related push notifications the following prerequisites should be met:

• Latest MTinfo 3000 mobile app installed on the users' mobile device



- Push notifications should be allowed
- User must be logged into the MTinfo 3000 mobile app

#### 9.2 Text notifications

When a project has one or more activated protection zones, notifications will be sent via text messages (SMS). Users' mobile phone number is entered as alarm number within the user profile to enable this.

Please refer to the rail device's user manual for possible notifications and follow-up actions.



#### WARNING

Safety-related SMS messages will not be delivered to the user if a wrong phone number is registered or when the user blocks the MTinfo 3000 sender's phone number. Verify you have entered the correct phone number and do not block the sender.

#### 9.3 Reminders

Reminders are sent for safety related notifications for specific rail devices. For example, when a rail device is offline. The reminders will help the user to remember that there is an unresolved issue with a specific rail device.

Rail devices that use batteries already have an implicit reminder system as the user is notified when the main or backup battery reaches a critical or depleted level.



#### NOTE

Reminders do not relieve the user of their responsibility to immediately act upon the notification. Please always consult the real-time status for up-to-date information about the situation.

A reminder is sent after a 15-minute interval. A maximum of 3 reminders are sent for one single situation. Reminders are only sent when the rail device is in activated state (i.e. in an activated protection zone).

Please refer to the rail device's user manual for possible notifications and the follow-up actions.



# **10 STATUS PAGE**

Use the internet status page to remain informed about system maintenance and health. This page provides real-time information about the system's health.

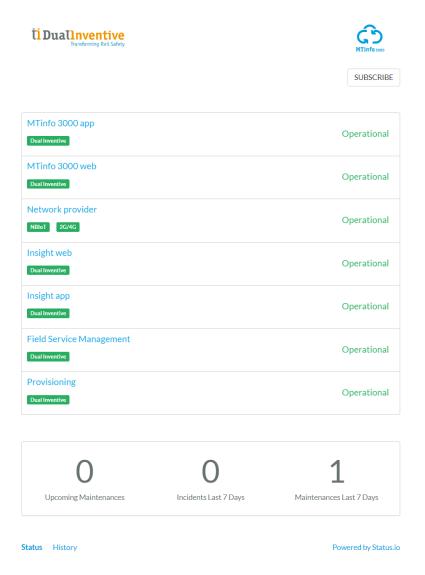


Figure 2 Status page

# 10.1 Access status page

- 1. Go to the Start Screen.
- 2. Select the Status Page icon Status page.
- 3. Or use this direct link: https://mtinfo3000.status.io/.

The status page shows current incidents, scheduled maintenance, and the history of past incidents.



# 10.2 Subscribe to the status page

To receive email notifications about system updates, open the status page, click the button, and follow the instructions to complete your subscription.

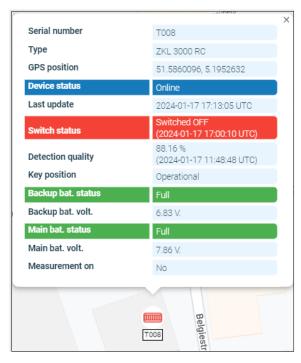
By using the status page and subscribing to updates, you will:

- 1. Receive timely notifications about system changes.
- 2. Be aware of ongoing incidents or maintenance.
- 3. Plan your activities based on the system's health.



## 11 APPENDIX ZKL 3000 RC

## 11.1 Explanation real-time status ZKL 3000 RC



ITEM	EXPLANATION	
Serial number	Serial number of the selected device.	
Туре	The type of the device that is being displayed, in this case a ZKL 3000 RC.	
GPS position	GPS position of the selected device.	
Device status	Status of the device. When it is offline, it is not connected with MTinfo 3000 or both batteries are empty.	
Last update	Last received message from the device.	
Switch status	The device is switched ON or OFF.	
Detection OK	The detection is OK or not OK.	
Detection quality	Detection quality (%) between the ZKL 3000 RC and the track. Anything > 0% is considered OK. The detection quality only becomes not OK when the value is exactly 0%.	
Key position	<ul><li>a. OPERATIONAL: The device can be switched remotely.</li><li>b. ON: manual switched is shorted, cannot be switched remotely.</li><li>c. OFF: manual switched is not-shorted.</li></ul>	
Battery status (backup, main)	<ul><li>a. Full: sufficient power (66-100%).</li><li>b. Half: adequate power (33-66%).</li></ul>	



ITEM	EXPLANATION
	c. Low: low in power (15-33%).
	d. Critical: almost empty (3-15%).
	e. Depleted: completely empty (0-3%).
	f. Removed: completely empty (0%).
Battery voltage (backup, main)	Shows the voltage of the batteries of the ZKL 3000 RC.

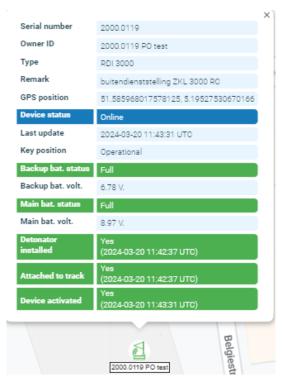
## NOTE

For a more in-depth explanation, see the <u>User Manual ZKL 3000 RC</u>, section Troubleshooting. When an error appears in the real-time status, it is very important to consult the manual.



## **12 APPENDIX RDI 3000**

# 12.1 Explanation real-time status RDI 3000



ITEM	EXPLANATION	
Serial number	Serial number of the selected device.	
Туре	Type of the device that is being displayed, in this case an RDI 3000.	
GPS position	GPS position of the selected device.	
Device status	Status of the device. When it is offline, it will not connect with MTinfo 3000 or both batteries are empty.	
Last update	Last received message from the device.	
Key position	a. OPERATIONAL: The device can be switched remotely.  b. ON: manually switched on, cannot be switched remotely.  c. OFF: manually switched off cannot be switched remotely.	
Battery status (backup, main)	<ul> <li>c. OFF: manually switched off, cannot be switched remotely.</li> <li>a. Full: sufficient power (66-100%).</li> <li>b. Half: adequate power (33-66%).</li> <li>c. Low: low in power (15-33%).</li> <li>d. Critical: almost empty (3-15%).</li> <li>e. Depleted: completely empty (0-3%).</li> </ul>	



ITEM	EXPLANATION
	f. Removed: completely empty (0%).
Battery voltage (back-up, main)	Shows the voltage of the batteries of the RDI 3000.
Detonator installed	<ul><li>a. Yes: detonator is on the rail.</li><li>b. No: detonator is not on the track, lies next to the rail.</li></ul>
Attached to track	<ul><li>a. Yes: the RDI 3000 is attached to the rail.</li><li>b. No: the RDI 3000 is not attached to the rail.</li></ul>
Device state	<ul><li>a. Yes: The RDI 3000 is activated.</li><li>b. No: The RDI 3000 is not activated.</li></ul>



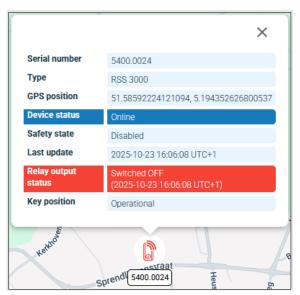
## NOTE

For a more in-depth explanation, see the <u>RDI 3000 User Manual</u>, section Troubleshooting. When an error appears in the real-time status, it is very important to consult the manual.



## **13 APPENDIX RSS 3000**

Explanation real-time status RSS 3000



ITEM	EXPLANATION	
Serial number	Serial number of the selected device.	
Туре	The type of the device that is being displayed, in this case an RSS 3000.	
GPS position	GPS position of the selected device.	
Device status	Status of the device. When it is offline, it is not connected with MTinfo 3000 or both batteries are empty.	
Safety State	a. Disabled	
	b. Disabling: The device is in the process of disengaging the external relay.	
	c. Enabling: The device is in the process of engaging the external relay.	
	d. Enabled	
Last update	Last received message from the device.	
Relay output status	The relay is switched ON or OFF.	
Key position	a. OPERATIONAL: The device can be switched remotely.	
	b. ON: manually switched on, cannot be switched remotely.	
	c. OFF: manually switched off, cannot be switched remotely.	



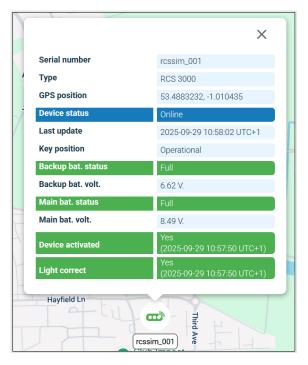
## NOTE

For a more in-depth explanation, see the <u>RSS 3000 User Manual</u>, section Troubleshooting. When an error appears in the real-time status, it is very important to consult the manual.



## **14 APPENDIX RCS 3000**

## 14.1 Explanation real-time status RCS 3000



ITEM	EXPLANATION	
Serial number	Serial number of the selected device.	
Туре	The type of the device that is being displayed, in this case an RCS 3000.	
GPS position	GPS position of the selected device.	
Device status	Status of the device. When it is offline, it is not connected with MTinfo 3000 or both batteries are empty.	
Last update	Last received message from the device.	
Key position	a. OPERATIONAL: The device can be activated/deactivated remotely.	
	b. ON: manual red light signal is on, cannot be deactivated remotely.	
	c. OFF: manual red light signal is off, cannot be activated remotely.	
Battery status	a. Full: sufficient power (66-100%).	
(backup, main)	b. Half: adequate power (33-66%).	
	c. Low: low in power (15-33%).	
	d. Critical: almost empty (3-15%).	
	e. Depleted: completely empty (0-3%).	
	f. Removed: completely empty (0%).	



ITEM	EXPLANATION	
Battery voltage	Shows the voltage of the batteries of the RCS 3000.	
(backup, main)		
Device activated	a. Yes: The RCS 3000 is activated.	
	b. No: The RCS 3000 is not activated.	
Light correct	a. Yes: The red light signal is working correctly.	
	b. No: The red light signal is not working correctly.	

## NOTE

For a more in-depth explanation, see the <u>RCS 3000 User Manual</u>, section Troubleshooting. When an error appears in the real-time status, it is very important to consult the manual.



## 15 APPENDIX NOTIFICATION MESSAGES

## 15.1 General



#### NOTE

A notification is a message, or a reminder of a message sent by MTinfo 3000 to a user's mobile device (tablet, phone).

A reminder for a critical notification is an extra service to help the user; but it is explicitly not a mitigation of an identified risk.

#### WARNING



SMS will not be delivered to the user if an incorrect mobile phone number is registered in MTinfo 3000 or if the user blocks the MTinfo 3000 sender's phone number.

Verify if you have entered your correct mobile phone number and do not block the sender.

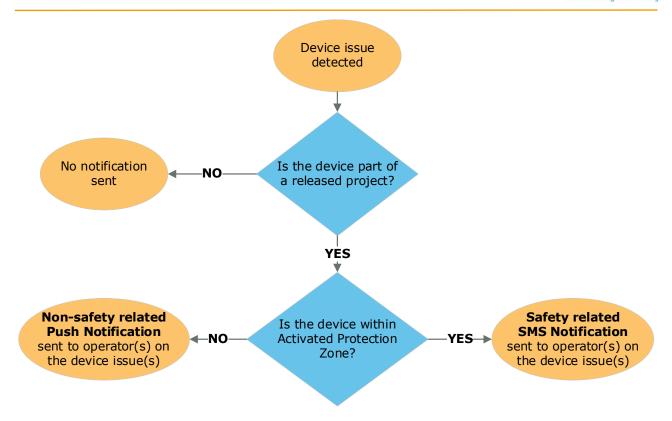
## WARNING



In order to receive the non-safety related push notifications, the following prerequisites should be met:

- Latest MTinfo 3000 mobile app installed on the user's mobile device.
- Push notifications should be allowed in phone settings.
- User must be logged into the MTinfo 3000 mobile app.





## 15.2 Notifications ZKL 3000 RC

## 15.2.1 Errors and Notifications

Users with switching rights on a released project will automatically receive push notifications. Note the prerequisites to receive push notifications are stated in the section 15.1.

Alerts from devices in activated protection zones will be sent via **text messages (SMS).** Users' mobile phone number is entered as alarm number within the user profile to enable this.

Use a mobile phone or tablet with push message functionality. Use the same phone number linked to the assigned user (for example, by using the same SIM card).

The notification service starts as soon as the ZKL 3000 RC has been assigned to a project and the project is released. It is the responsibility of the recipient to act upon these notifications (more information is available in the ZKL 3000 RC Installation Manual.

S/N	NOTIFICATIONS	EXPLANATION
1.	ZKL 3000 RC "Serial Number"  * Detection NOT ok. Please check manual for more information.	ZKL 3000 RC with ID "Serial Number" is no longer guaranteed to create a proper short circuit in the track. The detection is not OK.
2.	ZKL 3000 RC "Serial Number"  * is offline. Please check manual for more information.	ZKL 3000 RC with ID "Serial Number" is offline. The ZKL 3000 RC cannot make a connection to MTinfo 3000.
3.	ZKL 3000 RC "Serial Number"  * The backup battery is	Both batteries of the ZKL 3000 RC with ID "Serial Number" are critical. A new



S/N	NOTIFICATIONS	EXPLANATION
	CRITICAL, the main battery is CRITICAL. Please check manual for more information.	notification will be sent to your mobile phone device, as soon as one of the batteries is getting depleted.
4.	ZKL 3000 RC "Serial Number"  * The backup battery has sufficient power, the main battery is CRITICAL. Please check manual for more information	The main battery of the ZKL 3000 RC with ID "Serial Number" is critical, and the backup battery is ok (either full or half full). A new notification will be sent to your mobile phone device as soon as one of the batteries reaches the next depletion level.
5.	ZKL 3000 RC "Serial Number"  * The backup battery is CRITICAL, the main battery has sufficient power. Please check manual for more information	The backup battery of the ZKL 3000 RC with ID "Serial Number" is critical, and the main battery is ok (either full or half full). A new notification will be sent to your mobile phone device, as soon as one of the batteries reaches the next depletion level.
6.	ZKL 3000 RC "Serial Number" The backup battery has sufficient power, the main battery is DEPLETED. Please check manual for more information.	The main battery of the ZKL 3000 RC with ID "Serial Number" is depleted, and the backup battery is ok (either full or half full). A new notification will be sent to your mobile phone device, as soon as the battery reaches the next depletion level.
7.	ZKL 3000 RC "Serial Number" *The backup battery is DEPLETED, the main battery has sufficient power. Please check manual for more information.	The backup battery of the ZKL 3000 RC with ID "Serial Number" is depleted, and the main battery is ok (either full or half full). A new notification will be sent to your mobile phone device, as soon as the battery reaches the next depletion level.
8.	ZKL 3000 RC "Serial Number"  * The backup battery is DEPLETED, the main battery is CRITICAL. Please check manual for more information	The backup battery of the ZKL 3000 RC with ID "Serial Number" is depleted, and the main battery is critical. A new notification will be sent to your mobile phone device, as soon as the main battery is depleted.
9.	ZKL 3000 RC "Serial Number"  * The backup battery is CRITICAL, the main battery is DEPLETED. Please check manual for more information	The main battery of the ZKL 3000 RC with ID "Serial Number" is depleted, and the backup battery is critical. A new notification will be sent to your mobile phone device, as soon as the backup battery is depleted.
10.	ZKL 3000 RC "Serial Number"  * The backup battery is DEPLETED, the main battery is DEPLETED. Please check manual for more information	Both batteries of the ZKL 3000 RC with ID "Serial Number" are depleted.



S/N	NOTIFICATIONS	EXPLANATION
11.	ZKL 3000 RC "Serial Number"  * The backup battery is CRITICAL, the main battery has been REMOVED. Please check manual for more information.	The backup battery of the ZKL 3000 RC with ID "Serial Number" is critical, and the main battery has been removed. A new notification will be sent to your mobile phone device, as soon as the backup battery is depleted.
12.	ZKL 3000 RC "Serial Number"  * The backup battery is DEPLETED, the main battery has been REMOVED. Please check manual for more information.	The backup battery of the ZKL 3000 RC with ID "Serial Number" is depleted, and the main battery has been removed.
13.	ZKL 3000 RC "Serial Number"  * The backup battery has been REMOVED, the main battery is CRITICAL. Please check manual for more information.	The backup battery of the ZKL 3000 RC with ID "Serial Number" has been removed, and the main battery is critical. A new notification will be sent to your mobile phone device, as soon as the main battery is depleted.
14.	ZKL 3000 RC "Serial Number"  * The backup battery has been REMOVED, the main battery is DEPLETED. Please check manual for more information.	The backup battery of the ZKL 3000 RC with ID "Serial Number" has been removed, and the main battery is depleted.
15.	ZKL 3000 RC "Serial Number"  * The backup battery is CRITICAL. Please check manual for more information.	The backup battery of the ZKL 3000 RC with ID "Serial Number" is critical.
16.	ZKL 3000 RC "Serial Number"  * The backup battery is DEPLETED. Please check manual for more information.	The backup battery of the ZKL 3000 RC with ID "Serial Number" is depleted.
17.	ZKL 3000 RC "Serial Number"  * The main battery is CRITICAL. Please check manual for more information.	The main battery of the ZKL 3000 RC with ID "Serial Number" is critical.
18.	ZKL 3000 RC "Serial Number"  * The main battery is DEPLETED.	The main battery of the ZKL 3000 RC with ID "Serial Number" is depleted.
19.	ZKL 3000 RC "Serial Number"  * is switched off with a key. Please check the Real-time status in MTinfo 3000. Refer to the User Manual for details.	The key switch position of the ZKL 3000 RC is turned 'OFF – OVERRULED'.

## 15.2.2 Text Notifications - Reminders

For the offline and the detection safety related events a reminder system is introduced. The reminders are to remind the user that there is an unresolved issue with a specific ZKL 3000 RC.



Battery notifications already have an implicit reminder system as the user is notified when the main or backup battery reaches critical or depleted levels.



#### NOTE

Reminders do not relieve the user of their responsibility to go immediately to the device to inspect it!

Please, always consult the Real-Time Status for the up-to-date situation.

A reminder is sent after a 15-minute interval. A maximum of 3 reminders are sent for one continuous 'detection NOT ok' or 'offline' situation. Reminders are only sent when the device is in an active state (i.e. in an activated protection zone).

The reminder text messages are:

NOTIFICATIONS	EXPLANATION
Reminder: ZKL 3000 RC "Serial Number" * Detection NOT ok. Please check manual for more information.	Reminder message when the detection is not ok and the device is in an activated protection zone.
Reminder: ZKL 3000 RC "Serial Number" * is offline. Please check manual for more information.	Reminder message when the device is offline and the device is in an activated protection zone.

## 15.3 Notifications RDI 3000

## 15.3.1 Errors and Notifications

Users with switching rights on a released project will automatically receive notifications via push notifications. Note the prerequisites to receive push notifications stated in chapter 15.1.

Alerts from devices in activated protection zones will be sent via text messages (SMS). The user's mobile phone number is entered as an alarm number within the user profile to enable this.

The notification service starts as soon as the RDI 3000 has been assigned to a project and the project is released. It is the responsibility of the recipient to act upon these notifications.

S/N	NOTIFICATIONS	EXPLANATION
1.	RDI 3000 "Serial Number" * is offline. Please check manual for more information	RDI 3000 with ID "Serial Number" is offline. The RDI 3000 cannot make a connection to MTinfo 3000.
2.	RDI 3000 "Serial Number" is NOT against the track. Please check the manual for more information	RDI 3000 with ID "Serial Number" * is NOT against the track. The RDI 3000 might have been removed from track.
3.	RDI 3000 "Serial Number" has a broken led group. Please check the manual for more information.	RDI 3000 with ID "Serial Number" * has a broken led group. One or more red LED light elements are faulty. Red LED brightness no longer meets specifications.
4.	RDI 3000 "Serial Number" * detonator state is NOT ok. Please check manual for moreinformation.	RDI 3000 with ID "Serial Number" * detonator state is NOT ok. The RDI 3000 cannot guarantee the detonator is placed correctly on the track.



S/N	NOTIFICATIONS	EXPLANATION
5.	RDI 3000 "Serial Number" * The backup battery is CRITICAL, the main battery is CRITICAL. Please check manual for more information	Both batteries of RDI 3000 with ID "Serial Number" are critical. The system will send a new notification as soon as one of the batteries approaches depletion.
6.	RDI 3000 "Serial Number" *The backup battery has sufficient power, the main battery is CRITICAL. Please check manual for more information	The main battery of the RDI 3000 with ID "Serial Number" is critical and the backup battery is ok (either full or half full). The system will send a new message as soon as one of the batteries approaches the next depletion level.
7.	RDI 3000 "Serial Number" * The backup battery is CRITICAL, the main battery has sufficient power. Please check manual for more information	The backup battery of the RDI 3000 with ID "Serial Number" is critical and the main battery is ok (either full or half full). The system will send a new message as soon as one of the batteries approaches the next depletionlevel.
8.	RDI 3000 "Serial Number" *The backup battery has sufficient power, the main battery is DEPLETED. Please check manual for more information	The main battery of the RDI 3000 with ID "Serial Number" is depleted and the backup battery is ok (either full or half full). The system will send a new message as soon as the ok battery reaches the next depletion level.
9.	RDI 3000 "Serial Number" *The backup battery is DEPLETED, the main battery has sufficient power. Please check manual for more information	The backup battery of the RDI 3000 with ID "Serial Number" is depleted and the main battery is ok (either full or half full). The system will send a new message as soon as the ok battery reaches the next depletion level.
10.	RDI 3000 "Serial Number" * The backup battery is DEPLETED, the main battery is CRITICAL. Please check manual for more information	The backup battery of the RDI 3000 with ID "Serial Number" is depleted and the main battery is critical. The system will send a new notification as soon as the main battery is depleted.
11.	RDI 3000 "Serial Number" * The backup battery is CRITICAL, the main battery is DEPLETED. Please check manual for more information	The main battery of the RDI 3000 with ID "Serial Number" is depleted and the backup battery is critical. The system will send a new notification as soon as the backup battery is depleted.
12.	RDI 3000 "Serial Number" * The backup battery is DEPLETED, the main battery is DEPLETED. Please check manual for more information	Both batteries of RDI 3000 with ID "Serial Number" are depleted.
13.	RDI 3000 "Serial Number" * The backup battery is CRITICAL, the main battery has been REMOVED. Please check manual for more information.	The backup battery of the RDI 3000 with ID "Serial Number" is critical and the main battery has been removed. The system will send a new notification as soon as the backup battery is depleted.



S/N	NOTIFICATIONS	EXPLANATION
14.	RDI 3000 "Serial Number" * The backup battery is DEPLETED, the main battery has been REMOVED. Please check manual for more information.	The backup battery of the RDI 3000 with ID "Serial Number" is depleted and the main battery has been removed. The system will send a new notification as soon as the backup battery is removed.
15.	RDI 3000 "Serial Number" is switched off with a key. Please check the Real-Time Status in MTinfo 3000. Refer to the User Manual for details.	The key position of the RDI 3000 with ID "Serial Number" in an activated protection zone has been turned to the 'OFF' (overruled) position.

## 15.3.2 Text Notifications - Reminders

For the offline and safety related events a reminder system is introduced. The reminder s are helping the user by reminding that there is an unresolved issue with a specific RDI 3000.

Battery notifications already have an implicit reminder system as the user is notified when the main or backup battery reaches critical and depleted levels.



## NOTE

Reminders do not relieve the user of their responsibility to go immediately to the device to inspect it!

Please always consult the Real Time Status for the up-to-date situation.



A reminder is sent after a 15-minute interval. A maximum of 3 reminders are sent for one continuous 'not ok'-situation. Reminders are only sent when the device is in active state (i.e.in an activated protection zone).

The reminder text messages are:

NOTIFICATIONS	EXPLANATION
Reminder: RDI 3000 "Serial Number" * is offline. Please check manual for more information	Reminder message when the device offline and the device is in an activated protection zone.
Reminder: RDI 3000 "Serial Number" is NOT against the track. Please check the manual for more information	Reminder message when the device might have been removed from trackor moved to a different place or is not correctly installed.
Reminder: RDI 3000 "Serial Number" has a broken led group. Please check the manual for moreinformation.	Reminder message when the devicelight indication is not sufficient any longer.
Reminder: RDI 3000 "Serial Number" * Detonator state is NOT ok. Please check manual for more information.	Reminder message when the device cannot guarantee the detonator is ontrack.

## 15.4 Notifications RSS 3000

## 15.4.1 Errors and Notifications

Users with switching rights on a released project will automatically receive notifications via push notifications. Note the prerequisites to receive push notifications stated in the chapter 15.1.

Alerts from devices in activated protection zones will be sent via text messages (SMS). Users' mobile phone number is entered as alarm number within the user profile to enable this.

The notification service starts as soon as the RSS 3000 has been assigned to a project and the project is released. It is the responsibility of the recipient to act upon these notifications.

S/N	NOTIFICATIONS	EXPLANATION
1.	RSS 3000 "Serial Number" * Detection NOT ok. Please check manual for more information.	RSS 3000 with ID "Serial Number" is no longer creating a proper short circuit for the relay. The detection is not OK.
2.	RSS 3000 "Serial Number" is offline. Please check manual for more information.	RSS 3000 with ID "Serial Number" is offline. The RSS 3000 cannot make a connection to MTinfo 3000.
3.	RSS 3000 "Serial Number" is switched off with a key. Please check the Real-Time Status in MTinfo 3000. Refer to the User Manual for details.	The key position of the RSS 3000 with ID "Serial Number" in an activated protection zone has been turned to the 'OFF' (overruled) position.



## 15.4.2 Text Notifications - Reminders

For the offline and the detection safety related events a reminder system is introduced. The reminders are to remind the user that there is an unresolved issue with a specific RSS 3000.



#### NOTE

Reminders do not relieve the user of their responsibility to go immediately to the device to inspect it when receiving the first notification message!

Please always consult the Real Time Status for the up-to-date situation.

A reminder is sent after a 15-minute interval. A maximum of 3 reminders are sent for one continuous 'not ok' situation. Reminders are only sent when the device is in an active state (i.e. in an activated protection zone).

The reminder text messages are:

NOTIFICATIONS	EXPLANATION
Reminder: RSS 3000 "Serial Number" * Detection NOT ok. Please check manual for more information	Reminder message when the detection is not ok and the device is in an activated protection zone.
Reminder: RSS 3000 "Serial Number" is offline. Please check manual for more information	Reminder message when the device is offline and the device is in an activated protection zone.

## 15.5 Notifications RCS 3000

## **15.5.1** Errors and Notifications

Users with switching rights on a released project will automatically receive push notifications. Note the prerequisites to receive push notifications are stated in the section 15.1.

Alerts from devices in activated protection zones will be sent via **text messages (SMS).** Users' mobile phone number is entered as alarm number within the user profile to enable this.

Use a mobile phone or tablet with push message functionality. Use the same phone number linked to the assigned user (for example, by using the same SIM card).

The notification service starts as soon as the RCS 3000 has been assigned to a project and the project is released. It is the responsibility of the recipient to act upon these notifications.

S/N	NOTIFICATIONS	EXPLANATION
1.	RCS 3000 "Serial Number" * has a broken led group. Please check manual for more information.	RCS 3000 with ID "Serial Number" is no longer guaranteed to create a proper red signal in the track.
2.	RCS 3000 "Serial Number" * is offline. Please check manual for more information.	RCS 3000 with ID "Serial Number" is offline. The RCS 3000 cannot make a connection to MTinfo 3000.
3.	RCS 3000 "Serial Number" * The backup battery is CRITICAL, the main battery is CRITICAL.	Both batteries of the RCS 3000 with ID "Serial Number" are critical. A new notification will be sent to your mobile



S/N	NOTIFICATIONS	EXPLANATION
	Please check manual for more information.	phone device as soon as one of the batteries is getting depleted.
4.	RCS 3000 "Serial Number" * The backup battery has sufficient power, the main battery is CRITICAL. Please check manual for more information	The main battery of the RCS 3000 with ID "Serial Number" is critical, and the backup battery is ok (either full or half full). A new notification will be sent to your mobile phone device as soon as one of the batteries reaches the next depletion level.
5.	RCS 3000 "Serial Number" * The backup battery is CRITICAL, the main battery has sufficient power. Please check manual for more information	The backup battery of the RCS 3000 with ID "Serial Number" is critical, and the main battery is ok (either full or half full). A new notification will be sent to your mobile phone device, as soon as one of the batteries reaches the next depletion level.
6.	RCS 3000 "Serial Number" The backup battery has sufficient power, the main battery is DEPLETED. Please check manual for more information.	The main battery of the RCS 3000 with ID "Serial Number" is depleted, and the backup battery is ok (either full or half full). A new notification will be sent to your mobile phone device, as soon as the battery reaches the next depletion level.
7.	RCS 3000 "Serial Number" *The backup battery is DEPLETED, the main battery has sufficient power. Please check manual for more information.	The backup battery of the RCS 3000 with ID "Serial Number" is depleted, and the main battery is ok (either full or half full). A new notification will be sent to your mobile phone device, as soon as the battery reaches the next depletion level.
8.	RCS 3000 "Serial Number" * The backup battery is DEPLETED, the main battery is CRITICAL. Please check manual for more information	The backup battery of the RCS 3000 with ID "Serial Number" is depleted, and the main battery is critical. A new notification will be sent to your mobile phone device, as soon as the main battery is depleted.
9.	RCS 3000 "Serial Number" * The backup battery is CRITICAL, the main battery is DEPLETED. Please check manual for more information	The main battery of the RCS 3000 with ID "Serial Number" is depleted, and the backup battery is critical. A new notification will be sent to your mobile phone device, as soon as the backup battery is depleted.
10.	RCS 3000 "Serial Number" * The backup battery is DEPLETED, the main battery is DEPLETED. Please check manual for more information	Both batteries of the RCS 3000 with ID "Serial Number" are depleted.
11.	RCS 3000 "Serial Number" * The backup battery is CRITICAL, the main battery has been REMOVED. Please check manual for more information.	The backup battery of the RCS 3000 with ID "Serial Number" is critical, and the main battery has been removed. A new notification will be sent to your mobile phone device, as soon as the backup battery is depleted.
12.	RCS 3000 "Serial Number" * The backup battery is DEPLETED, the main battery has been REMOVED. Please check manual for more information.	The backup battery of the RCS 3000 with ID "Serial Number" is depleted, and the main battery has been removed.



S/N	NOTIFICATIONS	EXPLANATION
13.	RCS 3000 "Serial Number" * The backup battery has been REMOVED, the main battery is CRITICAL. Please check manual for more information.	The backup battery of the RCS 3000 with ID "Serial Number" has been removed, and the main battery is critical. A new notification will be sent to your mobile phone device, as soon as the main battery is depleted.
14.	RCS 3000 "Serial Number" * The backup battery has been REMOVED, the main battery is DEPLETED. Please check manual for more information.	The backup battery of the RCS 3000 with ID "Serial Number" has been removed, and the main battery is depleted.
15.	RCS 3000 "Serial Number" * The backup battery is CRITICAL. Please check manual for more information.	The backup battery of the RCS 3000 with ID "Serial Number" is critical.
16.	RCS 3000 "Serial Number" * The backup battery is DEPLETED. Please check manual for more information.	The backup battery of the RCS 3000 with ID "Serial Number" is depleted.
17.	RCS 3000 "Serial Number" * The main battery is CRITICAL. Please check manual for more information.	The main battery of the RCS 3000 with ID "Serial Number" is critical.
18.	RCS 3000 "Serial Number" * The main battery is DEPLETED.	The main battery of the RCS 3000 with ID "Serial Number" is depleted.
19.	RCS 3000 "Serial Number" * is switched off with a key. Please check the Real-time status in MTinfo 3000. Refer to the User Manual for details.	The key switch position of the RCS 3000 is turned 'OFF – OVERRULED'.

## 15.5.2 Text Notifications - Reminders

For the offline and the detection safety related events a reminder system is introduced. The reminders are to remind the user that there is an unresolved issue with a specific RCS 3000.

Battery notifications already have an implicit reminder system as the user is notified when the main or backup battery reaches critical or depleted levels.



## NOTE

Reminders do not relieve the user of their responsibility to go immediately to the device to inspect it!

Please, always consult the Real-Time Status for the up-to-date situation.

A reminder is sent after a 15-minute interval. A maximum of 3 reminders are sent for one continuous 'not ok' situation. Reminders are only sent when the device is in an active state (i.e. in an activated protection zone).



The reminder text messages are:

NOTIFICATIONS	EXPLANATION
RCS 3000 "Serial Number" * has a broken led group. Please check manual for more information.	Reminder message when the device has a broken LED group and the device is in an activated protection zone.
RCS 3000 "Serial Number" * is offline. Please check manual for more information.	Reminder message when the device is offline and the device is in an activated protection zone.



## **16 SUPPORT**

## 16.1 DI Technical Support

You can contact Dual Inventive Technical support through the email address <a href="mailto:support@dualinventive.co.uk">support@dualinventive.co.uk</a> or call 03300 169033.

Alternatively, please refer to the 'Contact Us' section within the MTinfo 3000 for customer support details specific to your project.

## 16.2 DI Security Contact

MTinfo 3000 is developed with a security-by-design method. Dual Inventive uses different layers of protection, including encryption, private networks, and a cloud system that is physically separate from other internet cloud systems. Dual Inventive monitors the system daily for security. Users are responsible for ensuring the security of their mobile devices.

If you identify any security concerns, please report them to <a href="mailto:security@dualinventive.com">security@dualinventive.com</a>.

## 16.3 Data Removal Requests (GDPR Compliance)

In accordance with GDPR, you have the right to request the deletion of your personal data from our systems. If you would like to exercise this right, please contact us at <a href="mailto:info@dualinventive.com">info@dualinventive.com</a>

We will process your request promptly and confirm once your data has been removed.