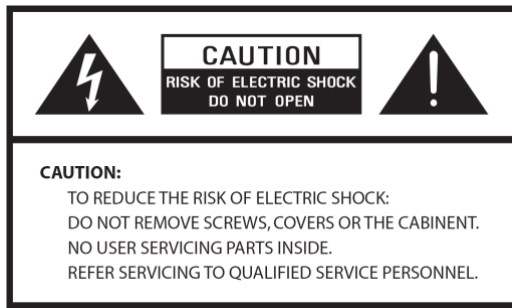# Pinell of Norway

User Manual

north

DAB/DAB+/ FM / Internet Radio / Bluetooth / Podcasts / Spotify

Important Safety Instructions

- Read these instructions
- Keep these Instructions
- Heed all Warnings
- Follow all instructions
- Do not use the speaker near water
- Clean only with dry cloth

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

1. Do not place unit near any heat source such as radiators, heat registers, stoves, or other apparatus that produce heat.
2. Do not attempt to use unit in temperatures outside the range of 0℃~40℃.
3. Do not block any ventilation openings of unit.
4. The unit shall not be exposed to dripping or splashing. No objects filled with liquids, such as vases, shall be placed on the unit.
5. Do not place any heavy loads onto the unit, and do not step on it.
6. Please read any rating labels or power input and other safety information.
7. This unit is intended to be used only with the power supply provided.
8. Protect the power cord from being walked on or pinched particularly at the plugs, convenience receptacles, and at any point where they exit from the unit.
9. Never unplug your unit by pulling on the power cord. Always grasp the plug firmly and pull straight out from the outlet.
10. Replace all electric service cords that have become frayed or otherwise damaged immediately. Do not use a cord that shows cracks or abrasion damage.
11. Unplug the unit for additional protection during thunderstorms or when the unit is not used for prolonged periods.
12. Any service work should be carried out by qualified technicians only.
13. The cabinet may only be opened by qualified technicians.
14. The normal function of the product may be disturbed by strong Electro-Magnetic Interference. If so, relocate the source of disturbance. Reset the product to resume normal operation.
15. The means of disconnecting this apparatus from the mains supply is plug of adapter. The disconnect device shall remain readily operable.
16. In the interests of safety and to avoid unnecessary energy consumption, never leave the unit switched on while unattended for long periods of time, e.g., overnight, while on holiday or while out of the house. Switch it off and disconnect the mains plug from the mains socket.

Table of contents

Introduction

Box contents

The Pinell north box includes the following items:
- 1x Main unit Pinell north
- 1x Power adapter 100-240 V to 9 V with **2x international power plugs, UK/EU**

External resources

To operate Pinell north, the following external resources are needed:
- A power source (100-240 V mains supply)
- Wireless (Wi-Fi) network with appropriate permissions and passphrase if required
- An iOS or Android device (for using control apps)

Conventions used in this guide

BUTTON (press) Physical button on the keypad

Option (select) Menu option shown on the display

Name Menu, screen or other name

Controls, connectors and display

Main controls and connectors

Reset

Keypad

Headphones

DC power in（9V）

BUTTON		INPUT	Function/usage
⏻ MODE	Power	Short Press/ Long Press 3S	Powering by battery: 1. Short press to turn on, the screen lights up and enter into the main interface 2. Long press 3S, release turning off warning, release your hand to turn off
		Short Press/ Long Press 3S	Powering by adapter: 1. The screen lights up and enters into the Standby state, display the clock 2. Short press to power on, enter into the main interface 3. Long press: enter into the Standby state display clock (the display shows the charging icon)
	Mode	Short Press	Short press in the power-on state, switch among Internet Radio, Podcasts, DAB+, FM, Bluetooth, Spotify modes;
SELECT	Select	Rotating	Rotate to clockwise or anticlockwise to adjust the volume based on the current mode page
		Rotating	Rotate to clockwise or anticlockwise switch to menu, list of items or station list. The current item is highlighted in reverse text (dark characters on a light background). Press to select the highlighted item.
		Short Press	FM mode: short press to enter into searching channels automatically
		Short Press	Play/Pause on Bluetooth mode
		Short Press	Confirmation function between on menu, item list or site list;

BUTTON	INPUT		Function/usage
◀	Move to Previous/Left	Long Press 3S	FM mode: searching previous channel automatically
		Short Press	DAB, FM mode: switch to the previous channel
		Short Press	Select function on Menu: move to previous function
		Short Press	Bluetooth mode: short press move to previous song
▶	Move to Next/Right	Long Press/3S	FM mode: searching next channel automatically
		Short Press	DAB, FM mode: switch to the next channel
		Short Press	Select function on Menu: move to next function
		Short Press	Bluetooth mode: move to next song
MENU	Menu/info	Short Press	Enter into Menu / move backwards in Menu / exit the Menu
		Long Press 3S	Show current channel information
PRESET	1	Long Press 3S	Store the current broadcasting station
		Short Press	Play the prestored radio station
	2	Long Press 3S	Store the current broadcasting station
		Short Press	Play the prestored radio station
	3	Long Press 3S	Store the current broadcasting station
		Short Press	Play the prestored radio station
	4	Long Press 3S	Store the current broadcasting station
		Short Press	Play the prestored radio station
RESET	Reset	Short Press	Hardware reset function key (hidden key)

Screens

The screen shows various menus, dialogues and displays. There are basically six types of screens:

- Standby (clock)
- Splash (mode)
- Now playing
- Dialogue
- Error/Information
- Menu

Where there is more text than can be fitted onto a screen, the text automatically scrolls right to left after a brief pause.

The **Standby screen** shows the time, date and any active alarm times.
If the Network is set to be active during Standby the Network Icon is shown.

A **Splash screen** is displayed for each mode.

Now playing screens show information about the audio source and track now playing, where available.

Dialogue screens are shown to allow the user to change settings. They vary in complexity from simple Yes/No options up to the scrollable network passphrase input screen.

The selected option is highlighted with a white background.

Dialogue screens mark the currently saved setting with an asterisk (*).
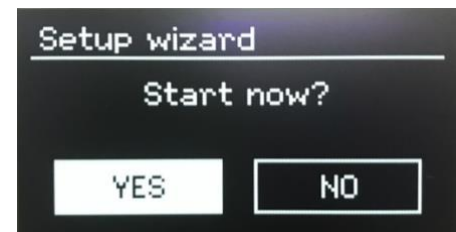
Error/Information screens give specific messages for a few seconds, then change automatically to the next screen.
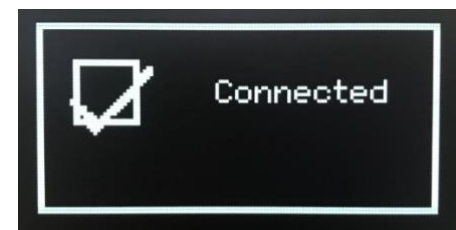
Menu screens – for details of the selected mode.

Getting started/setup

Pinell north is a sophisticated multi-source media player. To simplify the set-up process as much as possible when Pinell north is first started a setup wizard helps take you through the basic steps to enable connections with the different audio sources.
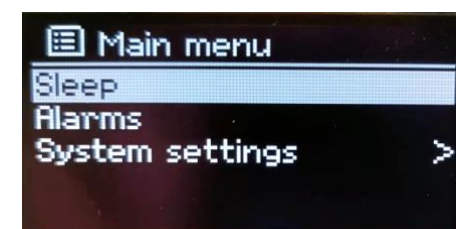
The various listening modes have different requirements:
- Internet Radio, Podcasts and Spotify Connect require a Wi-Fi connection
- DAB/FM requires a DAB/FM broadcast signal via the built-in antenna
- Bluetooth requires a Bluetooth capable smart device

To start Pinell north, connect the unit to a suitable power source using the power supply provided. The unit starts up (there may be a few seconds delay before the display is initialized).

After showing a Starting screen Pinell north will normally enter the last used listening mode. The first time Pinell north is started (or after being reset to factory settings) the setup wizard is launched automatically.

Language

When it is turned on for the first time, it will display the language setting and enter the Setup wizard for further settings. Select your language and press **SELECT**.
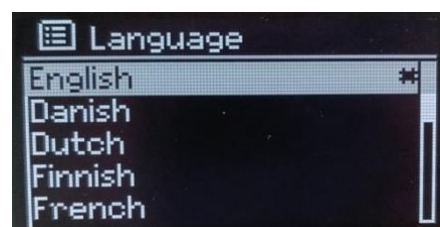
Setup wizard

Configure the date/time and network settings through the setup wizard. Once this has finished, the system is ready to use in most modes.
Select YES to start the setup wizard.
If you choose NO, a second screen asks if you would like to run the wizard next time Pinell north is started. The system then starts without configuring time/date and network settings and enters the Main Menu.
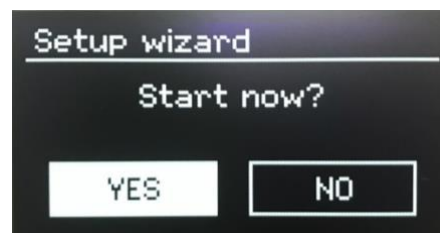
Note: To change these settings later, press **MENU** > **Main Menu** > **System settings** > and select the required settings option(s).
To run the setup wizard again, press **MENU** > **Main Menu** > **System settings** > **Setup wizard**.
The Network settings can be reset later manually running the Network wizard, press **MENU** > **Main Menu** > **System settings** > **Network** > **Network wizard**.

Note: If power is removed while the wizard is in progress, the wizard will run again next time Pinell north is started.

Operation

After the initial setup, Pinell north is ready for operating in most Modes.

Mode selection

To select a Mode press **MODE** repeatedly until the required Mode splash screen is displayed. After a brief moment Pinell north switches to that mode. If possible, the last station or track, previously used in that mode, is selected. If this is not possible, Pinell north scans for relevant stations, networks, or prompts the user for appropriate input.

The Common local controls for sound volume and Play/Pause are available in all listening modes.

Audio playback

The Volume rotary control (**SELECT**) is turned to increase or decrease the sound volume.

Press **SELECT** to start and stop tracks.

Use the 'Next' and 'Previous' button ▶ and ◀ :
- To scroll forwards or backwards through a track (long press)
- To skip to the next or previous track in the current playlist (short press).

Menu navigation

The primary control for moving through menus and options is the **SELECT** control. Rotate to move up or down a menu. Press **SELECT** once the required option or value is highlighted. All menus and lists act as loops such that turning the control to go beyond the first or last entry in a menu or list takes you to the opposite end of the menu or list. So going up from the first entry in a menu will take you to the last option in the menu, etc.

A scroll bar appears on the right of the screen if there are more options above or below those visible.
To enter the menu tree in a particular mode press **MENU**.
To move back a menu level press **MENU**.
To exit the menu system, press **MENU** again.

Each mode has a **Mode menu**, with options specific to that mode. For example, the FM mode menu has two mode specific options: Scan setting and Audio setting.
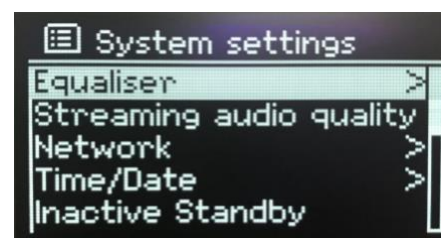
In addition, each mode menu has one final option:
System settings >. The '>' indicates options leading to further menus.
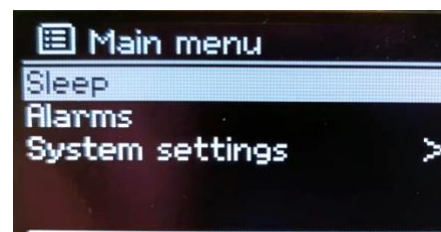
The **System settings** menu presents system setting functions to allow the user to setup how the unit behaves. This includes network, time, language and software parameters.

Text Entry

To enter search requests and or passwords, etc. the data entry screen presents all available characters and command functions in a continuous loop. Rotate **SELECT** to scroll back and forth through the loop as required. Press **SELECT** to select the currently highlighted character.

If you make a mistake, select the **BKSP** (backspace) option to remove the last character. When you have finished the word(s), select **OK** to enter the search word(s) or password. Select **CANCEL** to quit the entry screen.

Note: A short cut is available to reduce the amount of scrolling when selecting commands and characters. Press **MENU** to jump to the **BKSP** (Backspace) command option, from anywhere in the character loop.

To enter a string of characters, select each character in turn. As each character is selected, the key is built up and displayed in the field at the top of the display.

The three options – **BKSP**, **OK** and **CANCEL** – are included in the selection loop. These can be accessed just using **SELECT**, or, a short cut is available, press **MENU**, to jump to the **BKSP** option.
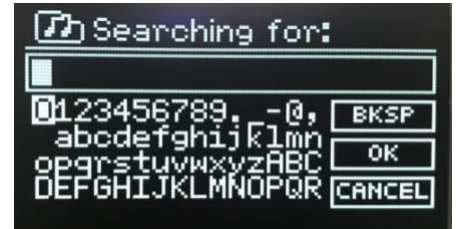
Presets

Under Internet radio/Podcasts (combined) / DAB / FM mode there are 4 preset buttons (1, 2, 3, 4). Presets are stored in the radio and cannot be accessed from other radios.

Select your favorite station to prestore, long press (1, 2, 3, 4) button, the screen will warn your stored success.

If you want to choose your preset station, short press (1, 2, 3, 4) button to switch your favorite station, complete your choice.

Settings

All settings parameters for Pinell north are available via the System settings menu.

Settings included in the Setup Wizard are indicated with 'wizard':

- Equaliser
- Streaming audio quality
- Network - wizard
- Time/Date – wizard
- Inactive Standby
- Language
- Factory Reset
- Software update
- Setup Wizard
- Info
- Backlight

Equaliser

Press **MENU** > **Main Menu** > **System settings** > **Equaliser**

Choose from a variety of predefined settings.

The last option 'My EQ profile setup' allows you to define your own settings, with custom bass and treble.
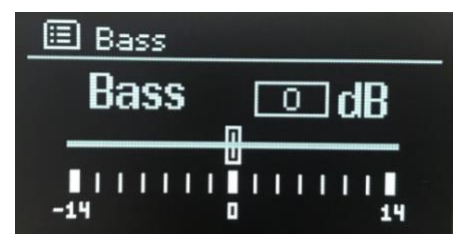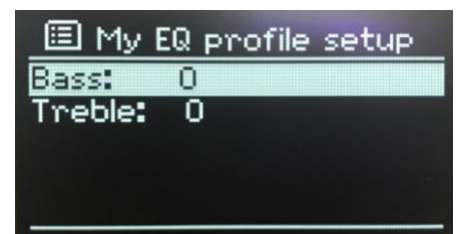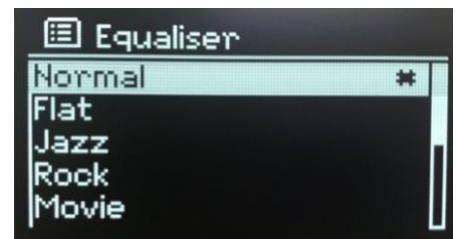
Streaming audio quality

- Low quality
- Normal quality
- High quality

Select the required level of audio quality for the available streaming services. The actual bit rate for each level depends on the service being used. The currently set quality level is indicated with an asterisk.

Network

- Network wizard - wizard
- PBC Wlan setup
- View settings
- Manual settings
- NetRemote PIN setup
- Network profile
- Clear network settings
- Keep network connected

Pinell north is compatible with all common network protocols and encryption methods, including *Wi-Fi Protected Setup* (WPS).

To connect Pinell north to your network, you need:

- A Wi-Fi wireless router, together with passphrase key, if set.

To select a network use either the Network wizard or Manual settings

Network wizard

This guides you through the necessary steps to join a network. This is also automatically run as part of the Setup wizard. The screens and options presented depend on the type of network and network protection used.

Selecting a network

When the Network wizard is chosen Pinell north automatically scans for available wireless networks and presents a list of SSID's (Service Set IDentifier) for the networks.

Pinell north remembers login details for the last four wireless networks it has connected to and will automatically connect to them when they are available. If connection to a network is temporarily lost, Pinell north will automatically reconnect.

Wi-Fi network (SSID), select a network from the list.
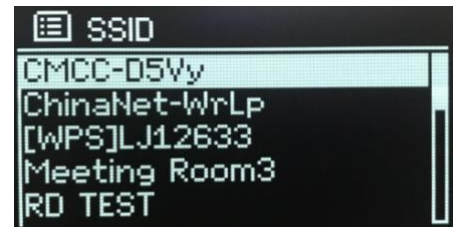
Open network

If the network is open (non-encrypted), Pinell north connects, and no further details are required; see On *completion* below.

Standard encrypted network

If the wireless network is protected the next screen presents options to enter the network key or passphrase.

Note: The default passphrase for most wireless routers is printed on a label on the router.

Enter the network key (passphrase), use the **SELECT** control to highlight the next relevant character and press to select each character in turn.

On completion
Pinell north connects to the selected network.
If connecting fails, Pinell north returns to a previous screen to try again. Press **MENU** to exit the process.

If the network connection is lost, Pinell north automatically reconnects.
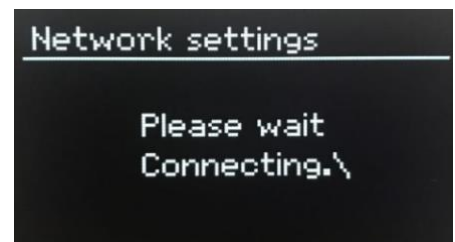
WPS setup (*Wi-Fi Protected Setup)*

WPS encrypted networks are identified by '[WPS]' at the start of the network name and have two methods of connection. Select one and follow the prompts. When using the network wizard an additional option to Skip WPS is available.

- **Push Button** >
  Pinell north prompts you to press the connect button on the router and then press **SELECT**.

- **PIN >** (code number)
  Pinell north generates an 8-digit code number which you enter into the wireless router, access point.

- **Skip WPS** >
  Enter key as for a standard encrypted network, above.

  Pinell north connects to the network, see 'On completion' above.

  For more information on setting up a WPS encrypted network, see your WPS router's instructions.

View settings

Displays the settings details for the current network setup, including:

- Active connections
- MAC address
- Wlan region
- DHCP
- SSID
- IP address
- Subnet mask
- Gateway address
- Primary DNS
- Secondary DNS
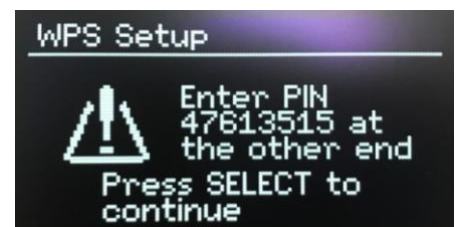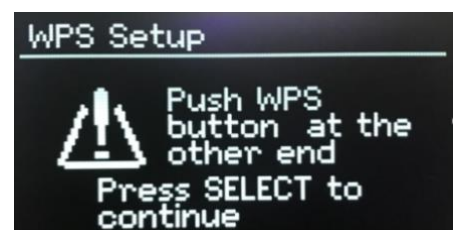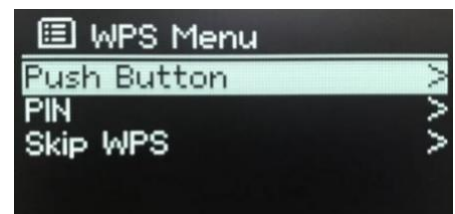
Manual settings

There are also other options for viewing and manually altering network settings from **MENU** > **Main Menu** > **System settings** > **Network** >. Users experienced with networking may find these options useful for diagnosing and fixing network problems.

- Wireless
- DHCP enabled/disabled
- SSIP
- Authentication
- Encryption type
- Passphrase/key

NetRemote PIN setup

Allows you to define a PIN number to be entered before being able to connect to Pinell north remotely over a network.

Network profile

This displays a list of the networks remembered by Pinell north (up to a maximum of 4). You can see the list of registered networks through **MENU** > **Main Menu** > **System settings** > **Network** > **Network profile** >. From here you can delete unwanted networks by turning and pressing **SELECT** then confirming delete **Yes**.

Clear network settings

This option will clear current network settings, to allow you to join an alternative network more easily.

Keep network connected

This option allows you to define whether Pinell north remains connected to its network in Standby mode and when not in Network radio mode.

Time/Date

- Set Time/Date
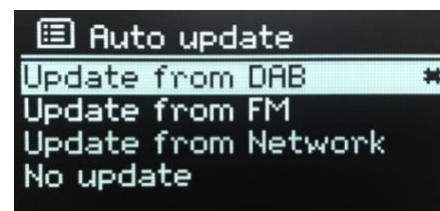- Auto Update
- Set Format

Set Time/Date (wizard)
The date and time are displayed as dd-mm-yyyy and hh:mm
AM/PM with the first value, dd, active (flashing). Adjust each value
with **SELECT** control.
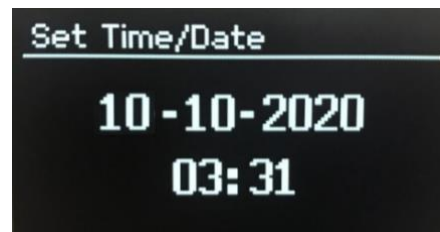
Auto-update (wizard)
Auto-update works with data sent over DAB, FM or the Internet.
The clock is only updated when in a corresponding mode, so it is
best to select a mode you use regularly.

DAB and **FM** use time signals broadcast with radio transmissions.
Network uses a time signal sent from the Frontier Smart
Technologies Internet radio portal when in any network- connected
mode.

1. Select **Update from DAB**, **Update from FM**, **Update from Network** or **No update**.
2. If you are updating from the network, set your time zone.
3. If your country uses daylight saving, the automatically updated time from the network may be
   wrong by one hour. When daylight saving adjustments are in effect, such as British Summer
   Time (BST), turn on the **Daylight savings** option to rectify this.

Note that if you are updating the time from DAB or FM, the **Daylight savings** option has no effect on the
clock's time.

Set format (wizard)

Allows you to change between 12- and 24-hour display.

Inactive Standby

This feature enables your radio to switch to standby mode by itself after a defined time.
Press **MENU** > **Main Menu** > **System settings** > **Inactive Standby** > select from Off, 2, 4, 5 or 6 hours

Language

The default language is English. To change, press **MENU** > **Main Menu** > **System settings** > **Language** >
then select your language.

Factory reset

A factory reset resets all user settings to default values, so time/date, network configuration and presets
are lost. However, the radio's current software version is maintained.

To perform a factory reset, press **MENU** > **Main Menu** > **System settings** > **Factory reset**;
Proceed? > **Yes**.

Software update

From time to time, Pinell may make software upgrades available with bug fixes and/or additional features. You can either check manually or set Pinell north to check periodically automatically (this is the default). If Pinell north detects that newer software is available, it asks if you want to go ahead with an update. If you agree, the new software is then downloaded and installed. After a software upgrade, all user settings are maintained.

CAUTION: Before starting a software upgrade, ensure that Pinell north is plugged into a stable mains power connection. Disconnecting power during a software update may permanently damage the unit.

To turn automatic checking on or off, select **MENU** > **Main Menu** > **System Settings** > **Software update** > **Auto-check setting**.

Software update manually

To upload new software to the Pinell north unit manually, identify and note the IP address of the relevant Pinell north unit (press **MENU** > **Main Menu** > **System settings** > **Network** > **View setti**ngs > **IP address**)

On your computer

1. Ensure the Wi-Fi interface of your computer or device is switched on.
2. In a Web browser on the computer or device, navigate to the Pinell north Web configuration page using the IP address identified above.
3. The Pinell north Web Configuration page opens.
4. Select the Update tab and browse to the appropriate file location. Select the required software file (*.sap.bin) and click on the send button to upload the software file to the unit. The display presents information on the progress of the software update.
5. When the software upload is completed, the unit automatically reboots using the new software.
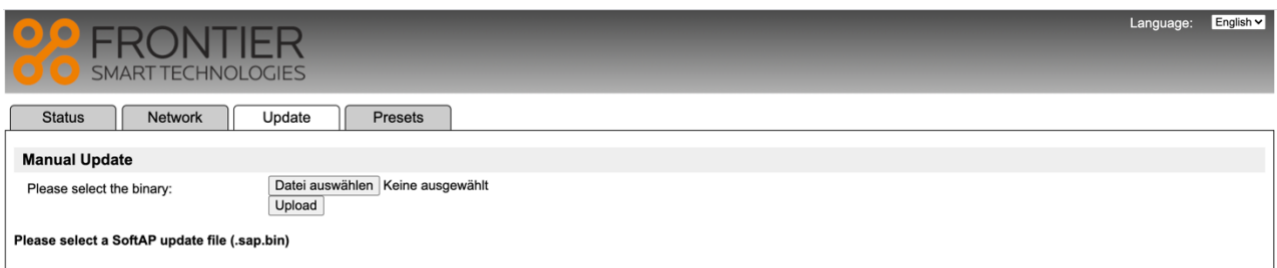
Setup wizard

This allows you to run the Setup wizard at any time. The wizard guides you through the essential settings in the following order:

1. Language
2. Date/Time – Set format
3. Auto update – select clock update source or No Update
4. Set Time/Date (this step is only needed if the 'No Update' option is selected in Auto update)
5. Network wizard automatically runs

Once you are connected to a network the wizard is completed.

Info

Shows details of the current system:
- SW Version
- Spotify version
- Radio ID: Unique code used to identify this particular radio device
- Friendly name: (name by which the radio is identified on a network).

Backlight

The display can be set to dim, when in Standby, after a Timeout period. This option allows you to set the timeout period and the brightness settings before (On level) and after (Dim level) the timeout period.
- On level: High, Medium or Low.
- Dim level: Medium, Low or Off

Internet Radio Mode

Pinell north can play thousands of radio stations from around the world through a Wi-Fi connection.

When you select Internet radio mode, Pinell north contacts the Frontier Smart Technologies Internet radio portal to get a list of stations, organized into different categories like Country, and Popular. Once you select a station, Pinell north connects directly to that station.
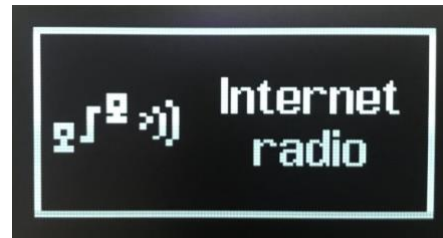
To enter Internet Radio mode, press **MODE** to cycle through the listening modes until *Internet Radio* is displayed.

The first time Internet Radio mode is selected (or no previous Internet Radio service has been selected), the user is taken directly to the Station list menu to find and select an Internet Radio service.

If the Internet Radio portal server is unavailable, Pinell north defaults to the last listened Playable URL for Internet Radio station, or the URL stored in a preset if playing from a preset.

Internet Radio menu

- Last listened
- Station list
- Main menu

Last listened

Presents a list of (up to) the last ten Internet Radio stations that have been selected.

Station list

If no previous Internet Radio service has been selected, the Station list menu is automatically presented to find and select an Internet Radio service.

The station list menu is provided from the Internet radio portal, so it is only accessible when Pinell north is connected to the Internet. Station lists and submenus will change from time to time.

The Station list is organized into various categories and search facilities:

- <Local area> - dependent on radio device's location, for example: UK
- Search
- Location
- Popular
- Discover

<Local area> - dependent on radio device's location, for example: UK

Presents a sub-menu for local area stations. The names and types of categories are dependent on local network information, for example a radio located in the UK would have a main title 'UK' and display, local stations, BBC stations, Genres and/or stations from a specific city.

Choose the required category and either a further list of sub-categories is shown, or (if there are no further sub-categories) the available stations for the chosen category are listed.
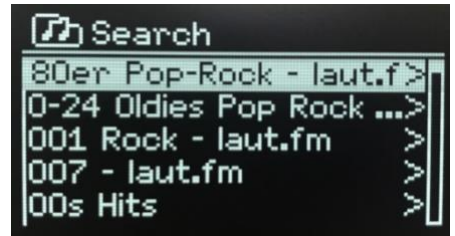
Search

You can also search through Internet broadcasts for stations with particular keywords in their title.

To search, press **MENU** > **Search**

Enter a keyword by selecting characters in turn, then **OK**.
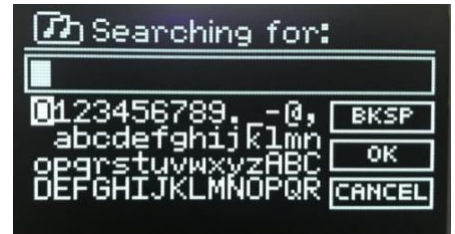
Select a broadcast from the list.

Location

To select an Internet broadcast from a particular location, press **MENU** > **Location**. Select a continent from the menu and a list of countries available is presented, select a country and the available internet radio stations are presented.

Choose a radio station from the list to tune to that station.

Popular

Presents a list of the most popular internet stations from around the world.

Discover

Allows you to select from a list of stations defined by either their origin (Country), Genre (style of music) or language. Navigate through the category options, once you have made your selection a screen confirms your selected category and the number of stations within that category. To see the list, select the option showing the number of available stations.

Now playing information

While the stream is playing, the screen shows its name and description. If artist and track information is available, this is also shown. To view further information, long press **MENU**. Each time you long press **MENU**, another set of information is displayed, cycling through the following details:

- Slogan (default; where available)
- Language/Location
- Codec and sampling rate
- Playback buffer
- Today's Date

Podcasts Mode

Pinell north can play thousands of podcasts from around the world through a Wi-Fi connection.

When you select Podcast mode, Pinell north contacts the Frontier Smart Technologies Podcast portal to get a list of available podcasts. Once you select a podcast, Pinell north connects directly to that podcast source.
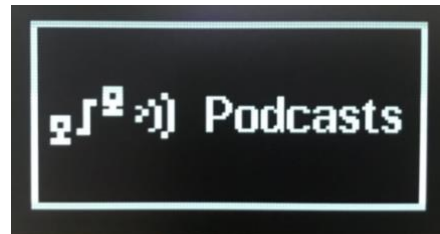
To enter Podcast mode, press **MODE** to cycle through the listening modes until *Podcasts* is displayed.

The first time Podcast mode is selected (or no previous Podcast service has been selected), the user is taken directly to the Podcast list menu to find and select a service.

If the Podcast portal server is unavailable, Pinell north defaults to the last listened Playable URL for Podcasts, or the URL stored in a preset if playing from a preset

Podcasts menu

- Last listened
- Podcast list
- Main menu

Last Listened

Presents a list of (up to) the last ten Podcasts that have been selected.

Podcast list

If no previous Podcast service has been selected, the Podcast menu is automatically presented to find and select an Podcast service.

The podcast list is provided from the Podcast portal, so it is only accessible when Pinell north is connected to the Internet. Podcast lists and submenus may change from time to time.

The Podcast list is organized into various categories and search facilities:

- <Local area> - dependent on radio device's location, for example: UK
- Search
- Location
- Discover

<Local area> - dependent on radio device's location, for example: UK

Presents a sub-menu for local area stations. The names and types of categories are dependent on local network information, for example a radio located in the UK would have a main title 'UK' and present a sub-menu to search for podcasts using a variety of categories, for example, Comedy of the week, Books and Authors, Popular, etc.

Choose the required category and either a further list of sub-categories is shown, or (if there are no further sub-categories) the available podcasts for the chosen category are listed.

Search

You can also search through podcasts with particular keywords in their title.

To search, press **MENU** > **Search**

Enter a keyword by selecting characters in turn, then **OK**.
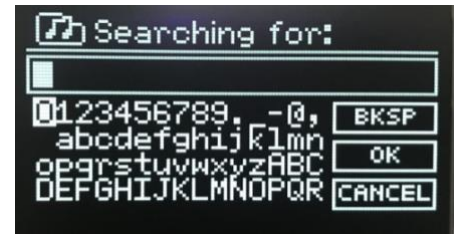
Select broadcast from list.

Location

To select a podcast from a particular location, press **MENU** > **Location** >

Select a continent from the menu and a list of countries available is presented, select a country and the available podcasts are presented.

Choose a podcast from the list to tune to that podcast.

Discover

Allows you to select from a list of podcasts defined by either their origin (Country), Genre (music) or language. Navigate through the category options, once you have made your selection a screen confirms your selected category and the number of podcasts within that category. To see the list, select the option showing the number of available podcasts.

Spotify Connect Mode

Use your phone, tablet or computer as a remote control for Spotify.
Go to spotify.com/connect to learn how.
The Spotify Software is subject to third party licenses found here:

https://www.spotify.com/connect/third-party-licenses

DAB Radio Mode

DAB radio mode receives DAB/DAB+ digital radio and displays information about the station, stream and track playing.

To enter DAB mode, press **MODE** to cycle through the listening modes until *DAB Radio* is displayed.

The DAB radio mode menu offers the following options:

- Station list
- Scan
- Manual tune (displays the signal strength for selected channel)
- Prune invalid
- DRC
- Station order
- Main menu
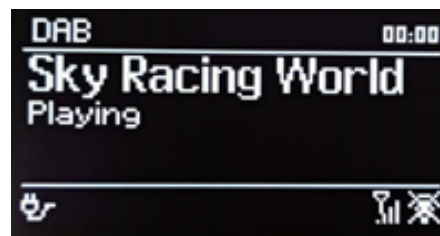
Station List

The first time you select DAB radio mode, or if the station list is empty, Pinell north automatically performs a full scan for available stations. You may also need to start a scan manually to update the list of stations for one of the following reasons:

- Available stations change from time to time

- If reception was not good for the original scan (for example the antenna was not up), this may result in an empty or incomplete list of available stations.

- If you have poor reception of some stations (burbling), you may wish to list only stations with good signal strength.

A question mark before a station in a list indicates that the station is currently unavailable. Depending on the cause of the loss of signal this may be only temporary.
Stations that are unlikely to be available again (for example you have moved out of the broadcast range of a station), can be removed from the station list.

Scan for stations
To start a scan manually, press **MENU** > **Scan**
Once the scan is complete, the radio shows a list of available stations.
The Manual tune menu option allows the user to select a particular channel and display the signal strength for that channel.

Remove stations from list
To remove stations that are listed but unavailable, press **MENU** > **Prune invalid**

Selecting stations
To listen to or change a station, turn **SELECT**, a list of stations from which you can select is presented. Stations listed with a '?' question mark in front of them are not available. Once selected, the station plays and the screen shows 'Now playing' information about the station, track or show broadcast by the station. Alternatively pressing either ▶ or ◀ , jumps to the stations up or down in the stations list.

Now playing information

While the stream is playing, the screen shows its name and DLS (*Dynamic Label Segment*) information broadcast by the station giving real-time information such as program name, track title and contact details. Stereo broadcasts are indicated with an icon at the top of the screen. To view further information, long press **MENU**.

Each time you long press **MENU**, another set of information is displayed, cycling through DLS text, program type, ensemble name/frequency, signal strength/error rate, bit rate/codec/channels, today's date and DL Plus (if available).

Settings

Dynamic range compression (DRC)

Some DAB broadcasts offer dynamic range compression (DRC). This feature allows radios to compress the dynamic range of the output audio stream, so that the volume of quiet sounds is increased, and the volume of loud sounds is reduced. This can be useful if you are listening to music with a high dynamic range in a noisy environment (for example, classical music while cooking).

To change the DRC setting for Pinell north, press **MENU** > **DRC**, and then **DRC high**, **DRC low** or **DRC off**.

Station order

You can choose the order of the DAB station list to be either *Alphanumeric* or *Ensemble*. *Ensemble* lists groups of stations that are broadcast together on the same ensemble, for example *BBC* or *South Wales local*.

To change station order, press **MENU** > **Station order** > then **Alphanumeric** or **Ensemble**

FM Radio Mode

FM radio mode receives analogue radio from the FM band and displays RDS (Radio Data System) information about the station and show (where broadcast).

To enter FM Radio mode, press **MODE** to cycle through the listening modes until *FM Radio* is displayed.

The FM radio mode menu offers the following options:

- Scan settings
- Audio settings
- Main menu

Selecting stations

To find a station, press **SELECT**. The frequency display starts to run up as Pinell north scans the FM band. Alternatively, you can scan up or down by long press the ▶ or ◀ buttons or tune manually with short press.

Note: Scanning can be set to search for strong signals only (see Settings below).

Now playing information

While an FM station is playing, the screen shows one of the two following sets of data:

- If RDS information is available, by default the service name (i.e. station name) is displayed.
- If no RDS information is available, the currently tuned frequency is shown.

Settings

Scan settings

By default, FM scans stop at any available station. This may result in a poor signal-to-noise ratio (hiss) from weak stations. To change the scan settings to stop only at stations with good signal strength, press **MENU** > **Scan setting** > **Strong stations only?** > **Yes**.

Audio settings

By default, all stereo stations are reproduced in stereo. For weak stations, this may result in a poor signal-to-noise ratio (hiss). To play weak stations in mono, press **MENU** > **Audio setting** > **FM weak reception: Listen in mono only** > **Yes**.
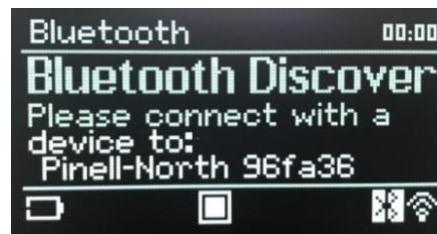
Bluetooth Mode

Bluetooth mode allows Bluetooth devices to pair with Pinell north, stream music and displays information about the track playing.
To enter Bluetooth Audio mode, press **MODE** to cycle through the listening modes until *Bluetooth Audio* is displayed.

The Bluetooth Audio menu offers the following options:

- Setup Bluetooth
- View details
- Main menu

Note: iOS 13 (or later) devices connected via Bluetooth technology are capable of sending Album artwork, associated with the track currently being streamed to the Pinell north device, for display on the screen of the Pinell north device.

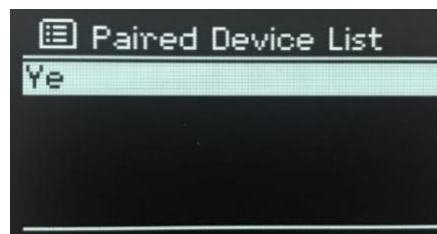## Pair a Bluetooth device with Pinell north

In Bluetooth mode, on Pinell north press **MENU** > **Setup Bluetooth**, this puts the Pinell north into discoverable mode.
The screen shows the Bluetooth name of the audio System
On your Bluetooth smart device, make sure you Bluetooth is on and scan for devices select the Pinell north audio system from the list of available Bluetooth devices
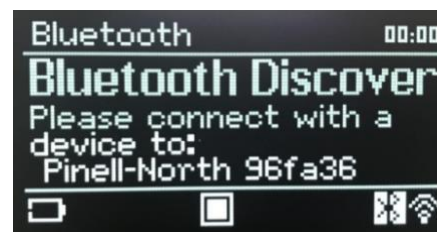
Switch to another paired Bluetooth device

In Bluetooth mode, on the Pinell north press **MENU** > **View details** > **Paired Device List** then select the required device from the list.

Control from Pinell north

While in Bluetooth mode you can pause, play, jump to next track and jump to previous track (in the playlist on the controlling Bluetooth device) using the buttons available on the Pinell north audio system.

Bluetooth connection details

For information on the current state of the Bluetooth connection and paired Bluetooth devices, in Bluetooth mode, press **MENU** > **View details**

The menu offers the following options:
Bluetooth Info – information on the current state and version of the Bluetooth connection on the Pinell north audio system.
Connected Device – details of the currently connected Bluetooth device

Paired Device List – list of up to eight devices that are paired with the Pinell north audio system.

Sleep and Alarms

In addition to clock/date, there are two versatile wake-up alarms with snooze facility, and a sleep function to turn the system off after a set period. Each alarm can be set to start in a particular mode.

Sleep

To set the sleep timer, press **MENU** > **Main menu** > **Sleep** > rotate **SELECT**: Sleep OFF, 15, 30, 45 or 60 minutes.
Stop when the required time is displayed, after a brief moment the screen returns to the screen being used before the sleep function was selected. On the Now Playing screens the remaining sleep time is displayed at the bottom of the screen.
To cancel a sleep time, select Sleep OFF from the sleep options.

Note: A sleep time is automatically cancelled if Pinell north is put into Standby.

Alarms

To set or change alarm press **MENU** > **Main menu** > **Alarms**.

Select the alarm number (1 or 2) then configure the following parameters:

- **Enable**: Off, Daily, Once, Weekends or Weekdays
- **Time**: 00:00AM (adjust as necessary)
- **Date**:   01-01-2021 (adjust as necessary -this option is usually hidden and only required if 'Once' is selected in the Enablefield)
- **Mode**: Buzzer, Internet radio, DAB, or FM
- **Preset**: Last listened or 1-10
- **Volume**: 0 – 32.

To save these settings and set the alarm, scroll down and select **Save**.

Note: The Now Playing, screen shows active set alarms with an icon at the bottom left. The Standby screen shows active set alarms with an icon and the alarm time.
At the set time, the alarm will sound. To temporarily silence it, press **SELECT**. Pressing **SELECT** repeatedly cycles through the available snooze periods: 5, 10, 15 or 30 minutes.
The radio returns to standby for the set period, with the silenced alarm icon flashing and a countdown of the remaining snooze period. After the set snooze time the alarm will sound again.

Note: During a snooze period, to change the snooze time, press **SELECT** to select a new snooze time. Any remaining snooze time is reset to the selected time period.
To cancel a sounding alarm, or an alarm in snooze, long press **MODE** (Power)

Troubleshooting and error messages

Troubleshooting

Problem	Cause	Solutions
Cannot connect to network	Network down	Check that network is working between a computer and the router
	Router restricts access to listed MAC addresses	Obtain the Pinell north MAC address from **MENU** > **Main Menu** > **System settings** > **Network** > **View settings** and add to router list.
	Insufficient Wi-Fi signal strength	Check distance to router; see if a computer can connect to the network in this location
	Unknown encryption method	Change encryption method on router. Pinell north supports WEP, WPA and WPA2
	Unusual network configuration	Setup network manually through **MENU** > **Main Menu** > **System settings** > **Network** > **Manual settings**
	Firewall preventing access	Check the following ports are open on the router: UDP and TCP ports 80 and 123; DNS port 53. Windows shares: ports 135 – 139 and 445. Windows Media Player: varies – non-Microsoft firewalls may require configuration for UPnP.
Cannot connect to Internet	Internet connection down	Check that Internet is working for a computer connected to the same network
	Firewall preventing access	Check the following ports are open: UDP and TCP ports 80 and 123; DNS port 53. Some Internet radio stations may require additional ports to be opened.
Cannot play particular Internet radio station	Station not broadcasting, overloaded or insufficient bandwidth. Station broadcasting using unknown codec. Link out of date.	Try other stations; try listening on computer via Internet radio portal website; try later.

Error messages

Message	Description	Example
Failed to connect	Correct key entered, but router rejects request	MAC filtering enabled on router
Network error	Problem past router - incorrect data being received from network	Data obtained from server is unreadable.
Network not ready	Problem with connection to router	Router switched off
Network timeout	Problem past router - no response being received from network	Streaming IR station and suddenly station becomes unavailable
Service not available (DAB)	No DAB reception	
Update failed	Software upgrade failed	

This symbol on the product or in the instructions means that your electrical and electronic equipment should be disposed at the end of its life separately from your household waste. For more information, please contact the local authority or your retailer where you purchased the product.

The product is CE certified. The manufacturer assures that this product will only be placed on the market in conformity with the LVD, EMC, RED and RoHS directives. The declaration of conformity can be found here with the product: **www.pinell.com/certificates**

*   Information in this manual is subject to change without notice.

Pinell is a label of TT Micro AS (www.ttmicro.no)
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