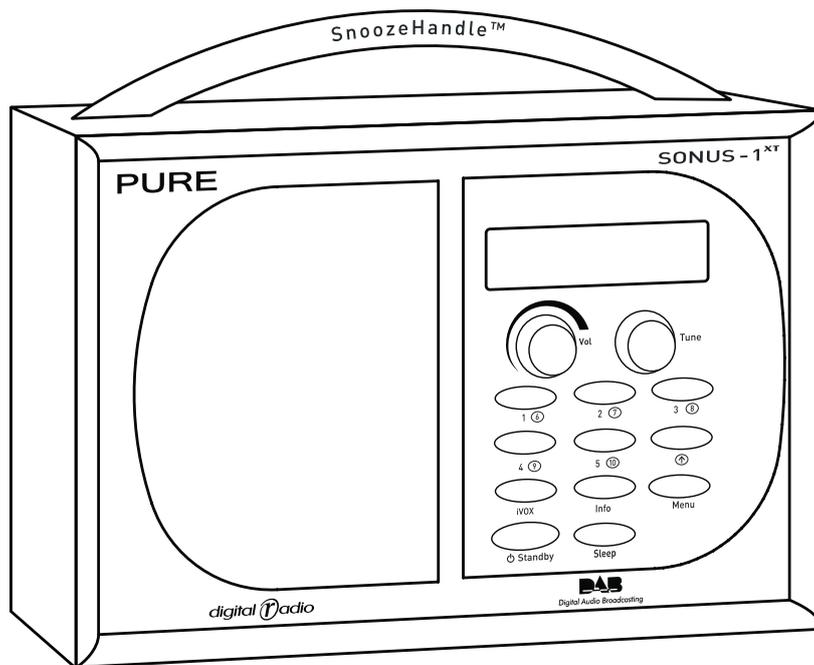


# PURE

# SONUS - 1<sup>XT</sup>

Owner's manual



**DAB**  
Digital Audio Broadcasting

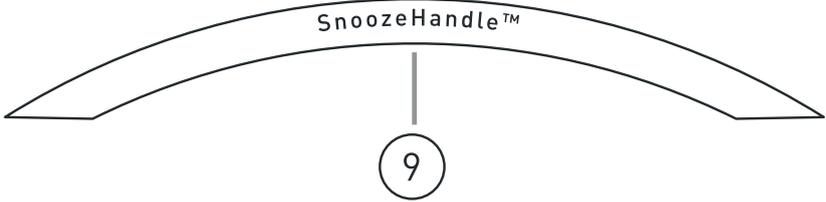
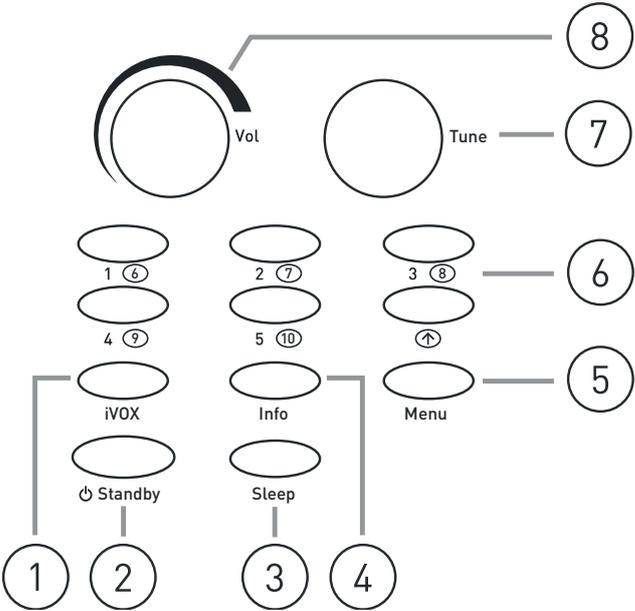
digital **R**adio

**iVOX**

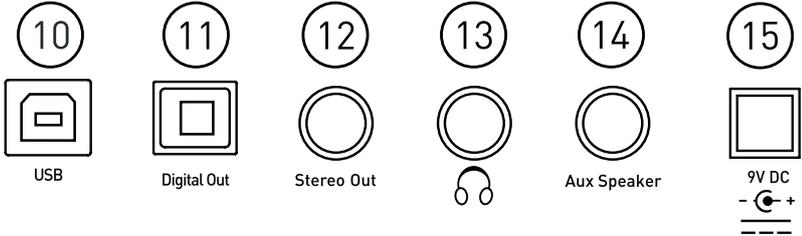
**VET**

# Controls and Connectors

## Front panel



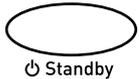
## Rear panel



1. **iVOX** – press and repeat to toggle speech on or off, or hold to switch full speech on.
2. **Standby** - press to switch between standby mode and power on.
3. **Sleep** - press and repeat to set your radio to enter standby in 15, 30, 45, 60 or 90 minutes.
4. **Info** - press and repeat to change the display mode between scrolling text, clock, day and date, programme type, multiplex name, channel, mode and signal quality. Hold down to hear scrolling text spelled out.
5. **Menu** - press to access the setup menu, turn the Tune knob to scroll through and push to select an option. You can also press Menu to exit menus and menu options.
6. **Presets (1-5)** - press and hold for around two seconds to store a station under that number. Press and release to select and listen to a preset. Press up arrow (⬆) first to access presets 6-10.
7. **Tune** - turn to scroll through and press to select radio stations and menu options. Press to hear current station name and see signal strength.
8. **Vol** – turn to adjust the volume.
9. **SnoozeHandle™** - tap to hear and see the time, set the alarm to snooze or illuminate the clock in standby. Tap twice to hear alarm settings. Hold in standby to display clock with full brightness.
10. **USB** - connect to a PC for software upgrades.
11. **Digital Out** - optical S/PDIF - connect to an external amplifier or recorder.
12. **Stereo Out** - analogue output - connect to an external amplifier or recorder.
13.  **Headphone** - connect to headphones.
14. **Aux Speaker** - connect to the optional XT-1 speaker for full stereo output.
15. **9V DC** - connect to mains adapter.

# Quick start

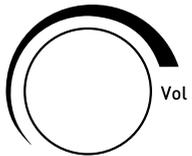
This section provides information on how to set up and start using your radio.



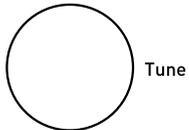
- 1 Fully extend the aerial, connect the mains adapter and plug in to your power supply.

- 2 Push the Standby button to switch the unit on.

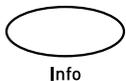
The LCD lights up, the radio says 'Welcome to the PURE SONUS-1<sup>XT</sup> with iVOX. Autotune in progress, please wait' and a progress bar indicates the progress of a full autotune to find the stations available. When finished the number of stations found is announced, the station names are placed in a station list and you hear the first station.



- 3 Adjust the volume control if required.

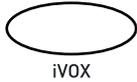


- 4 Turn the Tune knob to browse the station list. When you stop the station name will be announced. Push Tune to select and listen to another station.



- 5 Push the Info button and repeat to cycle through the optional display modes including the full screen clock.

# Using your SONUS-1<sup>XT</sup>

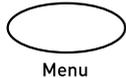


## iVOX - Making your radio speak



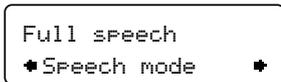
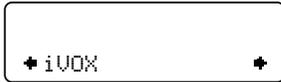
iVOX brings a new level of accessibility to your radio providing speech assistance to help you navigate menus, select stations, hear scrolling text and even check the time and alarm settings.

You can switch speech on or off at any time by pressing the iVOX button or customise using the iVOX menu options.



### Setting the speech mode

1. Press the Menu button, turn the Tune knob and push to select iVOX.
2. Select Speech mode. You see and hear the currently selected speech mode
3. Press Tune and turn and push again to select one of the following options:



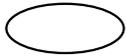
**Full speech** All speech on, including menu options.  
This is the default option.

**Time only** Time only, tap the SnoozeHandle to hear the time.

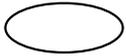
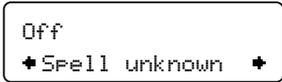
**Stations only** Station names only, scroll station list or select station to hear.

**Time/stations** Time and station names only.

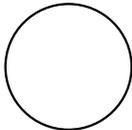
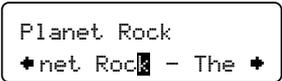
**Speech disabled** All speech off.



Menu



Info



Tune

## Spelling unknown stations

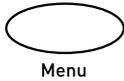
By default, if your radio encounters a station for which it has no speech stored it will announce its name as 'Unknown', if preferred you can set your radio to spell out the name of new or unknown stations by setting this option 'On'.

1. Press the Menu button, turn the Tune knob and push to select iVOX.
2. Select Spell unknown. You see and hear the current state.
3. Press Tune and turn and push again to switch the option on or off.

## Spelling scrolling text

You can set your radio to spell out the scrolling text broadcast by most DAB stations.

1. Hold the Info button down for around three seconds. You hear a beep and the scrolling text being spelled out and see a cursor on screen showing the position within the text. You hear another beep when the text end is reached.
2. Turn the Tune knob to pause the speech and step forward (clockwise) or back (anti-clockwise) within the text if required and press Tune to start the text scrolling again.
3. Press the Tune knob while text is scrolling to stop the scrolling and return to the start of the text.
4. Press the Info or Menu button to exit and switch off scrolling text speech.



## Setting alarms

SONUS-1<sup>XT</sup> has two alarms which switch the radio on (if in standby) and tune to a station or sound a tone. You can set alarms when your radio is on or in standby as follows:

◆ Alarm settings ◆

07:00 Daily Off  
◆ Alarm 1 ◆

1. Press the Menu button and push the Tune knob to select the Alarm settings option.
2. Turn the Tune knob to view and hear current Alarm 1 or Alarm 2 settings and push if you want to change that alarm.
3. Turn the Tune knob to scroll through the following options, you see and hear the current setting, push to change any of them. If you change a setting you move to the next option on the list.

**Set alarm** Set the alarm on or off.

**Set time** Turn the Tune knob to set the hours, push the Tune knob, turn and push to set the minutes.

**Set days** Choose between Daily, Weekday, Saturday, Sunday or Weekend.

**Set mode** Choose between a Radio (default) or Tone alarm. If you set a radio alarm the volume will be whatever the volume control is set at when the alarm goes off.

**Select station** Select the station you want your alarm to tune to. (If you have selected Radio mode above.)

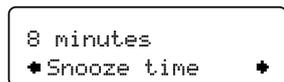
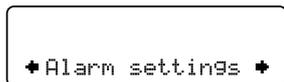


When finished, press the menu button or wait a moment and you'll return to your normal display mode. If your display mode is set to Clock you will see a bell symbol on the screen and alarm time for each alarm that is set.

**Note** If you set a radio alarm and the station is not available when it is due to go off a tone alarm will sound instead.



Menu



### Changing the alarm snooze time

You can change the period that the alarm snoozes for when you touch the SnoozeHandle™. The default is 8 minutes.

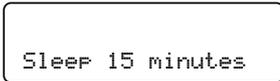
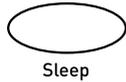
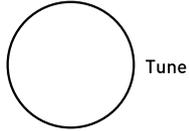
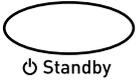
1. Press the Menu button, select Alarm settings and choose Snooze time. You see the current snooze time at the top of the screen.
2. Turn the Tune knob to choose a snooze period between 5 and 59 minutes and push to confirm the change. The snooze time set will apply to all alarms.

### Cancelling alarms

When a radio or tone alarm goes off you have three options, Snooze, switch off or switch on:



**Snooze** Tap the SnoozeHandle to snooze the alarm for the period set (the default is 8 minutes). The radio or tone will mute and you see the snooze icon on the screen. The alarm will repeat when the snooze period has elapsed. You can repeat the snooze as many times as you want up to 60 minutes after the last snooze.



The alarm will automatically turn off after 60 minutes. To cancel the snooze and the alarm push the Tune button.

**Switch off** Press the Standby button to return to standby and cancel the alarm.

**Switch on** If it is a tone alarm press the Tune button and the radio will switch on. If it is a radio alarm, any button (other than Standby) will operate as normal plus cancel the alarm.

## Setting a sleep time

You can set a sleep time after which SONUS-1<sup>XT</sup> will switch itself into standby mode, ideal if you want to fall asleep listening to the radio. You can also set a Sleep time from standby which will switch the radio on first.

Press the Sleep button and repeat to choose between 15, 30, 45, 60 or 90 minutes or select Off to set no sleep time. If your display mode is set to Clock you will see a SLEEP icon on the display.

Press the Sleep button again to view and hear the time remaining until SONUS-1<sup>XT</sup> will switch off or to change the sleep time again.



Stereo Out



Digital Out

## Recording from your SONUS-1<sup>XT</sup>

You can record from your SONUS-1<sup>XT</sup> using the Stereo Out or Digital Out sockets. You can also set a record timer to automatically switch your unit on and tune to a particular station at a time of your choosing – this may be useful if you have a MiniDisc recorder or similar with a synchro-record facility and you use the Digital Out socket. You cannot record one station and listen to another at the same time. **Note** The volume level of the recording is at a set level and is not dependant on the position of the volume knob.



Menu

### Setting a record timer

The record timer function lets you set times at which your SONUS-1<sup>XT</sup> will automatically switch itself on (if in standby mode) tune to a station for a specified period then automatically switch itself off again. You can set up to nine timers.

◆ Record timer ◆

07:00 Monday Off

◆ Timer 1 ◆

1. Press the Menu button and select the Record timer option.
2. Turn the Tune knob to view the nine timers and push to select and change one.
3. Set the station, day, start time and duration you want and also whether you want the speaker on or off. Push the Tune knob to select and turn to change settings.

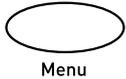
These instructions will not set the record time on your recorder. Some recorders can detect when a digital S/PDIF signal is present (synchro-record) or you may have to set your external recorder to start recording at the same time.

If using a synchro-record method you should check that the Digital out socket is set to Off/Timer so that your recorder can detect when the recording is to start. To do this, Push the Menu button, select Audio settings and choose Digital output. Select the Off /Timer option.



When finished, press the Menu button or wait a moment and you'll return to the idle display mode and the timer will be set. If your display mode is set to Clock you will see a timer symbol on the screen showing that one or more timers are set. The timer list will also show 'Set' next to those that are currently active.

# Setup options



Press the Menu button, turn the Tune knob and push to select one of the following setup options. Some of these options are also available from standby.

Alphanumeric  
✦ Station order ✦

## Station order

Changes the order in which stations appear as you scroll through the station list. Turn the Tune knob to scroll through the following options and push to select one:

**Alphanumeric** Displays all stations in alphanumeric order.

**Fav station** Displays your most listened to stations at the top of the station list and the rest below, in alphanumeric order. Your favourite stations are displayed with a heart (♥) next to their names.

**Active station** Displays active stations at the top of the service list and inactive ones at the bottom in alphanumeric order. Inactive stations are those on your station list but not currently available, marked with a '?'.

**Multiplex** Lists stations in groups according to their multiplex. Multiplexes or ensembles are groups of stations owned and broadcast by a multiplex operator.

**Trim stn. list** Removes inactive stations from the station list.

♥ → **presets** Available only when Fav station order (above) has been selected. Transfers your favourite stations to the preset buttons.

◆Display settings◆

## Display settings

Turn the Tune knob to view current settings and push to change one of the following.

High

◆Brightness◆

### Brightness

To change the screen brightness turn the Tune knob and push to choose between Low, High or Low/Timeout (backlight off until a button is pushed).

Backlight off

◆Standby mode◆

### Standby mode

You can choose whether the backlight is on or off when your SONUS-1<sup>XT</sup> is in standby mode. If you switch the backlight off in standby mode a touch on the SnoozeHandle will override this and turn the backlight on for a few seconds to display the clock, useful for checking the time in the middle of the night.

To change the display standby mode turn the Tune knob and push to choose between Backlight on and Backlight off.

◆Audio settings◆

## Audio settings

### Digital output

Off/Timer

◆Digital out◆

The Digital Output setting controls the Digital Out socket on the rear of your radio. Turn the Tune knob and push to select one of the following options:

**On** - if you want continuous output to an amplifier or recorder.

**Off/Timer** - if you want to connect to a recorder with a synchro-record feature.

DRC 0  
\* DRC value \*

### DRC value

DRC (Dynamic Range Control) value makes the quieter sounds in a broadcast easier to hear at low volume or in a noisy environment. The DRC level of a broadcast is set by the station and sent with the signal. At the time of writing in the UK only BBC Radio 3 and 4 regularly use DRC. Check with the broadcasters to find out if they use DRC on their stations.

The DRC value setting is only available if VET is set Off see the following section for details. Turn the Tune knob to scroll through the following options and push to select one:

**DRC 0** DRC is switched off. Any DRC level broadcast will be ignored.

**DRC ½** DRC level is set to ½ that sent with the broadcast.

**DRC 1** Applies the DRC level as sent with the broadcast.

Off  
\* VET levelling \*

### VET levelling

**VET**

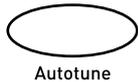
VET (Volume Equalisation Technology) helps level volume levels across different stations making each sound as if it is at the same volume. It does this by constantly monitoring the stations on your station list and lowering or raising their volume to meet an optimum level.

**Note** When VET is On use of DRC would distort the levelling effect so DRC is disabled when VET is On.

Turn the Tune knob and push to set VET On or Off.

## Tuning

Tuning SONUS-1<sup>XT</sup> is very simple. When you first switch on it automatically finds all the stations available in your area. You may want to re-tune if you move your radio to a different room or if you want to receive a new multiplex. Multiplexes, sometimes called ensembles, are groups of stations owned and broadcast by a single operator. You can re-tune your SONUS-1<sup>XT</sup> at any time using the following three tuning options:



### Autotune UK

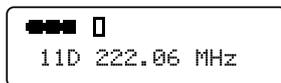
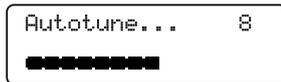
Scans all UK frequencies. This should only take a few seconds.

### Autotune full

Scans the full frequency range in Band III. This is useful if you use your SONUS-1<sup>XT</sup> outside the UK and may take a minute or more.

### Manual tune

Shows signal level, which you can use to find the best position for your radio and aerial.



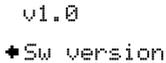
1. Turn the Tune knob to scroll through different channels and push to choose one (UK stations are in channels 11B to 12D). You see a signal level display. The empty block indicates the minimum required level for reception and the filled blocks indicate the current level.



11D Digital1

2. Move your aerial while watching the display and try to raise the current level to the empty block or beyond. Once you have a good signal the display will show the multiplex name and add the stations in that multiplex to the station list.
3. Push the Menu button to exit or turn the Tune knob and push to change channel.

**Note** You can also display the signal level for a station by pushing the Tune knob.



v1.0  
+ Sw version +

## Sw version

Displays the version number of the software installed in your radio. You may be asked to quote this if you contact Technical Support.



+ Sw upgrade +

## Sw upgrade

You can upgrade the software in your SONUS-1<sup>XT</sup> using a PC connected to the USB connection on the rear panel. To install an upgrade, select Sw upgrade and follow the instructions provided with the software. Upgrades may be issued to provide enhanced functions or improve performance. Check our website for details of when software upgrades are available and instructions on how to install them. To exit the Software upgrade menu press the Menu button again.

 15:35

## Demo mode

This mode demonstrates the unique speech features of the SONUS-1<sup>XT</sup> including accessing alarm times and station name announcement. Info modes are also demonstrated. While the unit is in demo mode a DEMO icon will appear on display. All controls will work as normal when demo mode is switched on.

**Note** Demo mode works even if you currently have no signal. SONUS-1<sup>XT</sup> will use pre-recorded samples for time and other announcements in this situation.

Turn the Tune knob and push to set the demo mode On or Off.

# Hints and tips

This section provides information and advice on using your radio.

## **(<</>>) Secondary services**

Secondary services accompany some stations, providing extra information or alternative content and may only be broadcast at certain times. At the time of writing not many secondary services are available. If a station has one or more secondary services available the display will show '>>' next to the station name on the station list and the secondary service will appear next to the station as you turn the Tune knob. A secondary service will display '<<' before the service name on the station list showing that it belongs to the station preceding it in the list.

## **(?) Inactive or unavailable stations**

Inactive or unavailable stations are stations which appear on the station list but are not currently available because either you are outside the broadcast area, have lost reception or the station is not currently broadcasting. If the station has '?' before its name in the station list the station is unavailable. If you select a station which has this symbol, your radio tries to tune to that station. If still unavailable, you will return to the last station you were listening to.

## **I hear a 'burbling' sound on some stations**

Although DAB is excellent at providing quality audio from very little signal, the quality can suffer if the signal strength is too low. If that happens, a 'burbling' sound can sometimes be heard. To help reduce this, check that your aerial is fully extended and upright. If the problem persists try moving your radio or repositioning your aerial using manual tuning.

## **Display says 'No stations available'**

Check that your aerial is fully extended. Use Autotune to search for stations. Try using manual tuning to adjust your aerial or radio position.

### **My alarm/timer didn't work**

Check that you set the alarm or timer on (If display mode is set to clock you will see a timer or alarm icon on the display).

Check that the station you are tuned to is available – the clock/alarm/timer relies on the time signal broadcast by the multiplexes.

If you are using synchro-record check that you have set the Digital out to Off/Timer this triggers your recorder.

### **Clock shows the wrong time**

This may happen if the multiplex you are tuned to broadcasts an incorrect time signal, try tuning to a station in another multiplex.

### **None of the buttons seem to work**

If the display is on but most buttons seem not to work your SONUS-1<sup>XT</sup> may be in standby. If so, you should see a standby indicator () on screen.

### **I can't see my clock in the dark**

Tap or hold (full brightness) the SnoozeHandle to illuminate the display if your unit is in standby or set your display backlight on for permanent illumination.

### **Resetting your radio**

Resetting your radio removes all presets, stored stations and favourite station settings and resets all options to defaults. To select the reset option:

1. Press and hold the Menu button for more than two seconds. The display will show 'Press Tune to confirm reset'. Release the Menu button.
2. Press the Tune knob to confirm the reset or press no buttons to cancel the reset.

# www.pure.com

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Imagination Technologies Ltd. warrants to the end user that this product will be free from defects in materials and workmanship in the course of normal use for a period of two years from the date of purchase. This guarantee covers breakdowns due to manufacturing or design faults; it does not apply in cases such as accidental damage, however caused, wear and tear, negligence, adjustment, modification or repair not authorised by us. Please return your warranty card to register your product with us. Should you have a problem with your unit please contact your supplier or contact PURE Digital Support at the address shown on the rear of this manual.

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PURE Digital, Imagination Technologies Ltd., Imagination House, Home Park Estate, Kings Langley, Herts, WD4 8LZ, UK



+44 (0)1923 277477 support  
+44 (0)1923 277488 sales



+44 (0)1923 270188



support@pure.com  
sales@pure.com

# PURE