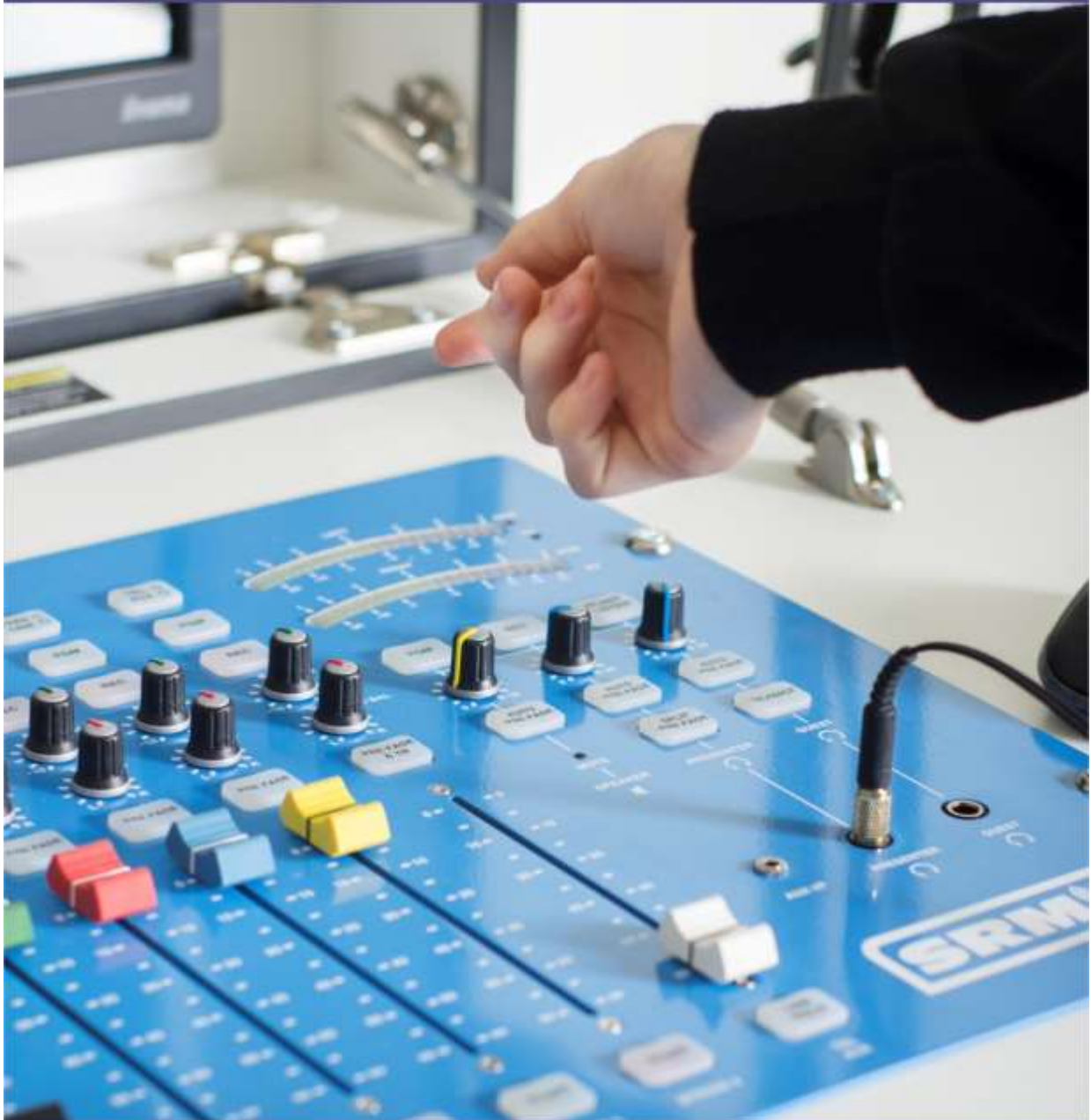




Studio User Guide



schoolradio.com

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Introduction

Your School Radio system includes everything you need to launch and run your own School Radio station. School Radio is a fantastic platform to offer your students a range of benefits including:

- Inclusion
- Building confidence
- Developing Speaking & Listening skills
- Achieving National Curriculum Goals
- Showcase Student work
- Enhance School Spirit
- Giving Students a voice
- Encouraging Teamwork
- Providing useful Vocational & Life skills

One of the key aims for most School Radio projects is to provide a platform for students to discuss topics that are important to them and share their interests, achievements and work with the school community.

This School Radio Training Manual will provide the basic information you need to start using School Radio equipment to launch and run your School Radio station. We also offer a range of additional resources to help you to develop the content for your station once you have the basic skills included in this manual. These include:

- First School Radio Show Handbook - <http://www.schoolradio.com/pages/first-school-radio-show-handbook>
- Premium Resource Kits - http://www.schoolradio.com/resource_categories/2
- Video Quick Guides – <http://www.schoolradio.com/pages/quick-guides>
- Mixing Desk Video Tutorials - <http://www.schoolradio.com/pages/mixer-tutorial-videos>
- Myriad Software Video Tutorials - <http://www.schoolradio.com/pages/myriad-software-tutorial-videos>
- Product Documentation - <http://www.schoolradio.com/pages/product-documentation>

All School Radio packages come with at least 12 months' technical support included so if you get stuck you can talk to one of our experts using the contact details below.

- Telephone +44 (0)1482 350700
- Email support@broadcastradio.com

Annual or lifetime support is also available at a small additional cost.

Ways To Broadcast

Before getting started on how to use your School Radio package to create radio shows and programmes, you should consider the different ways you could broadcast or deliver your content to your listeners. There are a number of options open to you and you can use a mixture of them to meet your requirements. How each of these individual methods are achieved falls beyond the scope of this manual, however our experts would be happy to offer advice and assistance on each of the broadcast options outlined below. Please contact us using the details above for further information.

- **Streaming Live or Pre-recorded Shows Around Your School Network –**
This is the backbone of most School Radio installations and involves using the schools existing network infrastructure to deliver 'live' radio to a range of devices around the school. These might include:
 - PC's & Macs in classrooms
 - Interactive whiteboards (with speakers) in classrooms
 - Mobile devices such as tablets and phones wirelessly connected to the school network. This includes both iPads and Android devices.
 - PA systems in assembly halls or dining areas. If you have a laptop and speakers that you use for assembly, then these could also be used to play your School Radio station.
 - Dedicated speakers. We can install both internal and external speaker systems to provide coverage in key areas of the school or playground.
 - Existing message board screens or TVs around the school.

In most cases this type of system will be set up as part of a standard School Radio installation (assuming network access is available at time of installation). Because this uses the School's existing infrastructure there

are no ongoing costs for this type of system other than general music licensing which applies to all broadcast radio.

- **Streaming on the Internet** – This method is very similar to Streaming on your School Network except that instead of being limited to devices within the school network, web broadcasts can be heard by anyone with a connected device. This has the following benefits:
 - Includes friends, family and the community with School activities.
 - Builds confidence and a sense of achievement for the students.
 - Showcases the students / school to the wider community.

Imagine a student writing a poem, recording it for the school radio and then going home, phoning his granny in Australia and telling her she can tune in to tomorrow's broadcast to listen to what he did in school today!

In order to make accessing your School Radio content as easy as possible, both web streaming and access to the School Radio Player is included free of charge for at least twelve months with every School Radio installation.



This simple web application can be customised to include your station name, description and logo. You can then add a launch button to your website to allow visitors easy access to both live shows and pre-recorded podcasts.

The School Radio Player is a cross-platform web based player which means it will work on computers, phones, tablets using Windows, OSx, iOS, Android, Linux etc.

There is a small ongoing charge for continued external web streaming. This is to cover the hosting of the stream as well as the School Radio

Player. You can alternatively use any third party service provider to stream your School Radio content to the web. The first twelve months (at least) is included free with all School Radio packages.

In addition to the School Radio Player, you may want to consider a dedicated mobile app for iOS, Android or both. We can provide this service in partnership with a third party company or any app developer should be able to help. Alternatively, it could be a great project for students to complete. Please contact our experts for further advice or information.

- **Pre-Recorded Podcasts** – In addition to live streaming, you can also create pre-recorded shows, features or segments that can be uploaded to your website or your School Radio Player. Whilst live shows play an important role in School Radio, the target audience (students) are increasingly consuming ‘on demand’ content in preference to traditional scheduled content so it makes sense to make your key School Radio content available in this format.
- **Speaker Installations** -

[Does Live always mean Live?](#)

In order to fit with School requirements, you may not always want your students to broadcast content ‘live’. Most School Radio actually consists of pre-recorded content that is scheduled to play at a certain time to be part of your ‘live broadcast’.

You may decide that initially students should pre-record everything as it give you more editorial control and allow them to correct any mistakes they make. Once they (and you) are more confident, you may wish to introduce some live content. The aim will be for the listener to not be able to tell what is ‘live’ and what has been pre-recorded.

[Ideas / Content you could include](#)

There is a wide range of content that you could include in your School Radio broadcasts covering everything from academic work to discussing social interest topics, comedy, drama and politics. The graphic below shows just some of the ideas we have seen being successfully used in School Radio stations.



Identifying Your School Radio Package

This manual refers to specific equipment and software, not all of which is included with every School Radio package. It will be useful for you to identify which package your school has and which key core equipment is included so that you can concentrate on the sections of this manual that are applicable to the equipment you have. The section below shows our most common School Radio packages and the key equipment included in each. Please note that older

packages and custom packages are not listed below. Our experts will be happy to assist you in identifying the equipment that you have.



Starter Package

Mixer: ARC8

Mics: 2 x Dynamic Mics

Software: Myriad Lite & AutoPlayer

Web Encoder: BUTT Encoder

School Radio Player: 12 Months



Classic Package

Mixer: SRM

Mics: 1 x Condenser + 1 x Dynamic

Software: Myriad Lite & AutoPlayer

Web Encoder: BUTT Encoder

School Radio Player: 12 Months



SR2 Portable

Mixer: SRM

Mics: 2 x Condenser Mics

Software: 3 x Myriad Suite & AutoPlayer

Web Encoder: SAM Broadcast

School Radio Player: 24 Months



SR3 Portable Plus

Mixer: SRM

Mics: 2 x Condenser Mics

Software: 3 x Myriad Suite & AutoPlayer



Web Encoder: SAM Broadcast
School Radio Player: 24 Months

SR4 Fixed

Mixer: SRM
Mics: 1 x Condenser + 3 x Dynamic
Software: 3 x Myriad Suite & AutoPlayer

Web Encoder: SAM Broadcast
School Radio Player: 24 Months



AR1 Accessibility

Mixer: SRM
Mics: 2 x Condenser Mics
Software: 3 x Myriad Suite & AutoPlayer

Web Encoder: SAM Broadcast
School Radio Player: 24 Months



SR5 Digital

Mixer: Axia iQ
Mics: 2 x Condenser Mics
Software: 3 x Myriad Suite & AutoPlayer

Web Encoder: SAM Broadcast
School Radio Player: 24 Months



SR6 Digital

Mixer: Axia iQ

Mics: 4 x Condenser Mics

Software: 3 x Myriad Suite &
AutoPlayer

Web Encoder: SAM Broadcast

School Radio Player: 24 Months

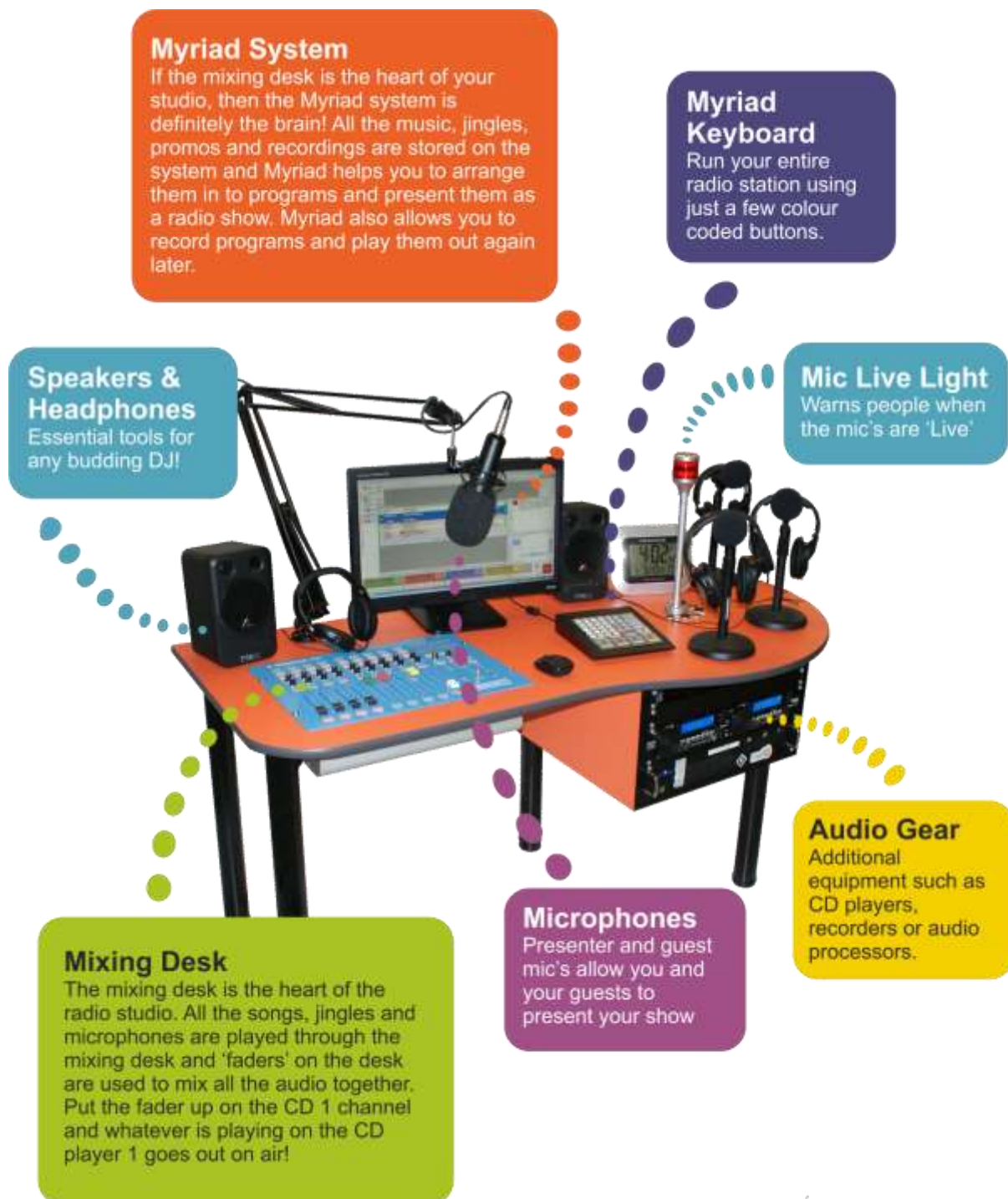
The key differences in these packages are outlined below:

- Mixers – We currently offer three different mixer technology solutions depending on your requirements and budget. All three will be covered in this manual although most of the focus will be on the SRM mixer as that is included in the majority of the packages.
- Playout Software – All of the packages include the Myriad Playout software as used in commercial radio around the world, but some of the packages include the full Myriad Suite whilst others only include Myriad Lite by default. Both versions will be covered in this documentation.
- Encoding Software – This is the software that encodes the audio as a web stream. We offer two different solutions depending on which package you opt for. BUTT is a basic application that is available for free on the web. SAM Broadcaster is a professional application that offers enhanced options. The cost of SAM Broadcaster is included in some of our packages.
- Microphones – In general, we offer two different types of microphone:
 - Condenser Mics – These are powered mics and are usually used for the main presenter.
 - Dynamic Mics – These are passive mics and are often used for guests.

Condenser mics are more sensitive (and often more expensive) but either are suitable for School Radio applications.

Parts of a School Radio Package (SR4)

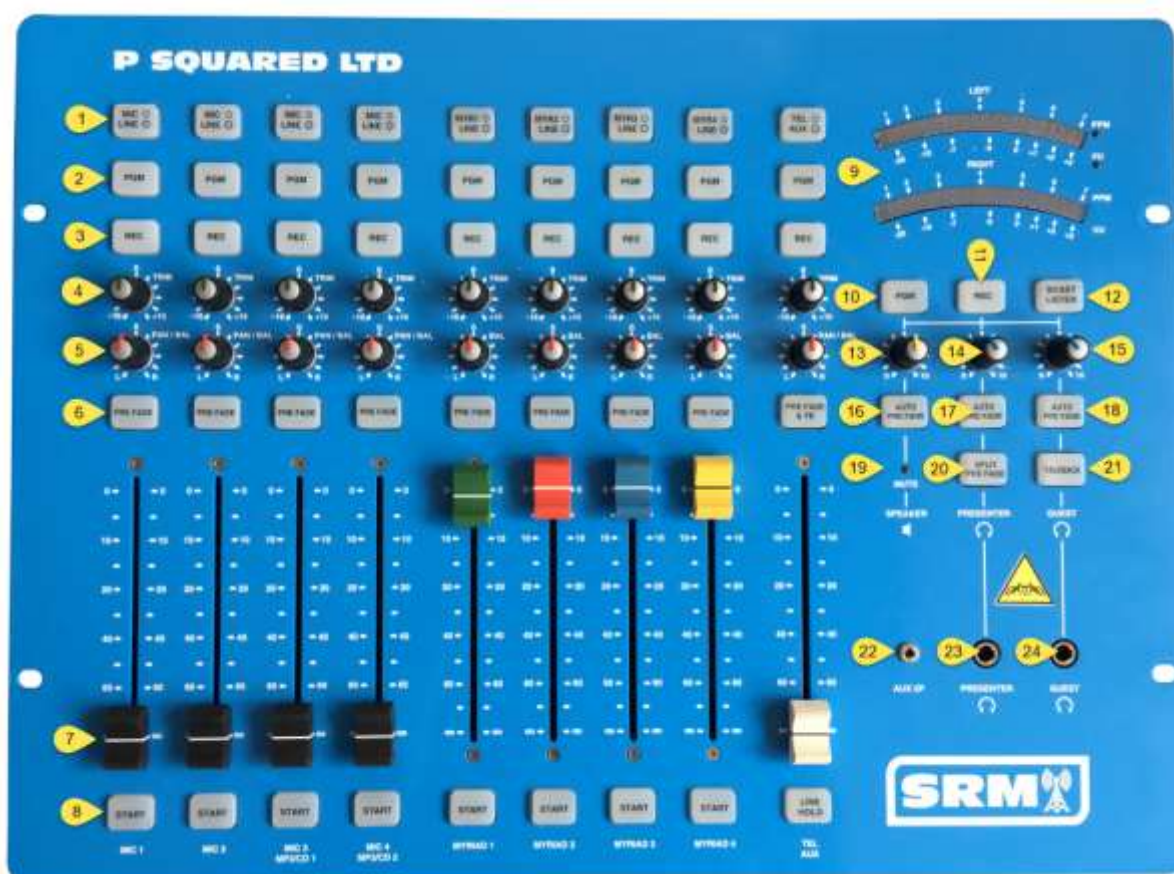
Whilst many of our School Radio packages look physically different, the main components that make up the package are similar. This section covers the most common technical parts in a typical School Radio package (an SR4 in this case). A detailed description of each of the components will follow.



Broadcast Mixing Desk (Mixer)

The mixing desk, or mixer, is used to mix together all of the audio from the various equipment and systems in your School Radio studio. Every microphone, CD player and Myriad Cart Player is connected to the mixer and the relative volume of each of these sources can be controlled using the vertical **Faders**.

SRM Mixing Desk Quick Reference Guide



1. **Source Select (Mic/Line etc.)** – This button allows you to switch the source for a channel between the two potential inputs (e.g. the Microphone and the CD Player). If the button is lit up then the bottom option listed on the button (Line in the picture above) is selected. The default status for all channels is not illuminated.
2. **PGM Output Bus Selection Button** – This button is used to toggle whether this channel is being sent to the PGM Output Bus, which is normally what is used for your 'live broadcast'. If the button is illuminated then that channel will be included in the 'live broadcast'. The default status is illuminated.

3. **REC Output Bus Selection Button** – This button is used to toggle whether the channel is being sent to the REC output bus which is normally used for recording audio in the Myriad Payout system. If the button is illuminated then this channel will be included in the recording. The default status is illuminated.
4. **Trim Knob** – Used to ‘fine tune’ the volume of the audio for the channel when the fader is in the fully open position (at the top). The default position is 12 o’clock.
5. **Pan / Bal Knob** – Used to bias audio to the left or right side for the channel. The default position is 12 o’clock.
6. **Pre Fade Button** – Used to ‘listen’ to a channel without putting the fader ‘up’. This allows you to listen to the channel without it going out live or recorded. This is essential for setting the correct audio levels for guest microphones etc. (using the Trim Knob - see 4).
7. **Fader** – Linear volume control for the channel. The ‘closed’ position is right at the bottom and is effectively off. The ‘open’ position is with the fader right at the top. Moving the fader between these two positions turns the audio up or down. In general, the fader is either fully closed or fully open and the Trim Knob is used for fine adjustments.
8. **Start Buttons** – In default configuration, the Start button on most faders is used as an indicator to show whether the fader is open (green) or closed.

On the Myriad channels the Start buttons are used a little differently.

- Not illuminated - Indicates the corresponding Cart Player in Myriad Payout is empty.
- Red Solid – Indicates that a Cart is cued and ready to play in the corresponding player. Pressing the Start button on the SRM in this state will start playback in Myriad.
- Green Solid – Indicates there is a Cart currently playing in the corresponding Cart Player in Myriad. Pressing the Start button in this state will pause playback in Myriad.
- Orange Flashing – Indicates that the Cart playing in the corresponding Cart Player has less than 10 seconds left to play.
- Red Flashing – Indicates the Cart playing in the corresponding Cart Player has less than 5 seconds left to play.

- Orange Solid – This colour is displayed when the Cart playing has passed the Extro point (e.g. it has finished) but it is still technically in a Cart Player.
9. **Audio Level Meter** – Shows the audio level of the selected Output Bus. You need to aim for between 4 and 5 on the PPM meters for all broadcasts.
 10. **PGM Monitor Button** – When this button is illuminated, the speakers, headphones and audio level meter are derived from the PGM Output Bus. This is normally used to monitor what you are broadcasting. The default state is illuminated.
 11. **REC Monitor Button** – When this illuminated, the speakers, headphones and audio level meters will be ‘monitoring’ the REC Output bus e.g. what you are recording in Myriad. By default, this should not be illuminated.
 12. **BCAST Listen Button** – When this button is illuminated, the speakers, headphones and audio level meter will be ‘monitoring’ the Broadcast Listen input instead of one of the main output buses (PGM or REC). In School Radio packages that include audio processing or limiting equipment, the BCAST Listen will be wired to the processor / limiter output to allow you to ‘monitor’ the post-processed audio.
 13. **Speaker Volume Knob** – Controls the volume level for the speakers in your studio.
 14. **Presenter Headphone Knob** – Controls the volume of the presenter headphones.
 15. **Guest Headphone Knob** – Controls the volume of the guest headphones.
 16. **Auto Pre Fade (Speakers) Button** – Toggles whether Pre-Fade audio is routed to the studio speakers (i.e. when you press the Pre Fade button on a channel, the speakers will switch to playing the pre fade audio). The default state is illuminated.
 17. **Auto Pre Fade (Presenter Headphones) Button** – Toggles whether Pre-Fade audio is routed to the presenter headphones (i.e. when you press the Pre Fade button on a channel, the presenter headphones will switch to playing the pre fade audio). The default state is illuminated.
 18. **Auto Pre Fade (Guest Headphones) Button** – Toggles whether Pre-Fade audio is routed to the guest headphones (i.e. when you press the Pre Fade button on a channel, the guest headphones will switch to playing the pre fade audio). The default state is illuminated.

- 19. Speaker Mute LED** – Indicates when any Microphone channel is ‘open’ by illuminating. This will also switch your ‘mic live’ light on if you have one.
- 20. Split Pre Fade Button** – This button toggles between standard and split pre-fade modes.
- Standard Mode (not illuminated – default mode) – Standard audio is replaced with Pre-Fade audio.
 - Split Mode (illuminated) – The selected Output Bus (PGM / REC / BCAST Listen) will be played in your left ear and Pre Fade audio will be played in your right ear.
- 21. Talkback Button** – This button is used to allow the main presenter to ‘talk’ to all the guests via their headphones. When this button is pressed, audio in the guest headphones is ‘dimmed’ and Mic 1 is automatically sent to all of the guest headphones. Ideal for warning guests that they will be on next. This button does not latch so you need to hold it down to talk.
- 22. Aux Input** – This mini-jack input provides a simple way of plugging in external devices such as tablets or phones. Plug your device into this socket using a standard 3.5mm jack lead and make sure the Tel / Aux channel is switched to Aux (the Tel / Aux input selector button should be illuminated) and you will be able to route Aux input through fader nine.
- 23. Presenter Headphone Output** – Plug your main presenter headphones into this socket. Note that this socket is also available on the rear of the mixer.
- 24. Presenter Headphone Output** – Plug your main guest headphones into this socket. Note that this socket is also available on the rear of the mixer.

Please note that the SRMv2 mixer is identical in functionality (except for the addition of an optional Skype output) and layout although it is dark grey in colour and features slightly different legends around the monitor section.



1. **Fixed Meter** - Usually programmed to show the audio level (in Peak Programme Meter (PPM)) for PGM 1 Output Bus.
2. **Channel Multi-Function Knob** - Used to navigate and select options in the Channel Display screen (see 5). Also normally programmed to adjust Trim/Gain (volume) for the channel by default.
3. **Output Bus Selection Buttons** - Used to select which Output Buses the channel will be fed to. Default settings is PGM 1 & PGM 2 illuminated. PGM 3 and Phone usually not used.
4. **Channel Fader** - When the fader is in the closed position (all the way down) then no audio is played through the channel. When in the open

position, the audio is played at full volume (but can be adjusted using the Trim / Gain function on the Multi-Function knob).

5. **Channel Display Window** – Multi-use display showing information and options related to the channel. Shows channel Source by default.
6. **Soft Button** – The soft button performs whatever action is displayed on the Channel Display Window directly above it so for example, when navigating menus, 'Exit' is displayed above the soft button and pressing it will close the current menu.
7. **Preview Button** – Used to listen to the audio source on the channel without opening the fader. Used to set level and check audio prior to broadcast.
8. **No / Off Buttons** – Channel control buttons that can be configured in a variety of ways. By default, the channel will automatically switch on when the fader is opened.
9. **Selectable Meter Toggle Button** – Toggles through the sources available for the Selectable Meter (see 26).
10. **Clock Button** – Toggles through the display options for the Clock / Timer Panel (see 25).
11. **Reset (Timer) Button** – Resets the stopwatch on the Timer Panel.
12. **Run / Stop Button** - Starts and stops the stopwatch on the Timer Panel.
13. **Record Button** – This button is generally used to set an alternative configuration for recording when in a live show. We don't use this feature in our School Radio packages.
14. **Profile Button** – Toggles Profile mode on and off. Profile mode allows you to select one of four pre-defined Profiles returning all settings and sources on the desk to the default for the selected Profile.
15. **Studio Multi-Function Knob** – This multi-function knob is used to adjust the volume for a secondary 'Studio' area by default although this is not used in most School Radio studios. When in Profile mode (see 14) the knob is used to scroll through and select (by clicking the knob) the Profile you want to switch to.
16. **Talk To Backfeeds Button** – This button is only used if you have an optional telephone system and it is used to allow you to speak (via the main presenter microphone) to the callers on the phone without broadcasting your conversation.

17. **Studio / Profile Display Windows** – Shows ‘Studio’ speaker volume by default (not used in most School Radio applications) and available Profiles when in Profile mode.
18. **Talk To Studio Button** – This button allows the main presenter to ‘talk’ to the guest via their headphones. When you press this button, the main presenter mic is automatically routed to guest headphones regardless of fader position.
19. **Monitor Section Display Window** – Shows a range of information and option menus relating to the Monitoring section (e.g. the speakers, headphones and meters in your studio).
20. **Monitor Selections Buttons** – This bank of buttons allows you to select the Output Bus that is the source for the speakers in your studio, the main presenter headphones and the selectable Meter (centre meter). Normally this should be set to PGM 1 to monitor what you are broadcasting but PGM 2 monitors what you are recording and EXT1 monitors ‘post processor’ if available. The other buttons are not generally used.
21. **Preview Knob** – When you Preview a channel, the Axia plays a mixture of PGM 1 and the Previewed Channel(s). This knob allows you to alter the ratio of that mix by default.
22. **Preview In Headphones Button** – This button toggles whether the Preview channels are also routed to the main presenter headphones.
23. **Monitors Knob** – Confusingly, in studios the speakers are referred to as ‘monitors’ so this knob is used to alter the speaker volume on your School Radio package.
24. **Headphone Knob** – In most installations, this knob will control the volume of the main presenters headphones only as additional headphones are controlled via an separate headphone amp.

ARC-8 Mixing Desk Quick Reference Guide



1. **Talk Button** – The Talk button on Channel 1 feeds Microphone 1 to an optional telephone interface system and then the phone input to the built in Cue system. This is used when the ARC 8 is used with an external telephone TBU. We do not use this feature in our standard School Radio Starter package so the button should be left in the Off position. Default position is off.
2. **Fader** – Used to control the audio level for the connected source for a channel. On the ARC-8 the standard ‘open’ position for faders is at the thick line located about 75% up the fader track. Additional ‘headroom’ can be used to boost the audio signal as needed.
3. **Channel On / Off Buttons** – Used to toggle each channel on and off. On the ARC-8 we recommend setting the fader positions at the beginning of your show and using the Channel On / Off buttons to switch on channel as needed.
4. **Cue Button** – The Cue button allows you to listen to the audio for a channel without opening the fader or switching the channel on. When a Cue button is depressed, the speakers and headphones will

automatically 'dim' the main output to allow you to hear the Cued source.

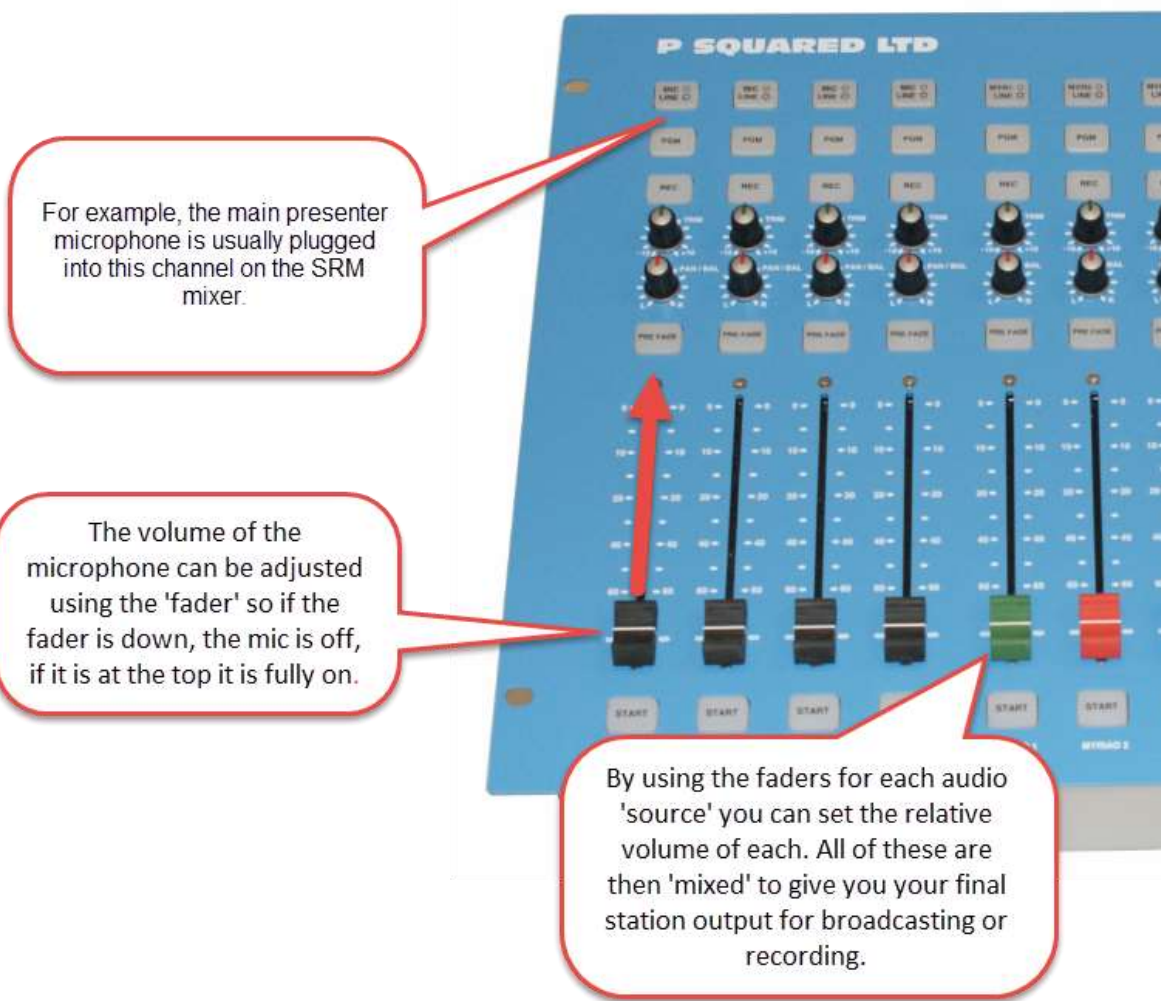
5. **Channel 3 Source Selection Button** – On the ARC-8, channel three has a dual input to allow you have two sources plugged in (balanced and unbalanced). This button toggles between them. We do not use the 'B' input on our standard School Radio packages so this button should be in the default (not depressed) position.
6. **VU Audio Level Meters** – These show a visual representation of either main output or Cue (if a cue button is pressed). The target level for audio on these meters is '0'.
7. **Channel 8 / PC Button** – The ARC-8 has a built in USB sound device that could be used as a soundcard for a connected PC. This button allows you to toggle the source for Channel 8 to be either audio input or USB soundcard. We do not use this feature in our School Radio packages so the button should be left in the default (not depressed) position.
8. **Monitors Fader** – This fader is used to adjust the volume of the speakers in your School Radio studio.
9. **Headphone Fader** – This fader is used to control the headphone volume in your School Radio studio. In the Starter Package, both headphones are controlled via this fader.

[Your Mixing Desk in more detail](#)

Now that we have had a quick look at the mixers and what all the knobs and buttons do, this section will go into a little more detail about what it all means and how we use the specific features of each desk.

[Faders](#)

If the faders are fully down, then volume for that source is zero. If the fader is fully up, then the source is fully 'on'.



As you can see, although the mixers we offer all look a bit different, they all feature vertical faders to control the volume of the connected sources.



P Squared SRM

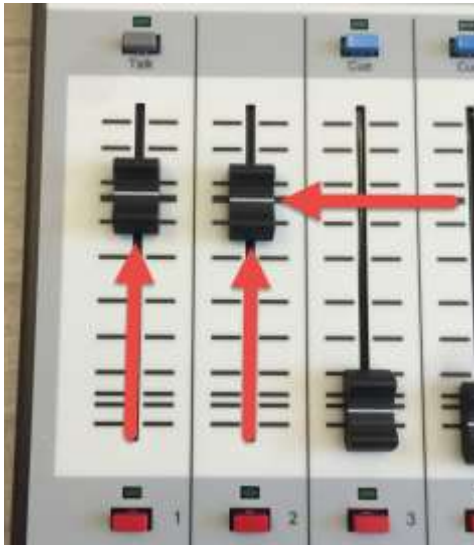


Arrakis ARC8



Axia iQ/Radius

The ARC8 is a little different, only push the faders up as far as the heavy mark three quarters up the fader channel. This is the 'top' position on the ARC8 with the excess used to give you a little headroom should you need it.



But what if the fader being fully up doesn't give enough volume?

Trim / Gain

This is when the **Trim** comes into play.

The Trim (sometimes also called Gain) on a fader is used to adjust the volume of the source when the fader is in the top position. So if you had two microphones for two presenters but one of the presenters was louder than the other, you would want to adjust the Trim on one of them so that when both faders were at the top position, their relative volume would be roughly the same.



On the SRM the Trim knobs are located just below the REC buttons on each channel.



On the Axia the multi-function knob located at the top of each channel will adjust Trim by default.

Again, things are a little different on the ARC8 mixer because it does not have Trim knobs. The ACR8 uses the faders to adjust the overall volume level.



You can use the extra travel on the mic faders (called headroom) to increase the microphone volumes if you need to.

You will need to remember where the fader is set for each presenter, so it is often better to leave the faders in the correct position and use the on/off buttons at the bottom of each mic channel to turn the mics on and off.

How do you know whether the volume of a source is too high or too low? For this you will need to look at the **Meters**.

Meters

The Meters are a visual representation of the volume of the audio being mixed by the mixer. So if you only have one microphone fader in the top position then the meter will show the volume of that mic as the presenter speaks. If multiple faders are 'up' then the meter shows the combined (or mixed volume) for everything. For the purpose of setting the individual trim for each mic (or other sources), you should only use one fader at a time. First find the meter on your mixer. On the SRM it is located in the top right hand corner. On both the Axia and ARC8 the meters are located in the top centre of the consoles.



These are called PPM meters. They measure the audio level running through the mixer. For speech you want to ensure that you are peaking at around level 5 (just before the red). Don't worry if you go over a bit while talking, just as long as it is not consistently in the red.

On the ARC8 a slightly different meter is used called a VU (Volume Unit Meter). In this scale the target value is '0'. You can see on the image above, the SRM has both PPM and VU scales on it and PPM 5 is the same as VU 0.



To set the correct trim settings for a microphone, move the appropriate microphone fader to the top position and ask the presenter to speak into the microphone just as they will in their broadcast (e.g. using their normal volume voice). Twist the Trim knob to the increase or decrease the overall volume until it is peaking at around about 5 on the PPM (or 0 on the VU). Don't worry if it goes over and under, that is normal when speaking. As long as it is not consistently over or under then you have set the trim correctly.

TIP: If in doubt set the trim to have the volume lower. You can easily increase the volume of a recording using the audio editor. By contrast, if your recording is too loud then it will be distorted and this cannot be fixed by editing.

Pan / Balance

The SRM has a PAN/BAL knob located directly below the Trim knob. This is used to adjust the left/right bias for stereo sources such as Myriad Cart Players or CD players. On microphone channels, it can be used to move the voice completely onto the left or right side of the stereo output. This is sometimes used to record or broadcast interviews that sound like a conversation, with one person's voice coming only out of the left and another person's only out of the right, switching the audio from left to right if listened to in stereo.

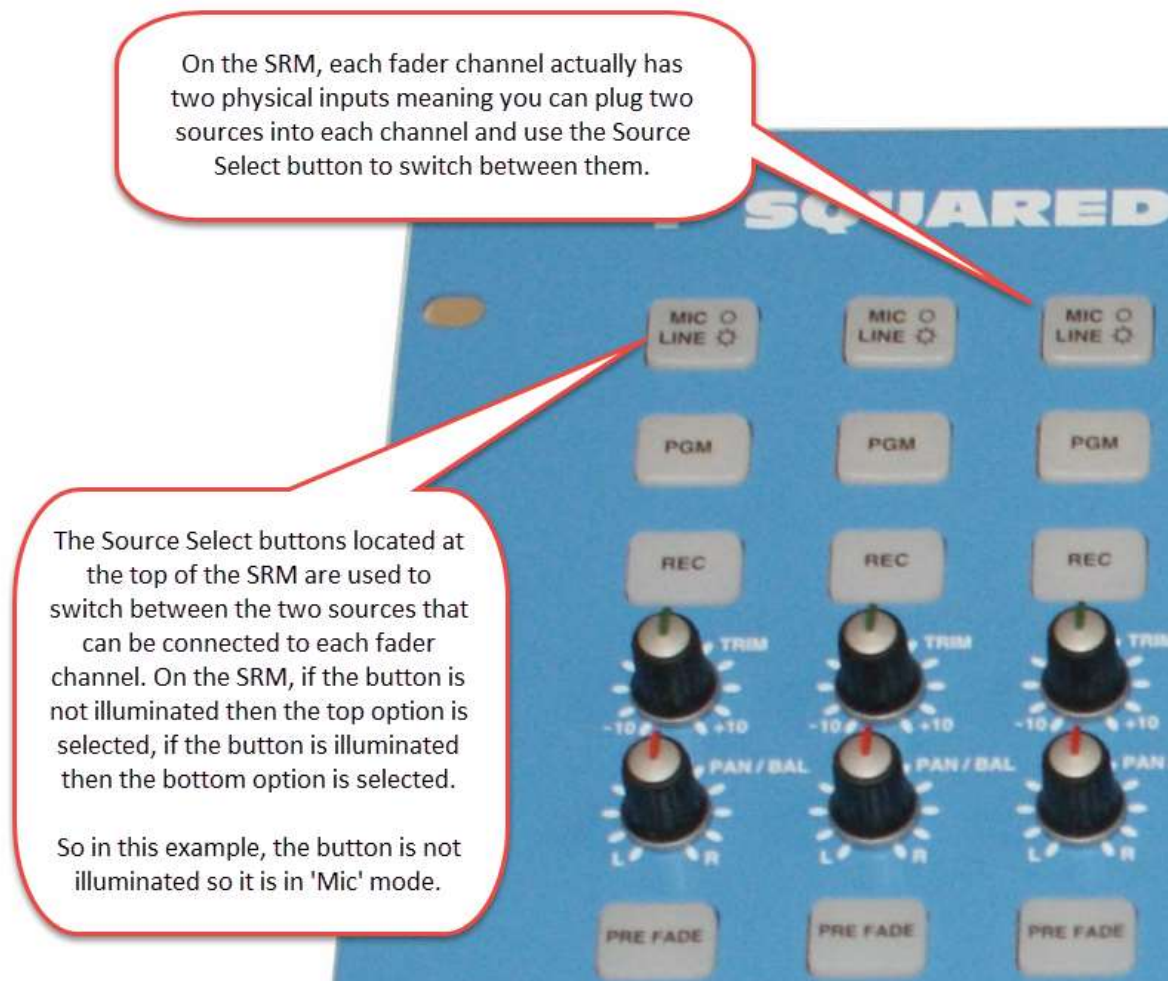
On the Axia iQ console, the Pan Balance option is accessed by clicking down on the main Trim knob then selecting Pan / Balance from the menu. You can then twist the knob to the left or right to adjust the Pan / Balance (instead of the Trim).

The ARC8 does not include a Pan / Balance option.

We would advise for most School Radio scenarios; the Pan / Balance knobs be left in the centre position.

Switching Sources (Mic/Line or Myr/Line Button on SRM)

The fader on a mixing desk generally only controls the volume for one source, so on a mixer like the SRM (with nine fader channels) you can only control the volume of nine things at the same time. In some cases, you may have more than nine potential sources of audio so some mixers (including the SRM) have two potential inputs per fader channel (giving you up to 18 potential sources of audio) and allow you to switch between the inputs as needed.



Switching Sources - Axia iQ

Things are a little more complex on the Axia iQ. The basic premise of the Axia system (called Live Wire) is that instead of plugging sources into fader channels on your mixing console, everything is plugged into the central mixer engine (called the QOR.16 or QOR.32 depending on the model). These sources are then defined as 'livewire sources' which can be assigned to any fader channel on the iQ console.

By default, an Axia based School Radio system will have a basic profile with all the regular sources pre-assigned to fader channels but you are free to alter these assignments using the following method.

1. Click on the multi-function knob located at the top of the fader channel.
2. Look at the little OLED screen at the bottom of the channel.



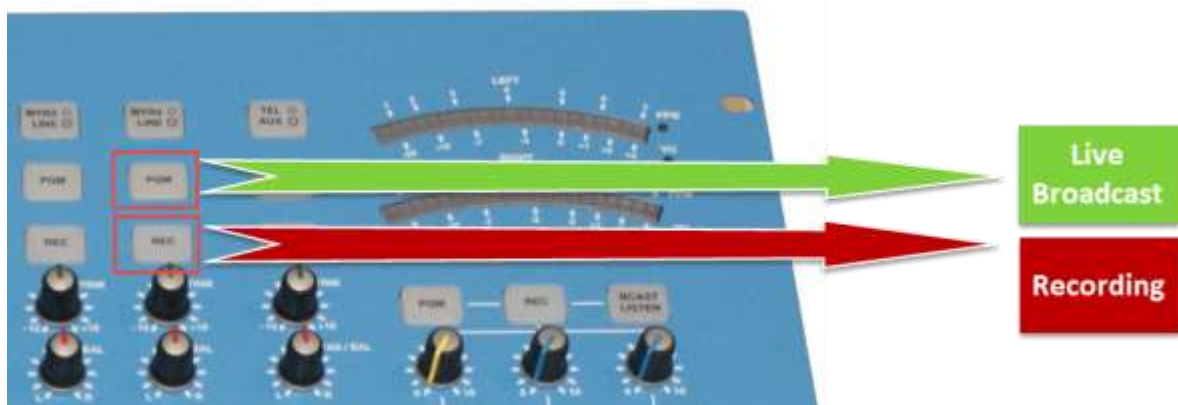
3. Twist the multi-function knob to select the **Sources** option then click down on the knob.
4. Next twist the knob to select the source you wish to assign. Once it is highlighted, click down on the knob again.
5. The source is assigned but you probably want to close the menu. Just below the screen is a button marked **Soft**. This button performs whatever action is displayed directly above it on the screen. At this stage you will see the screen says 'Exit' so pushing the Soft button will exit that menu. You will need to push the Soft button two or three times to return to the base state for the screen.

Please note that the source will now be switched to the new selection if the fader is closed or off. If the fader is open or the channel is switched to **On** then the new source will not be assigned until you close the fader and switch the channel to **Off**. This is so a source is not changed that might currently be 'on air'.

The ARC8 does not have multiple inputs per channel so this option is not applicable to School Radio packages built around the ACR8 (usually Starter Package).

Output Bus Selection Buttons (PGM & REC on SRM)

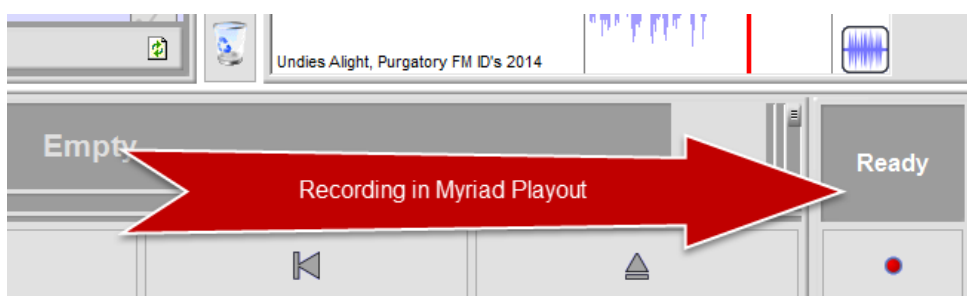
Most of the mixers included with our School Radio packages have two separate outputs often referred to as Output Buses. Look at the diagram below:



Generally, we use these two different outputs (sometimes called output buses) to connect the output of your School Radio studio to the 'Live Broadcast' system and Myriad Record respectively.

PGM is usually used to send your station output to the **Live Broadcast** system. In most School Radio installations, this is the feed that is encoded for broadcasting on the internet or around the school network via the School Radio Player.

REC is usually used to send station output to the **Record** input on your Myriad Payout system. This is what is recorded when you click on the Record button in the bottom right hand corner of Myriad payout.





Generally speaking you will want to send all channels to both the **PGM** and the **REC** outputs as you usually want to be able to both broadcast and record everything.

So usually you want each channel to look like this. Both the PGM and the REC buttons should be illuminated.



Sometimes you might need to send a specific channel to the 'Live Broadcast' but exclude it from your recordings. In that case you would set the desk so that the **PGM** is illuminated but the **REC** is not.

To switch off the REC for a channel, make sure the fader is in the down position then press the REC button to toggle it off.



Equally, if you wanted to record the output of a channel but not include it in your 'Live Broadcast' then you would toggle the **PGM** button off leaving only the **REC** button illuminated.

In most School Radio situations, you will want both the PGM and REC outputs selected (illuminated) at all times. In live radio stations, sometimes you want to record an interview with someone without broadcasting it (so you can play it

later in your show) in which case you would want to be able to record the microphones without broadcasting them (e.g. only the REC button illuminated). At the same time, you would want to not record the song that is playing (for example) but continue to broadcast it so you would exclude the appropriate channel from the recording but make sure it is broadcasting (e.g. PGM illuminated only).

In either case, the SRM only allows you to toggle the PGM or REC buttons when the fader is in the closed (down) position so you need to plan ahead a bit.

There is a fourth potential state you might see on the PGM / REC button and that is when neither button is illuminated.



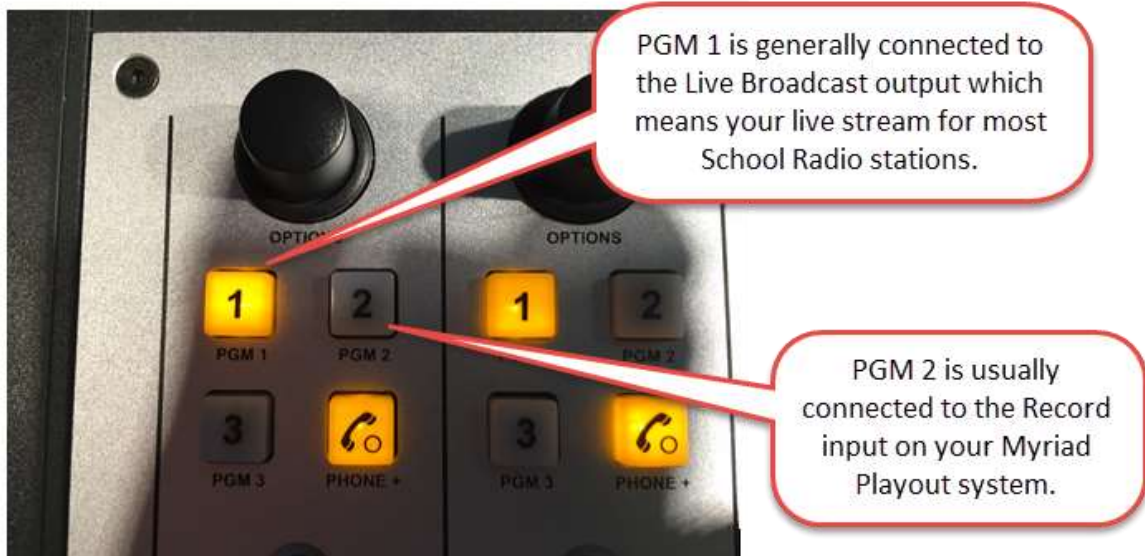
In this case, audio from this fader is going to neither output bus so the fader is effectively switched off.

If you cannot hear anything through a fader, the first thing to check is that you have at least one output bus selected.

TIP: If a channel is not working, check you have selected at least one output bus.

Output Bus Selection Buttons (PGM 1 & PGM 2 on Axia iQ)

The Axia iQ has a very similar setup to the SRM although the buttons are labelled PGM1 & PGM 2 and are located at the top of each assignable channel.



The same thing applies on the Axia iQ.

PGM 1 & 2 (Default) – Audio from the fader will be sent to both ‘Live Broadcast’ and the Record input in Myriad Payout.



PGM 1 Only – Audio from the fader will only go to the ‘Live Broadcast’ output.

PGM 2 Only – Audio from the fader will only go to the Record input on your Myriad Payout system.

Neither PGM 1 or PGM 2 Is Illuminated – The audio from the fader will not be fed to either the ‘Live Broadcast’ or the Record input meaning the channel is effectively off.

As with the SRM, if a fader appears to not be working, check at least one of the above PGM outputs is selected.

Please note that on the iQ there is also a PGM 3 and a Phone button. In most School Radio installations, these buttons are not used. If these buttons are in use, then we will cover this in onsite training.

The ARC8 mixer only has one output bus so there is no requirement to switch output channels on packages built around this mixer. In the case of ARC8 systems (such as the Starter Package) the main output is wired to both the 'Live Broadcast' and the Record input for Myriad.

Prefade / Preview / Cue

Depending on which mixer you have, you will have a Prefade, Preview or Cue button.



The **Prefade** button on SRM is used to allow you to listen to a channel with the fader in the down position meaning it is not broadcast or recorded.



The **Preview** button on the Axia iQ does the same thing.



The ARC8 has a **Cue** button but it does the same thing.

But why would you need to be able to listen to a channel without putting the fader up?

Imagine you are presenting a show and your guest has just arrived in the studio. You speak to them and discover they have a really quiet voice. If you just put them on live then it is likely that your voice will be louder than theirs and your listeners will struggle to hear what they are saying. The answer is to use the Trim / Gain knob to adjust the volume for their microphone channel

(see Trim / Gain). The problem is that if you are already broadcasting or recording, you need to be able to hear and adjust their volume without the listeners (or the recording) hearing.

The answer is to press the **Prefade / Preview / Cue** button on the guest microphone channel. This will allow them to speak into the mic and you will be able to hear them in your headphones, check the levels on the Meters and adjust accordingly via the Trim / Gain knobs.

Both the SRM and the Axia can be set to that 'Prefade' level and can be 'heard' by presenter & guest headphones as well as the speakers using the Monitor Section.

Prefade / Preview mode is cancelled automatically when the fader is opened on the SRM & Axia iQ. On the ARC8 you have to press the Cue button to toggle it off.

Channel Start Buttons

The Channel Start buttons are located at the bottom of the mixing desks and are used for multiple different functions depending on the mixer you have and the type of fader channel you are looking at.

Let's deal with the SRM first.



On the SRM there are three different modes for these buttons.

Status Indication Only – This is the default mode for microphone channels and line input channels (so that is Line 1 – 8, Mic 1-4 and Aux In). In this mode the button is not switchable and instead is only used to indicate whether the fader is open (green) or closed (red). As you move the fader up, the button will automatically switch from red to green.

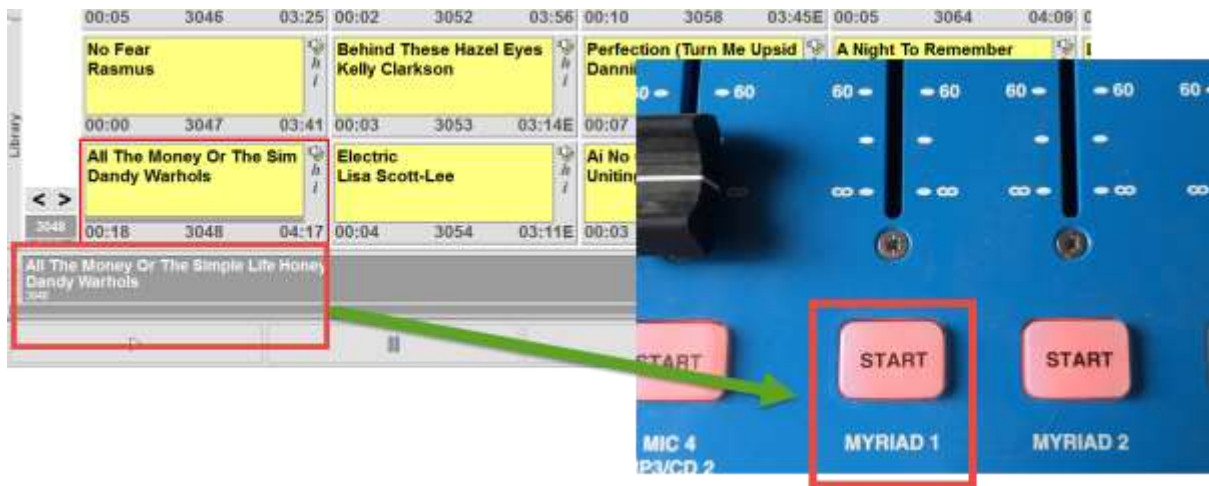
Myriad Interaction – The four Myriad Payout faders use a special mode where the Start buttons are used to indicate the status of the Cart Players in Myriad Payout but they can also be pressed to both start and pause payout on the corresponding Cart Player.



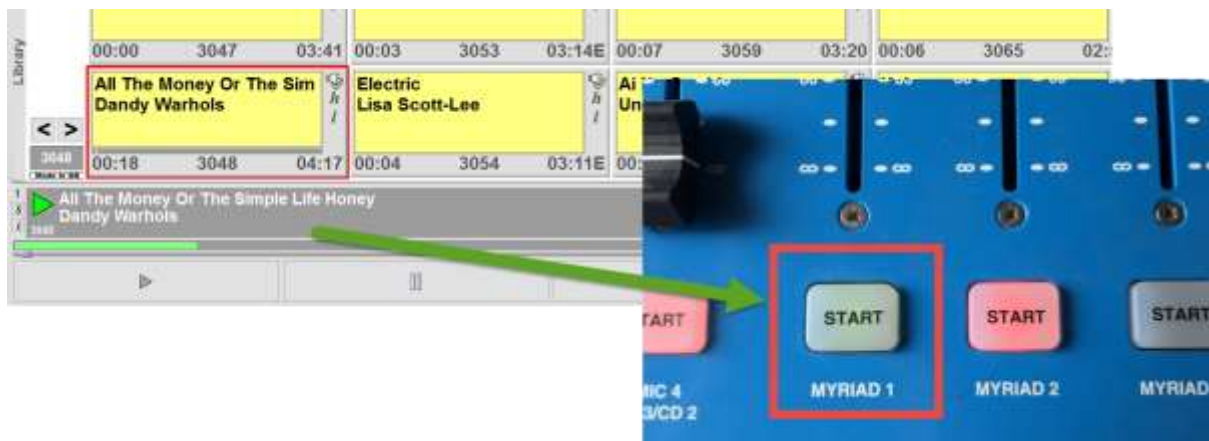
In this picture, you can see that the button on the Myriad 1 fader is currently not illuminated. This means the corresponding Cart Player in Myriad is currently empty.



If you then drag a Cart (the term for a piece of audio in Myriad) into the Cart Player, then the button on the SRM will light up red.



You can now press the Start button on the desk to start the Cart playing in Myriad.



You can now toggle playback between play and pause by pressing the Start button. Myriad can also be configured to re-cue when you press Start but pause of the default behaviour.

As the Cart comes to the end in Myriad Payout, the status of the Start button changes.

- 10 seconds left – flashes orange.
- 5 seconds left – flashes red.

This colour change acts as a warning to the presenter.



On / Of (with remote start) – The final mode is only used on the Tel / Aux channel on the SRM and then only when it is in Tel mode. With this mode selected, you can toggle the fader on and off by pressing the Start button at any time. On the Tel channel it will also pickup or drop a phone call.

Although we do not use this mode by default in School Radio packages, the SRM manual explains how you could change any of the faders to work in this mode so you could (for example) configure the desk to use the Start button to turn microphones on and off leaving the faders open all of the time.

The **ARC8** has small channel On / Off buttons at the bottom of the fader which switch the channel on and off. Because the ARC8 does not have additional Trim / Gain knobs we actually recommend you set the fader volumes at the beginning of your show and use the On/Off buttons



The Axia iQ On/Off buttons can be configured to work in a number of different modes but the default mode is to work in the same way as **Status Indication Only** mode on the SRM.



In the default mode, when the fader is closed (down) then the Off button is illuminated and as soon as the fader is opened (goes up) then the On button is illuminated.

You can also configure the iQ to allow you to press the buttons to switch the channels on and off plus trigger hardware outputs. Some School Radio packages that include external hardware such as CD players will be configured to allow you to start playback remotely from the On/Off buttons.

The Monitor Section (SRM)

The Monitor Section is located to the right of most mixing desks (certainly all the mixers what we are considering) and is generally used to control the audio you can hear or are 'monitoring'.

Broadly speaking the Monitor Section on a mixer is used to perform the following tasks.

- Select the source of the audio you are listening to in the studio.
- Change the volume of the speakers in the studio.
- Change the volume of presenter and guest headphones (SRM only).
- Decide who will hear the 'Prefade / Preview' audio.

Again, we will look in detail at the monitor section for the SRM mixer as the SRM is the most commonly used mixer in School Radio.

On the SRM, the Monitor section is located to the right of the mixer just below the Meters we looked at earlier.



The top row of buttons allows you to select the source of the audio that you are monitoring (and by that we mean what you hear through the speakers, headphones and also what is displayed on the Meter level when not in Prefade mode).



- **PGM** - You will be listening to the PGM output bus (see Output Selection Buttons).
- **REC** – You will be listening to the REC output bus. Use this if you are recording an interview whilst also live broadcasting. That way you can hear what you are recording not what you are broadcasting.
- **BCAST Listen** – This is short for Broadcast Listen and is commonly used in radio to provide a feed of what the listener is hearing. On some School Radio packages, this is not connected to anything so you should not select it. In other packages (the ones with a compressor/ limiter or dynamic processor) the output of the processor / limiter is fed back to the BCAST Listen input to allow you to switch the monitor section between pre and post processing.

Directly below the selection buttons are the volume control knobs.



The left hand knob controls the volume of the speakers in your studio package. The middle knob allows you to control the volume of the main presenter headphones. The right hand knob controls the volume of the guest headphones.

Some School Radio packages include an additional headphone amp to allow you to control the volume for additional sets of headphones. In this

configuration, the guest volume knob acts as the master volume for all the headphones connected via the separate headphone amp.



To understand the function of the **Auto Pre Fade** buttons you need to refer back to the **Prefade** buttons covered in an earlier section. You may recall that the Prefade button is used to allow you to listen to a fader without putting the fader up. This allows you to set volume etc. without broadcasting or recording it.

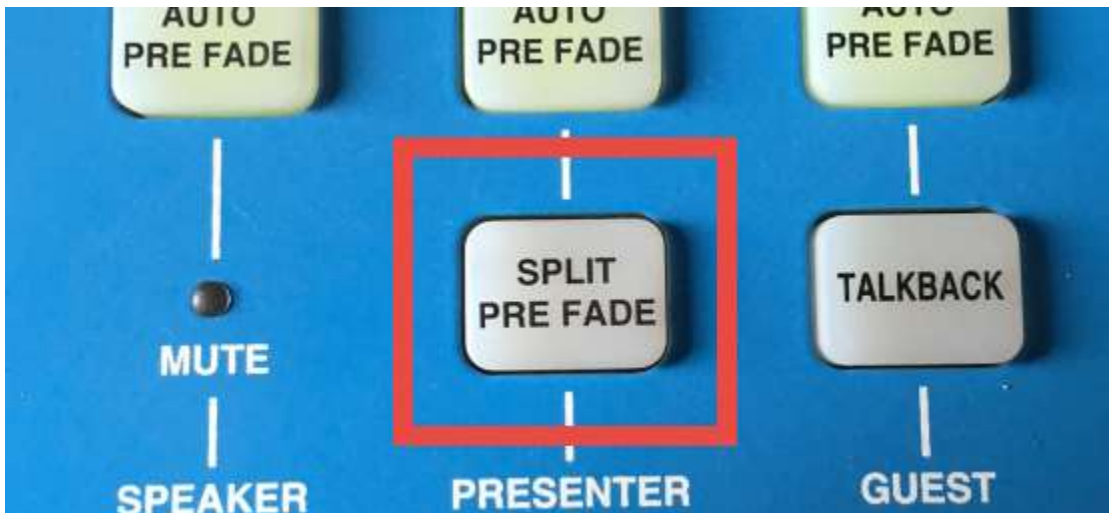
The Auto Pre Fade buttons allows you to select which of the three monitoring outputs will actually hear the Prefade items when the button is pressed.

If the left-hand button is illuminated, then the speakers in the studio will hear any Prefaded channels automatically.

The middle button allows you to select the main presenter headphones to also hear Prefaded items.

The right hand button determines whether your guest headphones will hear Prefaded items.

So in the configuration above, all three of them will be able to hear Prefaded items but if you toggled the buttons so that only the middle one is illuminated then only the main presenter will hear the Prefaded items which is ideal when you have a guest in the studio that you don't need to be able to hear you Prefading items.



The Split Pre Fade button toggles the Prefade mode as outlined below.

- **Illuminated** – If the button is illuminated then the main presenter will hear the main output (actually the output selected at the top of the monitor section) in his or her left ear and prefaded items in the right ear.
- **Not Illuminated** – When a Prefade is in progress, the main presenter will hear the prefaded item in both ears (in stereo)



The final button in the monitor section is the **Talkback** button which is used to talk to people using the guest headphones. Imagine you have a guest in the studio and they are enjoying the music you are playing. A few seconds before you switch their microphone on, you might like to warn them but don't want to have to wave your hands like your gloves are on fire!

If you press the Talkback button then the music on the guest headphones is automatically turned down and anything you say into Mic 1 on the SRM will be routed to the guest headphones over the top of the music.

Caution, this button puts Mic 1 live directly to the guest headphones so make sure you are ready to speak to them!

This button does not toggle so you hold it down to talk.

The Monitor Section (Axia iQ)

Now let's take a look at the same section of the Axia iQ as it is a little different.





Meter – This button is used to toggle the what is displayed on the middle meter on the iQ meter bridge.



This meter can switch between displaying PGM1, PGM2 or Monitor. When in Monitor, the selection can be changed using the buttons located at the bottom of the Monitor section. More on that later.

This meter display has a number of configuration options.



Clock – This toggles between various clock display options on the Meter bridge.

TIP: If you need to find the IP address of your Axia QOR so that you can access the web interface to configure it, holding down the Clock and Meter buttons for 10 seconds will select the system menu on the little display in the monitor section. From here you can select Network and then IP address to see the IP address of the Axia. Type this into a web browser and you can access the iQ's configuration system.

Event Timer – The Reset and Run / Stop buttons are used to start, stop and reset the timer that is displayed at the right hand side of the Meter bridge. The timer is sometimes used in radio when the presenter wants to know exactly how long they have been speaking. You can start, stop and reset the timer like a stop watch.

The iQ can also be configured to automatically start the timer whenever the microphone faders are opened but that is not switched on by default.

The next section down on the Monitor section covers profile selection, optional studio speaker volume as well as 'talkback' to studio and optional telephone system.



Record – The record button can be used to switch the Axia into a different configuration for recording but we do not use this option on any of our school radio packages so the button can be ignored in standard configuration.

Profile – The Profile button is used to toggle on Profile mode which allows you to select one of up to four pre-set desk configurations (called Profile). Whatever you have done to the iQ, you can restore all allocations and settings to one of the default profiles using the following steps:

1. Press the Profile button to select profile mode.
2. Look at the little display showing the available Profiles.
3. Twist the multi-function knob (marked Studio) to select the Profile you want.
4. Click down on the multi-function knob to select the Profile
5. You can now toggle Profile mode off using the Profile button.



Your School Radio package will have at least one Profile setup as part of the installation process but you may alter the Profile or add additional Profiles using the Axia iQ web interface which is covered in the Axia documentation.

NOTE: When you select a Profile, channel source allocation return to the original position (e.g. Mic 1 will be on fader 1 etc.). This only happens when the faders are down or the channels are off so if you select a new Profile when a fader is open, the source will not switch until you close the fader.

Studio Multi-Function Knob – This knob performs a number of functions depending on whether you are in Profile mode and how the system is configured. In our default School Radio layout, this knob has no default action so twisting will have no effect. If you have a second studio (like a talks booth) then we may configure this knob to alter the volume of speakers in this area.

Mini Display – The mini display shows a variety of information related to the monitoring section. When you are browsing menus or switching Profiles, the information is displayed here.

Talk To Backfeeds – This button can be configured to perform several tasks but in most School Radio studios, this will be configured to allow you to talk to any connected phone or ISDN systems. When you press this button, one or more of

the main presenter mics are fed directly to connected phone systems to allow you to talk to them without broadcasting your conversation.

Talk To Studio – As with the Studio multi-function knob, this button is normally only used when you have a separate studio or talks booth in which case pressing the button will allow you to talk to guests in that area via their headphones.

The final section is concerned with controlling the noise you hear in the studio and in your headphones.

Note: In Axia terminology, the Control Room (CR) is the room where the mixing console is so in most School Radio installations, there is only one studio and it is defined as the Control Room.

The Studio in Axia terminology is a secondary area where you might have additional microphones, headphones and speakers. Large scale broadcasters like the BBC often have setups like this so that the equipment is controlled by an engineer and the ‘talent’ sit in a different room to do the talking.

So when Axia equipment refers to the Control Room, in School Radio terms we mean the actual School Radio studio. A separate Studio area is normally only used in specialist installations.



Mini Display – The mini display shows a variety of information related to the knobs and buttons in this section. You should refer to this screen whenever using this section.

Monitor Selection Buttons – These buttons are used to select which of the Output Buses will be used by the Monitoring section.



These buttons determine which Output Bus will be routed to the speakers and headphones in your School Radio studio.

It will also determine which Output Bus will be represented by the centre Meter if the Monitor option is selected (see Meters above)

Remember, most School Radio studios are setup with the following Output Buses.

- PGM 1 – Main ‘live broadcast’ output.
- PGM 2 – Record output to the Myriad Payout system.
- PGM 3 – Not used.
- Phone – Only used if you have an optional phone system
- EXT 1 – This is usually connected to the main output after any compression or limiting. In most larger School Radio installations we include a Compressor/Limiter that limits the final output to avoid distortion. Pressing the EXT 1 button allows you to monitor this ‘post processing’ feed.
- EXT 2 – Not used.

As with almost all aspects of a digital studio installation, these options can be customised at any time so you should regard the above list as a guide only.

Preview Knob – On the Axia iQ when you Preview a channel (See Prefade / Preview / Cue) the default is for the presenter to hear a mixture of PGM 1 (or whatever is selected in the Monitor Selection buttons) and the channel(s) being previewed. By default, twisting this knob allows you to control the balance of these two sounds so if you want the Preview audio to be louder then twist the knob clockwise.

Preview In Headphones – By default, previewed audio will be played through the speakers on your School Radio package. If this button is illuminated then the preview will also be played in the main presenter headphones. Toggle the button on and off.

Note – On packages with multiple microphones (like the SR6), we normally include an external headphone amplifier to allow each pair of headphones to be controlled independently so this may only apply to the main presenter headphones.

The final part of the Axia iQ monitor section is used to control the volume of the speakers in your studio as well as the volume for the main presenter headphones.



Monitors – Confusingly in a studio, monitors means speakers (as well as the Monitoring section and of course the monitor you are looking at Myriad with!). So this knob controls the volume of the speakers in your School Radio package. Twist clockwise to increase volume.

Headphones – As mentioned above, in most digital School Radio packages we include a separate headphone amplifier to allow each presenter and guest to control their own headphone volume independently. So under normal circumstances, this knob will only control the volume of the main presenter headphones.

There is a lot to take in here so feel free to experiment as you can always reload a Profile if you get stuck. There is more information in the Axia documentation and the web interface used to configure the system is also really worth taking a look at if you are interested in how we setup your Axia system but be warned, it is not for the feint hearted!

The Monitor Section (ARC8)



The Monitoring section on the ARC-8 is a lot simpler than the Monitoring section on the SRM or Axia iQ.

It consists of a **Monitor** fader used to control the volume of the speakers in your studio and a **Headphone** fader used to control the volume of the headphones in your School Radio studio.

There is also an **External** button but we do not use this in the Start Package

Note: The Start Package is the only School Radio package to use the ARC-8 and whilst the Start does include two sets of headphones, they are both wired to the single Headphone fader in the ARC-8 so you cannot control them independently. Should you wish to add this functionality we can offer expansion options for adding additional headphone and microphones to your Starter Package.

Microphones

The **Microphones** in your School Radio system play a vital role as they are the mechanism used to allow your presenters to talk on the radio.

There are a wide range of microphones available and most will be compatible with your School Radio system, but in general your studio installation will include one of the following models.

Main Presenter Microphone (EMC 140 / 170)



Most of our School Radio packages feature at least one 'condenser' for the main presenter. A condenser microphone means that it is a 'powered' microphone requiring the mixing desk to supply voltage to it in order to work. Condenser microphones are generally more sensitive and include electronics to allow you to change the way they capture audio.

The two main condenser microphones we supply with School Radio packages are the EMC 140 and EMC 170. They are both the same specification but the EMC 170 is the newer model of the two.

You will have at least one condenser microphone if you have any of the following packages:

- Classic
- SR2, SR3, SR4, SR5, SR6
- Classic 5
- Classic 6
- AR1

The first thing you need to bear in mind when using one of these microphones is that they have a definite front that you need to speak into.



Whenever using either the EMC 140 or 170, you need to make sure you are speaking into the front of the microphone. You can locate the front by finding the logo.

On the example here you can see the IMG Logo is facing forward so that is where you need to speak.

Some mics are branded P Squared and other Broadcast Radio but regardless of the branding, always make sure that you are talking into the side with the logo.

The other thing to consider is the distance you are from the microphone. These mics have two levels of sensitivity but because schools are noisy environments, we recommend setting them to the lowest level of sensitivity to pick up less background noise.

This helps reduce background noise but also means your presenters need to be close to the microphone. The image below shows you how close you would ideally be.



You should also regularly check to make sure your microphone cradle is 'laced' correctly.



Check that the elastic is threaded through all of the hooks to make sure the microphone is suspended correctly and safely.

Finally, your microphones will be supplied with a removable 'muff' which is used to reduce the sound of breathing on the microphone and deaden the 'popping' sound when pronouncing words that begin with 'P'.



If you have a damaged or grubby microphone muff, we can provide replacements for a small additional charge (about £10 per muff).

We can also provide custom logo versions of the muff with your school logo printed on them, however the unit cost is fairly high (around £35 each) with a minimum quantity of five units.

Guest Microphones (DM-2100)

The other type of microphone we include in some School Radio packages is called a 'dynamic' microphone which is a fully passive microphone meaning it does not require the mixing desk to provide any voltage. This makes dynamic microphones compatible with all mixing desks but means they are a little less sensitive and don't include any active electronic circuitry.



If you have a Starter Package then the ARC-8 mixer is not able to provide the 'phantom power' needed to power a condenser mic so instead we only supply Dynamic microphones.

Unlike the condenser microphones, there is not really a wrong way to talk into the DM-2100 (unless you speak into the end with the socket!). Hold it like an ice cream and speak directly into the domed end.



As with the condenser microphones, you will get better results by turning down the Trim / Gain on the microphone channels and getting the presenters to be nice a close to the mics. That will help cut down on background noise but don't copy the children in the picture above as you should never hold the microphone while you are speaking as the sound of your hand moving on the muff could be very loud!

Caution: The DM-2100 mic has an on/off switch. If your mic stops working, check to make sure it has not been switched off by accident.

Audio Gear

Whilst all of our School Radio studios include everything you need to launch your own School Radio station, some packages include additional equipment to enhance the sound or provide extra facilities. The exact equipment provided varies from studio to studio depending on situation and requirement and there are far too many options to cover in this manual, but here are a few of the more common items that could be used in conjunction with your School Radio package.

CD Players



Once the staple of all radio studios, the CD player has largely been replaced with computer based playout or playout from devices such as iPads etc.

CD Players come in a variety of formats including single and dual systems as well as mixing CD players (such as CD-J's) used in nightclubs. The above unit is the one we use most in School Radio as it can play both from traditional CD and from MP3 files stored on a USB memory stick.

If you have a CD player in your School Radio package, then it will be connected to a Channel on your mixing desk. In the case of the SRM, CD players usually share the Mic 3 and Mic 4 channels and you can switch between the sources using the Source Selection button at the top of the channel. If you have an Axia iQ then the CD players are usually available as source to be assigned to channels as needed.

Compressor / Limiter

The job of a compressor / limiter is to condition the output of your School Radio studio to prevent the audio being so loud that it will distort. If standard level is used then the compressor / limiter will not be doing much but as soon as you start to get too loud, the compressor / limiter will dynamically reduce the volume to prevent the audio from being too loud for broadcast.



The MCL-204 compressor/limiter is the most commonly used unit for School Radio and comes included with SR2, SR3, SR4, SR5 & SR6 packages as well as many others. We will configure your MCL-204 as part of the setup processes but it is worth taking a photo of the settings for future reference. We can also supply a special guard to fit over the unit to prevent you from accidentally altering the settings.



A more advanced option is the Audessence Podblaster which can be specified as an upgrade option on any of our studios.

Whereas the MCL-204 does a great job of restricting audio that is too loud, it doesn't do anything about audio that is too quiet. The Podblaster does both ensuring a consistent output level regardless of whether the source is too loud or too quiet.

Headphone Amps

The job of the headphone amplifier is to amplify the audio for your headphones but also to provide individual level control when you have multiple headphones.

On the SR4 for example, the studio comes complete with four microphones and headphones but the SRM mixer only has two headphone outputs so we use a small headphone amp like the one below to provide audio to the additional headphones.



Each headphone output can be adjusted via the volume knob if needed.

Large studios and in particular the Axia iQ based studios will often have a larger rack mounted headphone amplifier.



Large VU

Several packages also feature a large VU display which offers a larger version of the meter display found on the mixing desks.



The Large VU will be calibrated so that you want to be peaking your audio just below the red LED segments.

These aren't that essential for School Radio but we think it makes it easier for younger presenters to keep an eye on levels plus makes the studios look cool!

Distribution Amplifier (DA)

The job of a distribution amp (DA) is to split an audio signal so that it can be routed to lots of different sources without affecting the volume levels to any of those sources.

We use DA's on our larger School Radio studios to split main output to go to all the places it is needed.



Once setup, you can effectively ignore the DA. If somebody fiddles with the knobs, return them all to 12 o'clock and it should be setup ok.

Mic Live Lights

The job of the 'mic live' light is to warn everyone in the studio whenever the microphone channels are open and therefore the mics are live.

We fit three different Mic Live solutions to school radio packages depending on the format of the studio.



The Tower Mic Light is used whenever there is a cluster of microphones around a table.

The Tower light is usually mounted in the centre of the microphones to provide a clear signal to all of your guests. The Tower Mic Live Light can be found on the SR4, SR6 & Classic studios.

Alternatively, several School Radio packages feature a wall light with 'Mic Live' etched onto a clear plastic.



This light is ideal for bolting to a wall, above a door or on a stand-alone desk mount.

The final Mic Live option is the SmartSign Lite system which is a computer based solution that can be configured to work in lots of different ways.



SmartSign can be configured to display different information such as clocks, on-air signs and mic live notices.

Whichever option you have; you will not have to do anything with your sign. It will automatically switch to warn you whenever the microphones are live.

[Myriad Keyboard \(K500\)](#)

The K500 Myriad keyboard is a dedicated control system for Myriad Payout that allows you to perform key functions quickly and simply. The keyboard may enable younger users to access the features of the Myriad Payout software more easily.



Here is what the buttons on a standard layout K500 do.

- **Instant Carts 1-20** – Instantly plays carts attached to the associated Instant Cart Number. Used for quick access to your favourite jingles, songs and sound effects.
- **Play 1-4** – Starts playback on the corresponding Cart Player
- **Eject 1-4** – Stops and ejects the corresponding Cart Player
- **Start Record** – Starts recording in the next empty Cart in the defined record cart range.
- **Stop Record** – Stops the recording process.
- **Go** – Used in 'Live Assist' shows to start the next item in the Log.
- **Log Item Change Ending** – Used in 'Live Assist' to toggle the end action of the currently playing Log item between start and stop.
- **Home** – Used in 'Live Assist' to jump to the currently playing item or the item that Myriad thinks should be playing now.

Speakers & Headphones

All School Radio packages are supplied with at least two headphones as well as speakers so that you can listen to your audio as you broadcast or record.

The reason that you need both speakers and headphones speakers normally play your select Output Bus (using the monitoring section) or any Pre Faded / Previewed channels but whenever a microphone channel is 'open' the speakers will automatically mute to avoid feedback issues so the only way to hear your voice along with station output is by wearing headphones.



CAUTION: Headphones can be turned up loud which could damage your hearing. **ALWAYS CHECK THE VOLUME CONTROL KNOB IS TURNED DOWN TO AN ACCEPTABLE LEVEL BEFORE PUTTING HEADPHONES ON.**

You can adjust the **Headphone** volume using the methods below.

ARC8 Mixer – To adjust the headphone volume, you use the Headphone fader located on the far right of the mixer.



SRM Mixer – The headphone controls for presenter and guest headphones are located on the right of the mixer underneath the Output Selection Buttons.



The left hand knob controls presenter headphones and the right allows you to adjust the guest headphones.

Axia iQ – The main presenter headphone control is located on the bottom right hand side of the console.



This normally only controls the volume of the main presenter's headphones with additional headphones controlled via external headphone amps.

You may also have a separate headphone amplifier that allows you to plug in additional headphones and control them independently. This is a common solution on the digital packages (SR5 & SR6) and the larger analogue packages such as the Classic 5 & Classic 6.



The **Speakers** are a similarly controlled from the mixing desk.

ARC8 Mixer – To adjust the speaker volume, you use the Monitor fader located second on the right of the mixer.



SRM Mixer – The speaker controls are located on the right of the mixer underneath the Output Selection Buttons.



The yellow marked knob is used to control the speakers.

Axia iQ – The main studio speakers are controlled via the Monitors knob located on the bottom right hand corner of the console.



The speakers used vary from package to package. Most are powered and many will have additional volume control built in. We recommend leaving the speaker master volume (the one on the speaker) at the level we initially set but feel free to adjust it if you feel it will be beneficial.

Myriad Playout System

The Myriad Playout system is an essential part of any School Radio system. It is used to allow you to do a number of key things including:

- Play song, jingles, link, interviews sound effects etc.
- Record interviews, features or entire shows.
- Plan and build shows from pre-recorded elements.
- Present 'Live Assisted' shows just like in most commercial radio stations.
- Compile and export complete programs for uploading to your website.
- Schedule programs or complete scheduled to play at a pre-determined time.

Myriad is professional radio playout software that is used across the entire broadcast industry from large commercial stations to online radio.

In schools, Myriad has been enhanced to offer simple workflows that allow presenters of all ages to create and present professional radio shows including advanced features with no prior knowledge of broadcasting.

Myriad Playout is covered in a great deal of detail in documentation and tutorial videos. In this manual we will concentrate on outlining the steps needed to perform the most common tasks you will face in your School Radio station.

Learn The Jargon

While discussing Myriad Playout we will use a lot of industry terms you may not be familiar with so the quick list below includes a definition of the terms we commonly use in Myriad.

- AudioWall – A numeric list of all the Carts on the system. Imagine a shelf with 99,999 slots on it with each slot being an individual piece of audio. Usually, similar content is clustered together on the AudioWall.
- Carts – A Cart is a single piece of audio in Myriad and it is represented as the blocks on the AudioWall.
- Intro – The period of a song before the vocals start.
- Hook – The most recognisable section of a song.

- Extro – The effective end of a song (maybe with a second or so left to play).
- Cart Players – The players located at the bottom of the screen (in most configurations) used to play Carts from the AudioWall. Usually there are four Cart Players that are connected to four fader channels on your mixing desk.
- Record Cart Player – Used to record audio into Myriad.
- SmoothEdit – The audio and data editor built into Myriad which is used to change title and artist information or edit the audio.
- The Pad – A manual playlist creation tool that allows you to build programs or sequences by dragging Carts into the Pad.
- Instant Carts – Shortcuts to your favourite Carts. Instant Carts are arranged into sets of 20 and can be played by clicking on screen or pressing the number keys on your keyboard. If you have a K500 keyboard, then Instant Carts can also be accessed from that.
- Library – Similar to the AudioWall but adds music classification and makes it easier to view content alphabetically.
- Live Assist – A term used to describe the semi-automated show presentation commonly used in radio. Shows are pre-prepared (or scheduled) and each item in the list is loaded as it is needed.
- Log Tab – Used to present Live Assisted shows.
- Jingle – Short audio piece used to identify the station. Can be speech and music.
- Sweeper – Like a jingle but only includes speech so that it can be mixed with music.
- Link – Speech element between other audio.
- Segue – The junction between two audio items.

More information is available in the full Myriad documentation or the online tutorial videos.

Myriad Playout Quick Reference Guide

The AudioWall Tab

A numeric list of all the Carts on the system. Imagine a shelf with 99,999 slots on it with each slot being an individual piece of audio. Usually, similar content is clustered together on the AudioWall.



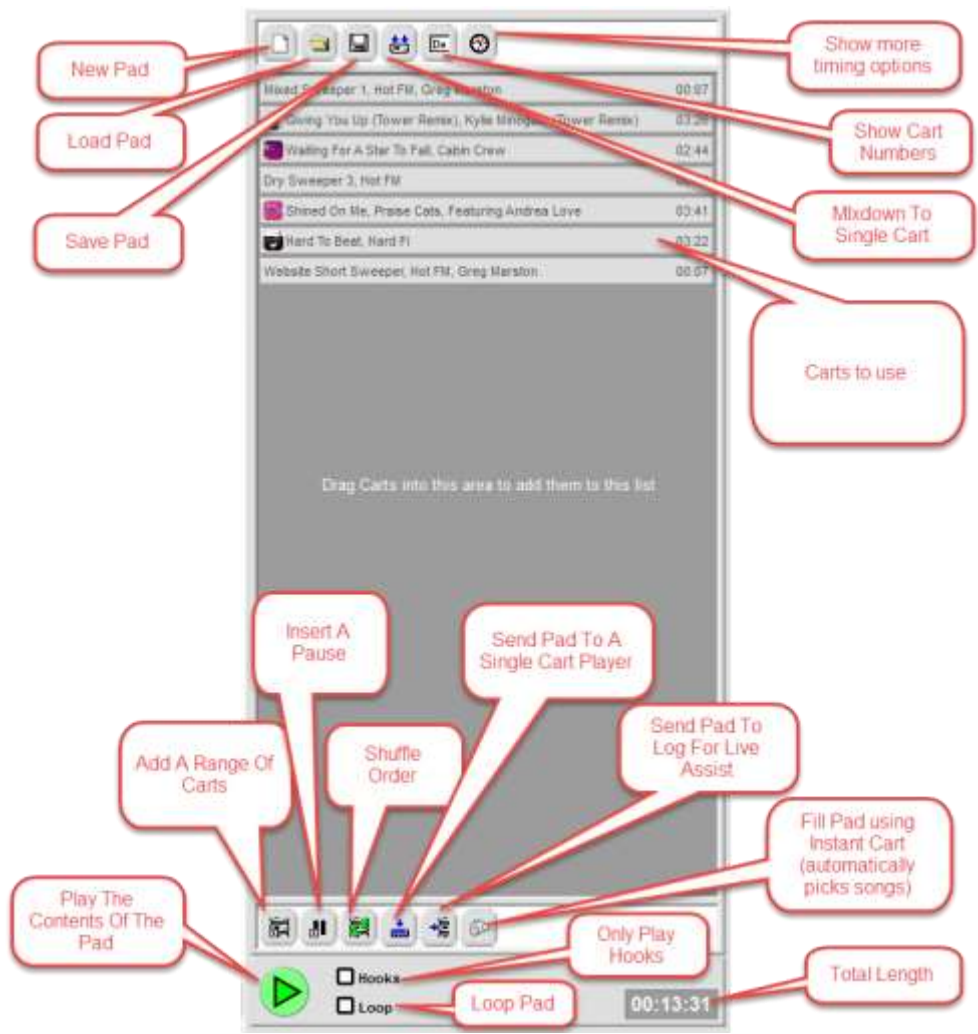
- 1. AudioWall Tab** – Switches the view to the AudioWall which is where all the audio on the system lives.
- 2. Find Button** – Searches the AudioWall for content by title, artists, description, length etc.
- 3. Jump Home** – Jumps to the pre-set 'Home' area which is also where new Carts will be recorded.
- 4. Jump** – Allows you to type in a specific location (Cart Number) on the AudioWall to jump to.
- 5. Move** – Allows you to move or copy a Cart on the AudioWall.
- 6. Edit** – Edit the details or audio for the selected Cart.
- 7. Scroll Left / Right Buttons** – Moves the view along the AudioWall page at a time.
- 8. Instant Carts Tab** – Switches the view to the Instant Cart tab.
- 9. Library Tab** – Switches the view to the Library tab.
- 10. Log Tab** – Switches the view to the Log tab.
- 11. The Pad** – Used to compile programs using Carts and other pre-recorded elements.

- 12.Carts** – Each Cart is a single piece of audio which consists of a title, artist, description and maybe a picture. There is also a range of additional timing information for each Cart.
- 13.Intro Time** – The time before the vocals start on a song.
- 14.Cart Number** – The unique reference number for the Cart.
- 15.Cart Length** – The effective duration of the Cart.
- 16.Extro Set** – Once an Extro (an end marker used for crossfading into the next item) is set, this icon has a green tick. If no Extro is set then a warning icon is displayed.
- 17.Hook Set** – If a Hook (most recognisable part) is set for a Cart then this icon is displayed.
- 18.Information Available** – If a Cart has additional text typed in then this icon is displayed.
- 19.Jumps** – Shortcut buttons to jump to key areas on the AudioWall.
- 20.More Jumps** – Allows you to edit the main Jumps button plus add additional Jumps.
- 21.Clock** – Tells the time.
- 22.Cart Players** – Players used to play Carts from the AudioWall. The Cart Players are usually connected to a fader channel on the mixing desk so the default four Cart Players will correspond to four channels on your mixer.
- 23.Current Cart Number** – Displays the Cart Number for the currently highlighted Cart. You can click on this to select a Cart Number to jump to.
- 24.Record Cart Player** – Used to start and stop recording in Myriad.

Cart Players

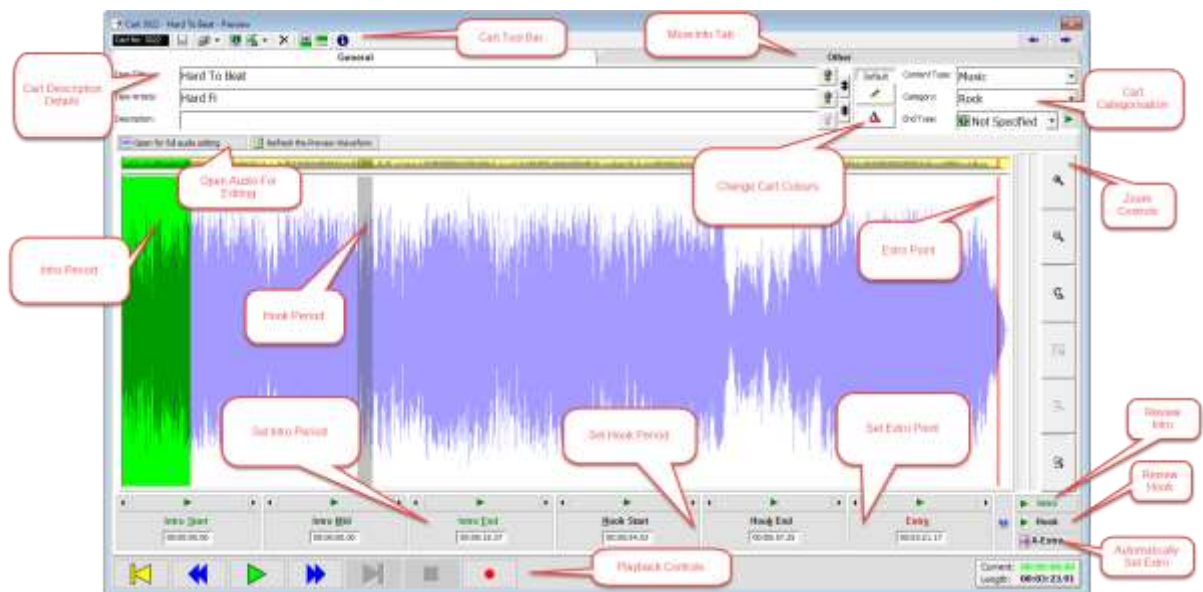


The Pad

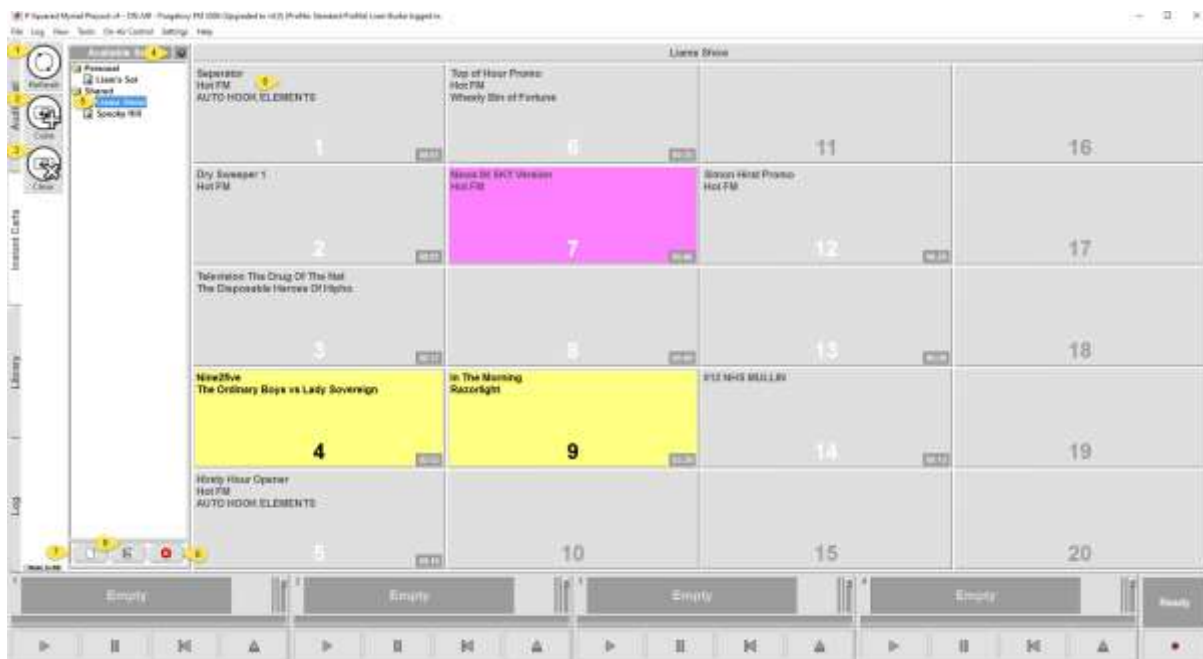


SmoothEdit

Please note that this screen is accessed by highlighting a Cart on the AudioWall and then pressing the Edit button on the AudioWall Tab.



The Instant Cart Tab

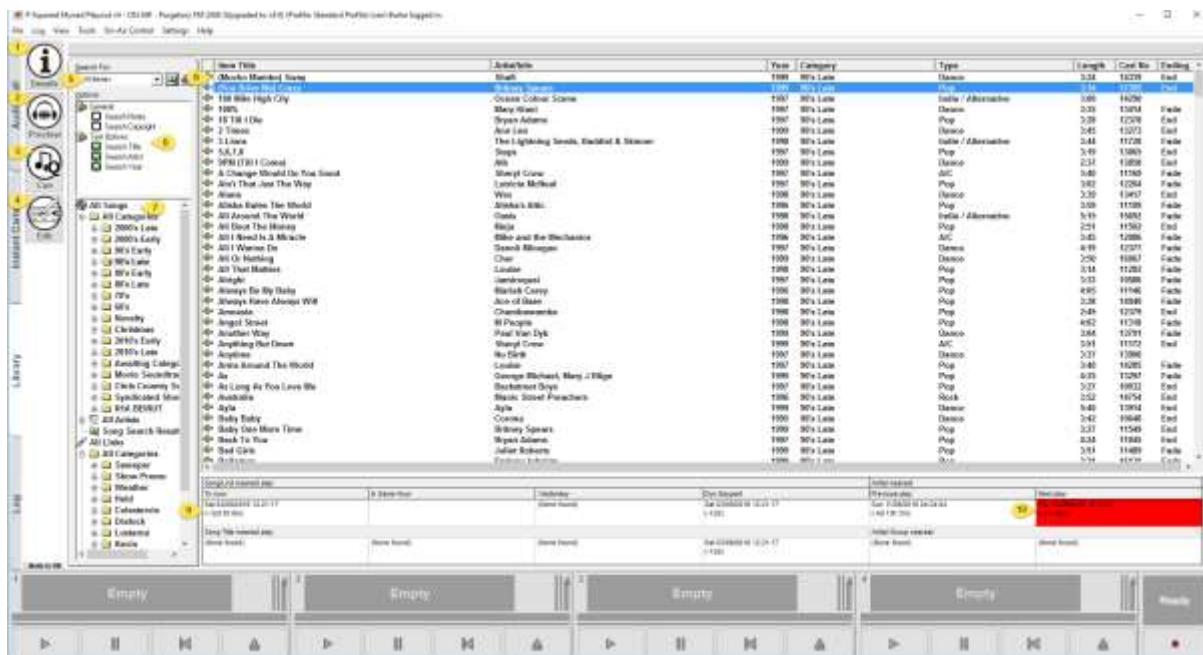


1. **Refresh** – Reloads the Instant Cart list.
2. **Carts** – Use this to browse the AudioWall and drag your favourite Carts onto Instant Carts.

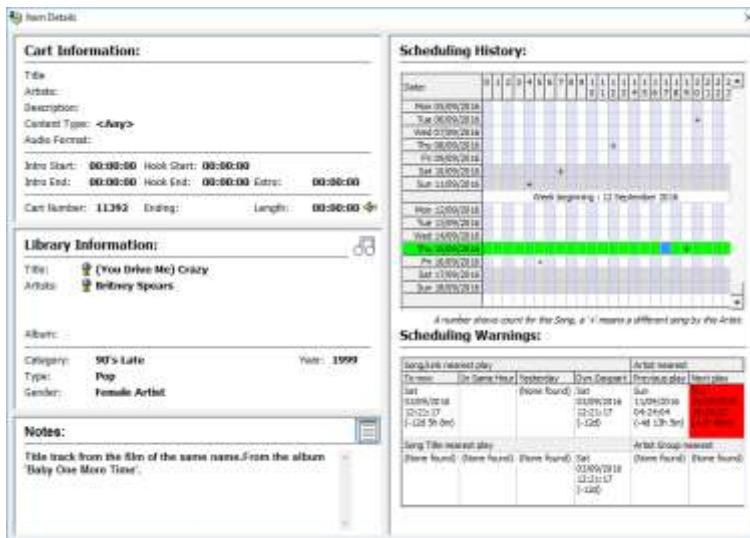
3. **Clear** – Toggles clear mode. To clear an Instant Cart, click clear, then click on the Instant Cart you want to clear. Agree you want to clear the Instant Cart. Finally click on the Clear button again to toggle clear mode off.
4. **Pin Instant Cart Set List** – This option allows you to hide the set list. In hidden mode, click on the Available Set button to select a new Instant Cart Set.
5. **Selected Instant Cart Set** – Shows the set currently selected.
6. **An Instant Cart** – Shows the Cart that will play when Instant Cart 1 is triggered.
7. **Create New Set** – Creates an empty Instant Cart Set.
8. **Delete Instant Cart Set** – Removes the selected Instant Cart Set (N.B. leaves the Carts on the AudioWall).
9. **Rename Selected Set** – Rename the currently selected Instant Cart Set.

The Library Tab

Please note that the Library tab is used extensively on 'rolling' radio stations with live shows but in School Radio environment, because most shows are pre-recorded and scheduled for playout later, this Library tab is less relevant.



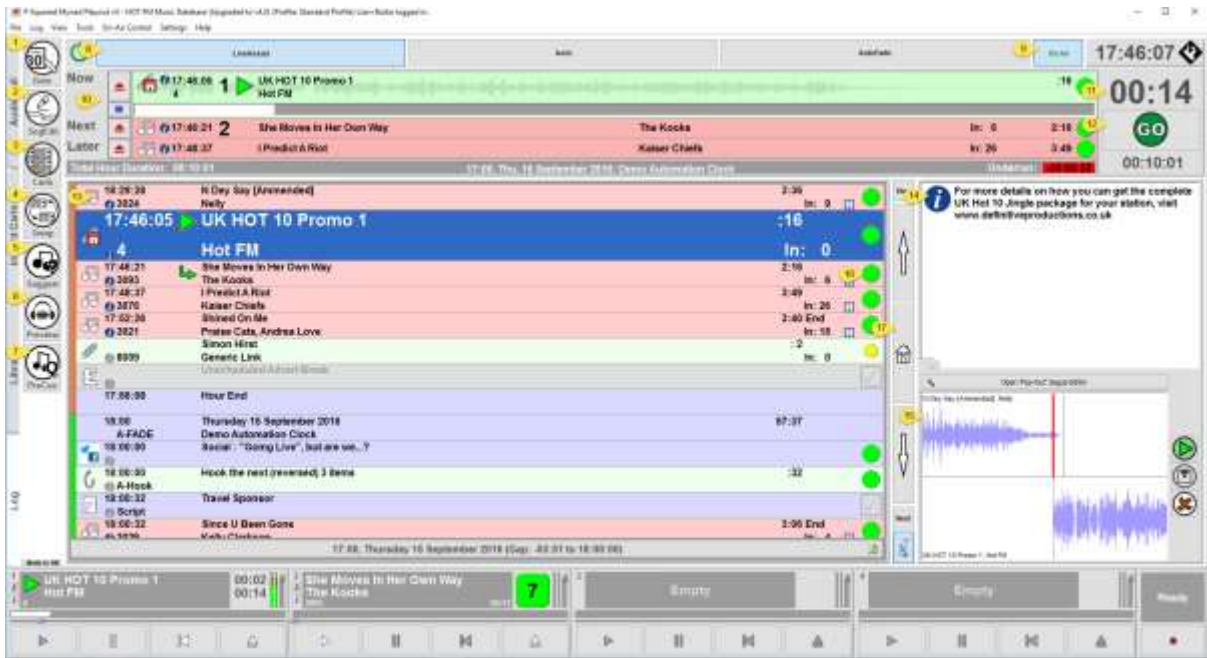
1. **Details** – Show advanced details for the selected Cart.



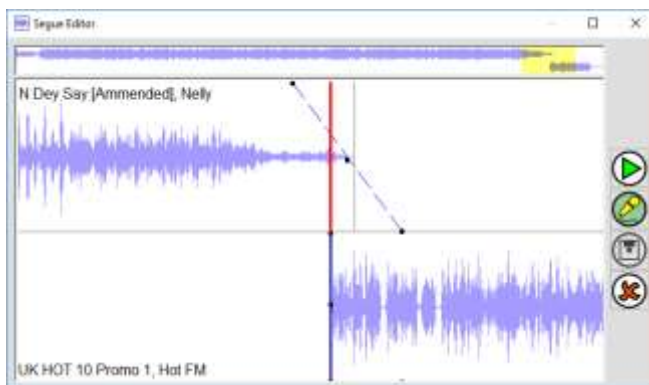
2. **Preview** – Preview the selected item.
3. **Cue** – Cue the selected item.
4. **Edit** – Edit the selected item using SmoothEdit.
5. **Search Box** – Search for a song title or artist. Click the button to the right to perform your search.
6. **Search Options** – Select search filter options.
7. **Browse Item Categories** – You can use the Category Browser to select song or link categories or list items by artist.
8. **Search Results List** – You can sort the results by any of the columns by clicking on the header.
9. **Show Rule Application Results** – Displays nearest song and artist play information for the selected item.
10. **Show Rule Application Results (Red Panel)** – A red panel in this section indicate that using the item 'now' would break on of the defined rules.

The Log Tab

The Log tab is used for 'Live Assist' shows where a pre-prepared or scheduled show is presented in real time. In Live Assist, as each item comes to the end, the next is cued by Myriad ready for use. The presenter then decides whether to pause at the end of the current it (to talk) or automatically continue into the next.



1. **Goto** – Allows you to jump to a specific date and time in the log.
2. **Segue Editor** – Opens the Segue Editor to allow you to edit the segue between two items or add a voice link. The Segue Editor opens as a floating window.



3. **Carts** – The Carts button opens the AudioWall Browser to allow you to drag Carts into the log.
4. **Swap** – Simply swap two items in the log. Highlight an item, click on the Swap button then click on the item you want to swap with the original item. Their positions will be swapped.
5. **Suggest** – Suggest alternatives to the highlighted item.
6. **Preview** – Preview the currently highlighted item. A preview will load into the designated preview player and will not count as a 'play' to the system.

7. **Pre-Que** – Will load the next item to play into a Cart Player. This happens automatically before the next item plays.
8. **Playout Mode Buttons** – Allows you to switch between active playout modes:
 - a. **LiveAssist** – Used for live shows, the presenter can mark items to pause at the end. The presenter is in charge of backtiming the hour.
 - b. **Auto** – All items are set to automatically segue on to the next item. The system does not do any automatic backtiming.
 - c. **AutoFade** – All items are set to automatically segue on to the next. The system will also automatically backtime to the top of the hour or the next Absolute Time marker.
9. **On / Off Air** – Allows you to toggle the workstation between on-air and off-air. Please note that in most School Radio configuration, this option is disabled and the studio is permanently set to be on air.
10. **Dashboard** – Shows the currently playing item details along with details of the next two items to play.



11. **Time To Next Segue** – Countdown to the next segue.
12. **Go Button** – Starts the next item. Will fade out the any currently playing items in normal configuration.
13. **Log Items** – Displays the detail for a Log Item.



14. **Infor Panel (optional)** – Shows the text information for the highlighted Log Item.
15. **Segue Editor (optional)** – Displays the segue between the currently selected item and the next. You can adjust the segue using the mouse.

16. **Segue Type** – Shows what will happen at the end of the Log Item.
 - a. **Green Circle** – The system will automatically move on to the next item.
 - b. **Red Square** – The system will stop at the end of the item.
 - c. **Yellow '+'** – The system will 'sweep' the item into the Intro of the next item.
17. **Home Button** – Jumps to the currently playing item (if in active playout mode) or the item it thinks should be playing (if in standby mode).

In addition to these main layout screens, there are a couple of alternative configurations you might consider for your School Radio.

Dual Screen

Dual screen configuration is commonly used in commercial radio as it displays the AudioWall, Instant Carts & Library tabs on the left hand screen and the Log tab (and dashboard) on the right hand screen. It is popular because it means the Log is always visible and you can drag content from the left-hand screen (AudioWall etc.) directly into the Log on the right-hand screen. The Cart Players will be spread along the bottom of both screens.



If your PC is dual screen capable (most School Radio supplied PC's are), you can simply plug in a screen monitor (usually a DVI or HDMI) and configure it in Windows as a desktop 'extension'. The next time you start Myriad it will automatically configure in dual screen mode.

N.B. Dual screen mode is not well suited to touchscreen as touch will normally only be on one of the screen.

Dual Screen on a Single Monitor (ideal for touchscreen)

In this configuration, Myriad will act like a dual screen system but with the whole interface displayed on a single physical monitor. This is ideal for studios where space is short or if you have a single touch screen.



In this configuration, the AudioWall, Instant Carts & Log tabs appear on the left hand side where as the Log tab (and dashboard) are always displayed on the right. The Cart Players are spread across the bottom as usual.

To select this option go to:

Settings Menu > Myriad Settings > Myriad Settings > General Options Tab > Display In 'Dual Screen' Mode On A Single Screen

Tick this option to enable the feature. You will need to restart Myriad for the change to take effect.

This option only works with a wide screen aspect monitor but as all School Radio packages are supplied with wide screens, that should not be an issue unless you opted for the dual screen option.

Common Tasks in Myriad

Myriad Payout is an advanced, professional system used in radio stations around the world. Full documentation and tutorial videos are available on our website and we are also able to offer detailed '1 to 1' training tailored for your needs. Please contact one of our experts for further information.

Most of the day to day tasks you will perform while running your School Radio station are fairly straight forward and require no prior knowledge of Myriad Payout or radio in general.

The following walkthroughs will guide you through these tasks.

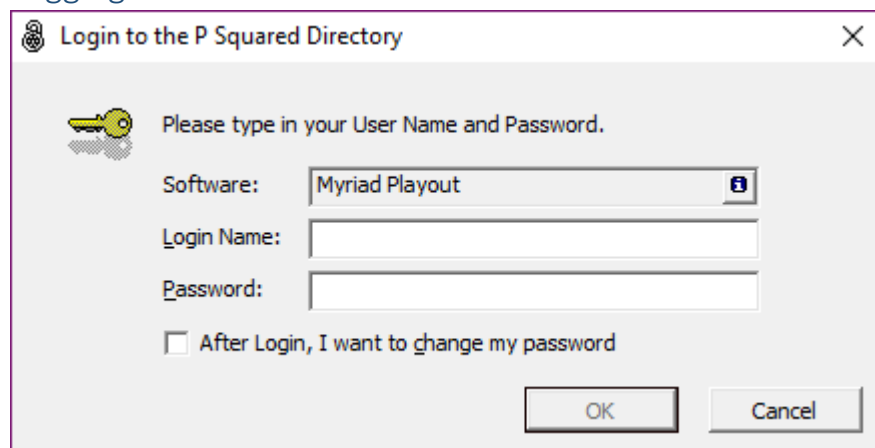
Logging into & out of Myriad Payout

Myriad Payout includes a simple user security system based on a login name and password. Users can be setup to allow them to access certain menu options as well as the content they can edit on the system

The majority of School Radio installations are configured to automatically start Myriad Payout as the computer boots up and to automatically login using a default login name. Generally speaking this automatic login has full and unrestricted access to the system which means you can change settings and edit & delete any content on the system.

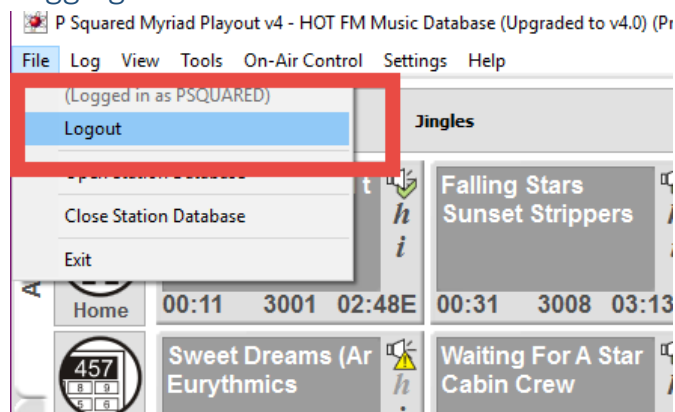
You may prefer to reduce the access that the default login has or to disable the automated login altogether forcing users to login to Myriad manually when it starts.

Logging In



To login to Myriad Payout, type your Login Name and Password into the Login box that appears in the centre of the screen (when no one is logged in).

Logging Out



You can log out of Myriad at any time by clicking on the File Menu option (top left corner) and selecting 'Logout' from the list.

Note that any playing audio will continue to play.

Changing Security Settings

Changing user security settings in Myriad Payout is done using the Myriad Manager application that is installed alongside Myriad Payout. To change User Security settings, follow these steps:

1. Run Myriad Manager (press Windows Start and type 'Myriad Manager' if you are not sure how to start it).
2. Login to Myriad Manager with a user name with sufficient rights to both use Myriad Manager and edit the security settings.

CAUTION: If you turn off the security access to the only user you have, you could get locked out. If that happens, don't panic! Contact our support team and we will be able to give you temporary access. You should always have at least two users setup on the system, one with full rights and the other with whatever rights you wish.

3. Click on the Contacts / Users tab on the left hand side.

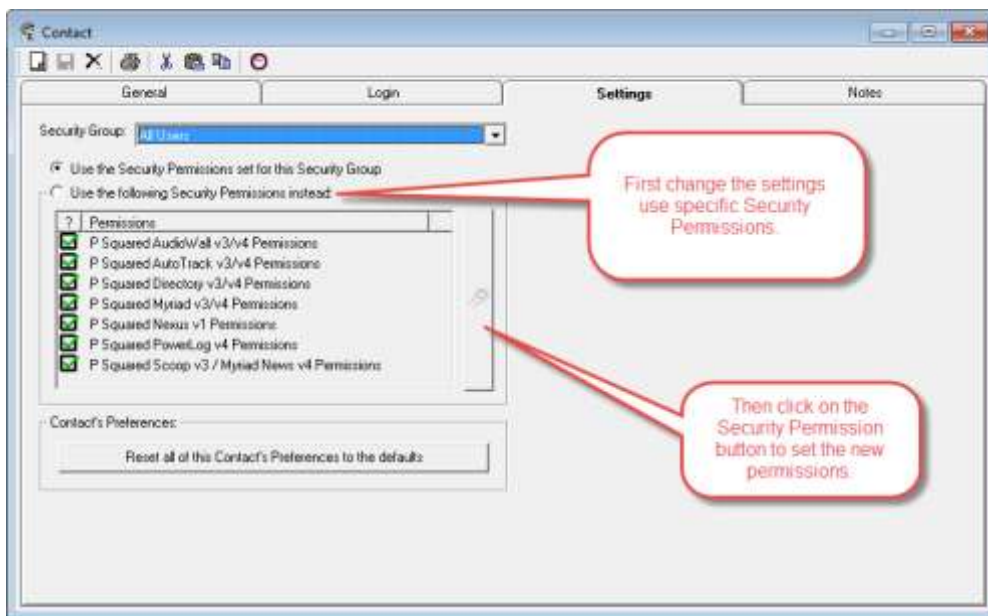


4. You will see a list of existing Users in the left hand window. Double click on the one you want to set security rights on.



In this example we are going to change Helen Webster's security settings to prevent her from accessing the settings menus and also restricting the range of Carts she can edit (record into and delete) on the AudioWall.

When you double click on Helen's name, her details will be displayed.

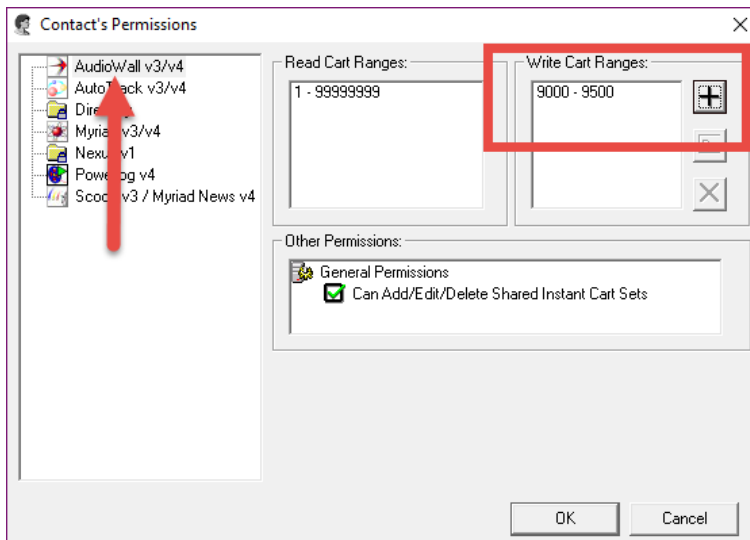


5. Click on the Settings tab and then select the 'Use the following Security Permissions instead' option.
6. Click on the Security Permissions button to set the specific permissions



for the User.

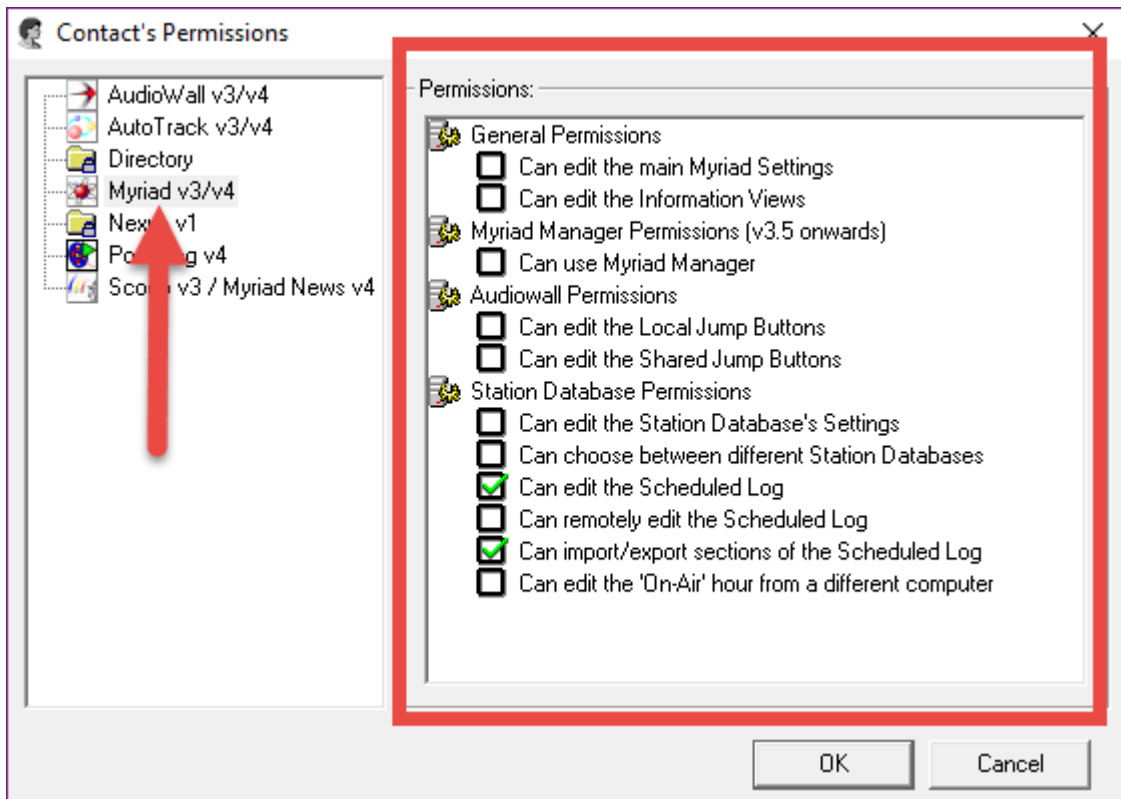
7. To restrict the range of Carts that the User can edit, make sure 'AudioWall' is selected on the left hand panel and then click on the '+' button to add a new Edit Range.



This allows you to type in a start and end Cart Number to create an edit range. The User can record, edit and delete any Cart in the assigned range.

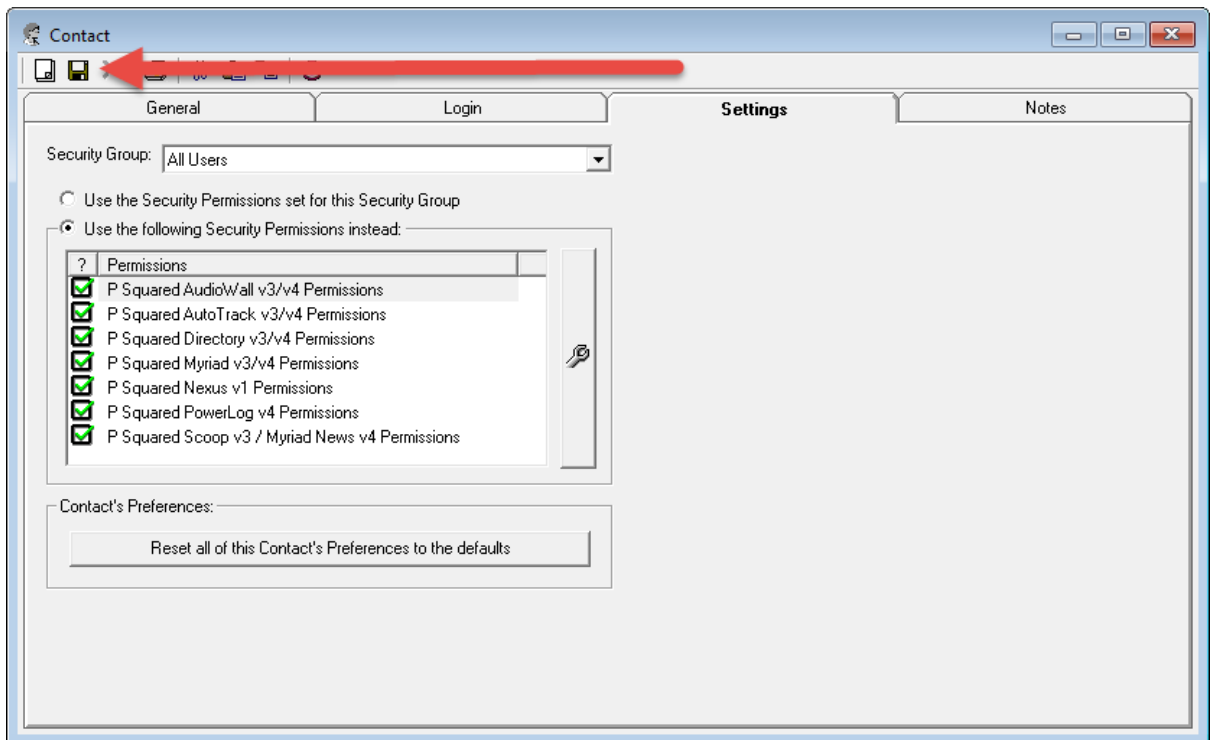
Please note that you can add multiple ranges for a single user to allow them to edit different places on the AudioWall. By default all users can edit Carts 1-99999999 (i.e. all of them). If you do not remove this range, then they can still edit all Carts.

8. We also wanted to restrict access to the settings menus. To do this, click on the Myriad v3/4 option on the left hand panel and untick all of the options except two as illustrated below.



This will allow the User to edit the Log and import Pad lists into the Log but nothing else.

9. We have now setup the Security Permission as we wanted but it will be worth looking through the other settings and turning them all off to prevent access to unnecessary parts of the system.
10. Click on OK to save the Security Permissions.
11. You now need to save the overall settings for the User by clicking on the Save button.



Next time Helen logs into Myriad Payout, she will only be able to edit Carts between 9000 and 9500 plus she will not have access to any of the settings menus.

CAUTION: You should ensure you have at least one User on the system with full access so that you can make changes in the future.

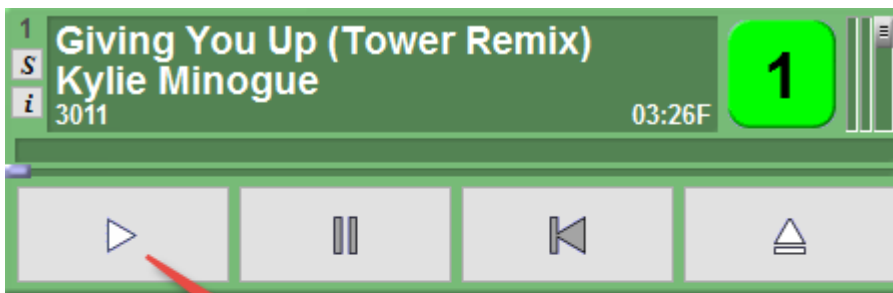
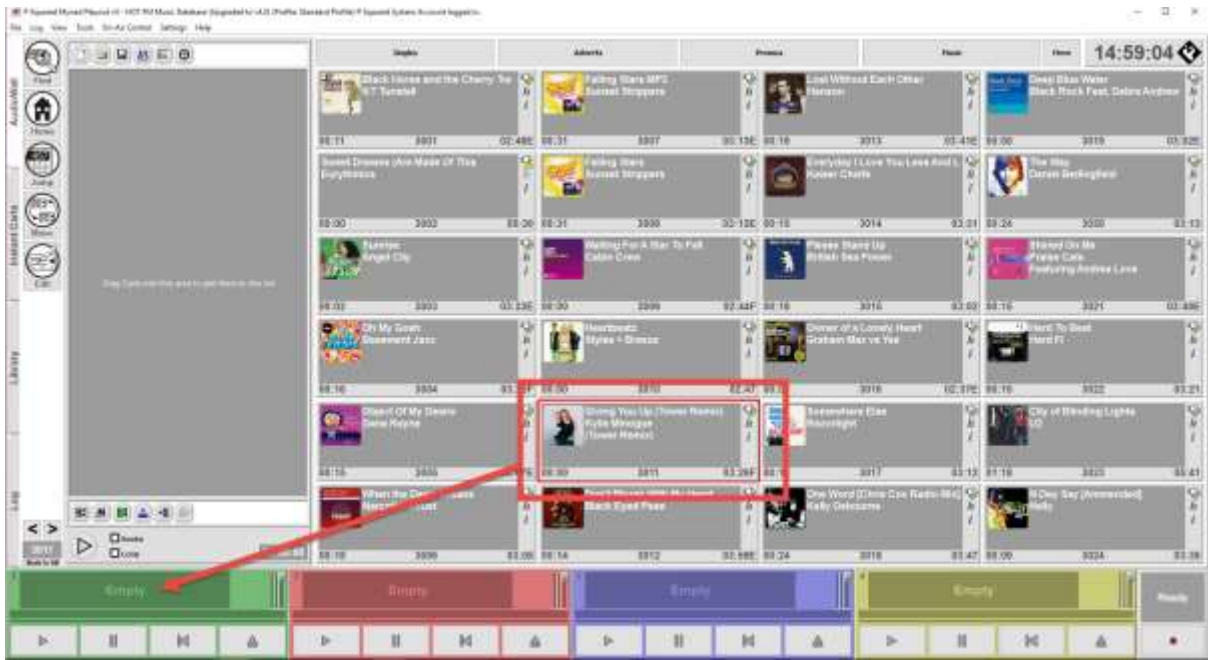
Playing Audio (Carts)

One of the fundamental actions you will perform in Myriad Payout is simply playing a Cart on the AudioWall using the Cart Players.

This is a very straightforward action but can be achieved in a couple of different ways.

Dragging Carts into The Cart Players

The most common way of playing a Cart is simply dragging it into a free Cart Player and then clicking on the Play button.



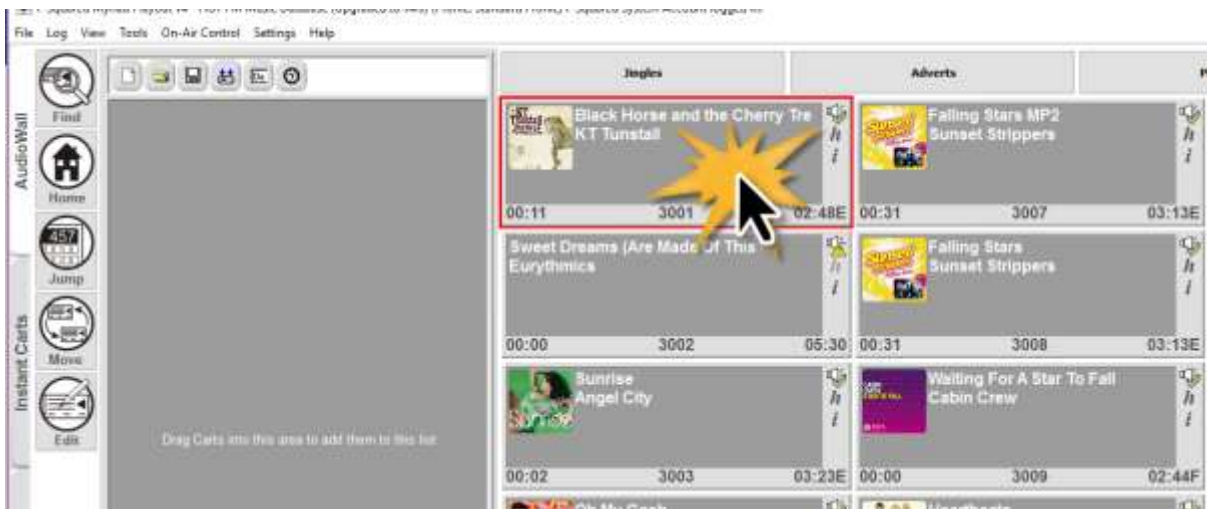
Click on the Play button to start playback.

You could also click on the Play button on the optional K500 keyboard (if you have one) or the Start button on the SRM mixer (if that is the mixer with your package).



Double Clicking On Carts

You can also play a cart by simply double clicking on it on the AudioWall.

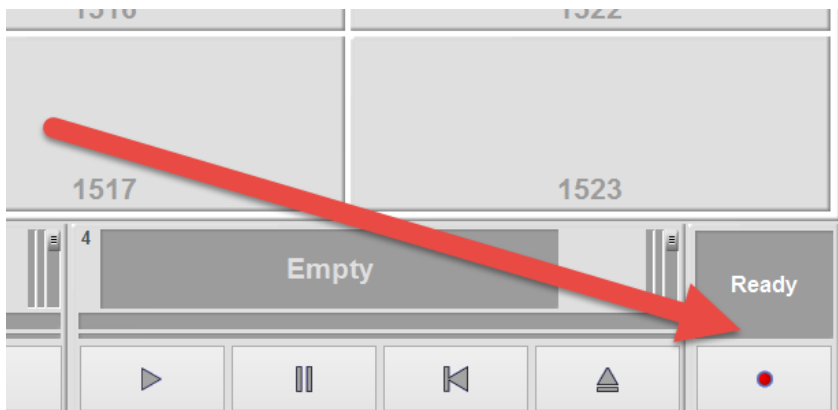


When you double click on a Cart on the AudioWall, Myriad Payout will automatically load the Cart into the first empty Cart Player and start playback immediately.

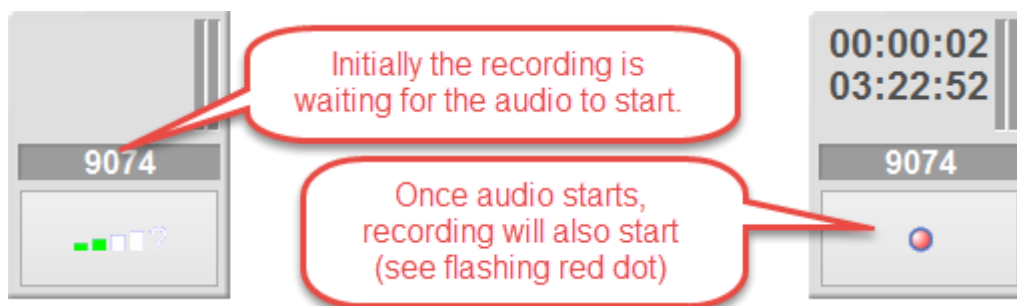
Recording Audio

The simplest way of recording audio onto the Myriad AudioWall is to follow these steps:

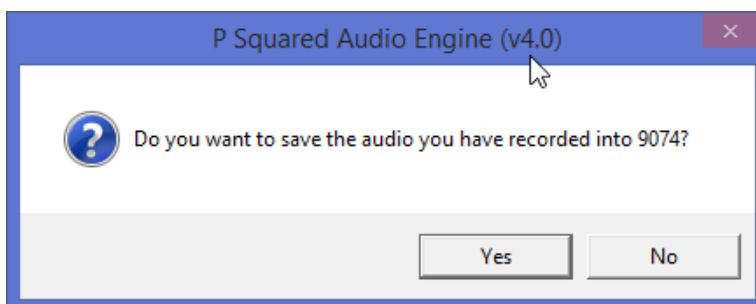
1. Click on the Record button located in the bottom right hand corner of the Myriad screen.



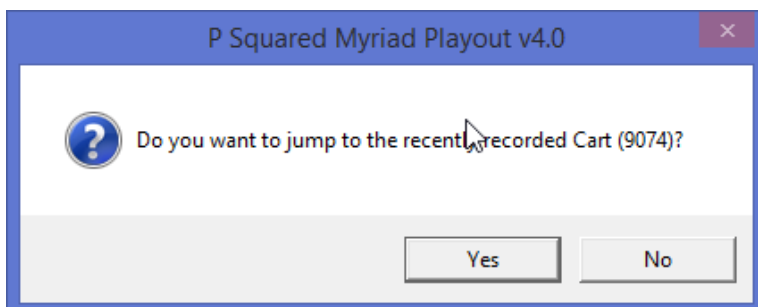
- Initially the Recorder will start in 'Trigger Level' mode which means it will not actually start recording until it 'hears' some audio to record. As soon as you play anything or open the mics and start talking, it will switch to record mode.



- An empty Cart is automatically assigned from a set range (default is 9000 – 9500). In the example above it is recording into Cart 9074.
- When you are ready to stop recording, simply click on the record button again.
- You will be asked whether you want to save your recording. If you say no then the recording will be deleted, if you say yes then it will be saved to the assigned Cart (9074 in this example).



6. Finally, you will be asked whether you would like to 'Jump' to the Cart you have just recorded.



Click Yes to go straight to your recording on the AudioWall.



Alternate Methods: You can also use the Record Start and Record Stop buttons on your K500 keyboard if you have one (this is standard with SR and Classic range studios). You can also record into a specific Cart on the Audio Wall by right clicking on the Cart and selecting the 'Record Into This Cart' option. Please note that if the Cart already has audio, you will be asked whether you want to overwrite it.

Editing Audio

Once you have recorded your audio, you will usually need to do some light editing to prepare it for broadcasting. Editing is covered in more detail in the main Myriad documentation and tutorial videos.

Most recordings you make will need the following edits doing before they are ready to be include in your broadcast.

- **Top** – Remove silence or audio before the bit you are interested in keeping.
- **Tail** – Remove audio after the bit you are interested in.
- **Normalise** – Make the loudest part of the recording the same volume as the loudest part of other recordings on your system.
- **Titling** – Change the title and artist information to be easily identified in the future.
- **Saving** – How to save your work and return to the AudioWall.
- **Adding Timing Information (songs only)** – When editing Songs, there are some additional timing fields that are worth setting.

Topping – Removing audio you don't need from the beginning of the recording. This might be needed to remove silence or even some chatter prior to the actual bit you are interested in. To remove this unwanted audio, follow these simple steps.

1. Highlight the Cart you want to edit on the AudioWall.
2. Click on the Edit button on the left hand button panel.



This will open the SmoothEdit window which is used to edit the audio in Myriad.

3. Initially SmoothEdit will open in Preview mode which is used for setting titles etc. but we want to edit the audio, so we need to click on the

'Open For Full Audio Editing' button located on the left-hand side, above the wave form.



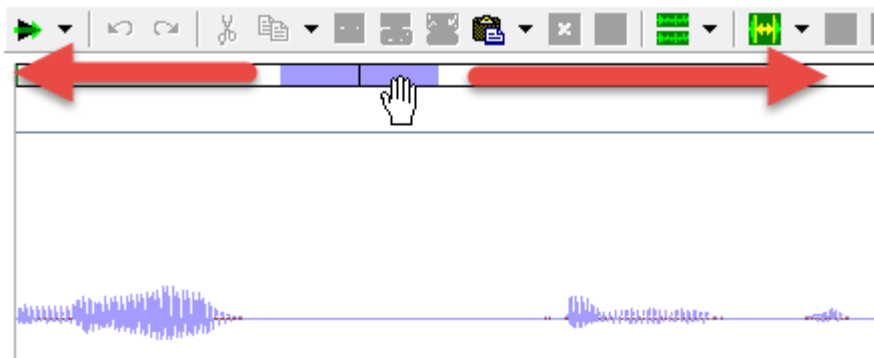
4. This will open the full Smooth Edit window and allow you to edit the audio (tip: you can tell it is on full edit mode because the tool bar icons change and a stereo waveform is displayed).



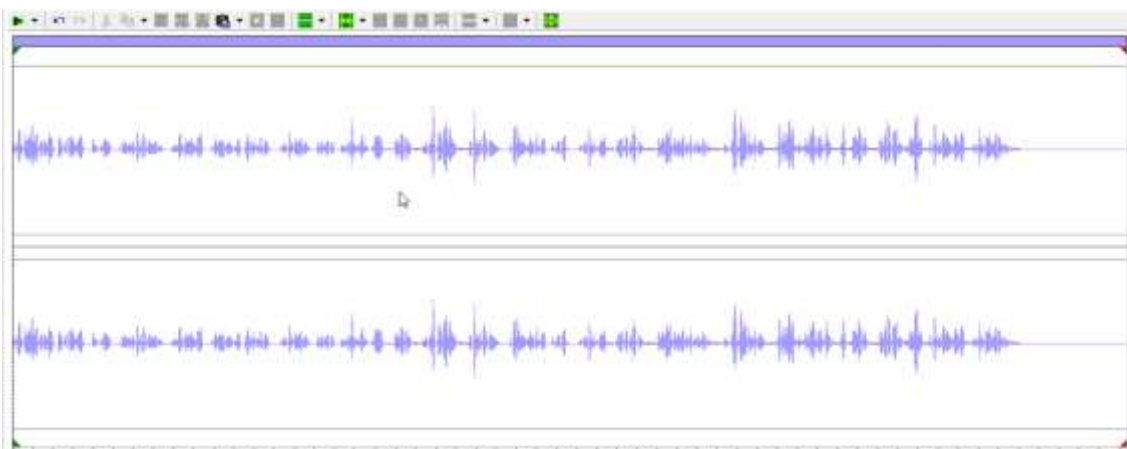
5. In the above example we can see some silence at the beginning of the recording that we want to remove. To do this, use the left mouse button to select the section of the wave form you want to remove.





You can use the mouse wheel (or magnify buttons) to zoom in and out to help you with this. When you have zoomed in, you can use the Scrub bar at the top of the waveform to move the viewport around within the magnified waveform.



6. Once you are happy that you have selected the section you want to remove, press the <DELETE> key on your keyboard.



7. We have now completed the Topping of the audio so if that is all we needed to do we could click on the  button on the top tool bar and shut the edit screen down by clicking on the  button in the top right (of the edit window, not the main Myriad window).

Tail – Remove unwanted audio from the end of the audio file

The Tail process is exactly the same as the Top process but you are working on the end of the file instead of the beginning. Review the steps in the last section and it should be clear how to apply them to Tail your audio.

Normalise – Making the loudest part of the audio a set volume

When Myriad Normalises a bit of audio, it carries out the following steps:

- A. Scans the audio and finds the bit where the audio is loudest.
- B. Compares the volume at the loudest point with the pre-set target volume.
- C. Works out whether it would need to amplify or reduce the volume at this loudest point in order to meet the target volume. So if your Normalise target value is 100% but the calculated volume at the loudest point in the file is only 66% then it would need to amplify the loudest part around 1.5 in order to hit the target.
- D. This amplification factor is then applied to the whole recording.

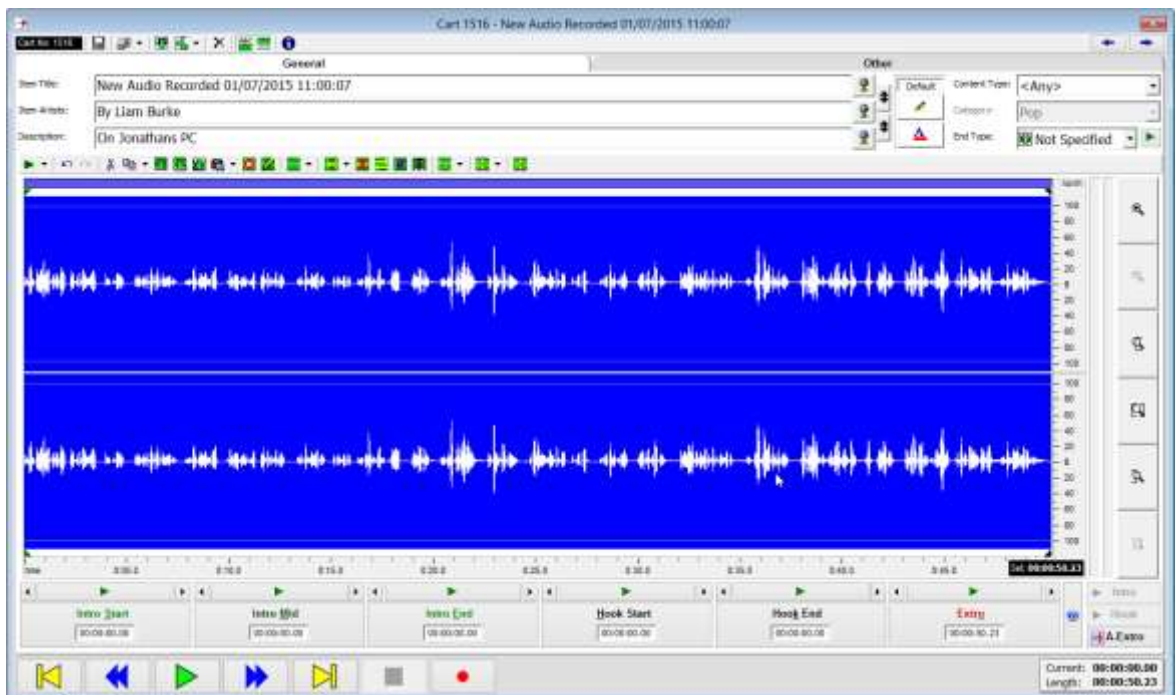
The reason for Normalising is if everything you add to the system is normalised to the same target level then theoretically the loudest part of every Cart on the system is the same. In practice this gives us a quick and simple method for roughly matching the levels of audio on the system.

The process of doing this is much easier than explaining the theory!

1. Assuming we already have the audio open in SmoothEdit and have done the Top and Tail (as outlined in the previous sections) then we should have something that looks like this.



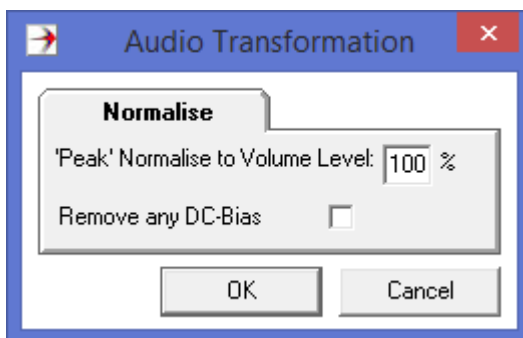
2. The Normalisation is applied to a selected area. In this case we want to Normalise the whole file so we need to select the entire wave form. The easiest way to do this is to double click in the centre of the waveform.



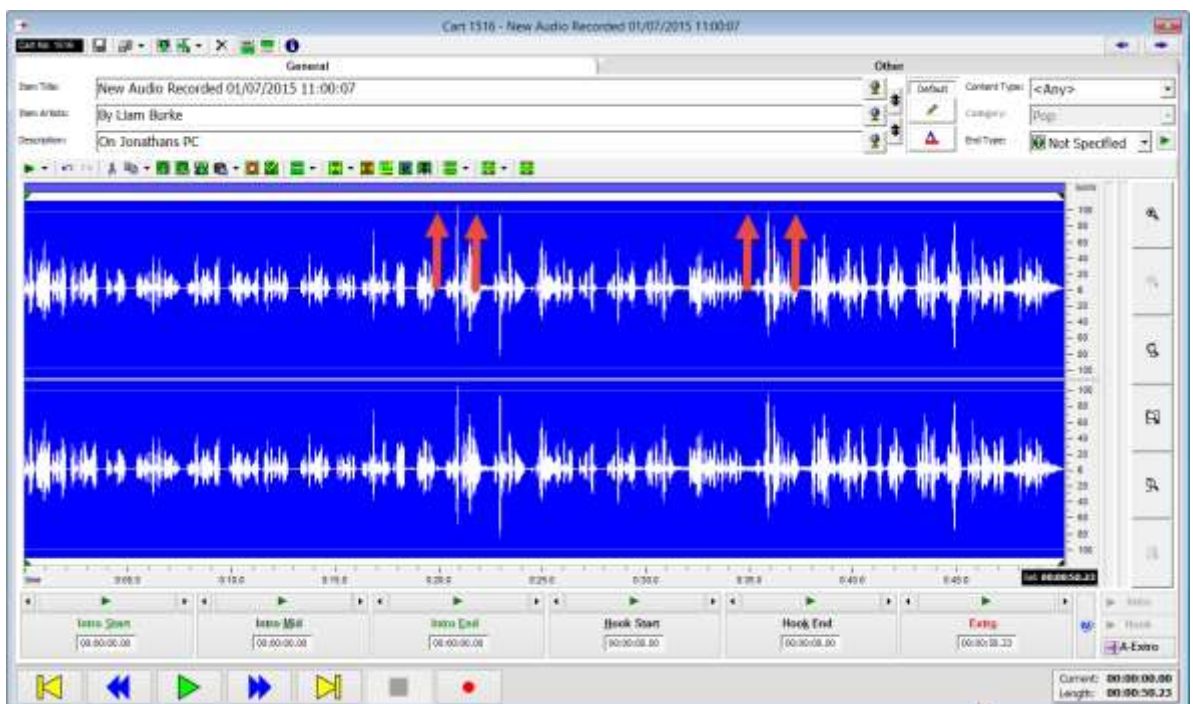
3. Next click on the Normalise button.





4. You will be asked to set the 'Peak' or target Normalise level. This should be set to 100% in most cases. Then click on OK.



5. The volume of the audio in the waveform has been increased such that the loudest parts hit the 100% mark. All the other audio has been amplified by the same factor.



6. We have now finished Normalising the audio. If we do not need to do anything further with the recording we could click on the  button on the top tool bar and shut the edit screen down by clicking on the  button in the top right (of the edit window, not the main Myriad window).

Titling – Changing the title and artist’s labels to be recognisable in the future
With all the audio editing work complete, the final stage before saving the audio is to give it a better title and artists label so we will know what it is in the future. The title information is all stored in the General panel located at the top of the SmoothEdit window.



To update the Title, Artist and Description fields, just type appropriate text into each.



Setting Timing Info (Intro / Hook / Extro)

When adding or editing songs to your system, there are few additional timing fields that should be set to make using the system easier for the presenter.

They include:


- **Intro** – The period between when the song starts and when the vocals start. Radio presenters often use this time to speak or play sweepers. This is an optional field.
- **Hook** – Most recognisable section of the song (should only be 3-4 seconds) that can be used to create promos. This is an optional field.

- **Extro** – Point at the end of the audio that Myriad Playout uses to automatically segue into the next item when in Auto or AutoFade mode. This should be set for all audio on the system.

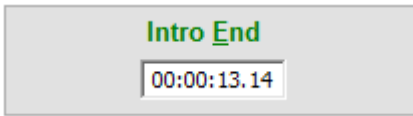
When adding recorded speech content or complete shows you can normally ignore both the Intro and the Hook but the Extro is recommended for all audio on your system.

Setting Intro – The Intro is the part of the song before the artist starts singing. Some songs don't have an Intro (i.e. singer starts virtually straight away) but most do. The Intro consists of an **Intro Start** and **Intro End** time. There is also an **Intro Mid** option but we will ignore that for now. The **Intro Start** should usually be set to **00:00:00.00** which means the Intro will begin at the beginning of the song. The **Intro End** needs to be set at the point where the artist starts singing. The way we set the Intro End is listening to the track and click on the Intro End button at the point where the singer starts singing. Here is the process:

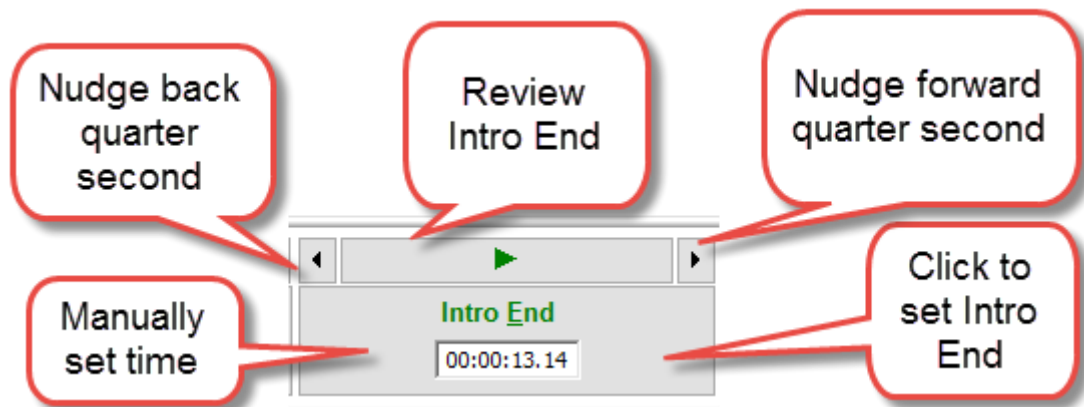
1. Highlight the Cart on the Audio Wall and click on the Edit button on the AudioWall tab.
2. Once **SmoothEdit** has loaded, click on the **Play** button on the bottom of

the SmoothEdit window. 

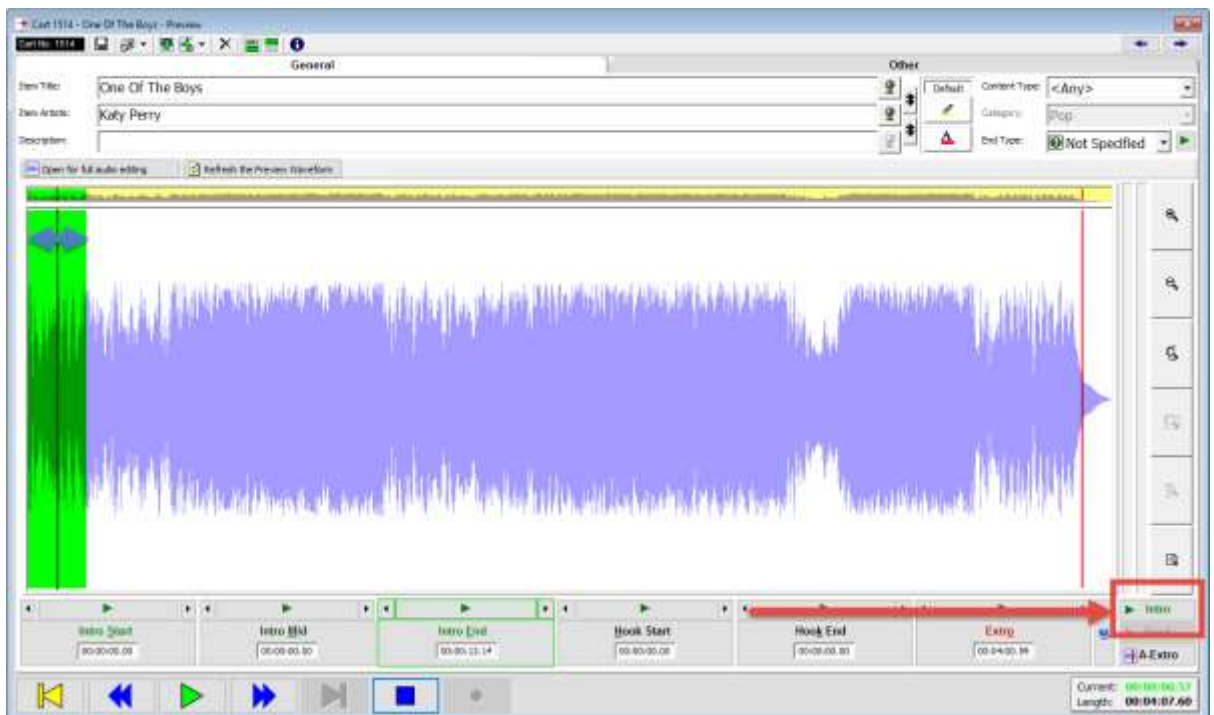
3. Use the '<' and '>' keys to jump forward or backward in playback. Listen to the audio carefully and try to anticipate where the vocals will start. If you miss it, just press the '<' key on your keyboard to jump back a couple of seconds.
4. At the point where the vocals kick in, click on the **Intro End** button to tag

the time. 

5. There are a number of additional option buttons around the main Intro Time button. They are outlined below.



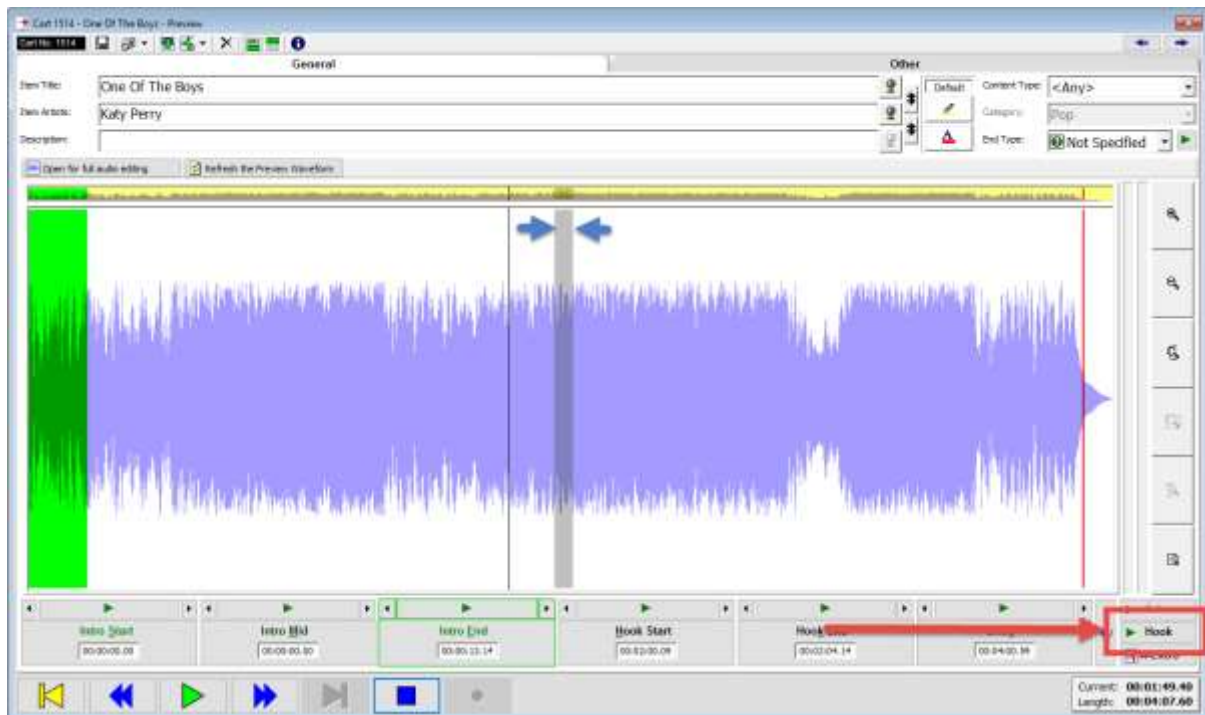
- The **Intro** is now set. You can see it as a green block on the wave form display and can review the whole Intro by clicking on the **Play Intro** button on the right of the SmoothEdit window.



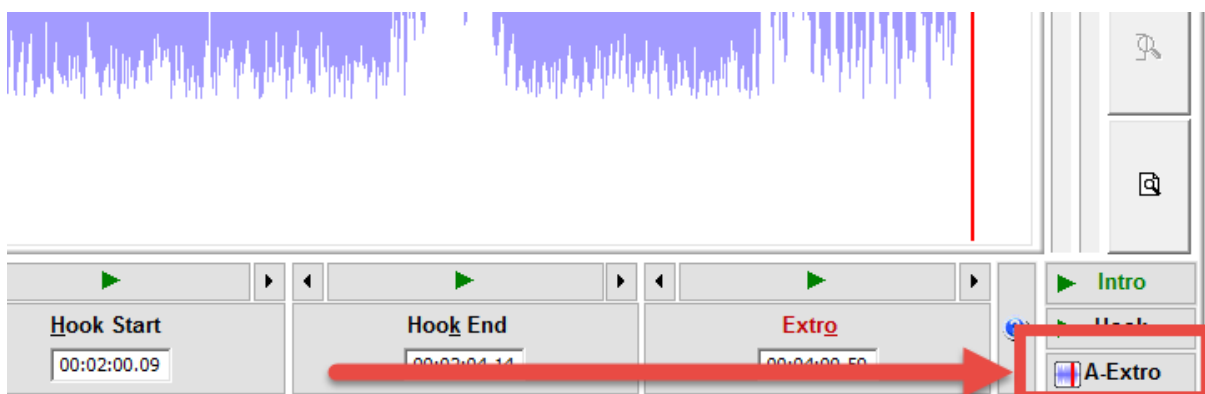
Setting Hooks – Hooks are the most recognisable part of a song and they can be used to dynamically create ‘teaser’ promos for what is coming up on your show. Hooks are most effective if they are short (probably between 3-4 seconds max).

Setting Hooks is done in much the same way as setting Intros except that both the **Hook Start** and **Hook End** must be set.

Follow the process outlined above to set the Hook Start and Hook End points, then click on the Play Hook button to review your Hook.





Setting Extro – Setting the Extro point can be done in exactly the same way as setting the Intro End or either Hook points but there is a lot easier way of doing it. Myriad Playout can automatically set the Extro point, just click on the **A-Extro** button and Myriad will calculate and set the Extro for you.




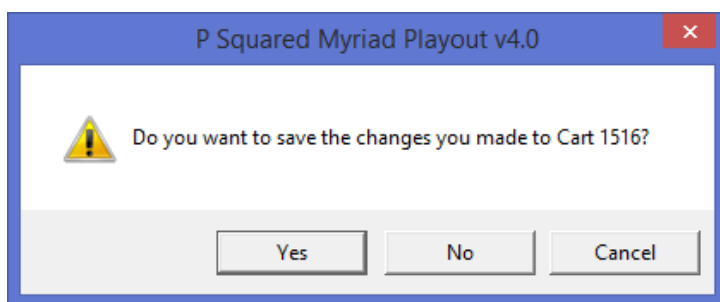
Saving – Saving your work and returning to the AudioWall



Now we have completed the audio editing and titling, all we need to do is save the changes and close the SmoothEdit window.



Click on the  button on the top tool bar and shut the edit screen down by clicking on the  button in the top right (of the edit window, not the main Myriad window).

Don't Want To Save? No problem click directly on the  button and you will be asked if you want to save the changes or not. Click No if you would prefer to close the Cart and discard all your changes.



You could also skip clicking on the  button first and jump straight to the  button and just click Yes or No depending on whether you want to save or not.

The SmoothEdit window will now close and return you to the AudioWall where your edited Cart will be waiting.

Using The Pad

The Pad is a simple tool in Myriad Playout used for manually planning and creating shows or features by dragging pre-recorded Carts into the Pad to create a playlist for the show.

Once you have planned your show, you can use the Pad to:

- Manually play your show
- Mix your show down to a Single Cart on the AudioWall
- Save your show for later use
- Schedule the saved Pad to automatically play
- Create a special Promo Cart

As with most things in Myriad Playout, the Pad is fairly intuitive and can be used in several different ways. Here are a few of the more common tasks you will perform.

Showing & Hiding The Pad



The Pad is located to the left of the AudioWall tab in Myriad.

In most cases it will be visible by default but it can be toggled on and off using a setting on the View menu.

If you cannot see the Pad then follow these steps:

- a. Check you are on the AudioWall tab (not InstantCarts).

- b. Click on the View menu at the top of Myriad.
- c. The bottom option is 'Display Pad'.
- d. Tick this option and the menu will close returning you to the AudioWall with the Pad now visible.

With the Pad visible, you can start building the playlist for your Show.

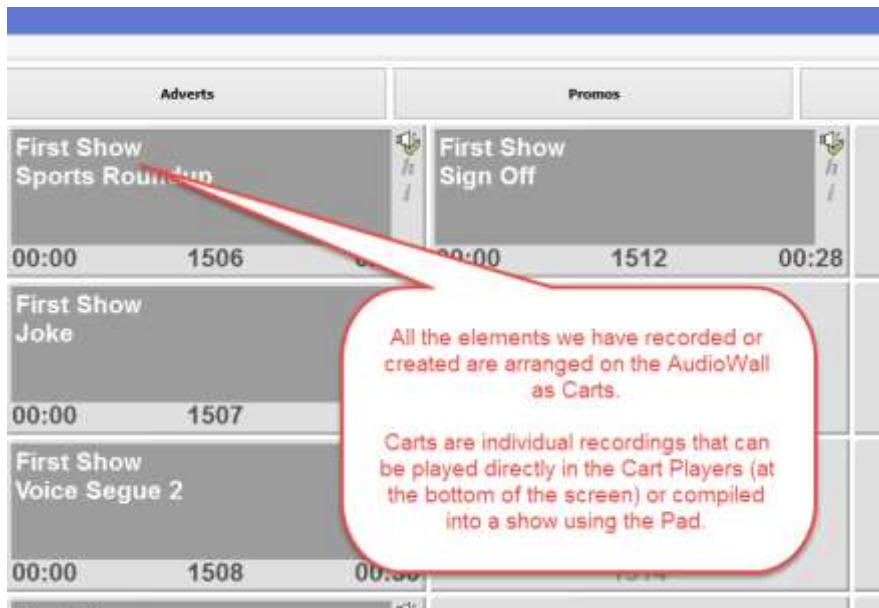
Creating a show Playlist (by dragging in Carts)

In most cases, School Radio programs will be manually built using pre-recorded elements (such as interviews and features) mixed with music and recorded speech.

To do this we use a tool in Myriad Payout called the Pad which allows you to build a list of Carts to use in your show.



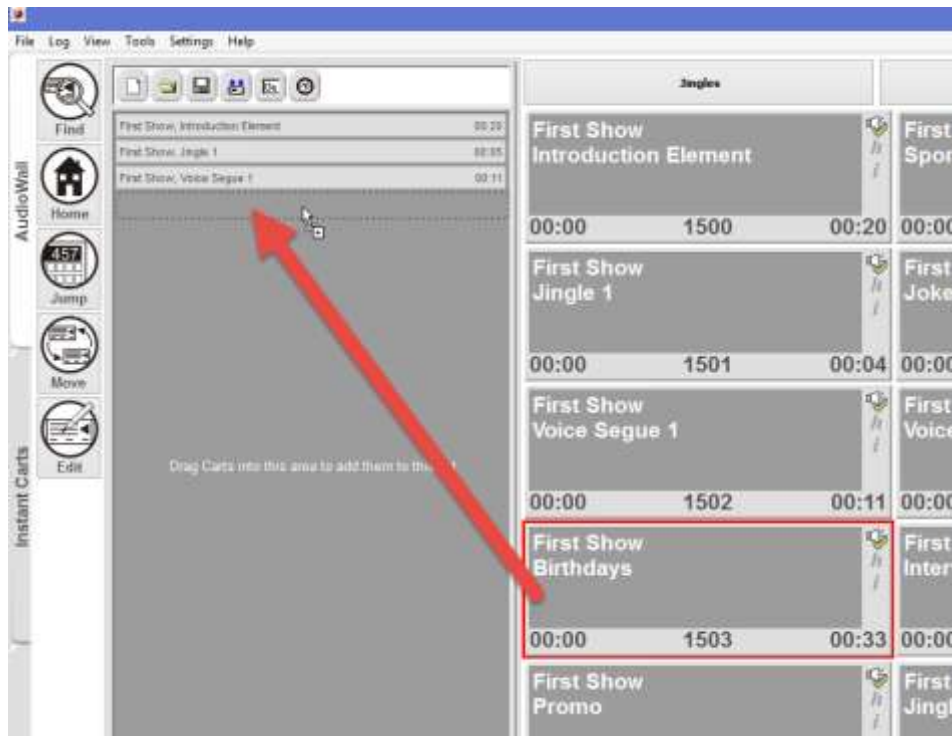
Any audio items on the system will be represented by Carts on the AudioWall. The best way to illustrate the process of building a show is to walk through a real world example. In this example, we will assume we have recorded a series of different program elements that we want to combine into a single show which can be exported or scheduled for playback later.



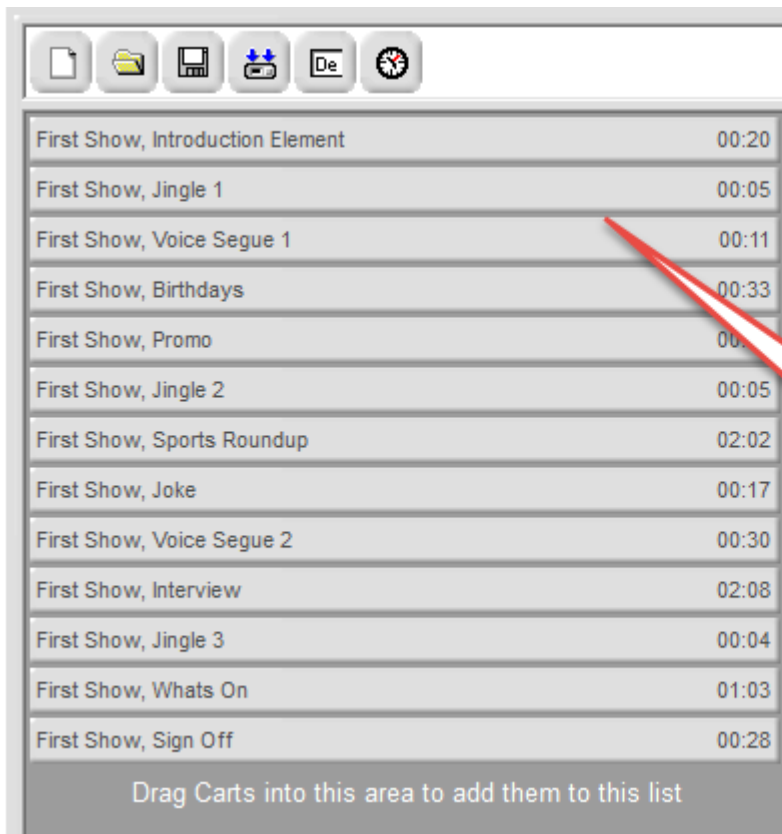
Note how we have also labelled the Carts to tell us what the element is and which show it is for.

Next we need to add the individual elements to the Pad to create the running order for our show.

1. Using the left button on the mouse (or the touch screen if you have one), drag each element from the AudioWall into the Pad in the order that you want the elements to be played in your show.
2. Don't worry if you get the order wrong as you can re-order elements within the Pad by dragging them up and down (using the left mouse button or touch screen).
3. If you accidentally drag an element into the Pad that you do not want to include, don't panic, just double click on the item in the Pad and it will be removed from the list.



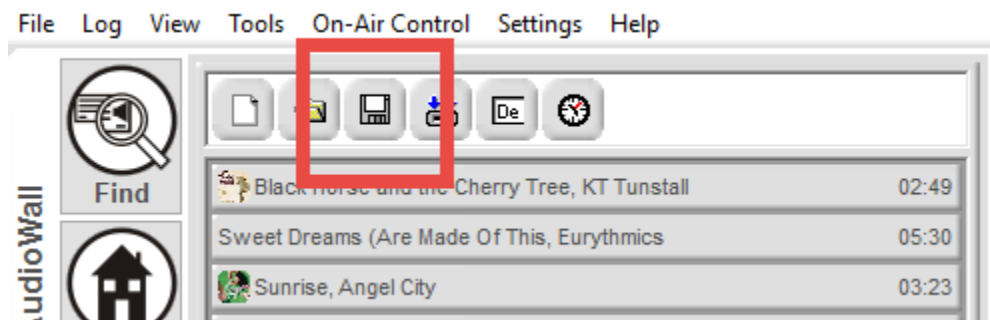
4. Once all the elements are in the Pad, double check by comparing with your written Running Order (if you have one) that you have everything and that it is in the order you want.



Your finished running order should look something like this.

Loading & Saving Pad Lists

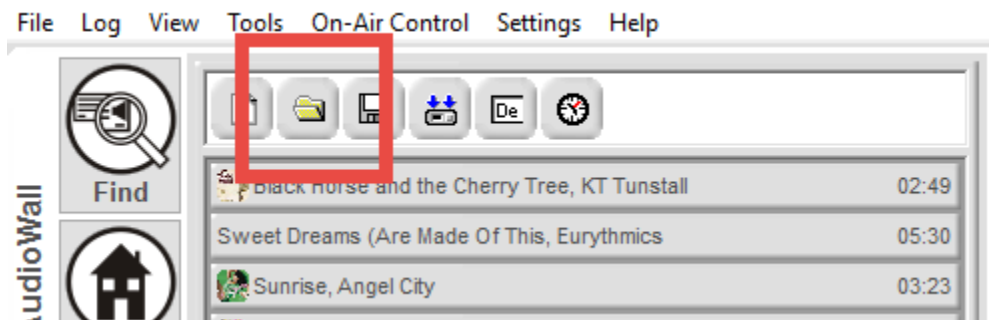
If you have created a playlist or 'Running Order' for your show, you may wish to save it so that you can easily reload it for use later. To do this click on the Save button located on the top toolbar of the Pad.



This will open a standard 'file browser' dialogue to allow you to browse to a location and add a file name to save your Pad List as.

N.B. This saves a list of the Carts you intend to use, not the Carts themselves. To export all the Carts as a single audio item check out the 'Mixing Down Your Shows To A Single Cart' section.

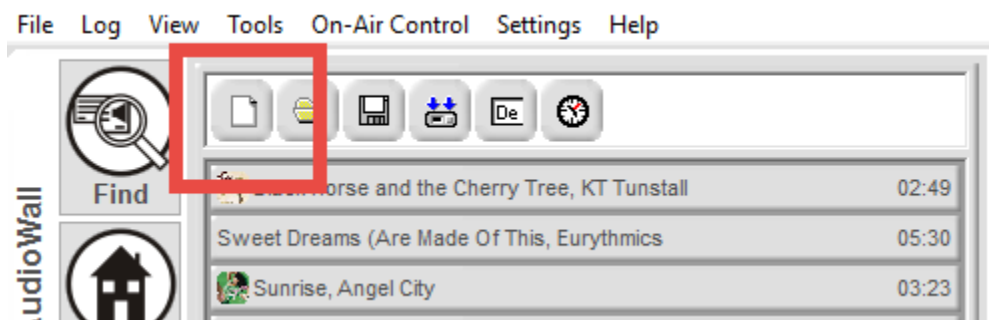
If you want to **Load** a Pad List you saved earlier, you click on the Load button and browse to the Pad List you want to load.



If you load multiple Pad Lists, the content of each list is appended to the end of the existing Pad allowing you to combine multiple pre-saved lists.

Clearing The Pad

If you need to clear the contents of the Pad, the Clear button is located to the left of the top toolbar.

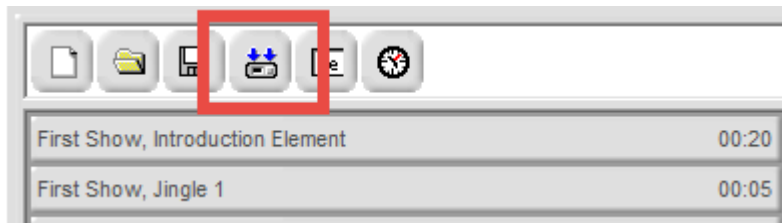


Mix down your show to a Single Cart

Once you have a list of Carts you want to 'mix down' to create your show, follow these steps:

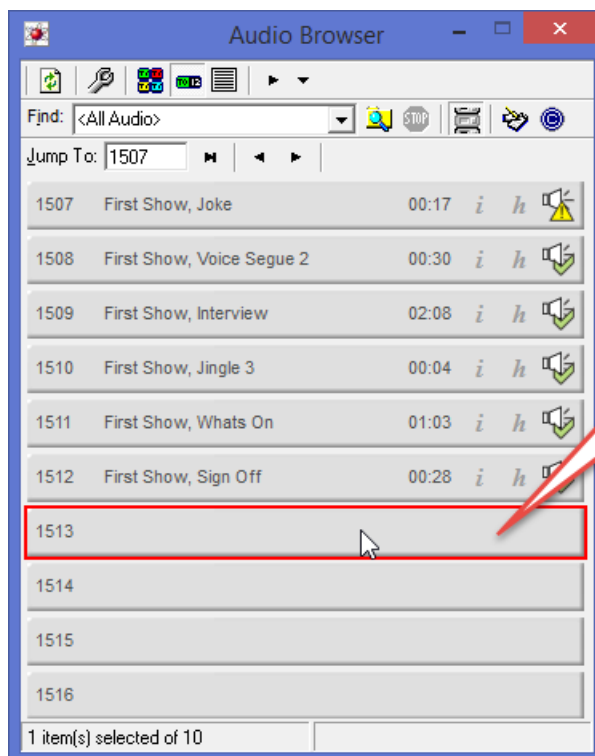
1. Check that the Hook tick box (at the bottom of the Pad) is unchecked.
2. The next step is to make Myriad compile the individual elements you have created into a single show which will appear as a Cart on the Audio

Wall. To do this, look at the toolbar buttons along the top of the pad, locate the 'Export As Single File' button and click on it.



This will open the Cart Browser window. This window is used to select an empty Cart on the AudioWall which will be used to create our show. In the example below, we have navigated to the same area of the AudioWall where our elements are stored (using the Jump To option) and have selected an empty Cart directly below the last element of our show.

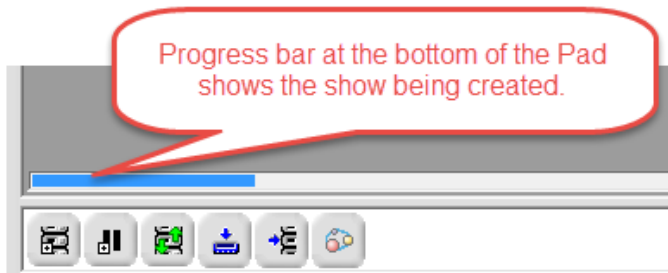
3. To select the empty Cart, double click on it using the left button on the mouse.



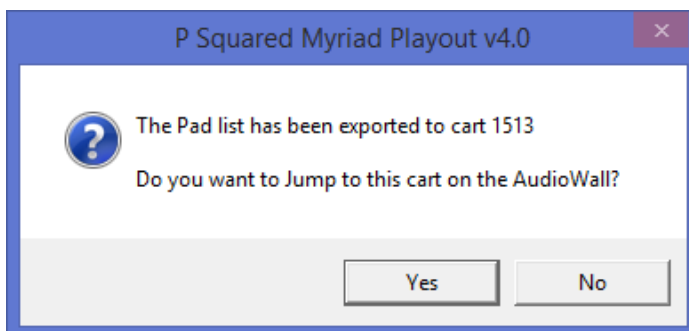
Find an empty Cart that you want to use for creating your first show and double click on it.

4. Myriad Payout will now start to 'mix down' all the contents of the Pad into a single Cart on the AudioWall. Depending on how long the content

is, this may take several minutes. At the bottom of the Pad you will see a progress bar showing you how far through the process the system is.



Once the process has completed, Myriad will ask you whether you would like to 'Jump' to that Cart, you should click on Yes.



At this stage, all of the elements in the Pad have been mixed together into a single Cart on the AudioWall which can be exported or scheduled for later playback.

Creating a Special Promo Cart

The term 'promo' is short for 'promotional item' and refers to an element used in radio to promote either the station or an event. This is usually not the same as an advert which is used to endorse a product or service.

In this case we are going to make a quick, simple and professional sounding element promoting the type of music played on your School Radio station, using the Hook features in Myriad.

This element includes a number of technical skills which we will cover step by step.

In this example we want to make a promo that includes short sections from several songs to let the listener know what kind of music they will hear if they listen to our school radio station. For this we will need several key elements:

1. A recorded voice element introduction for the promo.
2. A selection of four songs that have Hooks already set in the Myriad software.
3. A short recorded voice element to place in the middle of the promo.
4. A recorded voice element to finish the promo and urge the listener to keep listening.

The first thing you will need are the three recorded voice elements that you want to use in your promo. You could record these specifically for the promo (popular for a promo for a specific show) or use jingles and sound effects that you already have. In this example we will assume you have already recorded the voice elements you need (see Recording Audio).

Next you need to pick four songs that you want to include in your promo.



The Songs must have Hook's already set.

What is a hook? The Hook of a song is the most recognisable part of the song, usually a small section of the chorus that the listeners will instantly know when they hear it. The Hook should be short and snappy (maybe 5-6 seconds max). When songs are added to the Myriad software, you can optionally set a Hook for each song (songs provided as part of our Music Subscription service already include Hooks). Hooks are manually set for each song you add to the system (which is covered in the Myriad documentation and tutorial videos).

In this case we want to find four songs that we want to include that already have Hooks set. Follow the pictures below to help you identify the Songs that have Hooks that you want to use in your promo.



TIP: If you want to use a Song that does not have a Hook set then you can manually set the Hook for the song. Please refer to the main Myriad documentation or tutorial videos for more details on how to set a Hook.

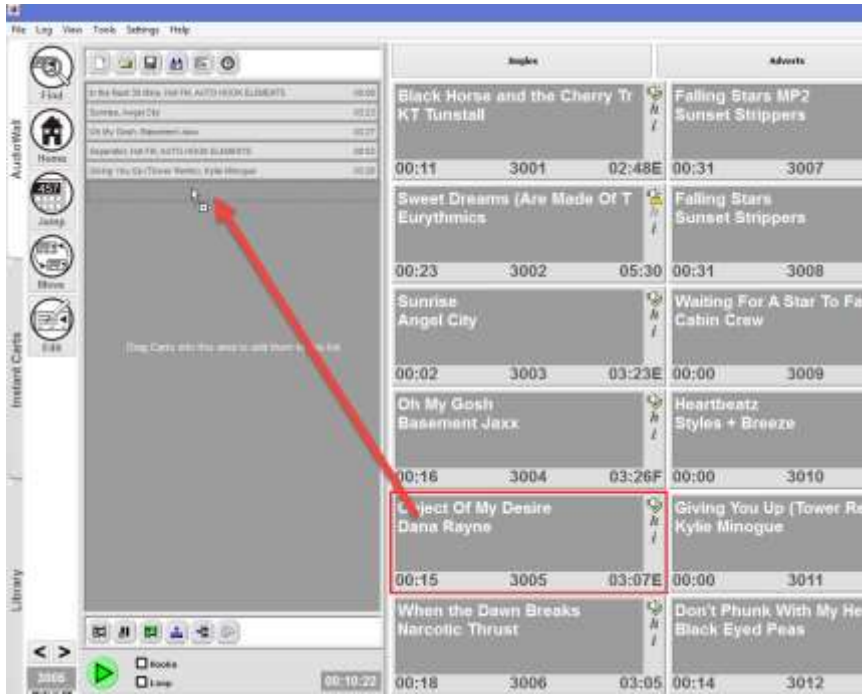
Once you have recorded all the voice elements that you need, and chosen the songs (with Hooks) that you want to include, it is time to put them all together and see how your promo will sound 'on air'.

This is actually really easy to do using the Pad as we can instruct the Pad to 'mix down' the content to a single Cart and only include the Hooks from each Cart.

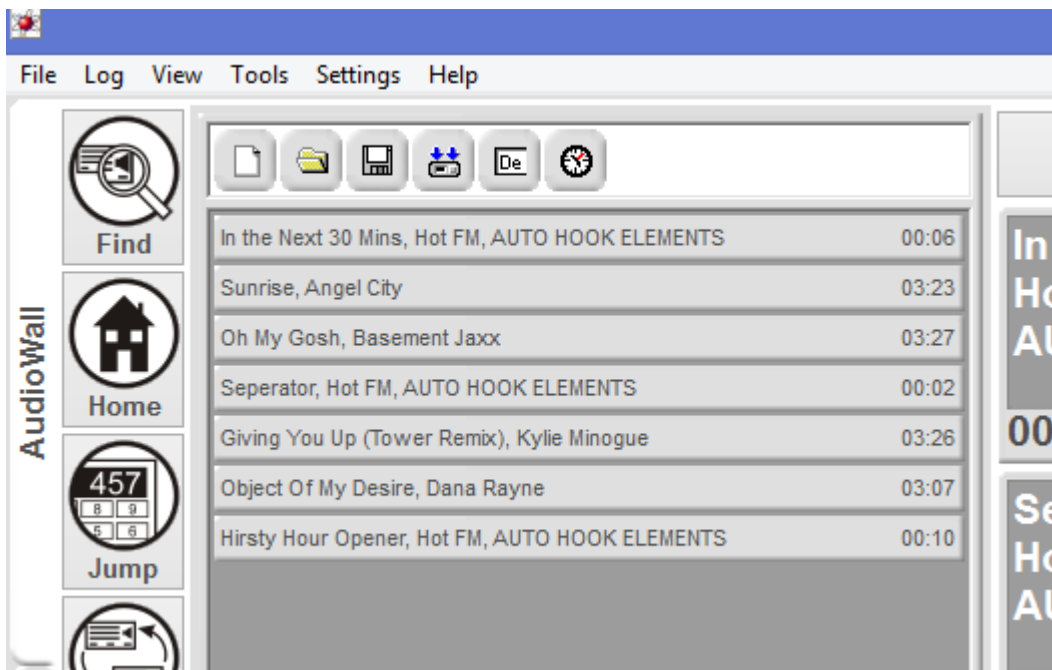
1. Check the Pad is visible. (See Show & Hide The Pad)
2. Next 'drag' the Carts from the AudioWall into the Pad in the order that you want to use them in.

It does not matter if you get them in the wrong order because you can drag Carts around within the Pad to change the order.

If you accidentally drag a Cart into the Pad that you do not want to use then you can delete it from the Pad by double clicking on it.

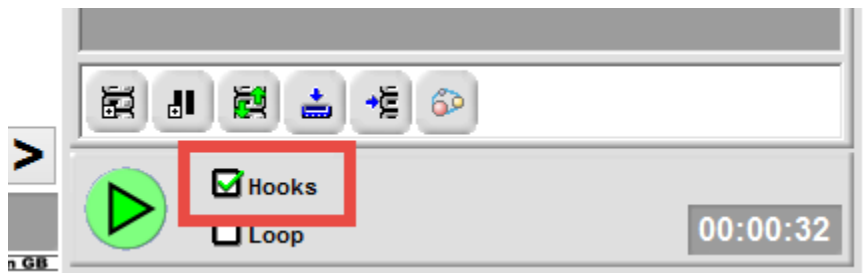


Once we have dragged all the individual Carts into the Pad it should look something like this:



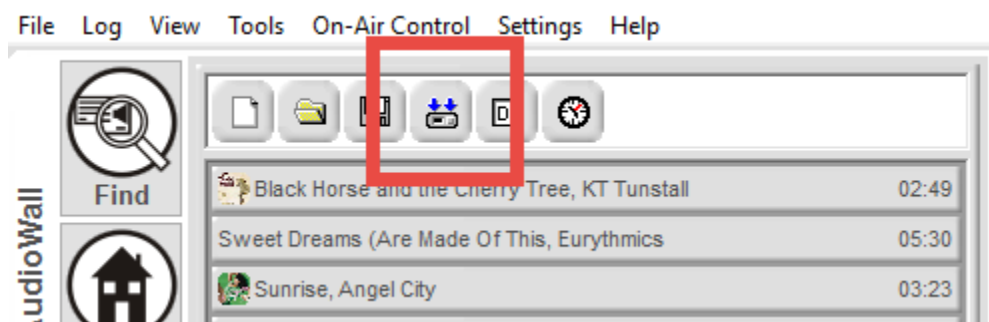
3. You can now use the tools in Myriad to create your finished promo. The first thing you need to do is instruct the Pad to only use the Hooks from each of the songs. This is important as if we skip this step, Myriad will include the complete songs and we will end up with a 12 minute promo!

To tell Myriad to only use the Hooks from the Songs, find the Hooks option located at the bottom of the Pad panel and make sure it is ticked.

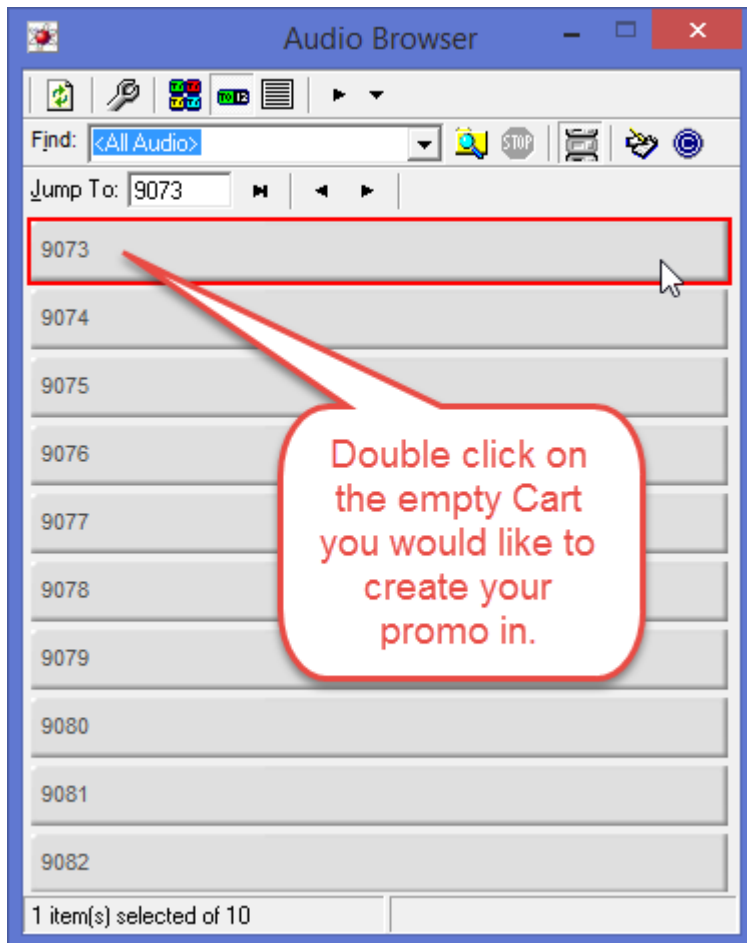


The duration in the bottom right should now be fairly short (maybe 30 seconds) because the Pad will only use the Hooks from each song.

4. You can now tell Myriad to make your promo ready for inclusion in your show. Look at the top of the Pad panel and find the 'Export As Single File' button.



5. When you click on this button you will then be asked to select an empty Cart that will be used to create the promo. This is done via the Cart Browser window which is a mini version of the AudioWall tab.



The Cart Browser is like a mini version of the AudioWall tab.

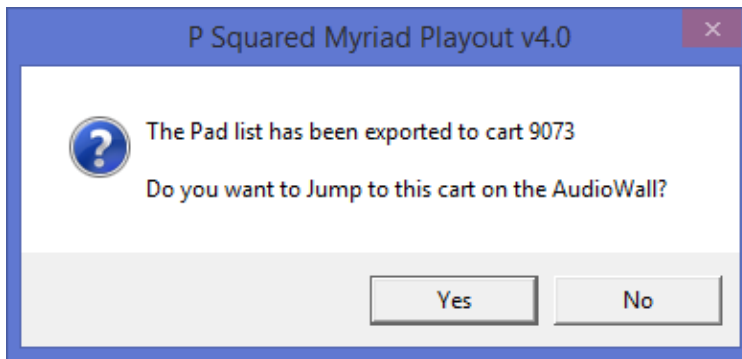
You can use it to browse and select Carts on the AudioWall. You can also use the 'Jump To' option to jump to a specific part of the AudioWall or the Find option to search for a specific Cart.

In this case, Myriad will automatically select the next empty Cart in the 'Home' record range which will be at the top of the Cart Browser window. Just double click on the Cart you want to use to create your promo.

So in this example, the 'Home' is set to start at 9000 but the first empty Cart Myriad could find (starting from 9000) was Cart number 9073 (so we must have recorded 72 Carts previously). This Cart (9073) is displayed as an empty Cart at the top of the Cart Browser window. To select this Cart, just double click on it.

You can browse to a different Cart if you wish as long as you make a note of the Cart Number you are using.

Your promo will now be created in the selected cart (9073 in this example). Once the Cart is finished, you will be asked whether you want to jump to the Cart, click on Yes.

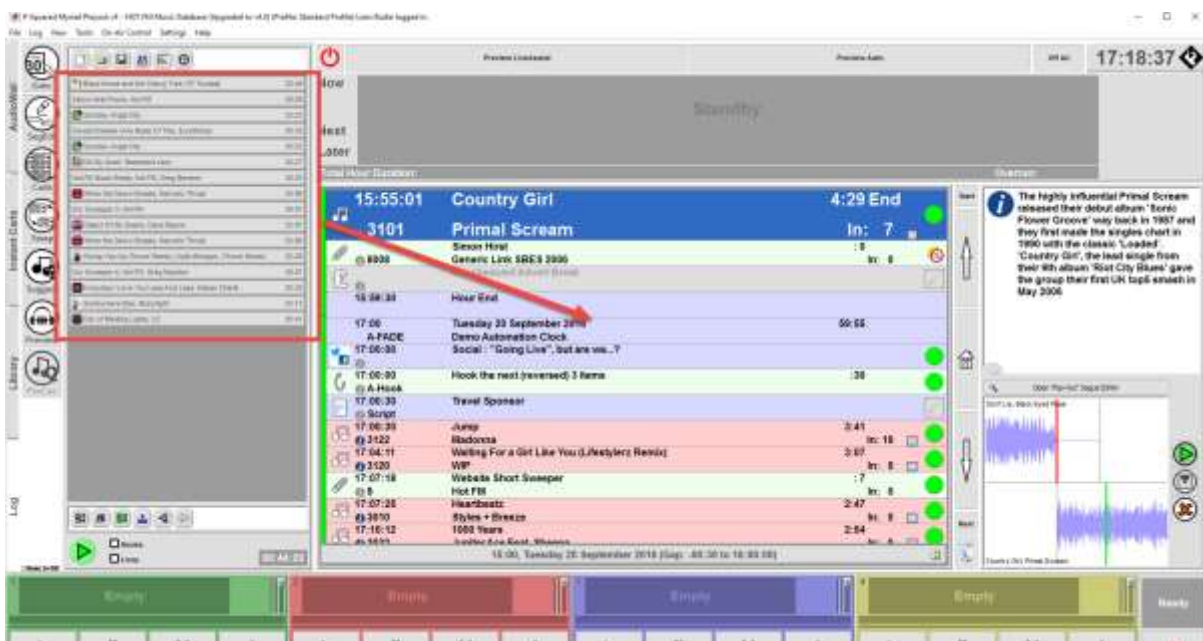


Your promo is now ready to listen to by dragging it into a Cart Player.



Adding a Pad List to the Live Assist Log

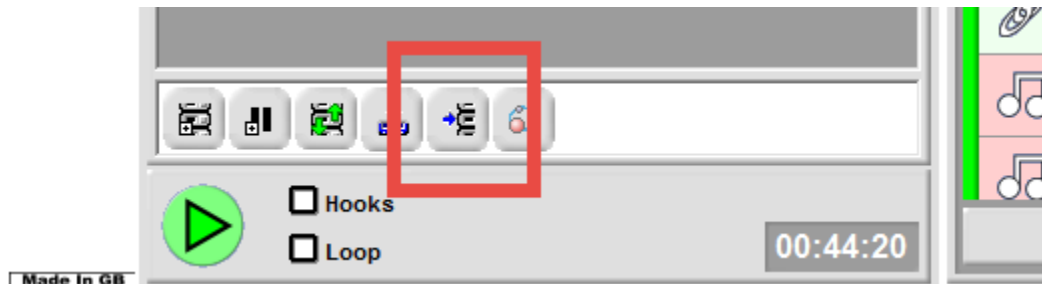
You can also 'push' a show you have prepared on the Pad to a blank hour on the Log tab to allow you to present it as a live assist show.



In the picture above, we want to 'push' the show we have created on the Pad into the 16:00 hour in the Log. You can see the time jumps from 15:59 to 17:00 which confirms we have not currently got a 16:00 hour.

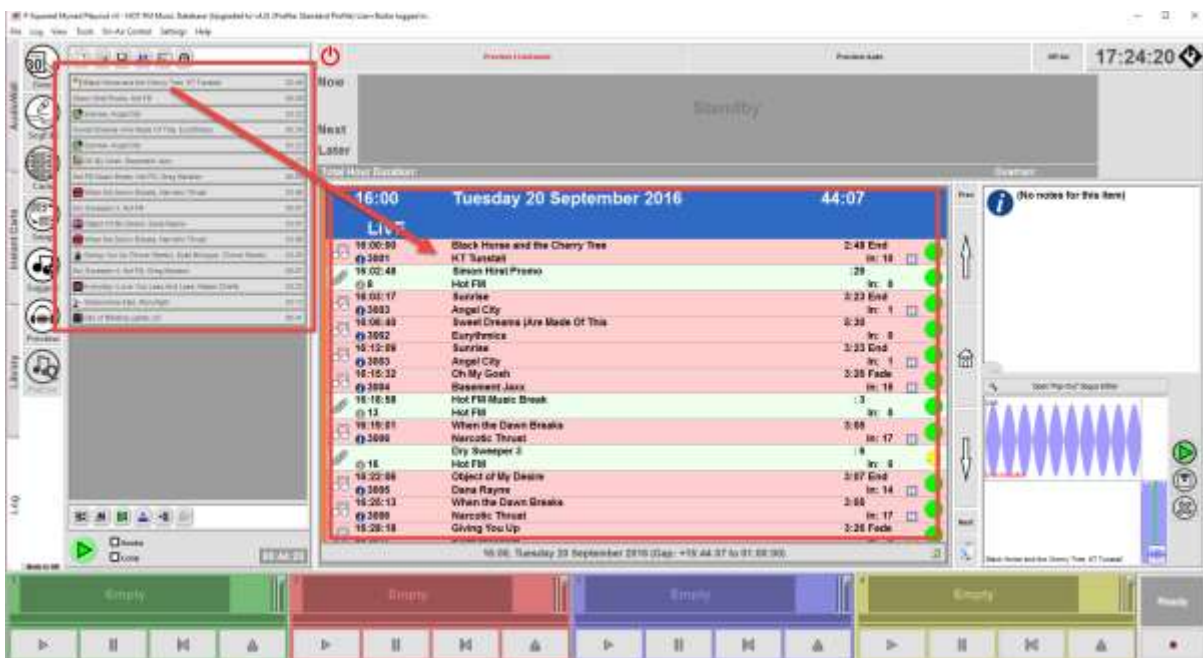
In many School Radio applications, your hours will actually be empty because unless you are also using AutoTrack to schedule ongoing output, hours will not exist until you create them.

To 'push' the Pad into the Log, click on the **Push To Log** button located on the bottom Tool Bar on the Pad.

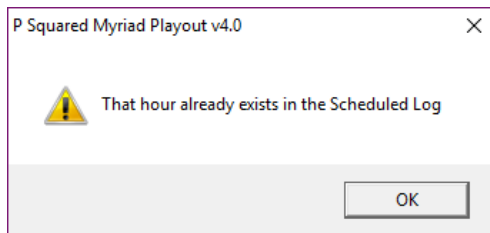


You will then be asked to select the time and date you want to push into. In this case we will select 16:00.

The contents of your Pad will then be added to the Log in the selected hour.



If you try to push a Pad List into an hour in the Log that already exists, Myriad will tell you that you can't do that.



In this case the only option is to right click on the Hour Start item in the Log and select Permanently Delete Hour but be careful with this option!

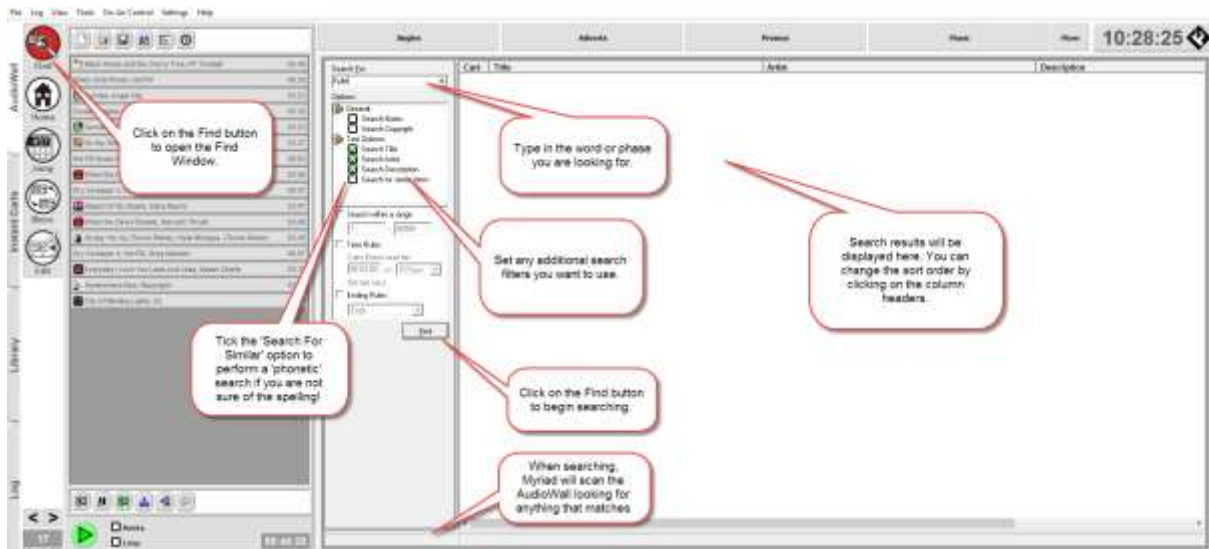
Finding Carts on the AudioWall

You can search the AudioWall for Carts by the following criteria:

- Title
- Artist
- Description
- Notes
- Copyright Details
- Lengths
- Range
- Ending Type

To search the AudioWall for a cart, follow these steps:

1. Click on the Find button on the AudioWall tab (left hand side).
2. Type in the word or phrase you are looking for into the 'Search For' box.
3. If you are not sure of the spelling, you can do a phonetic search by ticking the 'Search For Similar Items' option.
4. Add any other search criteria you wish.
5. Click on the Find button to start the search.
6. Myriad Playback will now scan the AudioWall looking for anything that matches your criteria.
7. Results are displayed in real time in the window to the right. You can stop the search at any time by clicking on the Find/Stop button.
8. You can sort the search results by clicking on the column headers.
9. You can drag items from the search results directly into the Cart Players or double click on items to jump to them on the AudioWall.
10. Click on the Find button on the AudioWall tab to toggle the Find window off.



The results are displayed as a list.



Exporting a Cart and uploading to School Radio Player as a Podcast

Any Cart on the AudioWall can be exported for use in other applications or for uploading to other platforms or websites. One common use for this is to export a completed program for uploading to the School Radio player as a podcast.

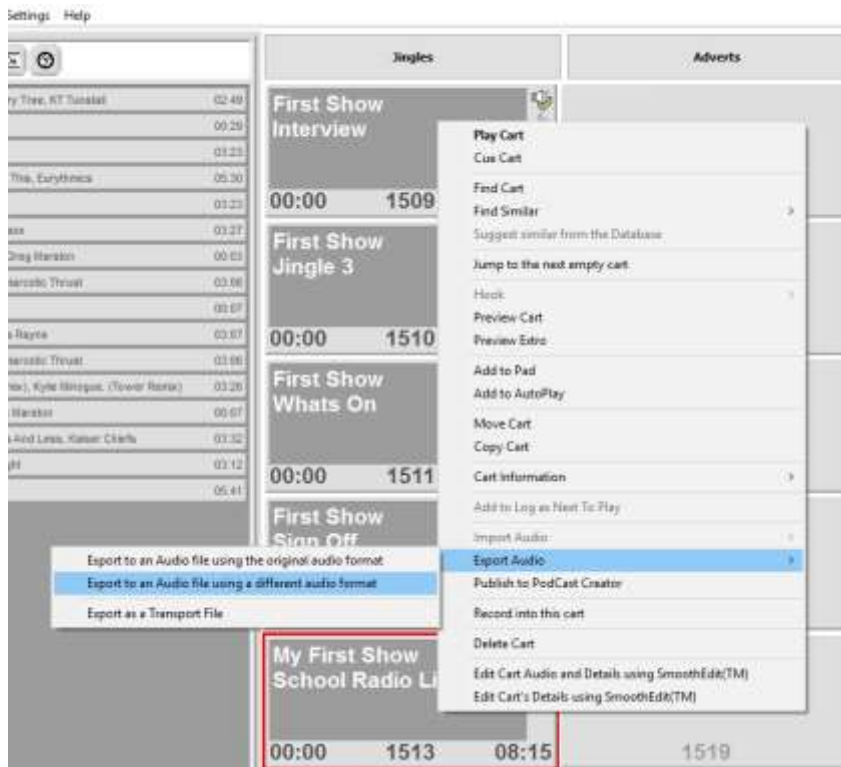
Exporting a Cart as an MP3 File

The first step is to export a Cart from the AudioWall as an MP3 file ready to be uploaded to the School Radio player.

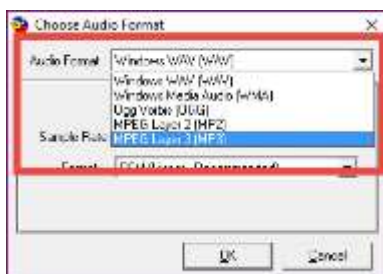
1. Find the Cart you want to export on the AudioWall.
2. Right click on the Cart and select the following menu options:

Export Audio > Export To An Audio File Using A Different Format

We are using a different format because we want an MP3 file in the end.



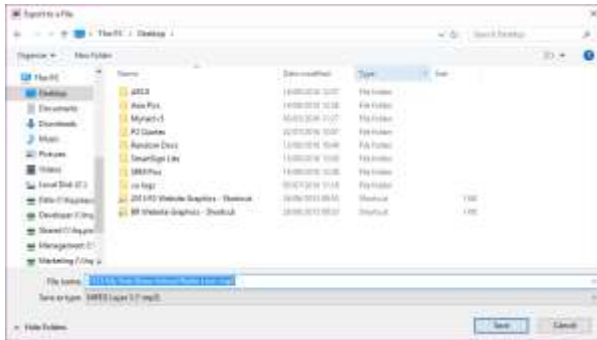
3. The Audio Format window will appear. The first thing to do is use the Audio Format drop down to select MPEG Layer 3 (MP3).



4. Once you have selected MP3, you can then set the sample rate and bit rate details. Set them to the following settings.
 - Sample Rate – 44,100Hz
 - Stereo – selected
 - Bit Rate – 80kbps

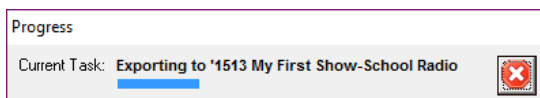
Then click on OK.

5. You can then select the location and filename of the exported audio file using the standard Windows File Explorer dialogue that appears.



In this case we will export the audio file to the Desktop.

6. As the file is created and exported, you will see a progress bar. This process may take several minutes depending on the file size.



Uploading a Podcast to the School Radio Player

The audio file has now been generated and is ready to upload to the School Radio Player.

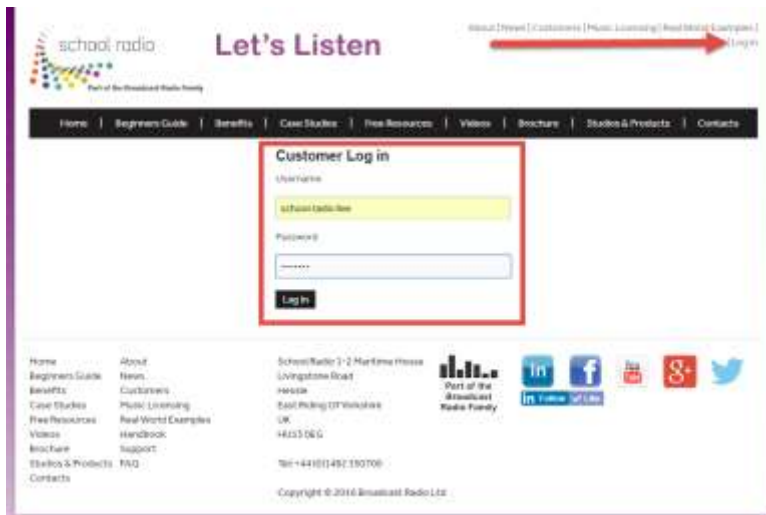
Please note that all School Radio installations include at least 12 months School Radio Player subscription. Beyond this you can continue to use the School Radio Player for a small monthly fee.

We will now look at how to add the exported file to your School Radio Player as a Podcast.

TIP – You can watch this process as a tutorial video here -

<http://www.schoolradio.com/pages/quick-guides>

1. Go to www.schoolradio.com in your preferred web browser.
2. Click on the Log In option in the top right hand corner.
3. Type in your supplied Username and Password. You should have been given these as part of your installation but let us know if you need to reset them.



Click on the 'Log In' button once you have entered the details.

4. This will take you to your School Radio Portal. From here you can:

- Upload your school logo
- Customise your School Radio Player
- Download the 'embed' code to easily add School Radio Player to your website.
- Upload and manage your podcasts
- Access the Premium Resource Kits

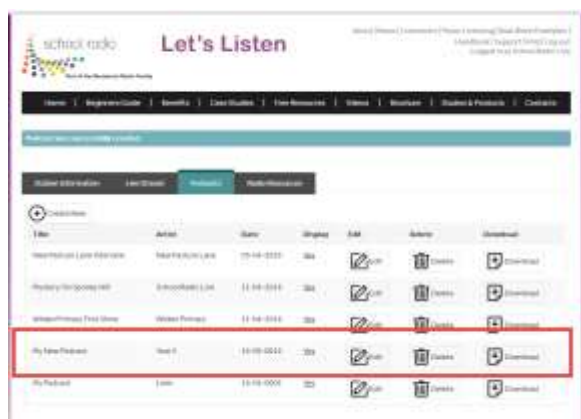
5. For now, we just want to upload a Podcast so click on the Podcasts tab.



6. You can see the existing Podcasts listed here and you can edit, delete or download them directly from this list. In this case we want to add a new Podcast so we need to click on the Create New button.

7. The New Podcast window will be displayed. You will need to add in the following details:

- a. Title – The Title that will appear on the School Radio Player.
 - b. Artist – The credited artist or presenter.
 - c. Date – Usually the date the Podcast was created.
 - d. File – Use the Browse button to select the file we created earlier.
 - e. Create Podcast – When you are happy with the details, click on the Create Podcast.
8. The file will be uploaded (which may take a few minutes). Once it is complete, your new Podcast will be listed on the website.



Here you can see the Podcast listed in the School Radio Player.

For more detail on using the School Radio Portal, check out the tutorial video on our website.

<http://www.schoolradio.com/pages/quick-guides>

Importing Audio

How to import audio onto the AudioWall as a Cart.

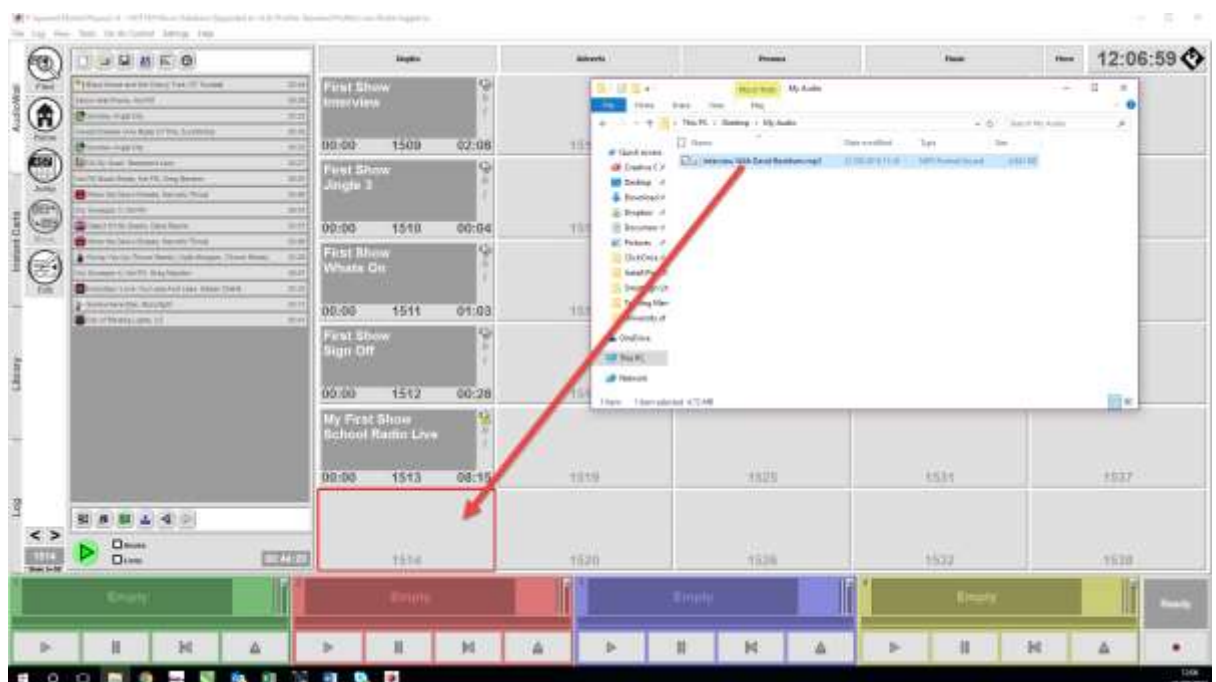
Simple Drag & Drop Method

The simplest way to import an audio file onto the AudioWall is to simply drag the file from a Windows File Explorer window onto the Cart you want to import it into.

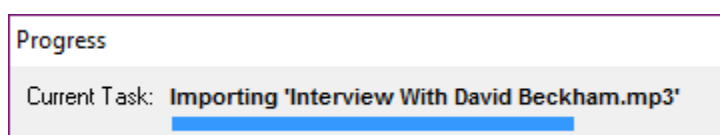
1. Open a Windows File Explorer windows (called My Computer).
2. Locate the audio file you want to import. This could be on a local drive, memory stick or network location.
3. Check to make sure it is in a format Myriad Payout can import. These include:
 - AAC (.aac / .adts)
 - Ogg/Vorbis (.ogg)
 - MP2 (.mp2)
 - MP3 (.mp3)
 - MP4 (.m4a & .mp4)
 - Wave (.wav)
 - Windows Media (.wma)
 - Transport Files (.zip but generated by Myriad Payout)

Files must not include copy protection (so Apple Music files cannot be imported) and some variable bit rate MP3 files are also not supported.

4. Drag the file from the Windows File Explorer window directly onto the Cart you want to import into.



5. The file will then be imported directly into Myriad Payout.




Once the process is complete, the file will be ready to play although you may wish to refer to the Editing Audio section to see how to prepare the file for broadcast.

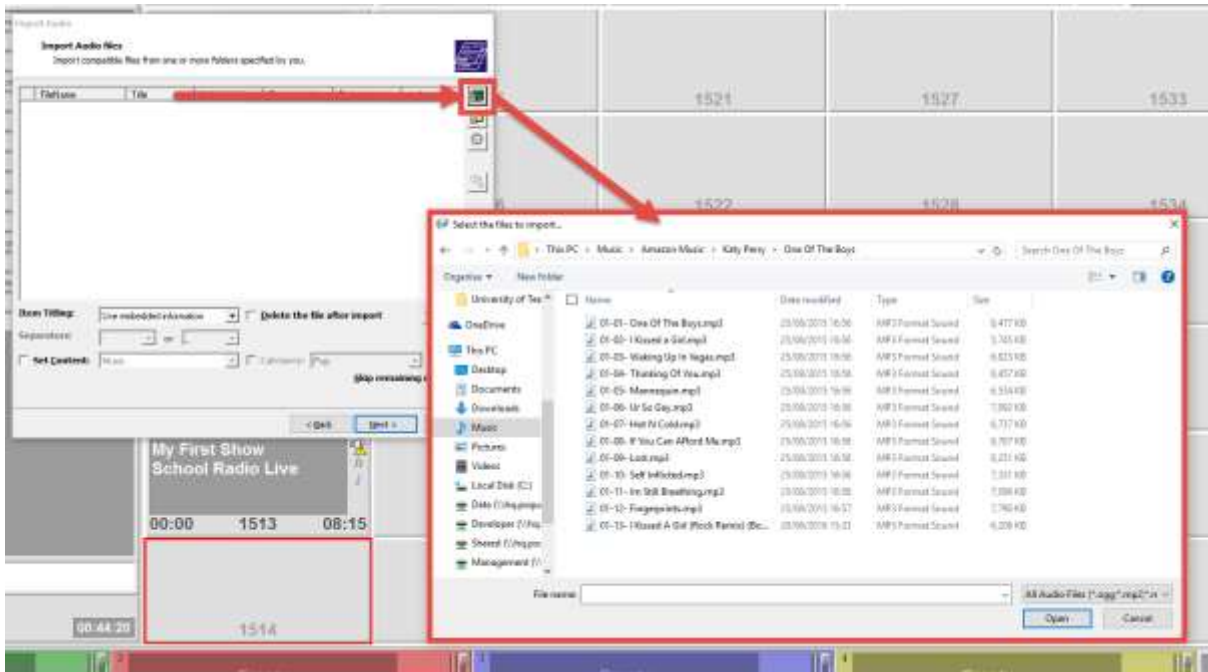
Importing Multiple Files using the Import Wizard

Whilst dragging a file directly onto the AudioWall is efficient for a single file, if you have several files you want to import then it is quicker to use the import wizard.

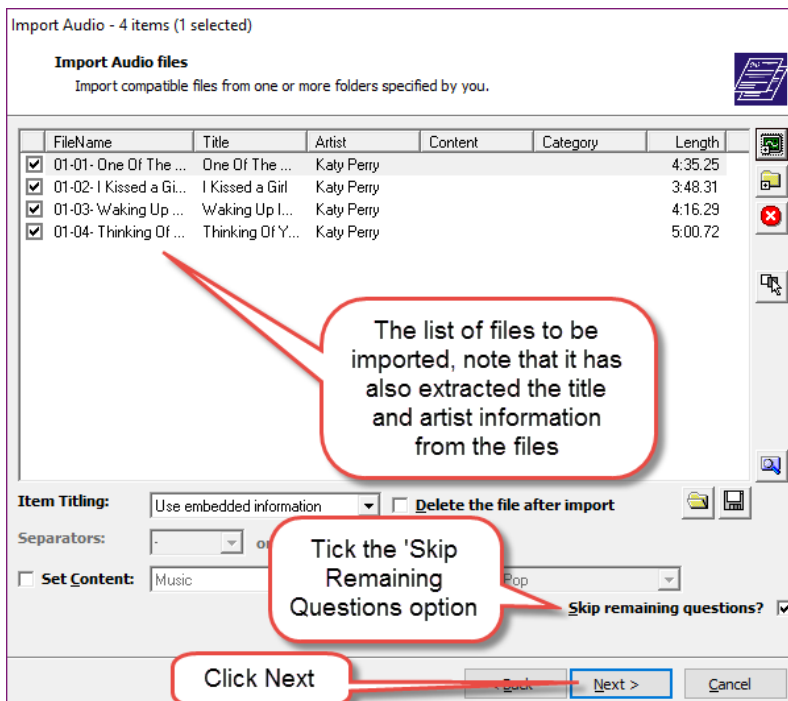
1. Right click on the Cart you want the first file to be imported into. Subsequent files will be imported into the next empty Carts on the AudioWall.
2. Select the following menu options:
Import Audio > Import Wizard
3. The first screen in the Import Wizard is a welcome screen which can be skipped by clicking on Next. There is also an option to not show that screen in the future (which is worth ticking).
4. The next screen in the wizard is the Source Audio Location screen which has the following options:
 - Import Audio Files – Import MP3/AAC/WAV files etc.
 - Rip Audio Tracks From CD – Allows you to import audio tracks from an audio CD placed in the PC's CD ROM drive.
 - Download Audio From An Online Store – This option is no longer used.

Select the **Import Audio Files** option and click on Next.

5. The **Import Audio Files** page allows you to select the list of audio files you want to Import. Click on the Import File button  and select the audio files you want to import.



6. The selected files will now be listed in the main window. In most circumstances we would now tick the 'Skip Remaining Questions' option and then click Next to start import process.



In this case we will un-tick the Skip Remaining Question option as there are a couple of extra options we should cover.

7. The **Cart Number Allocation** page allows you to set the start Cart number for the import process. This will be the Cart you right clicked on to open the Import Wizard. You can also set whether the import should overwrite existing Carts. We don't need to alter any of these settings in normal circumstances. Click Next.
8. The **Import Audio Format** page allows you to check and edit the audio import format settings for the imported files. In most cases we can leave the settings on the defaults but make sure the 'Automatically trim Silence from the start of the Cart' option is ticked. Then click Next.

Import Audio - 4 items (1 selected)

Import Audio Format
Select the Audio format to use for the imported audio

Convert the Audio to match the Audiowall's Format
Automatically convert the audio to match the main format used for the Audiowall

Import the Audio in it's current Audio Format
Leaves the audio in the original format even if this is incompatible with the Audiowall

Convert the audio to a specified format:
Windows WAV; 44,100Hz; Stereo; PCM
Select

Normalise the Audio after it's imported
Percentage to RMS Normalise to: 97 Audiowall Default Using default normalisation

Other Options:

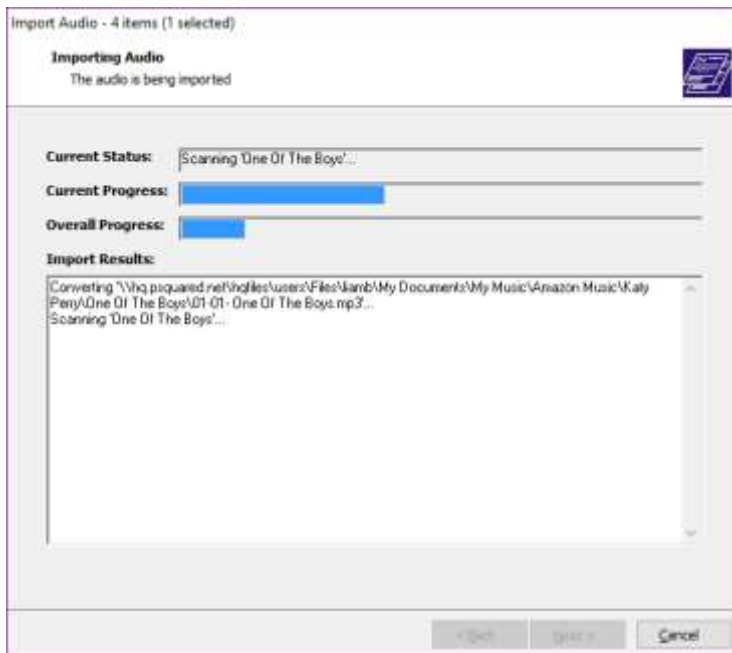
Automatically set Trim Exits of the new Audio using the threshold set in Audiowall Settings

Automatically trim the silence from the start of the Audio (Top)

Automatically crop the audio if Trim Points are stored in the audio files

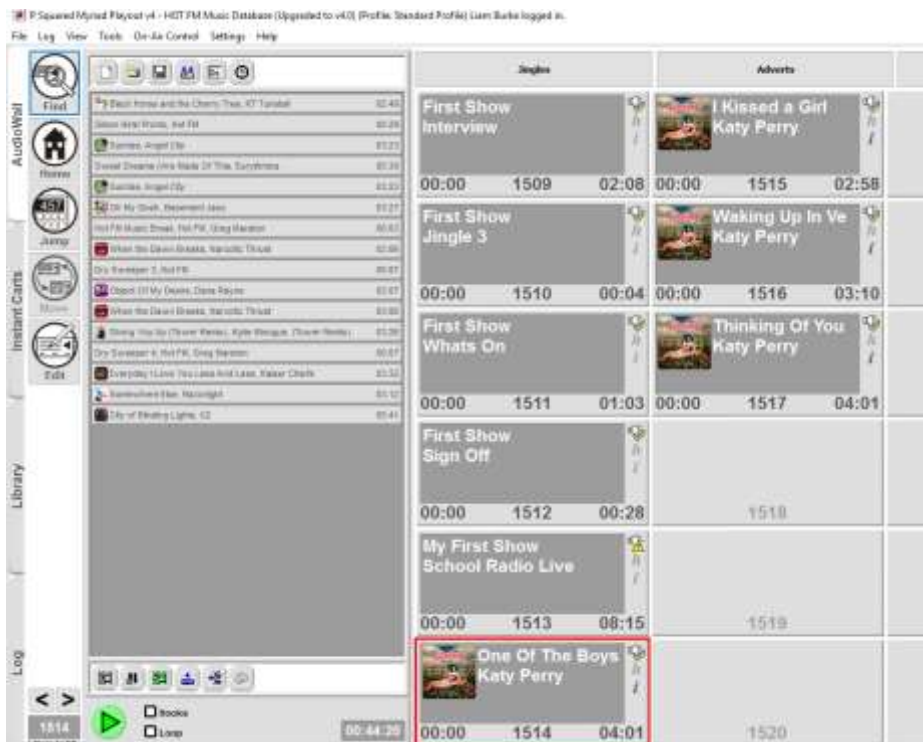
< Back Next > Cancel

9. The final two pages of the wizard display a summary of what will be imported and ask you to confirm the action, click Next on both to start the import process.



Once completed, a page will be displayed to confirm the import has finished.

- The audio has now been added to the AudioWall as Carts and are ready to be played but you may wish to review the Editing Audio section to see how to finish adding in the timing information etc.

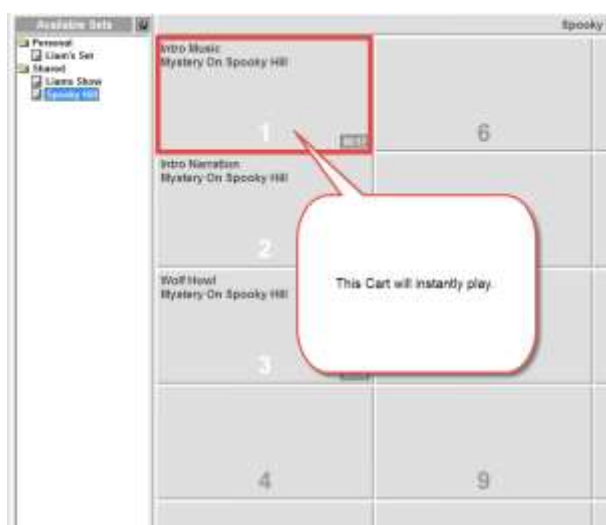


Using Instant Carts

InstantCarts are shortcuts to your favourite Carts on the AudioWall. They can be used to provide instant access to your favourite jingles, beds, music or sound effects. InstantCarts are also really useful for playing feature content of atmospheric audio for drama and plays.

The InstantCarts are arranged into sets of twenty with unlimited sets available. The audio that plays when an InstantCart is triggered depends on what Set is selected. You may setup different Sets for different shows or even for different features within a show.

Playing InstantCarts



Using Keyboards

InstantCarts are arranged into sets of 20 and each InstantCart is mapped to a button on the K500 keyboard. This means that if you have a specific Cart loaded onto InstantCart 1, whenever you press the '1' key on your K500 keyboard, that Cart will instantly play.

If you don't have a K500 (they are not included with the Classic or Starter Packages) then you can achieve the same by pressing 1-10 on your standard keyboard. To access InstantCarts 11-20 you can use <Shift Key> + <1-10> but we would recommend clicking on screen with the mouse or touchscreen as an alternative.

Using Touch Screen

InstantCards also play instantly when you click on them using either the mouse or touchscreen.

Assigning Cards to Instant Cards

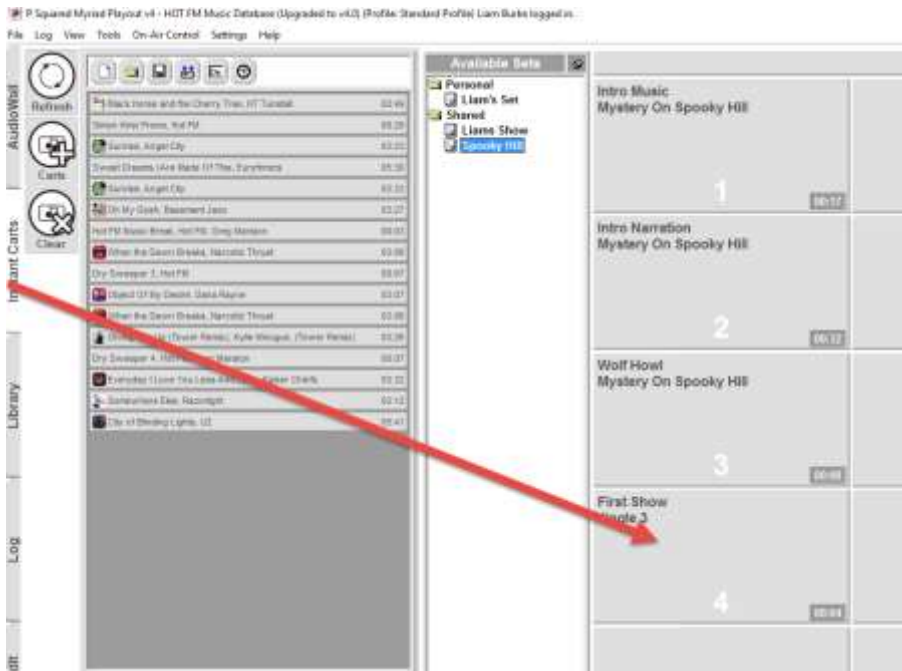
Cards are assigned to InstantCards by simply dragging the Card onto the InstantCard you want to use. There are two main methods for doing this.

Dragging from the AudioWall

1. Find the Card you want to use on the AudioWall.
2. Use the left mouse button (or your finger on the touch screen) to drag the Card over to the InstantCard tab on the left hand side.



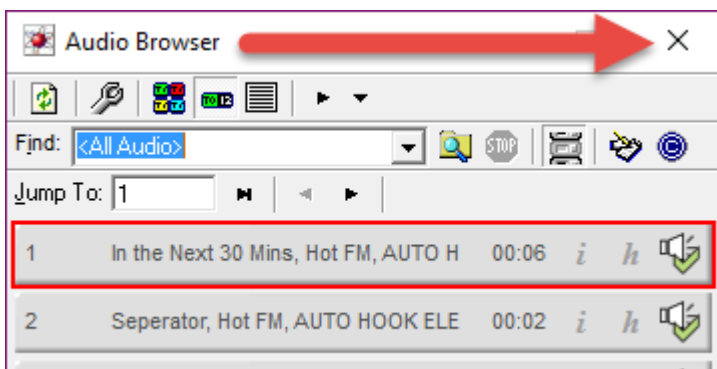
3. As you drag over the InstantCards tab, the main window will switch to the InstantCards window.
4. Keeping the left mouse down (or finger on the touchscreen) drag the Card back onto the InstantCards window and release the button (or lift your finger) when directly over the InstantCard you want to assign the Card to.

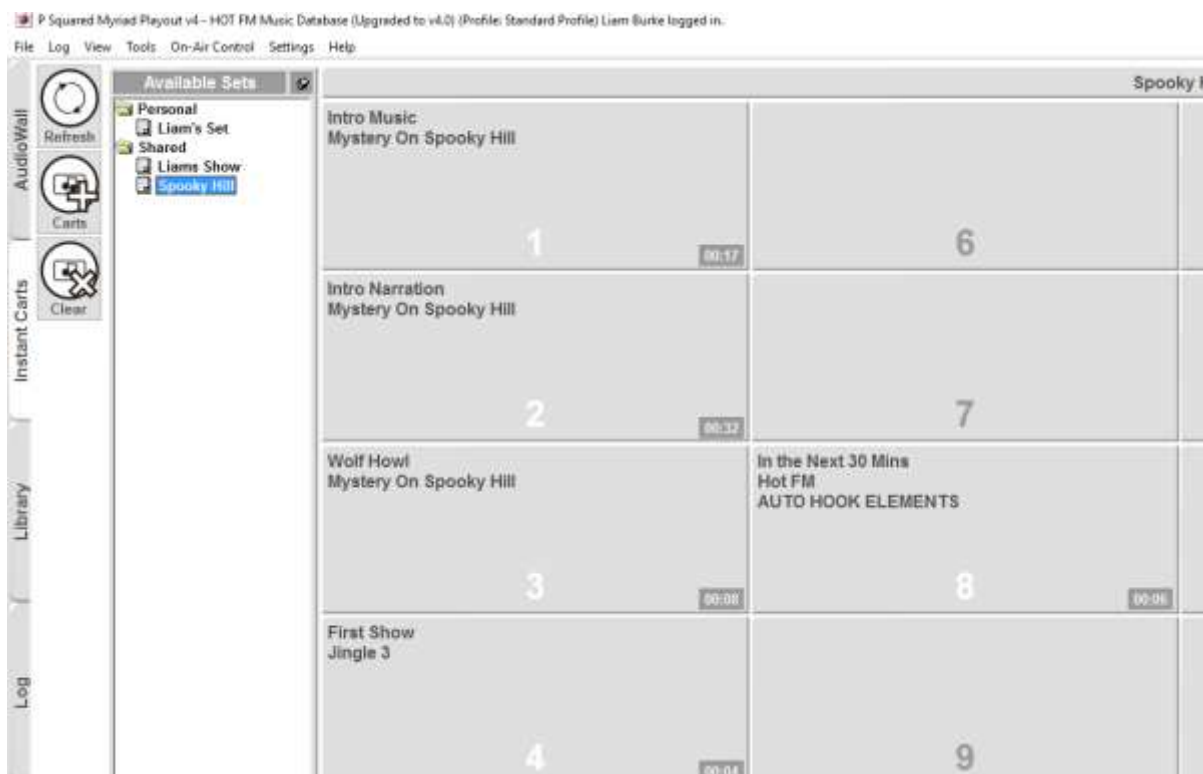
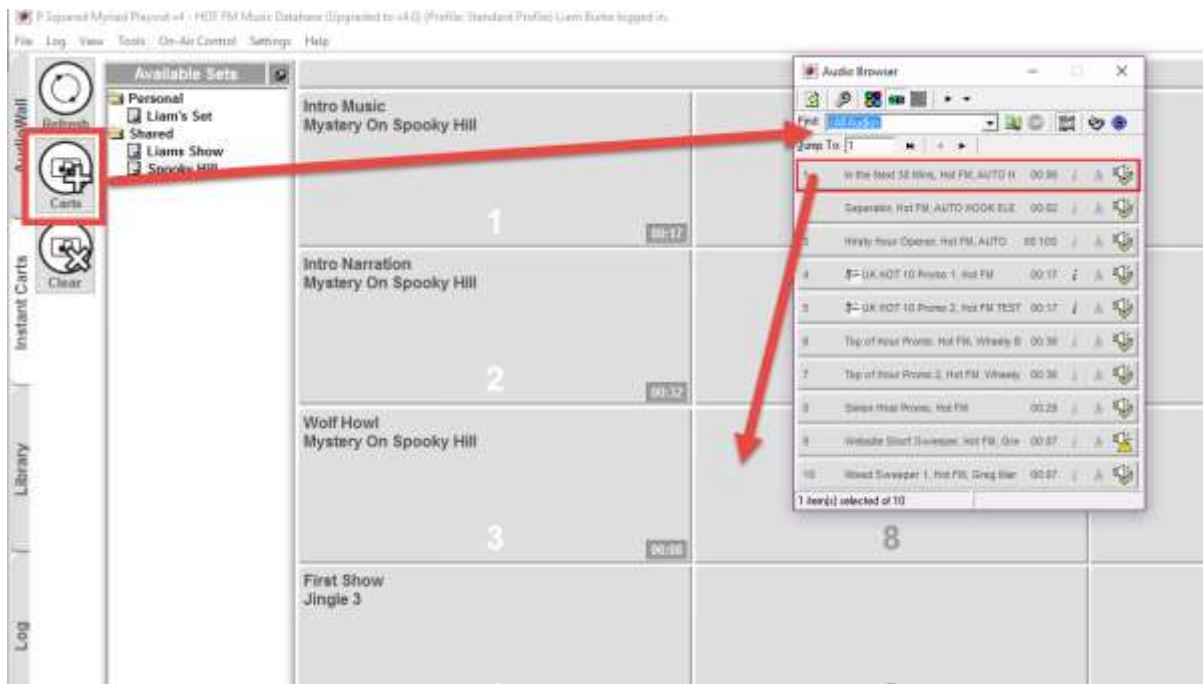


Using The Carts Button

If you are adding several InstantCarts then you don't really want to keep swapping between the AudioWall and InstantCart windows. The alternative is to click on the **Carts** button on the left hand InstantCart tab. This opens the Audio Browser window which is like a mini version of the AudioWall. You can now drag Carts from the Audio Browser directly onto InstantCarts.

Once you have finished, you can close the Audio Browser by clicking on the cross in the top right hand corner.





Removing InstantCarts

To remove a Cart from an InstantCart:

1. Click on the Clear button on the InstantCart tab.
2. Click on the InstantCart you want to clear.
3. Say 'Yes' when asked to confirm.
4. Click on the Clear button to toggle 'clear' mode off.

Switching InstantCart Sets

InstantCarts are arranged into sets of twenty. You can have as many InstantCart Sets as you like and the selected Set determines what is played whenever an InstantCart is triggered below.



Take a look at the two screen shots above. On the left-hand image, the 'Spooky Hill' Set is selected so if you pressed '1' on your keyboard, Myriad will play the 'Intro Music – Mystery On Spooky Hill' Cart as that is what is on InstantCart.

If you switched to the Liam's Show Set (by clicking on it in the Available Sets panel) then triggering InstantCart 1 will play the 'Separator – Hot FM – Auto Hook Elements' Cart.



You can switch between InstantCart Sets at will by clicking on the desired Set in the Available Sets panel. The Available Sets panel can also be hidden by clicking on the 'pin' button in the top right.



If the Available Set's panel is 'unpinned' then it will not be visible unless you click on the 'Available Sets' button at the top of InstantCarts Window.



Adding Renaming & Deleting Sets

You can add new Sets, rename existing Sets or delete Sets using the buttons located at the bottom of the Available Sets panel.



You can also do the same using the right click menu within the Available Sets panel.

Presenting a Live Show

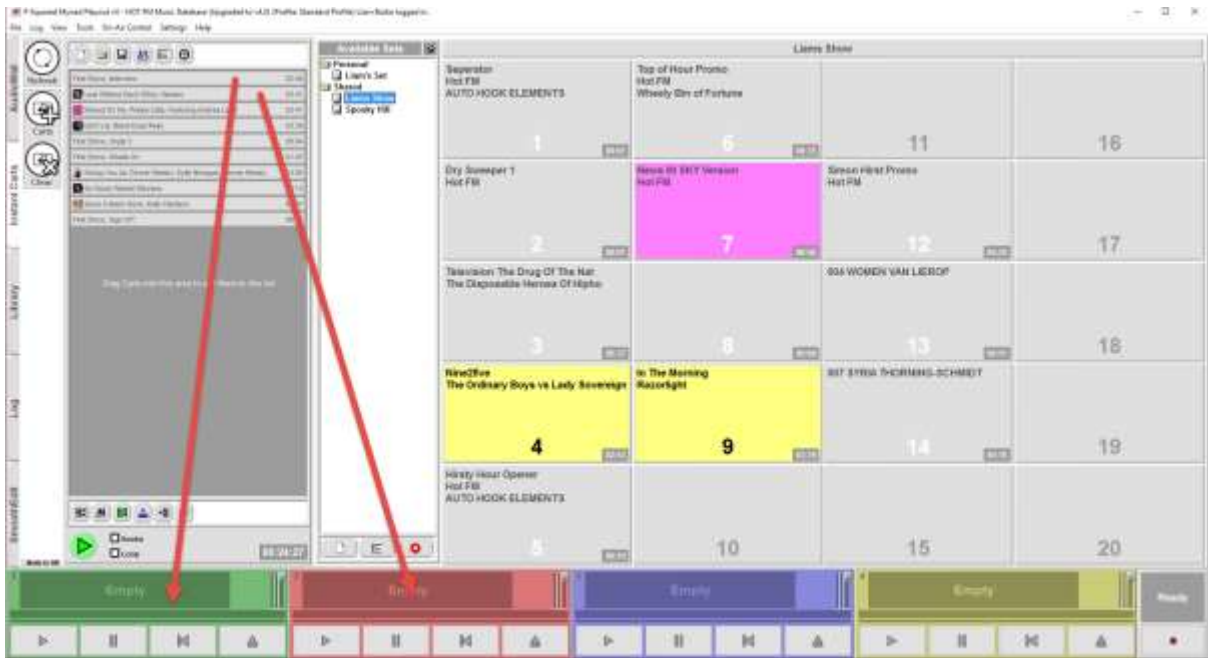
Whilst many School Radio shows are created by combining pre-recorded elements in the Pad, there will still be times when you want your presenters to present a live show either for broadcasting or record (or both).

There are a couple of ways you could approach this depending on complexity of the show and the experience of the presenter.

Manually Driven Show – The Simple Method

The simplest way of presenting a live show is to plan your show either on paper or using the Pad and then the presenter will manually load Carts as they need them and manually play each Cart.

In a lot of ways, this is more work for the presenters as they will be responsible for loading and playing content but it is also much easier to master and requires less technical preparation.



In the example above, we have prepared a list of Carts to use in the Pad and also put a few of our favourite Carts onto some InstantCarts.

To manually present the show, drag the first Cart into Cart Player 1 and press



the Play button.

As that Cart comes to an end, the presenter can prepare to press play on Cart Player 2.



At the end of the first item, the presenter can opt to immediately play the next item using the Play button, talk into the microphone or play and InstantCart.

Once we have started Cart Player 2, you would have 3:41 (in this case) to drag the next item from the Pad to an empty Cart Player.

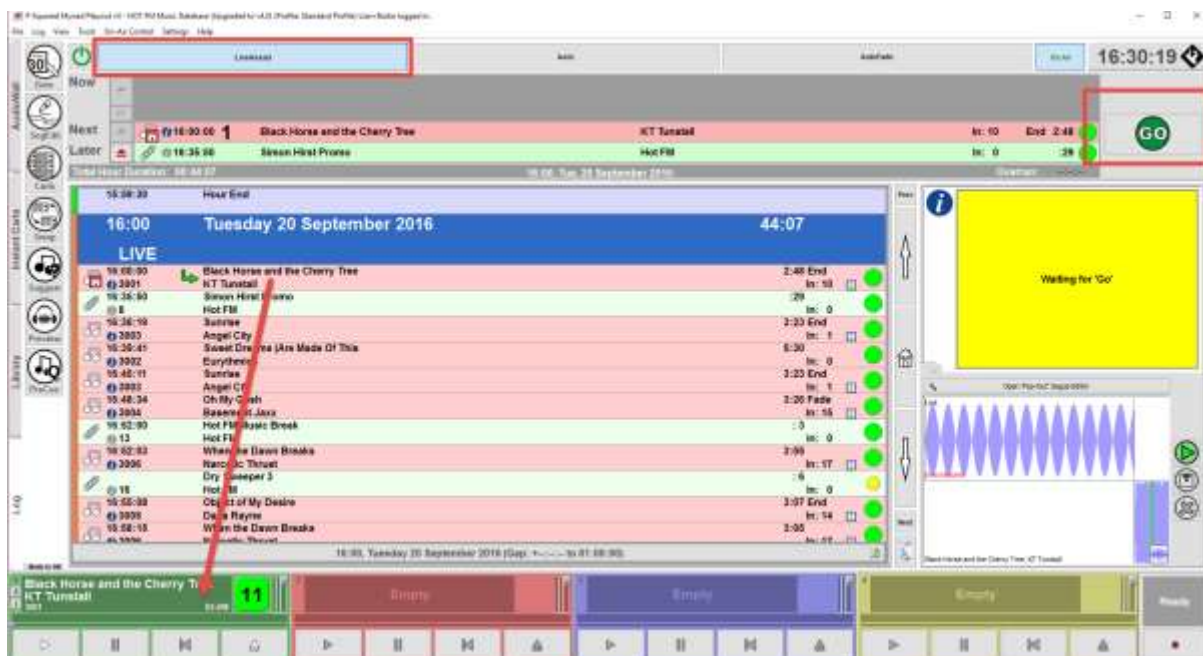
In radio we are only ever doing one of two things, we are either playing some audio or we are talking in the microphones.

Using this simple 'drag, drop & play' method combined with using the microphone faders means that you can teach presenters to present a live show in a matter of minutes.

Live Assist Shows – The Commercial Radio Method

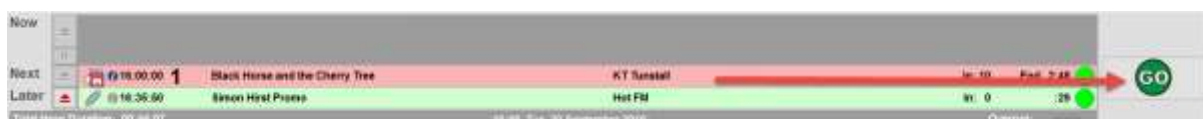
Whilst dragging and dropping things as you need them is fine, if you want to emulate how commercial radio operates, you need to look at Live Assist shows.

In a Live Assist, the show runs from a pre-determined list loaded into the Log tab (see Adding a Pad List to the Live Assist Log). In the section on the Pad we covered how to transfer a show created on the Pad into the Log, we will now use this to present a Live Assist show.



To start the Live Assisted show, highlight the item you want to start with and then click on the **Live Assist** button.

This will load the selected item into the first empty Cart Player. You will also see that the item is displayed in the 'Dashboard' located at the top of the screen and the Info window displays the message 'Waiting For Go'.



Press the Go button on screen on or your K500 keyboard.

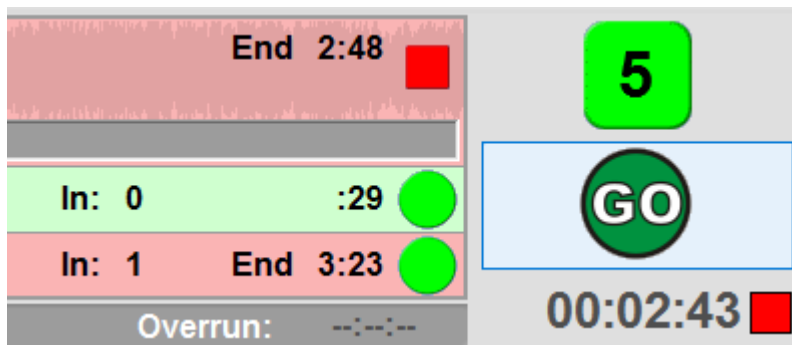
The selected item will start playing and the Dashboard will show you how long is left until the item finishes.



When the item approaches the end, exactly what happens is determined by the coloured shape to the right of the item.

- **Green Circle** – The system will automatically move on to the next item.
- **Red Square** – The system will stop at the end of the item.
- **Yellow '+'** – The system will 'sweep' the item into the Intro of the next item.

So if the item has a green circle, when the item finishes, the next item in the Log will automatically start.



If there is a red square then at the end of the item, the next item will be loaded ready to play but will not start until the presenter presses the 'Go' button.

So the presenter can decide where he or she wants to talk in the show by changing the 'Segue Type' on Log items to be red squares.



It is called Live Assist because it is a live show that the presenter controls but the system assists them by loading items as needed and automating segues as required.

You can also edit the log in Live Assist by dragging items around in the Log, dragging in new Carts and removing items as needed by clicking on the Log Item icon to the left.



Live Assist is not commonly used in School Radio. For more detail please check out the full Myriad documentation and tutorial videos.

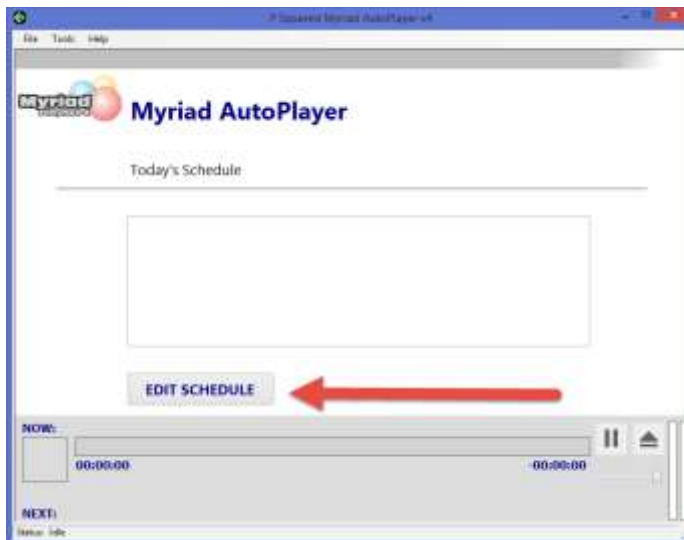
Scheduling a Cart or Pad to automatically play (using AutoPlay)

This is done using a separate tool called Myriad AutoPlayer that is included with most School Radio packages that feature Myriad 4. AutoPlayer can play either a specific Cart or a list of Carts at a specific time. This means you can

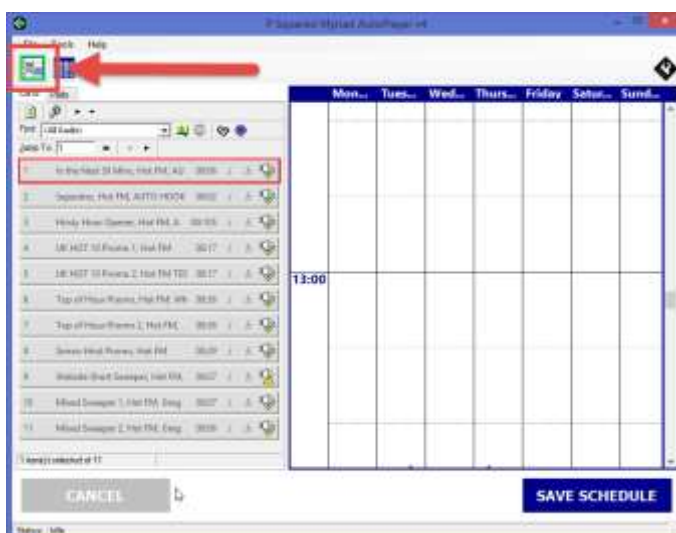
create a show and then ask AutoPlayer to play it automatically for example tomorrow lunch time. Then all you need to do is leave your system on and the show will be played at the pre-determined time.

To setup your show to play at lunchtime tomorrow, follow these steps.

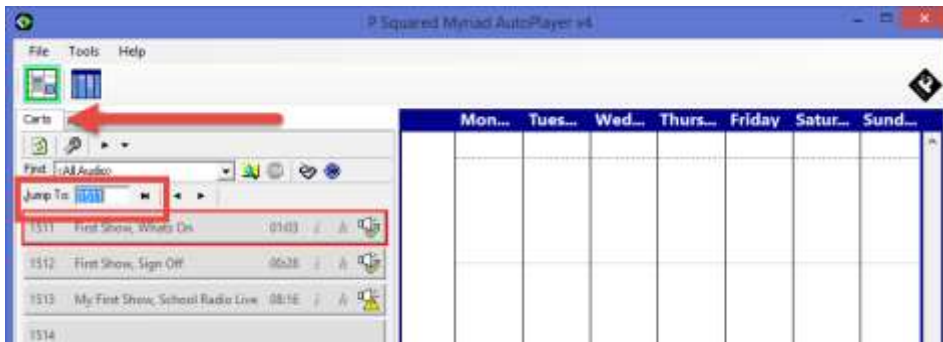
1. Run Myriad AutoPlayer.
2. Click on the Edit Schedule button.



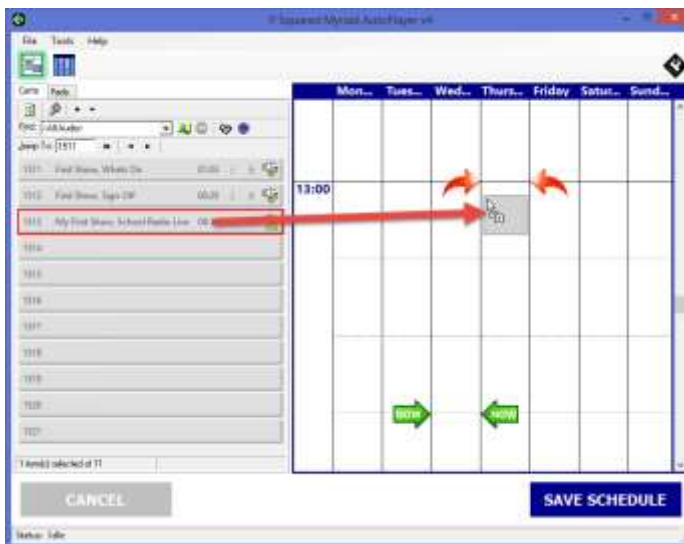
3. Click on the View Week button (located top left) or press F8 on your keyboard.



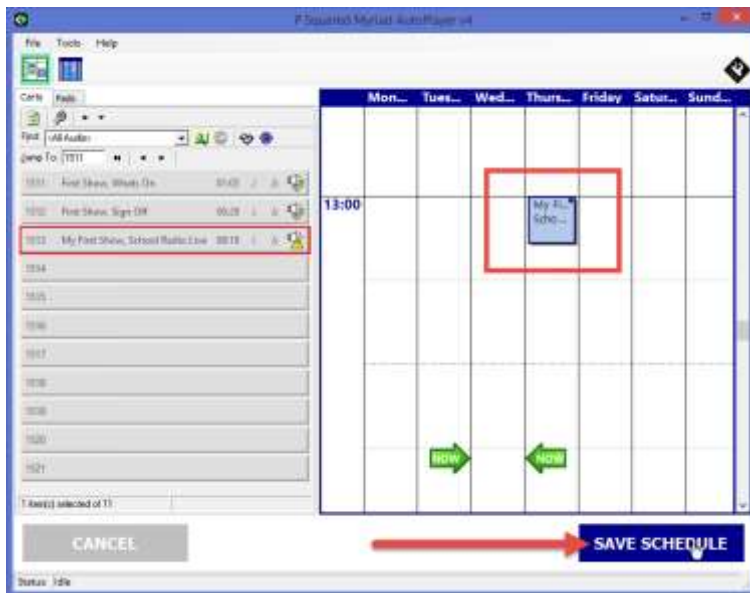
4. Make sure the Carts tab is selected (to view Carts on the AudioWall) and navigate to the area of the AudioWall where your show is located (you can use the 'Jump To' if you know the Cart number or the 'Find' if not).



- Once you have located the Cart you want to use, simply drag it into a 15minute time slot on the Week View grid. In this case we want it to play at 1pm tomorrow (Thursday).



- You can drag other Carts to play after your show in the same time slot or any other time slots you wish. Once you are happy, click on the Save Schedule button.



- Now all you need to do is leave AutoPlayer running (along with your encoder software which will either be Samcast or BUTT) and the mixer switched on and your show will play at 1pm tomorrow.

AutoPlay can also be used to automatically play running orders created using the Pad in Myriad. The Pads tab displays a list of saved running orders in a specific folder. Any running orders saved into this folder (generated in Myriad or using the New Pad feature in AutoPlayer) can be dragged into the weekly schedule using the same method as a single Cart.

AutoPlayer can also be used to display 'Now Playing' information on a website or on displays around your school.

For more information on using AutoPlayer, check the AutoPlayer tutorial videos and documentation.

Streaming your Station around your School & on the Web

In order to stream your School Radio around your school network or to the web, via the School Radio Player, you first need to encode the audio into a format that can be streamed on a network.

In School Radio studios, we use one of three methods to achieve this depending on package and requirement.

- BUTT Encode – Simple, free encoding system available to download from the web.

- SAM Broadcast – Professional encoding software that is recommended and included in most School Radio packages (except Starter & Classic).
- Barix Instreamer (Hardware) – Hardware encoder solution available as an upgrade option with all School Radio packages.

Setting Up SAM Cast Pro to Stream Live Shows to School Radio Player

Things you will need before you start:

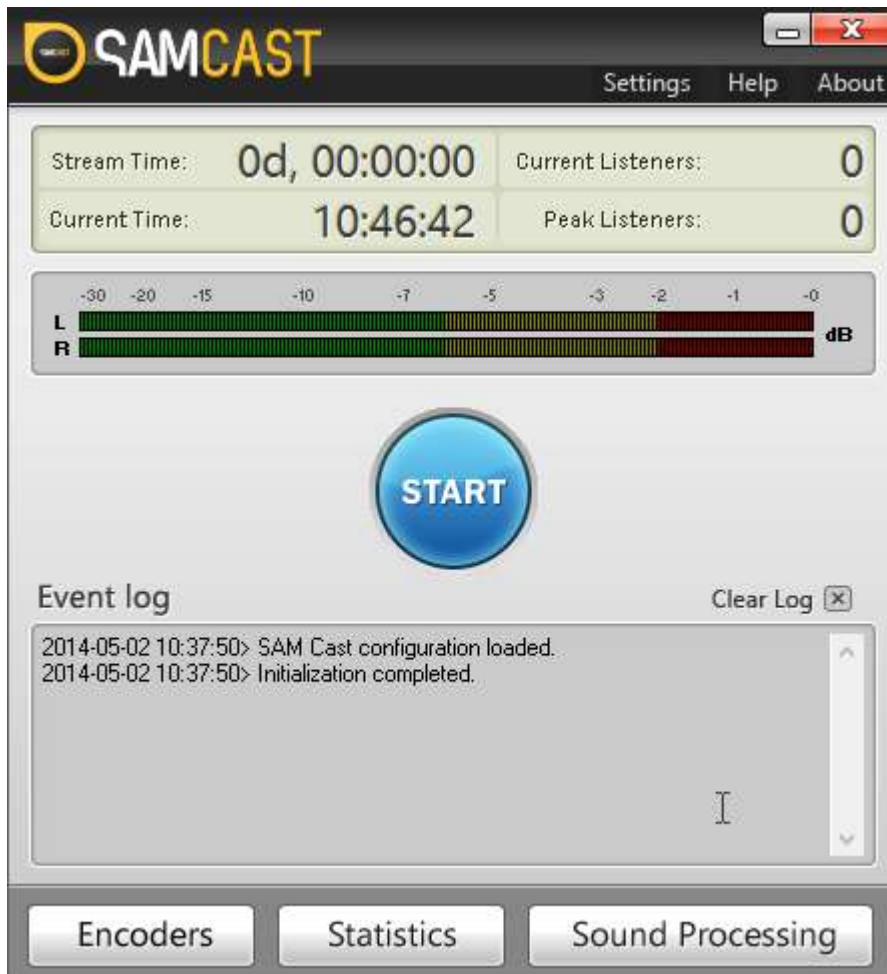
- *Streaming server details provided by School Radio.*
- *A purchased copy of the SAM Cast Pro software.*
- *Possible access to your router in case you have to enable a port.*

This walk through will help you to configure SAM Cast Pro (our recommended stream encoder software) to send your live station output to the School Radio Player for broadcasting.

If you have not done so already then you will need to purchase a copy of SAM Cast Pro from the School Radio (hello@schoolradio.com).

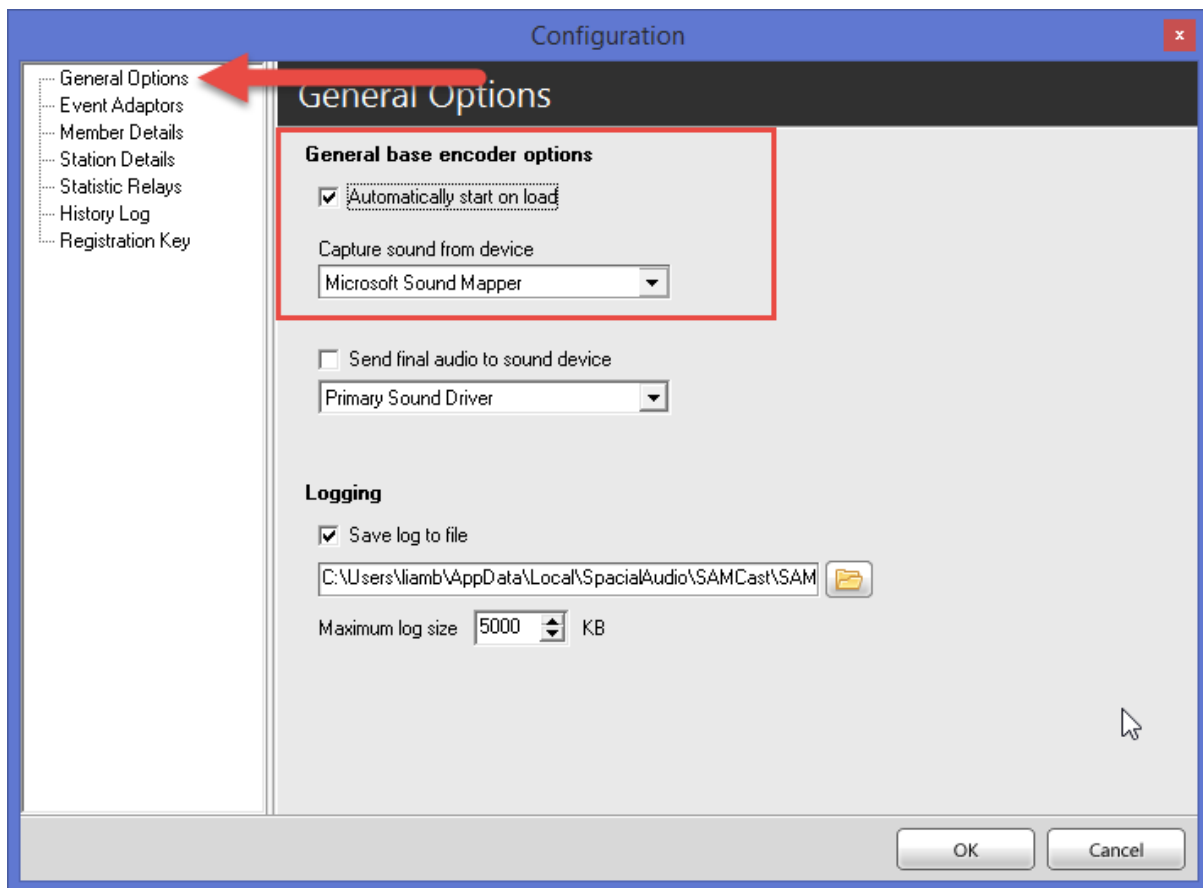


Once installed click on the SAM Cast icon to launch the application.



Selecting The Soundcard Input

The first thing to do is to select the soundcard input you wish to use to encode. To do this click on the **Settings Menu** option.



Make sure that the **General Options** is selected from the left hand list (it is the default).

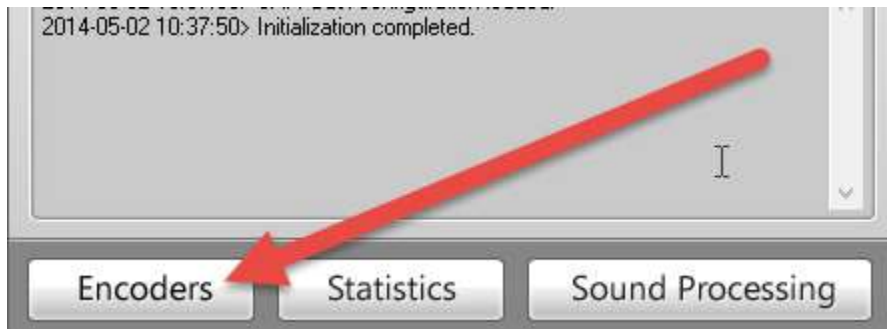
You need to change two settings on this tab.


1. Tick the **Automatically Start On Load** option as this will mean the encoder will start as soon as SAM Cast loads.
2. Using the **Capture Sound From Device** drop down option, select the soundcard input that you want to use. This will vary depending on studio setup, soundcard installed and the way it has been configured. The most common option is the **Line (Aureon 7.1 USB)** but it might be different if you have an older studio setup or you are streaming from a different PC. If you get stuck, then contact support@broadcastradio.com

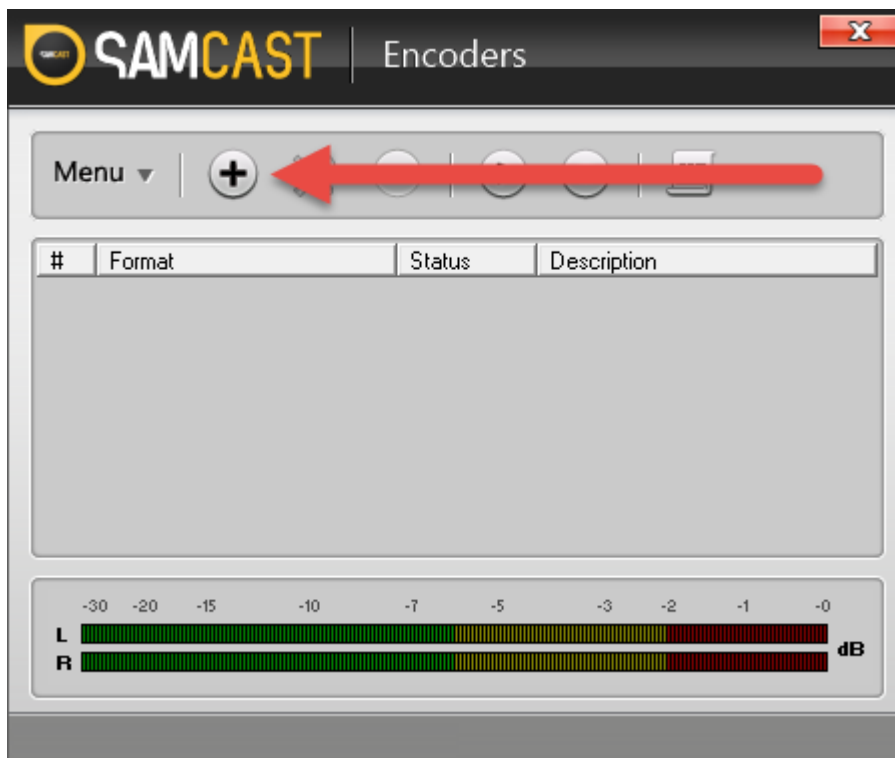
You will not need to alter any other settings on this page or any other pages in the Settings Menu so click on Ok to close.

Adding an Encoder

The first thing you need to do is add a new Encoder by clicking on the Encoders button.

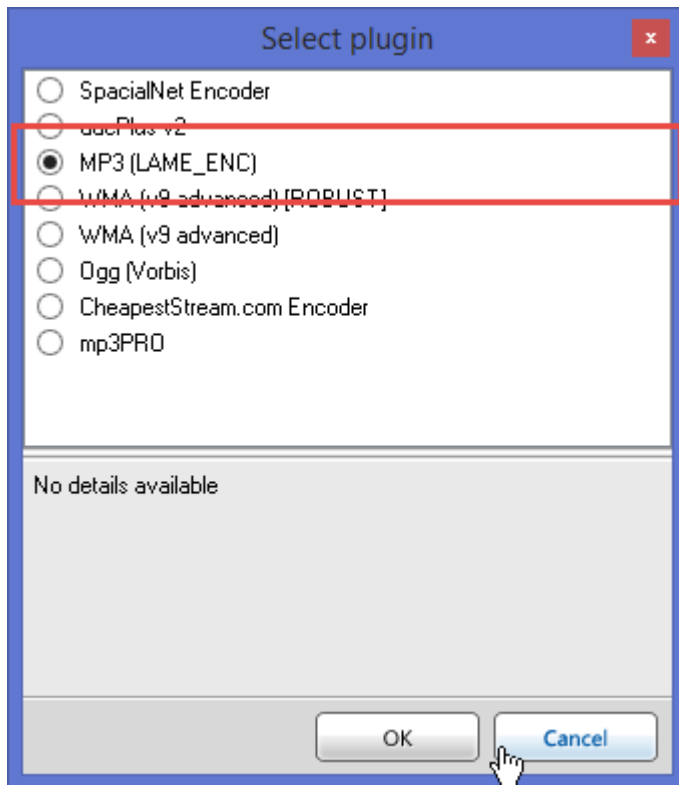


This will open the Encoders window. Click on the  button to add a new Encoder output.



Select Plugin

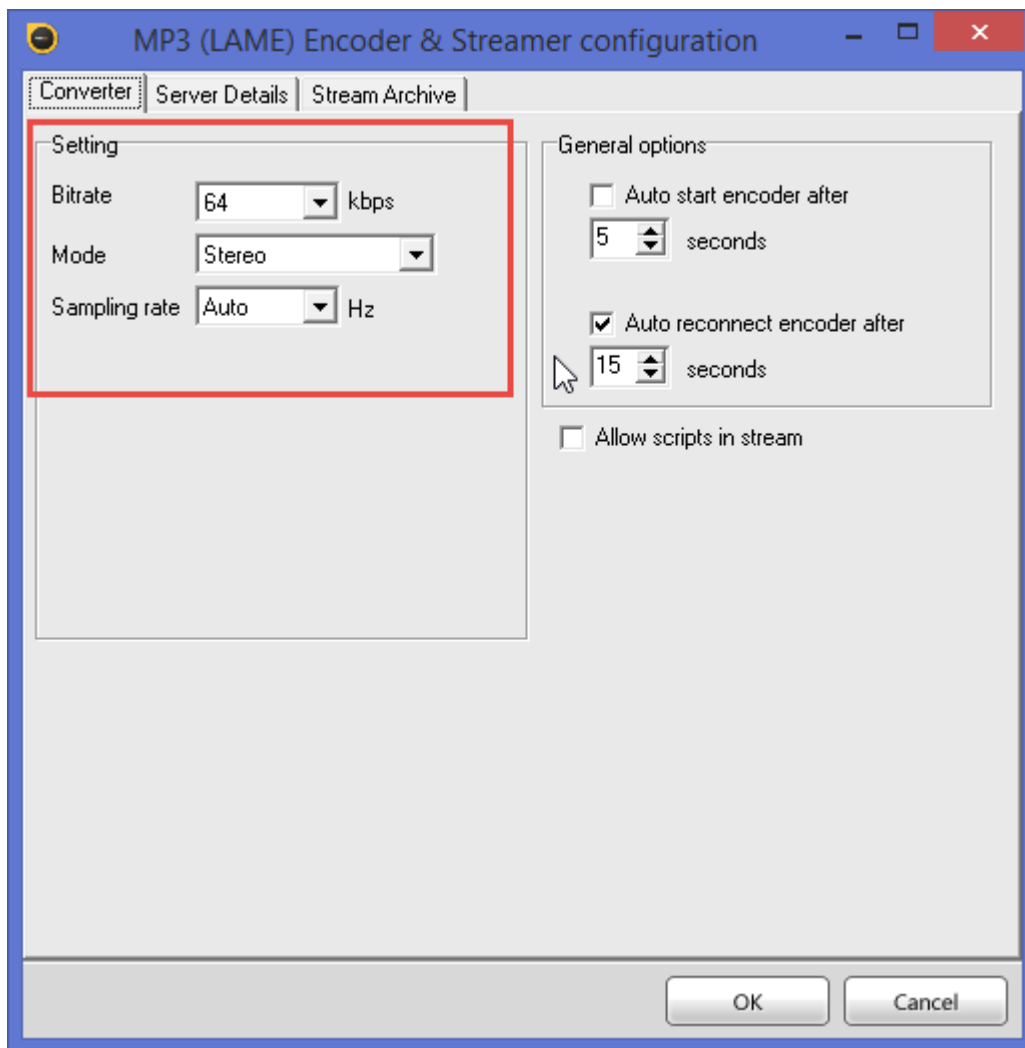
IMPORTANT: Make sure you select MP3 for the option list on the Select Plugin window that appears.



Once you have selected MP3 from the Select Plugin window, you will be asked to add a setup the rest of the detail.

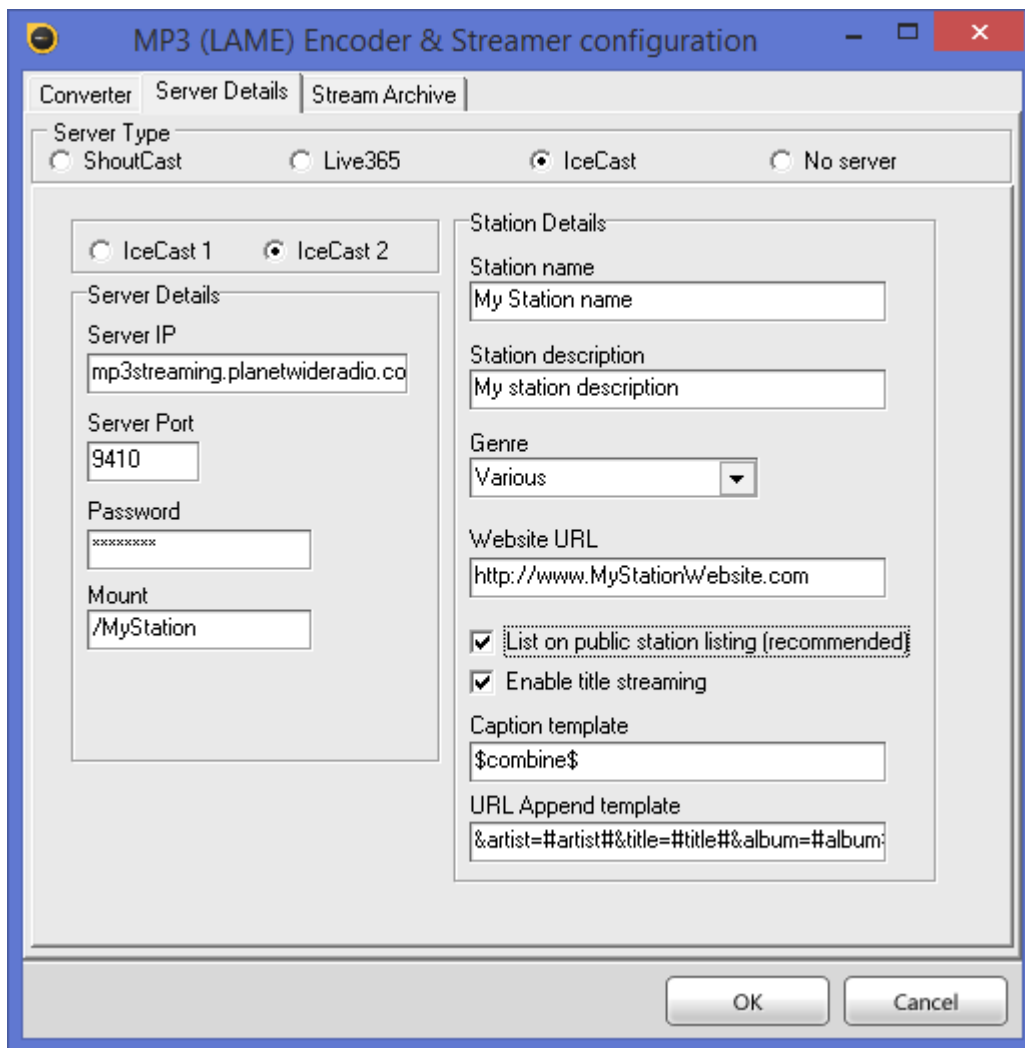
Converter Tab

In most cases the default settings on the Converter tab will be correct. This tab allows you to set the audio quality which should be set to 64kbps Stereo unless you have paid to stream at a higher audio quality. The other settings on this tab should be left in the default state.

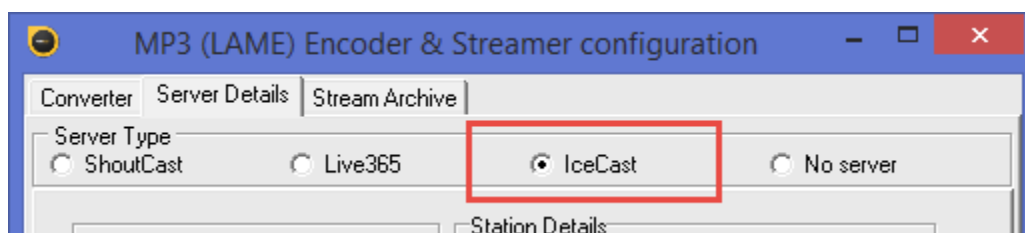


Server Details Tab

The settings on this tab are crucial for setting up streaming to the School Radio Player so double check that you have set these correctly before calling us for technical support as the majority of problems encountered when setting up streaming occur in the settings on this tab.

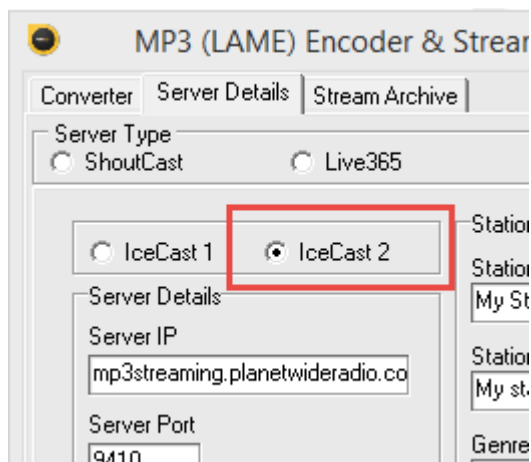


1. Make sure **IceCast** is selected in the **Server Type** section.



Please note that if another Server Type is selected then the options listed will also look different to make sure you have selected IceCast (and not ShoutCast).

2. Next make sure that **IceCast 2** is selected.



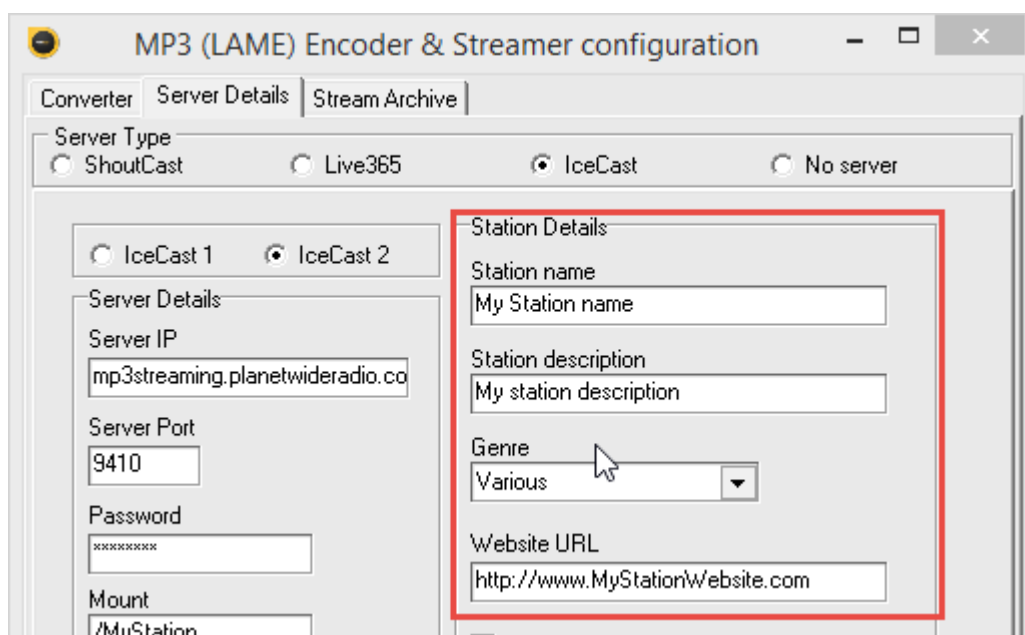
3. We will have sent you a document which lists the details of your streaming service including the server details, base port, mount point and password. It is not too important what these all mean but it is important that you type them into this section exactly as we have provided them. We would recommend copy/paste if possible to avoid typing errors.

In the **Server Details** section type in the following information:

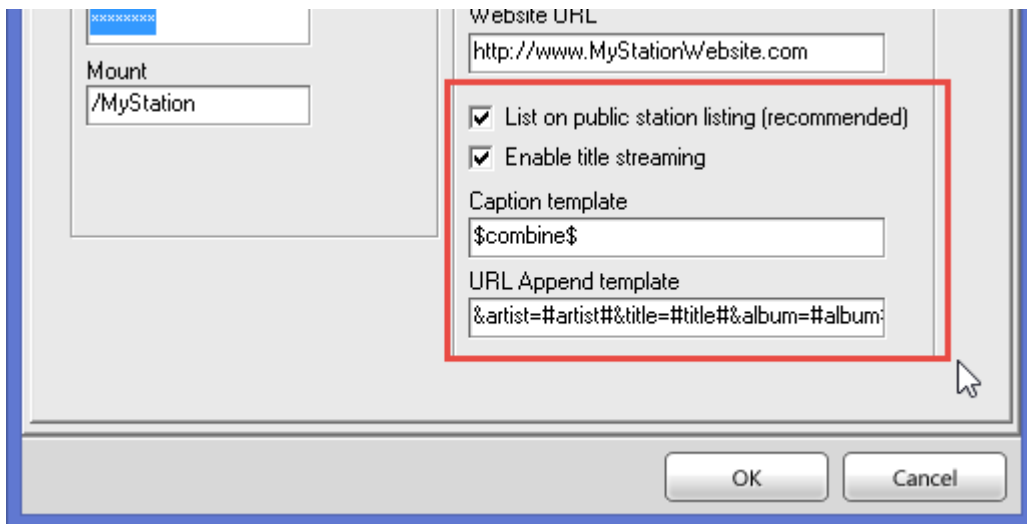
- **Server IP** – this will typically be *mp3streaming.broadcastradio.com* but check with your documentation.
- **Server Port** - this is the Base Port number provided with your streaming details. It is typically a four or five digit number *e.g.:* *9410* but it will be unique for your stream so check carefully.
- **Password** – again, you can get this from the streaming details document provided by School Radio. The password will usually consist of upper and lower case characters, numbers and possible symbols. Make sure you type it in exactly as provided or better still, paste it directly from the document.
- **Mount** - *****important***** this is the Mount Point described on your server details document. It is vital to get this correct as the default value of */live* will work but you will not be able to get any statistical data needed to report back to the copyright bodies so it

is vital you type in the Mount Point exactly as it appears on your server details document.

4. The **Station Details** section allows you to set some additional information about your station.

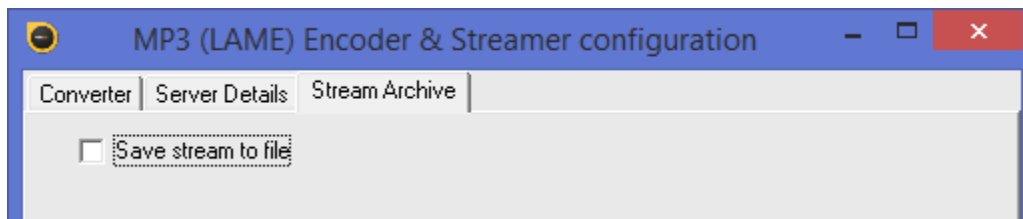


Type in your Station Name, Description and your Website as well as selecting the Genre that best describes your station from the drop down list. Whilst it is best to set this information, none of it is critical.



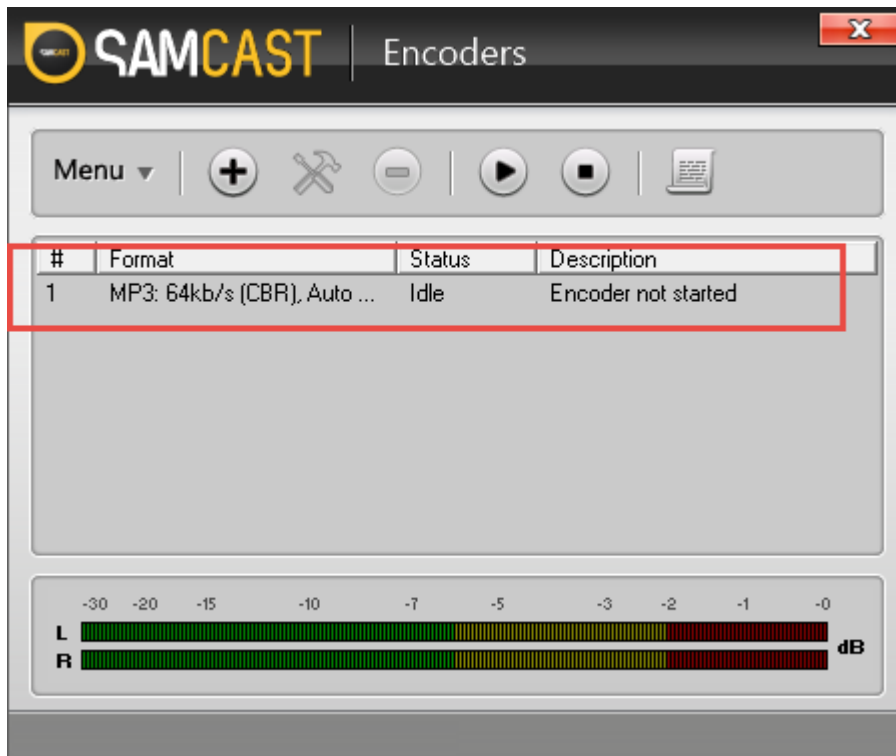
The lower section contains information for embedded script processing which will not be used so can be left at the default settings.

Stream Archive Tab



We will not be using this feature so make sure that the **Save Stream To File** option is not ticked.

Now that all the needed options are set, click on the **OK** button to save the Encoder settings.

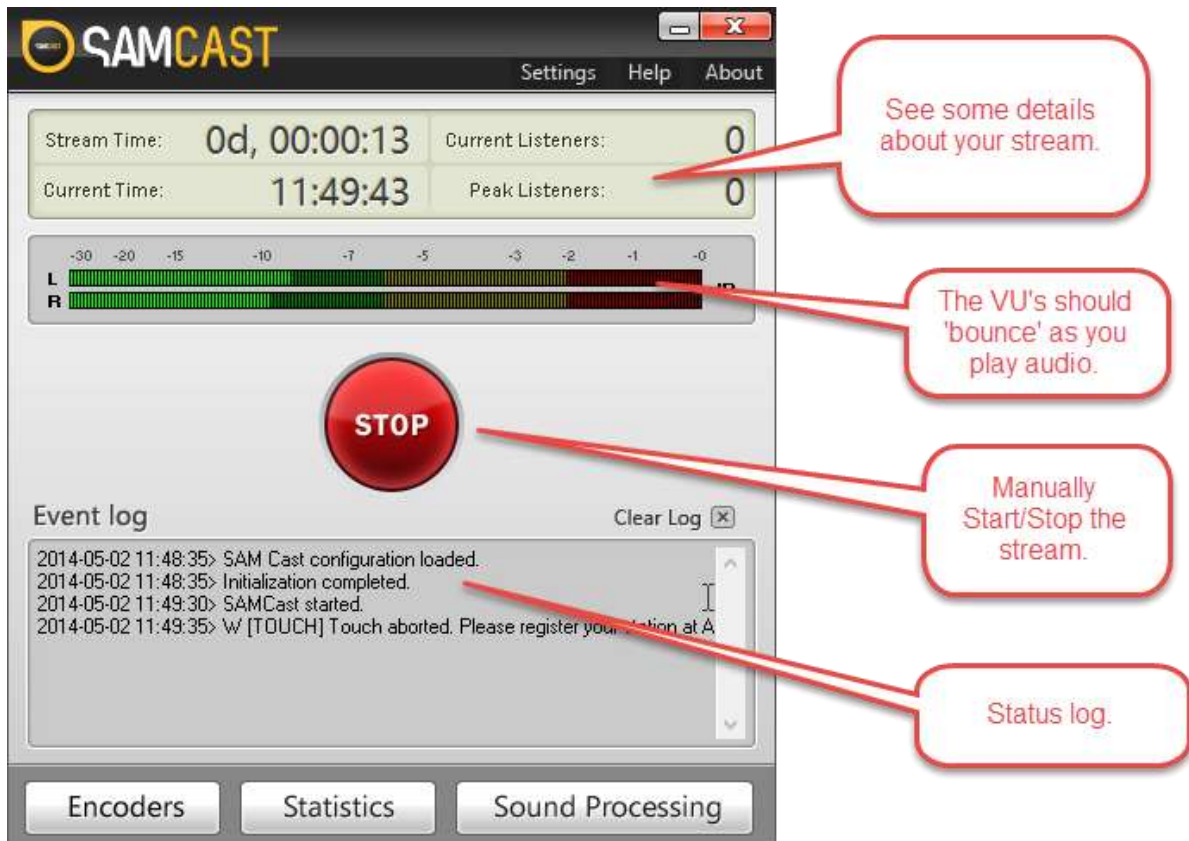


You will see the encoder output now listed in the Encoders window.


Manually Starting Your Stream

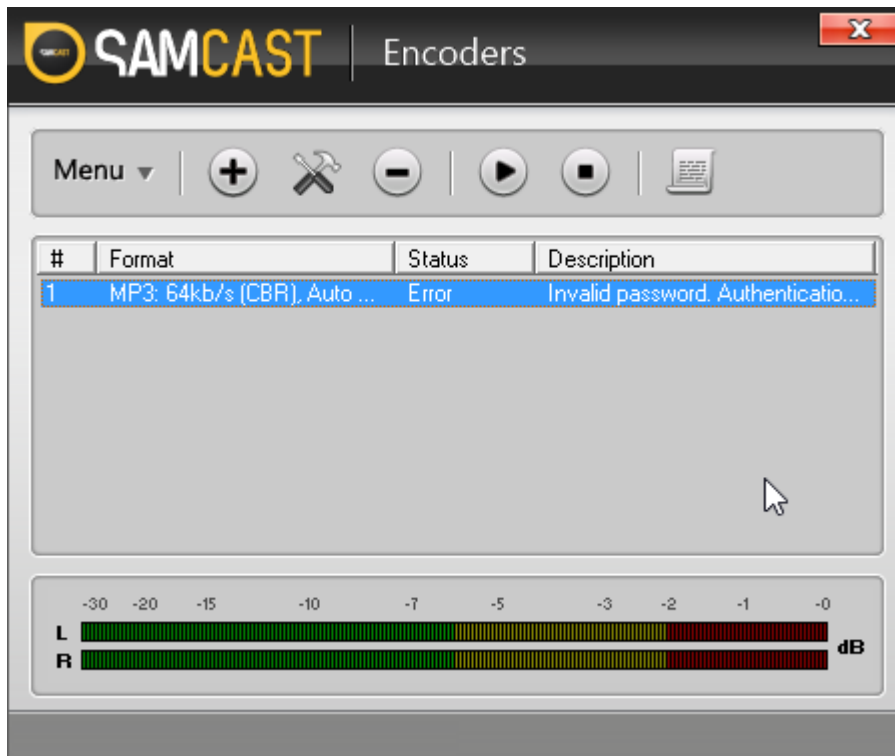
Now that you have setup all the information SAM Cast needed, you can manually start the stream running by clicking on the large Start button.





What if it doesn't work?

If something goes you can usually see what the problem is by clicking on the **Encoders** button, then highlighting the Encoder output and manually click on the  button.



This will try to manually connect and the Description field shows the status or the reason for the failure. In the example above, the password is wrong.

There are sometimes problems that SAM Cast cannot detect. Most commonly (in schools) this is firewall and port related. If you think everything is configured correctly but it just is not working, then it is likely the port is being blocked by your firewall. You will need to ask your IT department to open the **Port Base** number used in setting up the stream. That should allow both outward streaming and also listening via the School Radio Player.

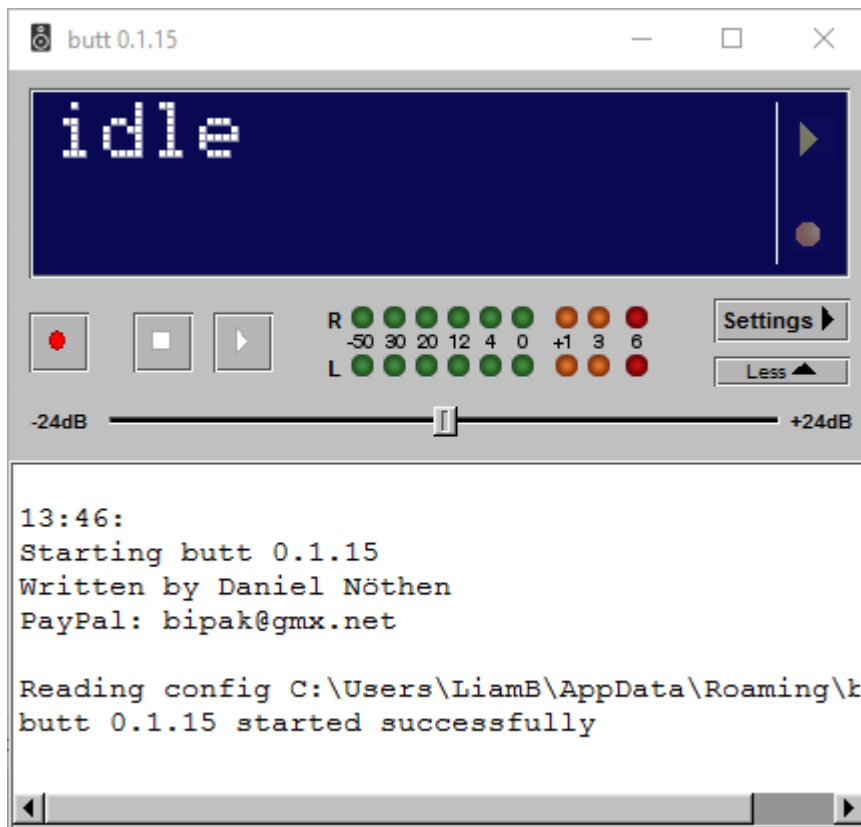
SamCAST should be fully configured now and will connect to the server and start streaming automatically when it is started. So to start broadcasting on the School Radio Player, simply run SamCAST.

Setting Up BUTT Encoder

BUTT Encoder is free software available to download from the web (best to just google BUTT Encoder). It is written by an enthusiast and distributed free of charge but with no guarantee or support.

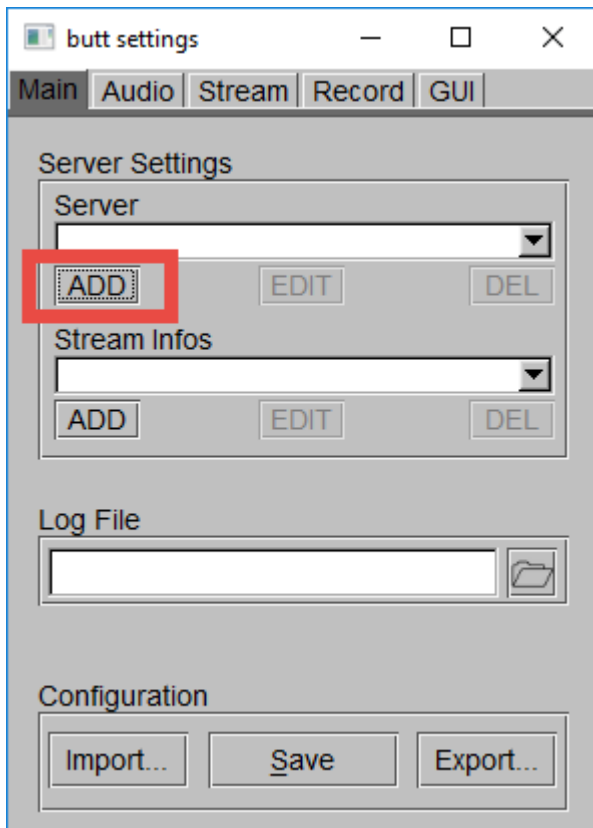
Because of this, we recommend you consider purchasing a copy of SAMCAST as it is a supported commercial and fully licensed product.

We do not offer support for BUTT Encoder but because we know that some School Radio stations use it, we have included a quick setup guide as part of this manual.



When you first run BUTT encoder, it is not configured to connect to the School Radio player (or your local copy of IceCast for network streaming), so the first thing you have to do is go into the settings and add the server.

1. Click on the **Settings** button.
2. Locate the Server section and click on the **Add** button.



3. On the Settings window, you can enter the connection details BUTT will need to connect to the School Radio servers (or your local copy of IceCast for local network). You will receive all of these connection details as part of your installation documentation but if not we will be happy to let you know what details you need.
 - a. **Name** – Give it a name like School Radio Player.
 - b. **Type** - ***** Important***** you must set this to **IceCast**.
 - c. **Address** – this will typically be *mp3streaming.broadcastradio.com* but check with your documentation.
 - d. **Port** - this is the Base Port number provided with your streaming details. It is typically a four or five digit number *e.g.: 9410* but it will be unique for your stream so check carefully.
 - e. **Password** – again, you can get this from the streaming details document provided by Broadcast Radio. The password will usually consist of upper and lower case characters, numbers and possible symbols. Make sure you type it in exactly as provided or better still, paste it directly from the document.
 - f. **Mount** - *****important***** this is the Mount Point described on your server details document. It is vital to get this correct as the default value of */live* will work but you will not be able to get any

statistical data needed to report back to the copyright bodies so it is vital you type in the Mount Point exactly as it appears on your server details document.

Add Server

Name:
School Radio Player

Type:
 ShoutCast IceCast

Address: ming.planetwideradio.com Port: 9410

Password: Show Password

IceCast mountpoint: stream IceCast user: source

Cancel ADD

4. Click on the **Add** button.
5. You can also add in the Stream Infos section by clicking on the Add button.

Server Settings

Server
School Radio Player

ADD EDIT DEL

Stream Infos

ADD EDIT DEL

Log File

6. Fill in the information about your station. This section is optional.

Add Server Infos

Name:

Description: Genre:

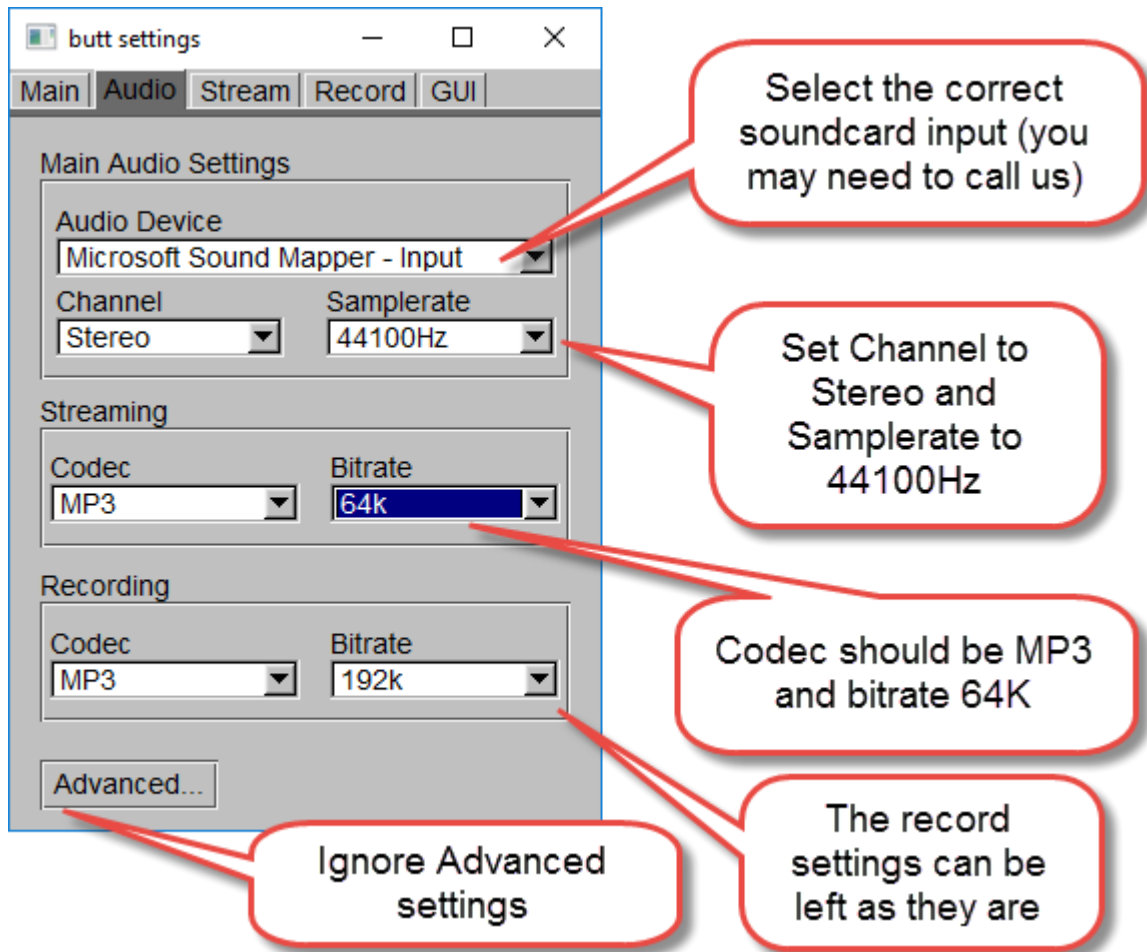
URL: ICQ:

IRC: AIM:

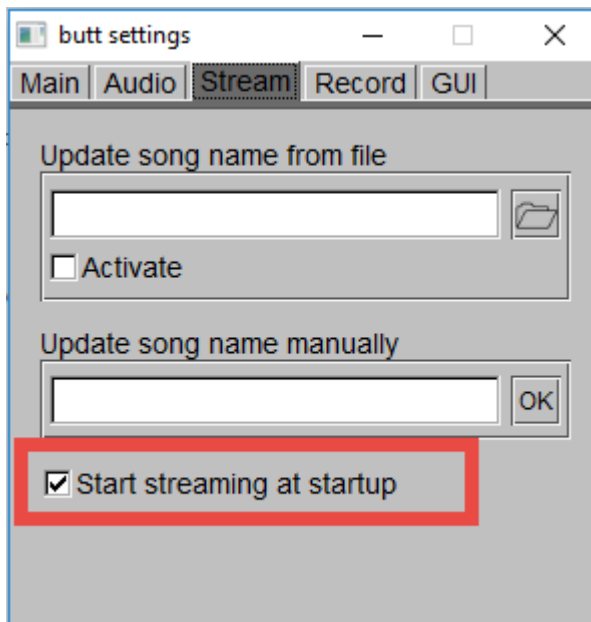
Make server public

Click on Add to add the details

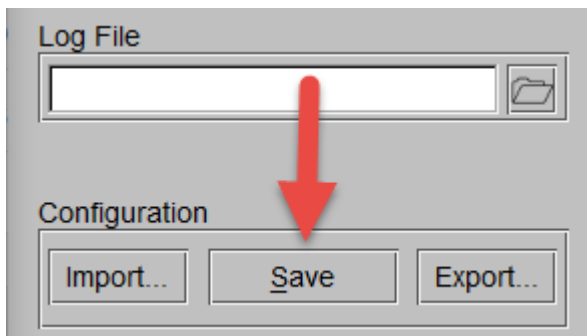
7. On the Settings window, click on the **Audio** tab at the top. You can set the following settings:
 - a. **Audio Device** – Select the correct soundcard input. This will differ from system to system but it should be the soundcard input that is connected to the PGM/PGM1 output bus. It may be best to give us a call for this one!
 - b. **Channel** – Set this to Stereo.
 - c. **Sample Rate** – Set this to 44100Hz
 - d. **Codec** – Set this to MP3.
 - e. **Bitrate** – Set this to 64k
 - f. **Recording** – We don't use these settings to leave them as the defaults.
 - g. **Advanced** – There is no need to adjust the Advanced



8. Switch to the **Stream** tab. Most of the settings on this tab can be ignored but you want to tick the option to '**Start Streaming At Startup**'. Ticking this option means that whenever you start BUTT Encoder, it will connect to the server and start streaming straight away.



9. The remaining tabs (Record / GUI) can be ignored.
10. Click on the **Main** tab and then the **Save** button to save the Server Settings.



BUTT Encoder should be fully configured now and will connect to the server and start streaming automatically when it is started. So to start broadcasting on the School Radio Player, simply run BUTT Encoder.

Barix Instreaming 100 Hardware Encoder

The Barix Instreaming 100 is a hardware based web streaming encoder that automatically encodes audio ready for streaming via an ISP such as School Radio Player.

Broadly speaking the Barix Instreamer requires the same information as SamCAST and BUTT but obviously it is not simply a case of running the software. Instead whenever the Instreaming starts up, it will 'speak' its IP

address through the headphone socket. Plug in some headphones and you should here the IP address read aloud when it starts up.

If you type this IP address into a web browser on a PC on the same network you will get to the Barix configuration portal which allows you to adjust the encoding rate, format and server connections.

If you have purchased a Barix Instreamer from us, then we will set this up for you. If you need to adjust the settings, then you should contact our support team as it is a little beyond the scope of this manual.



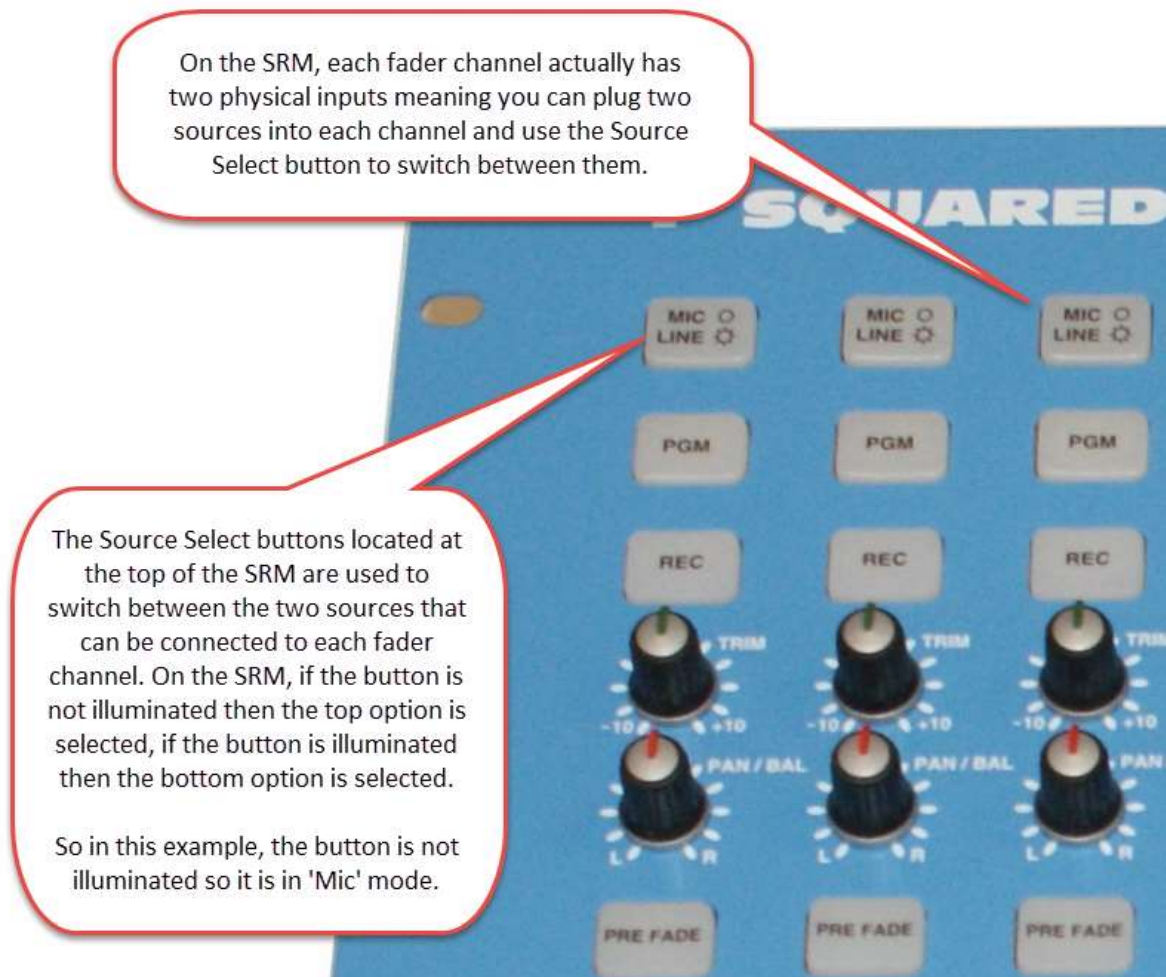
Trouble Shooting

[The Fader is up but I can't hear anything?](#)

Check the correct Output Bus has been selected. On the SRM check that both the PGM and REC buttons at the top of the channel are illuminated. On the Axia IQ check both PGM1 and PGM2 is illuminated.



If that is not the problem, check the correct source input is selected. On the SRM you can switch between primary and secondary inputs using the buttons located at the top of the channels. The default for most of these buttons is for the button to **Not Be Illuminated**



On the Axia, look at the small display screen at the bottom of the channel and check the source you are expecting is displayed.



If that doesn't solve the problem, then check the channel On/Off status for each channel.

If the channel is Off then press the button to switch the channel on.

Finally, check that the cables are correctly plugged in.

[Guest Microphones not working](#)

Some guest microphones have an on/off switch on them. Ensure the switch is in the 'on' position and that the cable is fully inserted into the mic.

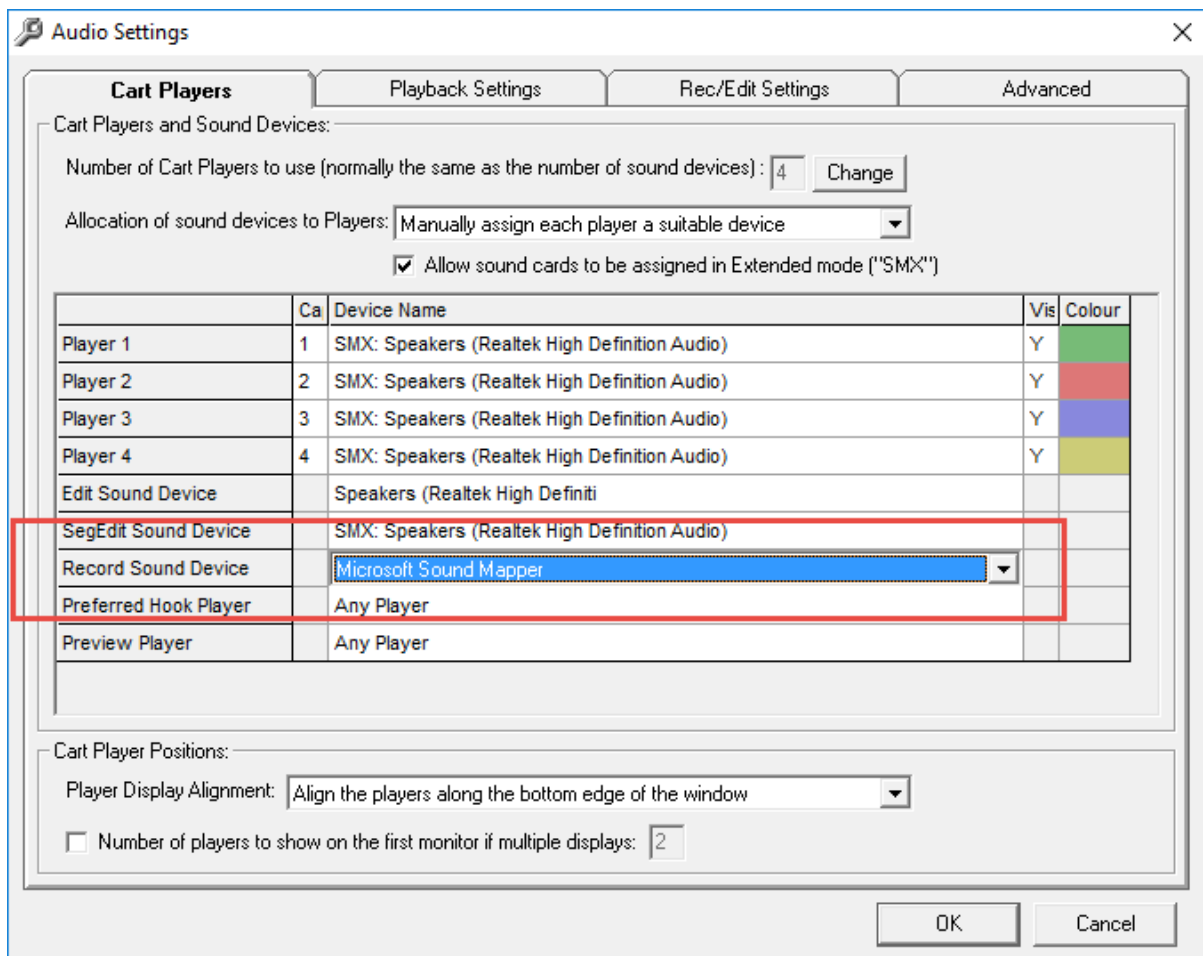
[Nothing is recording in Myriad](#)

In most setups, Myriad will be set to record from a separate Output Bus to the main output. On the SRM mixer, check the REC button is illuminated on the channels you want to record. On the Axia make sure PGM2 is illuminated on the channels you want to record.

If that is not the problem then you can check that Myriad is using the correct soundcard input to record from. Go to the following area on Myriad:

Settings Menu > Audio Setup > Audio Settings > Cart Players Tab

And make sure the correct soundcard input is selected for recording.



This differs from installation to installation so you may need a little help from technical support to select the right input device.

[I have forgotten my Login details for Myriad](#)

Don't panic, contact our support team (support@broadcastradio.com) and they will be able to provide with a 'day code' that will allow you access for a day to reset your password etc.

[The Computer won't turn on](#)

Check you are pressing the power button and not the reset button as they are next to each other and the same shape on our rack mounted chassis.

Check the power cable has not dropped out of the back of the PC. You might have to remove the rear panel of the rack to do this on some studio packages.

If your computer still won't power on then you need to contact our technical support team.

Return Axia iQ to Default Profile

If someone has made lots of changes to your iQ console, it is easy to return it to our default configurations.

1. Press the Profile button located on the right hand side of the console (near the top).
2. Pull down all the faders.
3. Use the knob located below the Profile button to select the default profile you want to use. Click on the option (press down knob) to select the profile.

Default Settings for SRM

The following outlines the most common default settings for the knobs and buttons on the SRM but your installation might be different.

- **Source Select (Mic/Line, Myr1/Line, Tel/Line)** – Default status is **Not Illuminated**.
- **PGM** – All channels should be illuminated.
- **REC** – All channels should be illuminated.
- **Trim** – All knobs set to twelve o'clock position.
- **Pan/Bal** - All knobs set to twelve o'clock position.
- **Pre Fade** – All buttons not illuminated (only turned on when needed).
- **Faders** – No default.
- **Start Buttons** – No default.
- **PGM/REC/BCAST Listen Buttons** – PGM should be illuminated by default.
- **Speaker Volume** – Default position is 9 o'clock.
- **Presenter & Guest Headphone** – Default position is 9 o'clock.
- **Auto Pre Fade** – All three should be illuminated by default.
- **Split Pre Fade** – Not illuminated by default.
- **Talkback** – Not illuminated. Press as needed.

Default Settings for ARC8

There are not too many options on the ARC8 mixer but if you need to reset the mixer to default then following these settings:

- **Channel 1 Talk** – Off by default.
- **Faders** – Thick line is the 'on' position, down is the 'off' position.
- **Channel On Buttons** – Switch as required.
- **CH3 Button** – Off by default.

- **Cue Buttons** – Switch on as needed. Off by default.
- **CH8 / PC** – Off by default.
- **External** – Off by default.
- **Monitor Fader** – Quarter up by default.
- **Headphone Fader** – Quarter up by default.

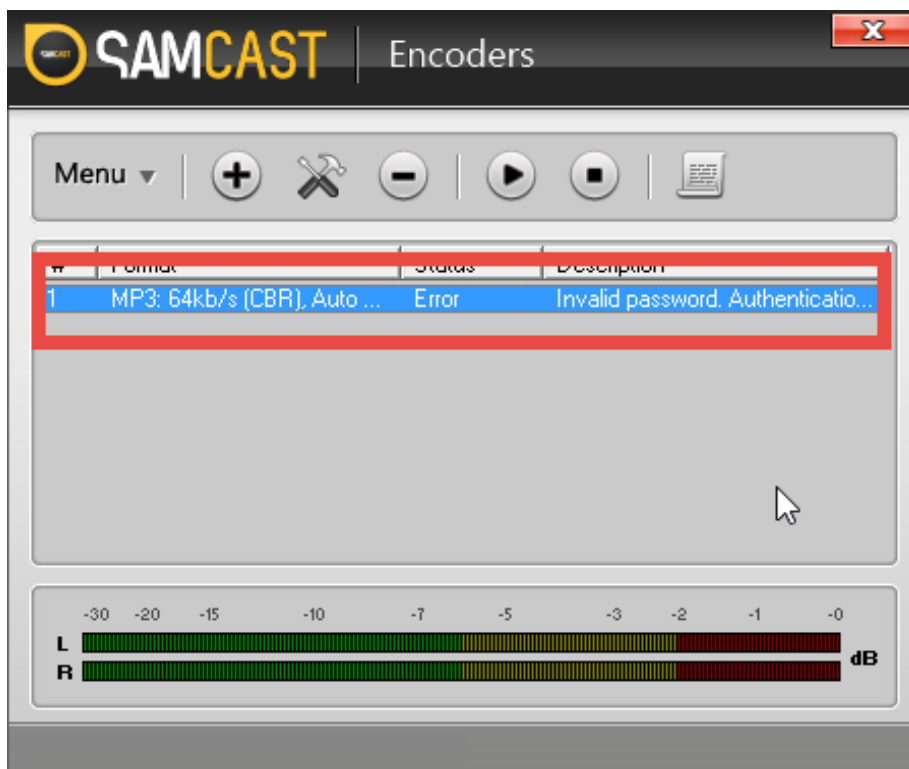
[My School Radio Stream is not working](#)

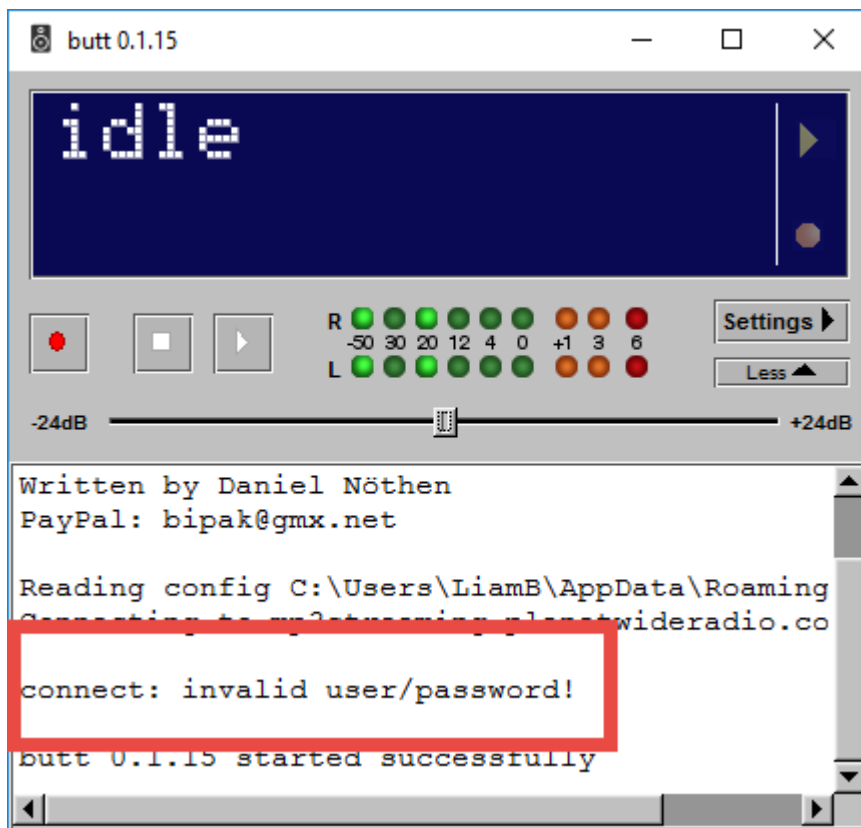
There are several potential reasons for this type of fault.

Firstly, check you have the PGM (SRM) or PGM1 (Axia) Output Bus selected on all channels.

Next check that your encoder software is running. Either SamCAST or BUTT Encoder must be running in order to broadcast.

If they are running, next check the screen on each as any errors will be reported there.





In each of the above screenshots, the encoders have failed to connect with an 'incorrect password' error.

If you have an error on screen or it is still not working, then it might be time to give technical support a call (support@broadcastradio.com).

Contacting us for Technical Support

Whilst the aim of this manual is to cover most of the common questions that you may encounter with your School Radio system, there are times when it is just better to get some professional advice.

All School Radio packages include a minimum one year's technical support which can be extended on an annual or lifetime basis.

To contact our support team, use the following details:

- Email – support@broadcastradio.com
- Telephone - +44 (0)1482 350700

In most cases we can also diagnose and fix your system remotely. For more details visit: <http://www.broadcastradio.com/support>

Other Resources & Documentation

You may also find the following resources and product documentation useful.

Quick Guides – Short written documentation and tutorial videos covering common activities. <http://www.schoolradio.com/pages/quick-guides>

Mixer Tutorials – Short video tutorials covering common aspects of our most popular mixing desks. <http://www.schoolradio.com/pages/mixer-tutorial-videos>

Myriad Playout Tutorials – Basic and in depth video tutorials covering all aspects of the Myriad Playout system.
<http://www.schoolradio.com/pages/myriad-software-tutorial-videos>

Product Documentation – The manufacturers original documentation for the most common components of School Radio packages.
<http://www.schoolradio.com/pages/product-documentation>

School Radio Resources – Standard (available for all) and Premium (only available to School Radio customers) resources to help you develop your School Radio station and link it to the curriculum and school life.
<http://www.schoolradio.com/pages/free-resources>

School Radio First Show Handbook – Quick guide to producing your first School Radio show including technical info and creative advice.
<http://www.schoolradio.com/pages/free-resources>



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