Intros ÖV-Radar
User Manual

Author: SBV-FSA/Technology and Innovation Department
Version: 1.5 (November 2024)

Contents

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, if 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.
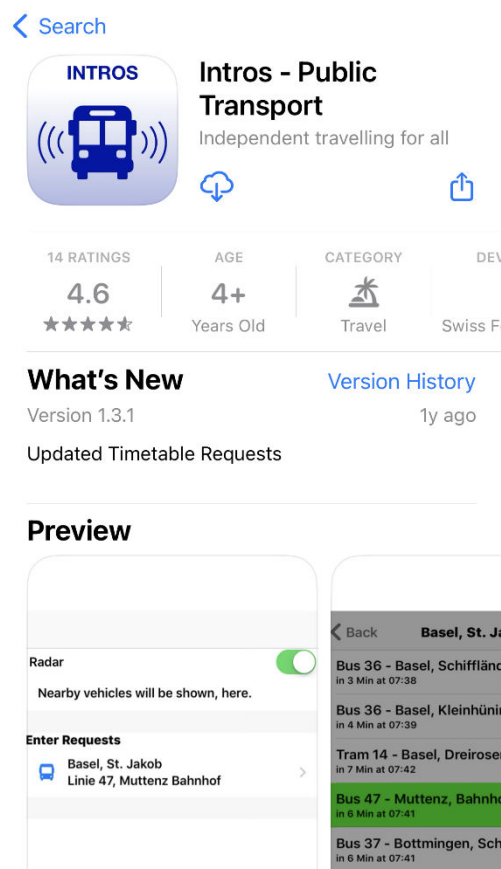

Figure 1: Intros ÖV-Radar in the app store

2.   Requirements

To allow you to use all the functions of Intros ÖV-Radar, individual functions must be enabled for the app on your smartphone.

2.1   Bluetooth

Intros detects and identifies incoming buses via Bluetooth communication; therefore, Bluetooth must be enabled on the mobile device. When

starting the app for the first time, Intros asks for access to Bluetooth, this request must be approved. For smooth communication between the Intros app and the equipped vehicles, a minimum BLE version of 4.2 is required, BLE version 5.0 is recommended.
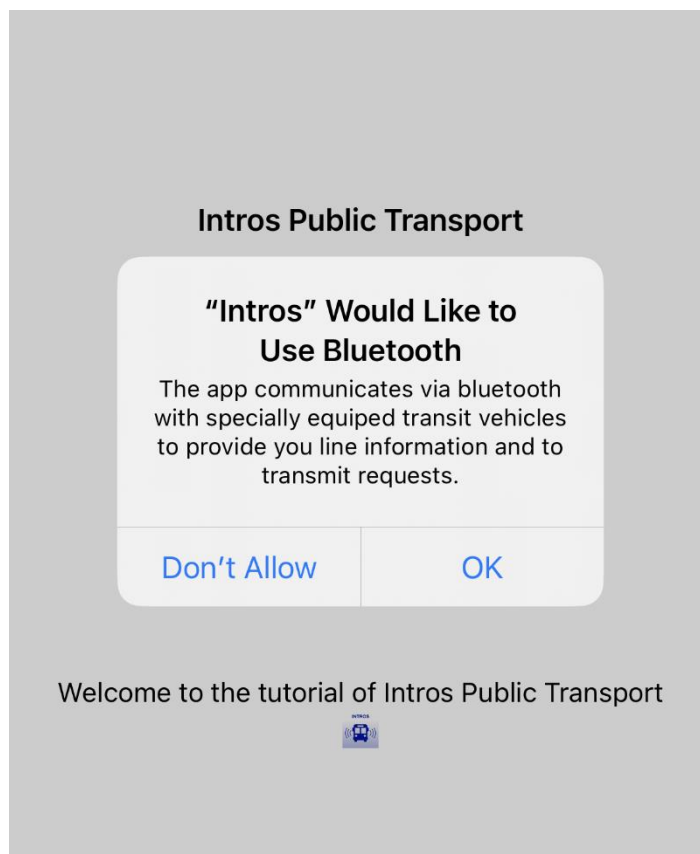

Figure 2: Enable Bluetooth so that Intros ÖV-Radar can connect to the module in the bus.

2.2   Notifications

To allow Intros ÖV-Radar to notify you using push messages that a bus is approaching, you must confirm the message "Intros would like to send you notifications" by tapping on "Allow".
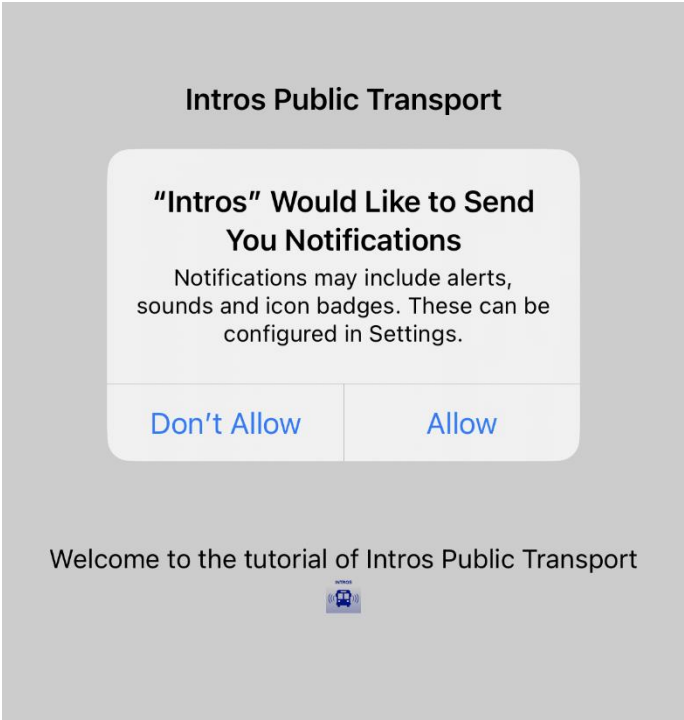
Figure 3: Allow notifications

2.3　Location sharing

Location services need to be used in the background to trigger notifications about approaching buses when the app is not open in the foreground. You must confirm the message by tapping on "Always allow".

Figure 4: Accessing the location

2.4　Retrospectively enabling iPhone functions

You can also enable these three settings retrospectively via the phone settings. "Bluetooth" must be set to "On". Under "Notifications", the Intros ÖV-Radar app must be authorised to receive notifications. In addition, you can enable location sharing by selecting the app in the phone settings.

3. An overview of the most important functions

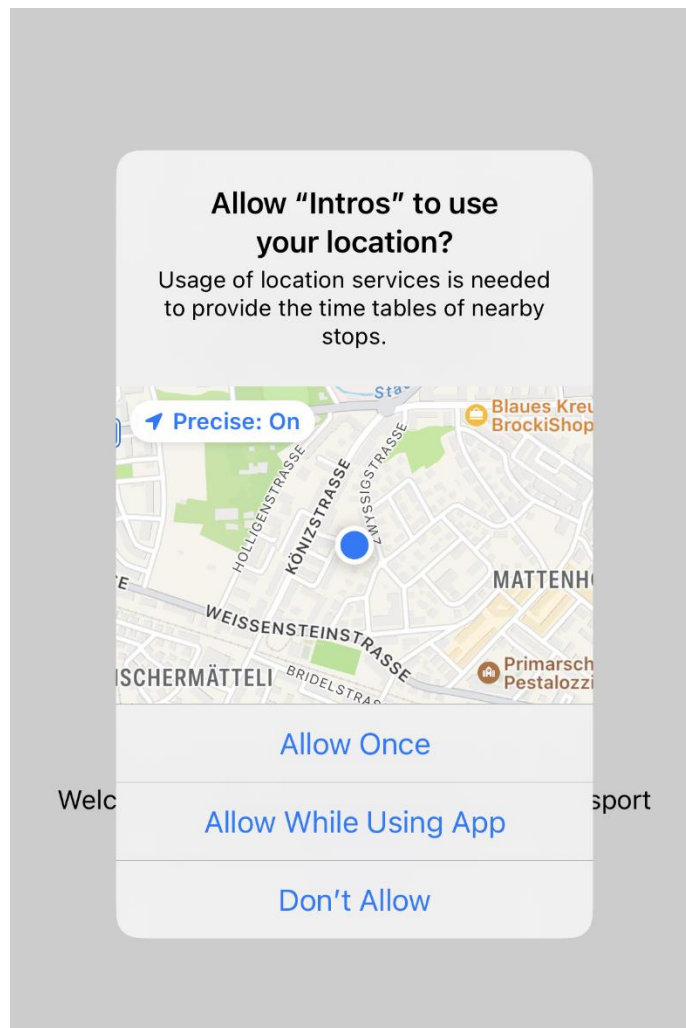When you open Intros ÖV-Radar, the "Radar" tab is always displayed. This shows all the buses nearby that are fitted with the vehicle module. By selecting a connection, you can confirm your intention to board a bus on this route. In the lower part of the screen, you can add existing connections to or remove them from your favourites. If a connection is enabled, an intention to board is automatically triggered when the vehicle arrives provided you are actively checked in to the app (see 4.1).

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 several settings for different functions that allow you to adapt Intros ÖV-Radar to meet your needs.

4. Radar

In the Radar tab, you will find all the functions that enable direct communication with nearby vehicles. 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 Check in

A Check in button can be found in the top right of the Radar screen. Checking in grants the user advanced Radar functions. See also Favourites (4.4) and Push notifications (4.5). The user will be checked out of the app again after a while. The conditions for checking out can be adjusted in the app settings (see 6.4). However, when a user is checked in, the button always shows when the app checks a user out.

4.2 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 approaching from the bus stop. Owing to the Bluetooth communication protocols, vehicles remain visible for a little while after they have departed.

4.3   Intention to board

You can send your intention to board by tapping the "Board" button next to the bus on the screen. If voice output is enabled on the "Settings" tab, your intention to board is confirmed by voice output and vibration. 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.

4.4   Favourites

Favourites can be found in the lower part of the screen. If a connection is enabled, an intention to board is automatically triggered when the corresponding vehicle approaches. However, you must be checked in to the app for this to trigger (see 4.1). The boarding assistance functions are the same as those described in the previous section.

A favourite is defined by the line number, destination and stop at which it should be triggered. Provided a GPS signal is available, favourites are only triggered if all three elements match.

Favourites can be activated or deactivated by selecting them. To find relevant favourites more quickly, they are sorted by distance after you check in, provided you have a GPS signal.

You can send an entry from the "Timetable" tab to the "Favourites" area on the "Radar" tab (see section 5.4). A connection shown under "Favourites" can be deleted again by swiping it in the "Radar" tab.

Figure 6: Nearby buses are shown on the "Radar" tab

4.5   Push notifications and app in the background

The app also offers background features if a user has checked in (see section 4.1). Firstly, favourites are also triggered in the background. In addition, push notifications inform the user about approaching vehicles. The user therefore has the option of tapping on the message to open the app at the right place.

4.6   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.

‹ Radar **Bus 8: Saali**

Next Stops

Holenacker
in <1min at 15:56

Tscharnergut
in <1min at 15:56

Bethlehem Kirche
in 1min at 15:57

Bethlehem Säge
in 2min at 15:58

Leave

Figure 5: The list of stops when a connection is selected

4.7   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.

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

The next departures are listed on the "Timetable" tab. Unless you select another bus stop yourself, the display shows the nearest bus stop and the connections there. This information is shown in real time, if the option is offered by the timetable provider. When you select a connection which has buses fitted with the Intros module, you can swipe to select "Add to Favourites" or to enable the connection. Routes where the buses are equipped with modules for Intros ÖV-Radar are shown in green. If you are using the voice output function, you will hear "Actions available" on the relevant route.

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 in the top right-hand corner of the screen. Alternatively, you can swipe a connection in the departure table to add it to your favourites. This connection 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

In this tab, you can choose individual settings for the app.

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 Sound effects

When you send your intention to board and alight from the bus, if sound effects are enabled, this is confirmed by an acoustic signal, as well as vibration.

You can also choose to switch "Speak announcement" on or off. If the "Speak announcement" function is switched on, when you send your intention to board a bus, this is confirmed with voice output from your smartphone.

6.4 Automatic check out

This is where you can manage the duration of a check in (see section 4.1). The following 3 options are available:
-        After 5 minutes
-        After 10 minutes
-        After changing location (approx. 100 meters from your current location)
"After changing location" is selected by default here.

As explained in point 4.1, vehicle recognition while the app is running in the background and automated intentions to board only work if the user is actively checked in to the app!

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.