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1. Introduction

The Intros ÖV-Radar app helps people with restricted mobility to use local public transport independently.

At stops that are served by several different bus routes, Intros ÖV-Radar enables people to identify the bus they want to board, provided that it is fitted with the necessary vehicle module. The app is available free of charge for iOS (version 12.0 or higher) and Android (version 6 Marshmallow or higher) in the relevant app stores.



Figure 1: Intros ÖV-Radar in the app store

2. Requirements

When you first open the app, you will see an information dialog which lists all the requirements.

2.1 Location

Your actual location is not needed for the bus search and is not used at any time. This applies to both foreground and background use of the app. However, the buses that are found may indicate your current location under certain circumstances. This is why the app asks permission to identify your location.



Figure 2: Accessing the location.

2.2 Search for vehicles in the background

To enable Intros ÖV-Radar to inform you about approaching buses, even when the app is closed, you must select the "Always allow" option for location sharing. You can do this in the app settings.



Figure 3: Allow notifications

2.3 Bluetooth

Bluetooth must be enabled on your smartphone to allow Intros ÖV-Radar to detect and identify approaching buses. When you first open the app, it will ask you to enable Bluetooth, if it is not yet enabled on your smartphone.



Figure 4: Enable Bluetooth so that Intros ÖV-Radar can connect to the module in the bus.

2.4 Physical activity

This permission is used solely to improve the search for buses nearby and is therefore optional.



Figure 5: Accessing physical activity

3. An overview of the most important functions

When you open Intros ÖV-Radar, the "Radar" tab is always displayed. This shows all the buses nearby that are fitted with the vehicle module. By selecting a connection, you can confirm your intention to board a bus on this route. In the lower part of the screen, you can also add existing connections to or remove them from your favourites. If a connection is enabled, your intention to board is automatically triggered when a bus arrives.

The "Timetable" tab shows the next departures from a bus stop. When you tap on "Choose bus stop", all the nearby bus stops are displayed in the order of their distance away. After you choose a stop, the next connections are shown. The information is shown in real time, if this option is offered by the timetable provider.

The "Settings" tab has a number of settings for different functions that allow you to adapt Intros ÖV-Radar to meet your needs.

4. Radar

Radar is the term used to describe all the functions for communicating with buses. The buses must be fitted with a vehicle module. In addition, the "Radar" button in the top part of the screen must be set to "On".

4.1 Nearby buses

The nearby buses are shown in the top part of the main screen. Each bus is clearly identified using its route number and destination bus stop. Buses are shown when they are 50 metres away from the bus stop. Because of the Bluetooth communication protocol, buses remain visible for a few seconds after they have departed.

4.2 Boarding requests

You can signal your intention to board by tapping on the button "Board on route X" next to the bus you want in the list of buses. As soon as your intention to board has been successfully sent, the app will give voice feedback or will make your smartphone vibrate, if this option is enabled in the settings. When the bus stops, the door finding signal is triggered. This guides you to the door nearest to the front of the bus, which opens automatically. Once you are inside the bus, the app tells you the route number and the final stop on the route. If you are not yet near the door, the door finding signal can be triggered again.

4.3 Favourites

Your favourites are in the bottom half of the screen. When a connection is enabled, your intention to board is automatically triggered as a bus approaches. The boarding assistance functions are the same as those described in the previous section.

When a bus has arrived and the automatic boarding function is enabled, the connection is disabled in your favourites. You can then enable the connection in "Favourites" area of the screen again, which will allow you to use the automated support function in future.

You can send an entry from the "Timetable" tab to the "Favourites" area on the "Radar" tab (see section 5.4). You can delete a connection in "Favourites" by swiping it on the "Radar" tab.

4.4 List of bus stops

During your journey, you can see a list of bus stops on the "Radar" tab. When you select a nearby bus, the list of stops is displayed immediately. It shows the following four stops and the next stop automatically moves to the top of the list. This information comes directly from the onboard system and is updated in real time.

4.5 Intention to leave bus

You tap on the "Leave" button to indicate your intention to alight from the bus. The button is at the bottom of the screen when the list of stops is displayed. This function has the same effect as pressing the stop button in the bus. When the bus reaches the stop where you want to get off, the door nearest the front opens automatically.



Figure 6: The list of stops when a connection is selected

5. Timetable

The Intros ÖV-Radar app takes its timetable data from various timetable providers. You can select your region on the "Settings" tab (see section 6.1). The information is supplied over the internet and therefore requires a functioning internet connection.

5.1 Departure display

When you select a connection which has buses fitted with the Intros module, you can press and hold to add it to or remove it from your favourites. Routes where the buses are equipped with modules for Intros ÖV-Radar are marked with a timetable icon.

5.2 Selecting a bus stop

In Intros ÖV-Radar, you can select bus stops that are not nearby. You can search for a stop using the "Search for bus stop" function. When you select the bus stop you have searched for, the connections to that stop are shown.

5.3 Displaying connection details

If you select a connection in the departure table, the relevant bus stops with time information are shown in this view. This gives you an overview of your journey in advance. If you select a specific bus stop during your journey, the departure table for that stop is shown.

5.4 Managing favourites

In the detail view of a connection, you can mark the connection as a favourite at the top of the screen. Alternatively, you can press and hold a departure in the departure table to add this route to or remove it from your favourites. Routes that are marked as favourites here will then be displayed and enabled in the "Favourites" area of the "Radar" tab. This allows you to enable a connection quickly and efficiently if you regularly use a particular route.

Your favourite connections are marked in the departure table. You can delete the favourite by swiping it in the departure table or in the journey view.

6. Settings

The settings can be accessed from the main menu. You open the main menu by swiping from the left-hand edge of the screen or by using the menu bar in the top left-hand corner on the "Radar" or "Timetable" tab.

6.1 Selecting the region

Depending on the location and the availability of Intros ÖV-Radar, you can select a timetable here. To do this, tap on "Select region". Depending on the timetable provider, the data may be available in real time. We recommend choosing the (local) provider wherever possible, which will help to ensure that real-time information is available.

6.2 Bus settings

The following two assistance options are available here:

- Support when boarding and alighting from the bus This informs the driver that you may need assistance to board the bus, for example wheelchair ramps etc.
- Route announcement and door finding signal If this function is disabled, the door finding signal and the acoustic route announcement are not enabled when you board a bus.

6.3 Feedback from the Intros ÖV-Radar app

If the "Voice output" option is enabled, a voice will read out the buses detected by the radar.

Vibration is also available as feedback.

7. Information

This includes information about the version of Intros ÖV-Radar you are using, sources of data and data protection, plus contact details to get support with the app. To allow us to process your support request efficiently, it is very helpful if you can tell us which version of the app you are using.

Here you can also find information about the developers of the app and, of course, this manual for Intros ÖV-Radar.