

User Guide

Imperium (1U & 2U)

Version 4.0 • June, 2022



First things first... Thank you for choosing the Imperium Monitor Console!

The Imperium is being continuously and meticulously designed, developed and hand built in Denmark as a labour of love, and we sincerely hope it will enhance your mix/mastering experience and inspire your creativity. If you have any ideas on how we can improve the Imperium, or just need someone to talk to, we're always eager to lend an ear. You can reach us by using the contact form at www.2400audio.com

Sincerely,

Mark and Niels, 2400 Audio

Legal notice

Ok... We hate this part, but we need to get the boring stuff our lawyers make us put in out of the way...

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From the Web site, you may also download and refresh this document if it has been updated.

Where to get help

2400 Audio support, product, and licensing information can be obtained as follows.

Product information — For documentation, release notes, software updates, or for information about 2400 Audio products, licensing, and service, please visit <https://2400audio.com>

Technical support — For technical support, please contact your local 2400 Audio distributor before reaching out to us. They will redirect you in case they're unable to resolve your issue. If you have issues, comments, or questions about specific information or procedures, please include the title and, if available, the part number, the revision, the page numbers, and any other details that will help us locate the subject that you are addressing.

Preface

Style Conventions

The following style conventions are used in this document:

Bold

- Names of Imperium (TouchOSC) functions or chapters or sections in this document.

Bold red

- Important warnings to be taken extremely seriously!

Italic

- Emphasis or external reference (a function, a term, an app, a brand name. Etc.)

[] Square bold brackets indicate a physical button on the front facia of the Imperium.

{OG1U}

- Indicates operation exclusive to the original 1U Imperium (OG=Original Gangsta).

{OG2U}

- Indicates operation exclusive to the original 2U Imperium (OG=Original Gangsta).

{NG1U}

- Indicates operation exclusive to the 1U Imperium NG (NG=Next Generation).

{NG2U}

- Indicates operation exclusive to the 2U Imperium NG (NG=Next Generation).

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IMPORTANT NOTICE

To protect your monitoring equipment (and your ears), the Imperium ships with the *Level bypass* function disabled, hence there is no light in the **[Level bypass]** switch by default. Don't worry, it isn't broken. The switch has to be deliberately activated. Please refer to the **Front panel switch functions** section on page 11 to learn how.

What does *Level bypass* do and why should I care?

The *Level bypass* function passes incoming audio on any assigned input on to any assigned output without any attenuation! Please read the **Front panel switch functions** section on page 11 before engaging *Level bypass* (and hitting us up with a law suit!).

WARNING!

Activating 'Level bypass' can potentially cause hearing loss and/or damage your equipment if used incorrectly!

- On units with firmware versions below V1.0 *Level bypass* is global (affects all outputs).
- If in doubt, please upgrade your firmware to V1.0 or above.
- To check the firmware version of your unit, please refer to **Switch Combos** on page 16.
- If you are not able to get your Imperium to display the current firmware version, please refer to *how to update the firmware* in the video link on page 19.
- We recommend all users update to the latest firmware. All units bought after June 2015 will have shipped with V1.0 or higher. But checking never hurts.
- When using the *Level bypass* function, you should have some sort of level control before the input stage.
- Please read the **Front panel switch functions** section on page 11 - before trying out this feature! *We're not kidding!*
- 2400 Audio can and will not be held responsible for any damage - personal or equipment wise - resulting from any misuse of this product what so ever!

Oh, and another thing... Even though the Imperium apparently is equipped with an *Ethernet* port, this is not the case. The *Link*-port is intended for connection to future 2400 Audio Products. Connecting ANYTHING else to this port may result in damaging other equipment. Or destroy the Interweb.

There... That wasn't so bad, now, was it? We promise the rest of this document will contain information you'll actually want to know. For realz!

What is the Imperium?

The Imperium is a simple, yet flexible and extremely accurate digitally controlled stereo passive analog monitor console, optimised for use with active studio monitors in professional sound mix/mastering studios and showrooms. It comes in two flavours, a 1U rack version and a 2U rack version. They share the same software and overall functionality, but the I/O options and front panel switches differ.

Key Features & Options

Imperium NG (Next Generation) 1U basic features

- 2 or 3 stereo balanced inputs (depending on configuration)
- 3 or 4 stereo balanced outputs (depending on configuration)
- 256 stepped balanced relay attenuator
- 8 programmable level selection switches
- 3 Independent in- and output selection switches
- DIN MIDI I/O (for remote control)
- Link port (for connecting future 2400 Audio products - No, you cannot link two Imperiums!)

Available NG 1U options

- Mastering option
- *Trinnov* option (for control of *Trinnov* systems via *TouchOSC*)
- WiFi option (for wireless remote control)
- USB option (for direct connection to computers)
- *Barefoot MEME* option (for control of *Barefoot* speakers via *TouchOSC*)
- Custom caps for input, output and Level switches (design your own too*)

* Please see our growing list of custom caps and submit your own ideas on www.2400audio.com

Imperium NG 2U basic features

- 2 stereo balanced inputs
- 3 stereo balanced outputs
- 256 stepped balanced relay attenuator
- 6 toggle switches for choosing levels and selecting In- and Outputs
- 3 high quality single-digit LED Displays

- DIN MIDI I/O (for remote control)
- Link port - (for connecting future 2400 Audio products - No, you cannot link two Imperiums!)

Available NG 2U options

- Up to a total of 4 stereo balanced inputs
- Up to a total of 8 stereo balanced outputs
- Mastering option
- *Trinnov* option (for control of *Trinnov* systems via *TouchOSC*)
- WiFi option (for wireless remote control)
- USB option (for direct connection to computers)
- *Barefoot MEME* option (for control of *Barefoot* speakers via *TouchOSC*)
- Custom Caps for in- and output switches (design your own too*)

* Please see our growing list of custom caps and submit your own ideas on www.2400audio.com

Hardware upgrades can be easily installed, at any time, by an authorised 2400 Audio dealer. Original Imperium units can be retrofitted with any or all of the new options - at a discount too for a limited time! Please contact your local distributor, or visit <http://2400audio.com> for details.

Front panel switch functions

As your Imperium can be configured and programmed in a number of ways, we will begin by describing the functionality of the basic {NG1U} model as it is delivered from our assembly line. Whenever operation differs on the {NG2U} model, or optional extras are required, this will be addressed directly.

Certain features can be programmed from the front panel directly, and there are some differences depending on your Imperium version. You will need to install and run *Hexler Ltd. TouchOSC* to take full advantage of all the features of your Imperium (optional MIDI-interface, USB- or WiFi-option is required).

But hey - You can totally just go ahead and plug in your Imperium and start using it without ever opening *TouchOSC*! We do however heartily recommend that you take advantage of our 15% voucher (macOS/Windows version) and visit <https://hexler.net/touchosc> and purchase, download and install *TouchOSC*, as it will greatly enhance your Imperium experience.

To do so, please follow the instructions found on the provided voucher (if for some reason the voucher isn't in your Imperium box, please don't hesitate to contact us - we'll get you sorted!).

Imperium NG 1U Front Panel Switches



1. Parallel output

For this button to have an effect, you will need to program it first, as by default it is not connected to any other output.

Use this function to engage the *Parallel output* when selecting one (or more). This is useful for e.g. sending signal to a speaker pair and a subwoofer simultaneously.

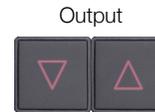
Any number of outputs can be linked to the *Parallel output* (up to 7, if you have a fully expanded {2U}). The *Parallel output* is always the *last* output on your Imperium (Output 3 on a {1U} and basic {2U}, Output 8 on a fully expanded {2U}).

Please note, that if your Imperium is fitted with the optional **Mastering Option kit**, this function must be addressed from TouchOSC, as the **[Parallel output]** switch on the unit is replaced by the **[Cut L]** switch.

☞ To program a specific output to engage the Parallel Output, first select the **[Output]** you want to assign. On the {1U}, press



Use the **[Output]** arrows on the {2U}:



☞ Then press and hold the **[Parallel out]** switch for about a second.



It and the selected output will flash three times, indicating that the outputs have been linked. Now, whenever you select this output, it will engage the *Parallel output* as well.

To disengage a linked output from the *Parallel output*, simply repeat the above process.



2. Insert

The **[Insert]** switch can function in three different ways.

The *Normal* mode (default on {NG} models) sends unattenuated signal out of the *Send* jacks, and routes the *Return* signal through the attenuator. This is typically how an insert point works on mixers and other hardware. This mode is ideal if you're using e.g. a master room eq with your Imperium.



L/R Send/Return jacks

The *Send only* mode is convenient for sending unattenuated signal to e.g. a separate headphone amplification system or a hi-res level meter. In this mode, the *Return* jacks are muted.

The *Bypass attenuator* mode (default on {OG} models) sends unattenuated signal to the *Send* jacks, and also bypasses the attenuator on *Return*. This is useful if you want to use a traditional volume control, such as an *SPL Volume 2*, with your Imperium.

To change the behaviour of the **[Insert]** switch, you will need to connect your Imperium to *TouchOSC*. Please refer to the **TouchOSC** section on page 18 to learn how.



3. Level bypass

When we urged you to be cautious earlier, we really weren't kidding. Enabling this function can *seriously damage your gear and your ears*, as it bypasses all attenuation on the selected input when engaged!

Needless to say (though we do seem to keep harping on it, don't we), it is extremely important that you know exactly what you are doing when using this function, otherwise you may damage both your ears and your speakers! There, we said it. Again.

Engaging this feature can result in some seriously loud level going on!

We've taken extra caution so you can't accidentally engage this function unless you are absolutely sure you need to. Before you can use the **[Level bypass]** switch, you will have to activate it.



To activate *Level bypass*, insert an object, such as a straightened out paperclip, into the hole beside {1U} or below {2U}* the **[Level Bypass]** switch until you feel a 'click', and hold it for a couple of seconds.



The **[Level bypass]** switch will dimly light up, indicating that it is ready to be programmed.



Press and hold the **[input]** for which you want to activate *Level bypass*, and then press and hold **[Level bypass]** for about five seconds.



* NB! {2U}: In-/Output assign in TouchOSC only.

The switch will start flashing incrementally faster until it is activated. The process takes about five seconds to keep you from activating *Level bypass* by accident.

If you release the switches before the sequence is completed, the programming will be aborted.

To disconnect *Level bypass* from an input, simply perform the above steps again.



Press and hold the **[Output]** for which you want to activate *Level bypass*, and then press and hold **[Level bypass]** for about five seconds.



* NB! {2U}: In-/Output assign in TouchOSC only.

The switch will start flashing incrementally faster until it is activated. The process takes about five seconds to keep you from activating *Level bypass* by accident.

If you release the switch before the sequence is completed, the programming will be aborted.

To disconnect *Level bypass* from an output, simply perform the above steps again.



4. Polarity left ch.

This switch flips the polarity of the left channel on all outputs. This is very useful to check for phase correlation. When used in conjunction with the **[Mono]** switch, you will hear *difference summed to mono*.

*Please note, that if your Imperium is fitted with the optional **Mastering Option kit**, the **[Polarity left ch.]** switch on the unit is replaced by the **[Diff]** switch. Please refer to the **Mastering Option kit** documentation for details.*



5. Mono

You've probably guessed this one, right? But again, our lawyers are a tough breed, so we need to get through this: This switch sums the stereo image to mono on all outputs. When used in conjunction with the **[Polarity left ch.]/[Diff]** switch, you will hear *difference summed to mono*.

But wait! There's more! You can also assign **[Mono]** to be automatically activated when selecting a specific output. Handy if you e.g. have a mono center speaker or a subwoofer in your setup.



Select the **[Output]** you wish to link the **[Mono]** switch to, and then press and hold the **[Mono]** switch for about a second.



Use the **[Output]** arrows on {2U}



To unlink **[Mono]** from an assigned output, simply repeat the process.



6. Cut

For fear of stating the painfully obvious, when engaged, this switch cuts all output signal from the Imperium. Well, sort of. There are some exceptions depending on which *Insert mode* (see page 11) is active.

When *Send only* mode is engaged for the **[Insert]** switch, signal will still be sent to the *Send* outputs, even when **[Cut]** is engaged. This is great for being able to keep sending signal to e.g. a headphone preamp, while your speakers are muted.

The **[Cut]** switch is always enabled when the Imperium boots. This keeps nasty pops and clicks at power up out of your speakers. Speaking of pops and clicks - it is a good idea to engage **[Cut]** before turning off your Imperium to protect your speakers.

The **[Cut]** switch can be a real lifesaver when you - accidentally of course - send a really loud signal to your precious speakers. Just smash the **[Cut]** switch to immediately cut off all sound going out of the Imperium (except of course if *Send only* mode is active for the *Insert* point).

This is also why we strategically placed the switch on the very far right side of the front panel - easy to reach, and muscle memory will kick in fast.

7. Inputs



Imperium base models come with three stereo balanced input pairs*. Only one of these can be active at a time (the Imperium isn't a mixer).

* If the *Hybrid I/O* is used in the default input mode on the {1U}. Please see the **Hybrid I/O** video on <https://2400audio.com> for details. The number of inputs can be expanded to 4 on the {2U}. For more information about available upgrades, please visit <https://2400audio.com>.

👉 On the {1U}, simply press the desired **[Input]** switch.

👉 On the {2U}, use the **[▽ ▲]** switches in the **Input** section to scroll through the available outputs. The dedicated LED display will indicate which input is active.

8. Level switches



The {1U} features eight discrete programmable *Level* switches, while the {2U} features a pair of **▽△** arrow switches and a dedicated LED display. These make setting up extremely accurate, instantly recallable listening levels a breeze. We consider them the secret sauce of the Imperium. We have chosen a default set of levels that we find work great for most standard applications.

 *On the {1U}, simply press the numbered button representing the desired level.*

 *On the {2U}, use the **▽△** keys in the *Level* section to scroll through the eight *Level* settings. The dedicated LED display will indicate which input is active.*

Of course, these switches can also be programmed freely to suit your personal requirements and preferences. With 256 expertly aligned discrete levels* at your disposal, we're quite confident you can dial in exactly the set of level settings you need. In fact, we predict you'll quickly find yourself using mostly just three or four on a regular basis.

What's more, you can store up to eight unique *Level profiles*, to accommodate individual use cases, or several engineers working at the same facility can create their own set of eight levels for instant recall.

For more information on how to setup *Level profiles*, please refer to the **TouchOSC** section on page 18 of this document.

* This is exclusive to {NG} versions of the Imperium. {OG} models have 'only' 128. For information about available upgrades, please visit <https://2400audio.com>.

9. Outputs



Imperium base models come with three stereo balanced outputs*. By default, only one of these are active at a time. You can, however, assign a *Parallel output* to one or more outputs (see page 10).

By using the *Hybrid I/O*, you can turn Input 3 into an extra output ({1U} only).

* Please see the **Hybrid I/O** video on <https://2400audio.com> for details. The number of outputs can be expanded to 8 on the {2U}. For more information about available upgrades, please visit <https://2400audio.com>.

 On the {1U}, simply press the desired **[Output]** switch.

 On the {2U}, use the **[▽ Δ]** switches in the Output section to scroll through the available outputs. The dedicated LED display will indicate which output is active.

Switch Combos

Impressive as all of this is, your Imperium has a number of extra little tricks up its sleeve. We've implemented a number of switch combos that give you even more front panel power, without having to launch *TouchOSC*.

Engage *Difference Summed to Mono**

Difference Summed to Mono is a mainstay of mixing and mastering, as it can help identify phasing issues and smearing. So naturally the Imperium offers several ways to engage this.

You can simply press **[Mono]** and then **[Polarity left ch.]**

If you find yourself using this option often, you can link the two.



The switches will flash three times to indicate the function has been enabled.

Now, the **[Mono]** switch will still behave as normal.

Pressing **[Polarity left ch.]** will engage both **[Polarity left ch.]** and **[Mono]** at the same time, allowing you to hear *Difference Summed to Mono* instantly.

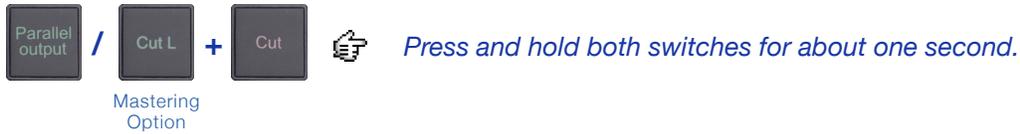
Perform the process in reverse to unlink.

*Please note, that the **[Polarity left ch.]** on older Imperium models was labeled **[Phase left ch.]**. The functionality is the same, only the labelling has changed.*

If you have the Mastering Option installed, the **[Polarity left ch.] switch is labeled **[Diff]** instead and activates *Difference Summed to Mono* by default, thus linking to the **[Mono]** switch isn't necessary.*

Save Imperium Boot State

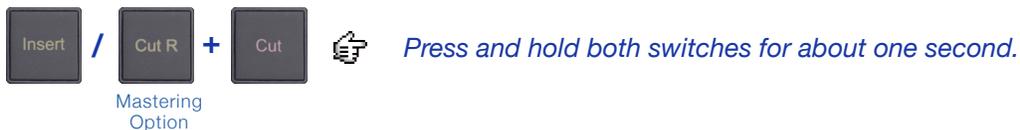
You can save the current settings of the Imperium to flash memory.



The LEDs will flash three times to indicate that the current state of the Imperium has been saved. Saved settings include selected *Input* and *Output*, *Parallel output* programmings, *Level bypass* switch state and -assignments.

Show Firmware Version

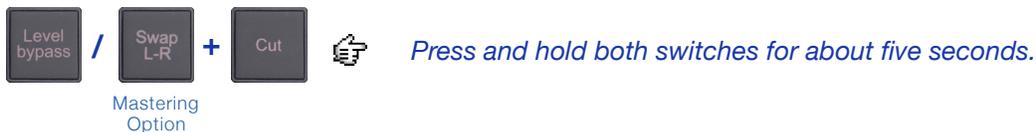
You can check the currently installed Imperium firmware version at any time.



On the {1U}, the first firmware digit will flash in one of the *Level* switches, then the second (e.g. **[2]** then **[4]**, indicating firmware version 2.4). On the {2U}, the firmware version will be displayed in the first and third LEDs.

Factory reset

In case you need to reset your Imperium to the factory settings, you can do so from the front panel.



The switches flash three times to indicate that the Imperium has been reset.

LED Display intensity ({2U} only)

The {2U} lets you control the brightness of the three LEDs.



TouchOSC



As we have touched upon (ha ha) before, your Imperium is battle ready straight out of the box. You may never need to change a thing.

That said, we have designed the Imperium with *Hexler Ltd. TouchOSC* in mind, simply because this rather cheap piece of software is immensely powerful, cross-platform compatible, and completely user-definable. It offers up possibilities we would never be able to realise in hardware only, without the price of the Imperium leaving Earth's orbit.

Besides being designed for tablet/touch-based OSC and MIDI remote control, *TouchOSC* runs tightly on pretty much everything from *macOS* and *Windows* to *iOS* and *Android*, giving you a vast range of choices and options.

TouchOSC is also completely user-programmable, meaning you don't have to do things our way. You can customise the remote control-interface of the Imperium entirely to your own liking. And *TouchOSC* can of course be used to control many other things besides your Imperium.

Still, we figured you'd rather get some hits ready than program software, so we have done the hard work for you and supply you with some *TouchOSC* Imperium Layouts ready to rock!

Communicating with your Imperium

There are basically three ways to remote control and/or program your Imperium from a computer or tablet/phone device:

- ✓ Connecting the onboard 5-pin DIN MIDI I/O connectors to a USB-MIDI interface*
- ✓ Installing the USB Option** and connecting the Imperium to a computer via USB2
- ✓ Installing the WiFi Option** and connecting your Imperium to your wireless network.

All of these require *TouchOSC*. Luckily, we've been able to secure our customers a 15% discount on the macOS/Windows*** version. Please make sure this voucher is in your Imperium box. If not, please don't hesitate to get in touch. We'll fix it!

You will find all the necessary files and documents for setting up control of your Imperium [here](#)

** We have found that some cheap USB-MIDI interfaces have trouble with SysEx data, rendering them useless with the Imperium. Please make sure your MIDI-interface can handle MIDI SysEx data.*

*** Please note, that the MIDI DIN ports are disconnected when the USB-card is installed. Please visit <https://2400audio.com> for details on options and pricing.*

**** The voucher is regrettably only valid for the macOS/Windows version. If you plan to control your Imperium using an iOS or Android device, you will need to purchase the tablet version of TouchOSC for iOS or Android separately.*

Installing TouchOSC (macOS/Windows)

We're going to assume you have some experience with downloading and installing apps on your system. If you follow the instructions when downloading *TouchOSC*, it should be pretty straightforward, whether you're a *macOS* or *Windows* user.

We're on your side, so we've created a video guide that should have you up and running in no time with both *TouchOSC* installation and firmware updating. Check out our support page on www.2400audio.com

Using TouchOSC

The *TouchOSC* app is almost identical across platforms. We're sure you'll get the hang of it quickly. Please be sure to check <https://hexler.net/touchosc> for updates regularly, so you're always up to date. If you sign up to receive our newsletter over at <https://2400audio.com>, you'll be continuously notified about firmware updates and other news and special offers from us.

Making changes to the Imperium TouchOSC Layout

We've taken great care to provide you with some clean, easy to grasp *TouchOSC* Layouts for your Imperium that we hope you'll enjoy using. You will find them in the *Resources* folder you just downloaded (if you haven't yet, [here's the link](#) again). But you can of course change every last bit of it to your own liking, should you want to. That's one of the neat things about *TouchOSC*.

For information on how to do this, we kindly refer you to the [TouchOSC User Manual](#) provided by *Hexler Ltd*. If you encounter issues in this regard, feel free to contact us, and we will try to help as much as possible.

The Imperium Layout pages

Once the Imperium Layout is loaded into *TouchOSC*, simply click the **Play** icon in the top bar to start using it.



Operation from this point on is all but identical on all platforms (*macOS, Windows, iOS, Android*).

Please note, that as there are several functions reserved for Imperium options, you may encounter some “Only available with...” popups in the *TouchOSC* interface. For details on the various Imperium options, please visit <https://2400audio.com>

Monitor Console tab

The **Monitor Console** tab is where you'll be spending most of your time controlling your Imperium. It contains a visual representation of all the Imperium's physical controls, as well as the **Relay Volume Bar**, which lets you seamlessly scroll through all of the 256 levels - akin to a traditional volume slider, but with much higher accuracy.

You will also find a **Refresh** button in the lower right corner. This is used for updating changes made on the Imperium in *TouchOSC* (this usually happens automatically, but can be necessary if e.g. the connection is temporarily lost).



*Touch any button on screen to activate it. Slide your finger across the **Level Bar** to change the volume.*

Level Profiles tab

This is where you program your preferred level settings to the eight level switches on the Imperium. You can program up to eight discrete **Level Profiles**. If you have the *Mastering Option* installed, you can link any **Level Profile** to any output of the Imperium Outputs. Very useful if you have different sets of monitors that need to be level calibrated to each other.

The screenshot shows the 'Level Profiles' tab with eight profiles (Profile 1 to Profile 8) and their corresponding level sliders. The sliders are labeled 1 through 8 at the bottom. The current level is shown as -65.0 dB. Below the sliders are buttons for 'Recall Default Profile', 'Save Profile', 'Copy profile', and 'Paste profile'. At the bottom, there are 'Step trim' and 'Overall trim' controls with '+' and '-' buttons, and a 'Refresh' button.

 Touch and drag up/down in each of the slider fields to set your levels. Use the **Step trim** and **Overall trim +/-** buttons below the sliders for precise adjustments.

You can **Save**, **Copy** and **Paste** *Level Profiles* using the buttons at the bottom left of the screen.

To save a *Level Profile*, select the **Profile 1-8** button on the left you wish to save your settings to, and click **Save Profile**.

To copy a *Level Profile* setting to another, select the **Profile 1-8** button you want to copy from and click **Copy Profile**. Now select the **Profile 1-8** button you want to copy to and click **Paste Profile**.

Settings tab

On the Settings tab you will find three sub tabs.

Scenes sub tab

The **Scenes** sub tab lets you store up to eight *Scenes*. A *Scene* contains all Imperium settings. This is handy for e.g. making A/B/C comparisons between more than one setting (e.g. Level + Mono + Diff-in-phase + Output 2).

Monitor Console Level Profiles Settings

Scenes Assign table Advanced

Scenes let you save a snapshot of the current state of the imperium, including your settings.
This can fx. be used as a fast A/B/C comparison of different setups when listening

Scene 1 Scene 2 Scene 3 Scene 4 Scene 5 Scene 6 Scene 7 Scene 8

Save Scene

Refresh

How to use it:

1. Select a scene
2. Setup the Imperium
3. Press 'Save scene'
3. Recall another scene
4. Set the alternative setup of the Imperium
5. Press 'Save Scene'
6. You can now swap between the scene by selecting them.

 **Touch any Scene 1-8 button to select it.**

It's very easy to save and recall *Scenes*. Just follow the on-screen instructions.

Assign Table sub tab

The Imperium lets you assign a number of additional functions to it's in- and output buttons. For instance, you can activate the **[Mono]** switch when selecting a particular output, or - if you have the *Mastering Option* installed, assign a specific **Level Profile** to a specific output.

Monitor Console	Level Profiles	Settings
Scenes	Assign table	Advanced

	Inputs	Outputs					
	1	2	3	1	2	3	
Mono				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Enables mono if output is selected
Parallel output				<input type="checkbox"/>	<input type="checkbox"/>		Enables parallel output if output is selected
Level profiles				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	If fx. output 1 is assigned, Level profile 1 will always be used for this output Allows use of level profiles as individual trim for speaker sets
Level bypass	<input type="checkbox"/>	Enables Level bypass if input/output is selected Be very carefull using this functionality, Imperium will go to maximum volume(0dB)! Please practice at low input levels.					

Press and hold for 5 sec. to activate
It will only work if 'Allow Level Bypass' is activated, see advanced settings.

All these settings can be saved for each Scene.
If Scenes are not used, the settings can be saved using the 'Save configuration' and will be recalled after each power up.

[Refresh](#)



*Touch any of the coloured squares to make assignments. Then click **Refresh** and/or **Save Scene** on the **Scenes** sub tab.*

You will find additional explanatory info on the **Assign table** sub tab.

Advanced sub tab

The **Advanced** sub tab contains a number of sub sub tabs (we know, it's somewhat contrived, but we're not sure what else to call them. Don't worry, they're just tabs).

The screenshot shows the 'Advanced' sub-tab interface. At the top, there are three main tabs: 'Monitor Console', 'Level Profiles', and 'Settings'. Below these are sub-tabs: 'Scenes', 'Assign table', and 'Advanced'. The 'Advanced' sub-tab is active, showing several settings:

- Save configuration:** A red button with a tooltip: "This saves the current setup of Imperium, and will be recalled after each power up. Note that 'Cut' state is not saved, and will be enabled after each power up."
- Allow level bypass:** A red button with a tooltip: "This allows setup of Level Bypass in the assign table. Press and hold for 5 sec. to activate"
- Soft level transition:** Three radio button options: 'Off', 'Fast', and 'Slow'.
- Insert:** A tab that is currently selected, showing settings for the Insert switch behavior. It includes a description: "Sets the behavior of the Insert switch on TouchOSC and the Imperium switch" and three radio button options: 'Normal', 'Send only', and 'Bypass level', each with a corresponding description.
- Mastering Mode, Trinnov ST-2, Barefoot MEME, Resets:** Other tabs in the sub-tab.
- Imperium firmware version:** and **Imperium layout version:** are displayed at the bottom, with a green **Refresh** button to the right.

The **Save Configuration** button saves the current state of the Imperium. This then becomes the new boot state.

Allow Level Bypass activates **Level Bypass**. Touch and hold for 5 seconds for **Level Bypass** to take effect. **Please use this feature with extreme caution!** (see **3. Level Bypass** on page 12 for details).

Soft Level Transition (Mastering Option only) will make the Imperium ramp up or down between levels whenever a **Level Switch** is recalled for a smoother switching experience. This can be set to **Off**, **Fast** or **Slow**.

Insert sub sub tab

This is where you control the behaviour of the **Insert** switch. You will find all the info you need on the **Insert** tab page (also on page 11 of this document).

Mastering Mode sub sub tab

NB! This page is only relevant if you have the *Mastering Option* installed. For details, please visit <https://2400audio.com>.

The screenshot displays the web interface for the Imperium NG 4.0, specifically the Mastering Mode sub-tab. The interface is organized into several sections:

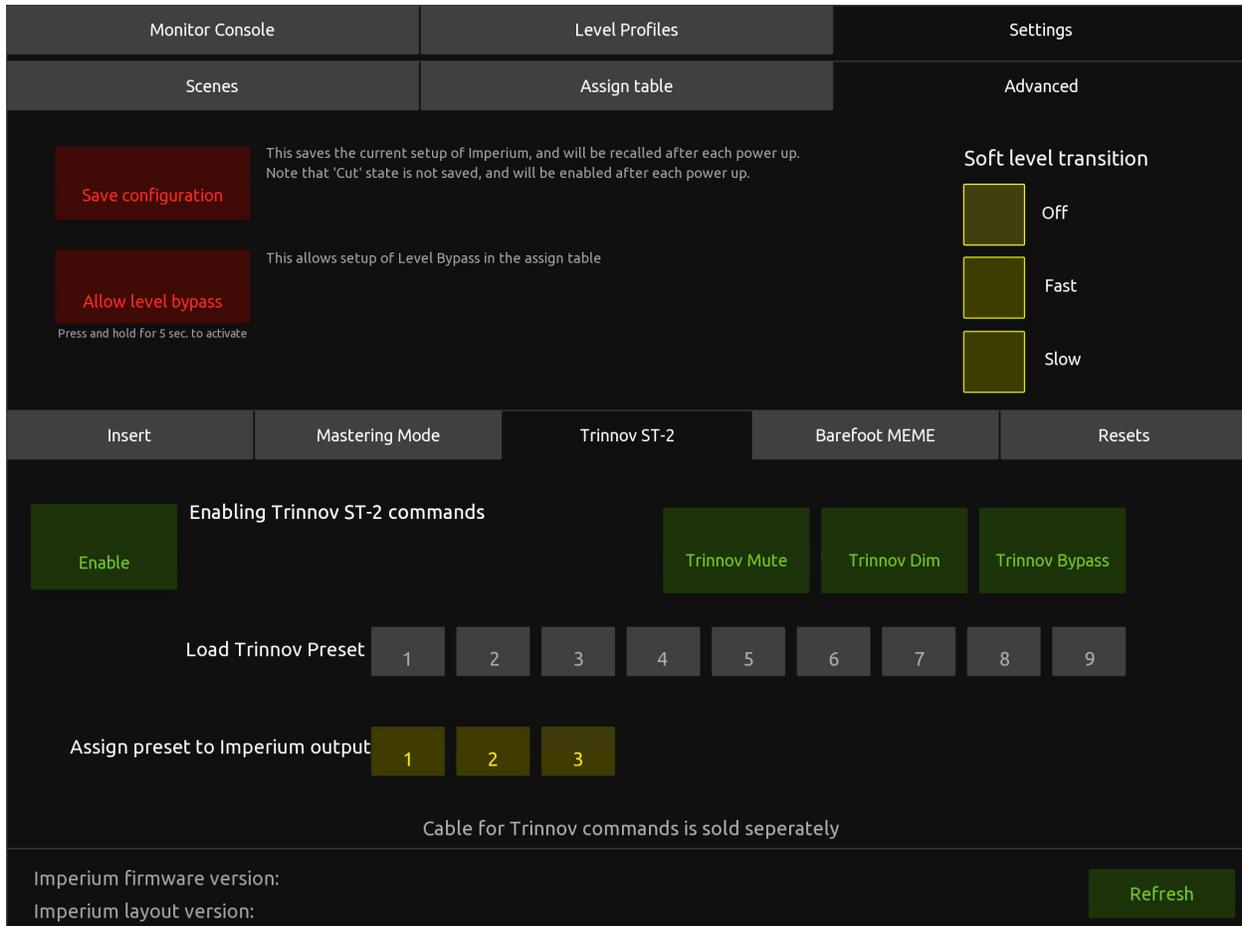
- Top Navigation:** Monitor Console, Level Profiles, Settings, Scenes, Assign table, and Advanced.
- Configuration Options:**
 - Save configuration:** A red button with text: "This saves the current setup of Imperium, and will be recalled after each power up. Note that 'Cut' state is not saved, and will be enabled after each power up."
 - Allow level bypass:** A red button with text: "This allows setup of Level Bypass in the assign table. Press and hold for 5 sec. to activate"
- Soft level transition:** Three yellow buttons labeled "Off", "Fast", and "Slow".
- Bottom Navigation:** Insert, Mastering Mode (active), Trinnov ST-2, Barefoot MEME, and Resets.
- Mastering Mode Content:**
 - Enable:** A green button with text: "Press and hold for 2 sec. to activate".
 - Enabling Mastering mode will change the following on the Imperium front switches:**
 - 'Parallel output' is changed to 'Cut L'
 - 'Insert' is changed to 'Cut R'
 - 'Level bypass' is changed to 'Swap L/R'
 - 'Phase left CH' is changed to desired function, please choose from right:
 - 'Phase left CH' switch function:** Three green buttons: "Phase left ch", "Diff in Phase", and "Diff out of Phase".
 - Footer note:** "You will need to change the caps yourself to match the cap with the function. See more at 2400audio.com"
- System Information:**
 - Imperium firmware version: 0.7
 - Imperium layout version: 0.12
 - Refresh:** A green button.

The front panel switches of the Imperium will change behaviour once **Mastering Mode** is engaged. If you have purchased your Imperium with the *Mastering Option*, this will be active by default. If you have purchased the *Mastering Option* as an add-on, this is where you activate it. You will also need to switch out the relevant button caps on the Imperium. For details, please visit <https://2400audio.com>.

You will find all the additional info you need on the **Mastering Mode** tab.

Trinnov ST-2 sub sub tab

NB! This feature is only relevant if you have the *Mastering Option* installed, and are using a *Trinnov ST-2* system. For details, please visit <https://2400audio.com>.



Monitor Console Level Profiles Settings

Scenes Assign table Advanced

Save configuration This saves the current setup of Imperium, and will be recalled after each power up. Note that 'Cut' state is not saved, and will be enabled after each power up.

Allow level bypass This allows setup of Level Bypass in the assign table
Press and hold for 5 sec. to activate

Soft level transition

Off

Fast

Slow

Insert Mastering Mode **Trinnov ST-2** Barefoot MEME Resets

Enable Enabling Trinnov ST-2 commands **Trinnov Mute** **Trinnov Dim** **Trinnov Bypass**

Load Trinnov Preset 1 2 3 4 5 6 7 8 9

Assign preset to Imperium output 1 2 3

Cable for Trinnov commands is sold separately

Imperium firmware version: Refresh

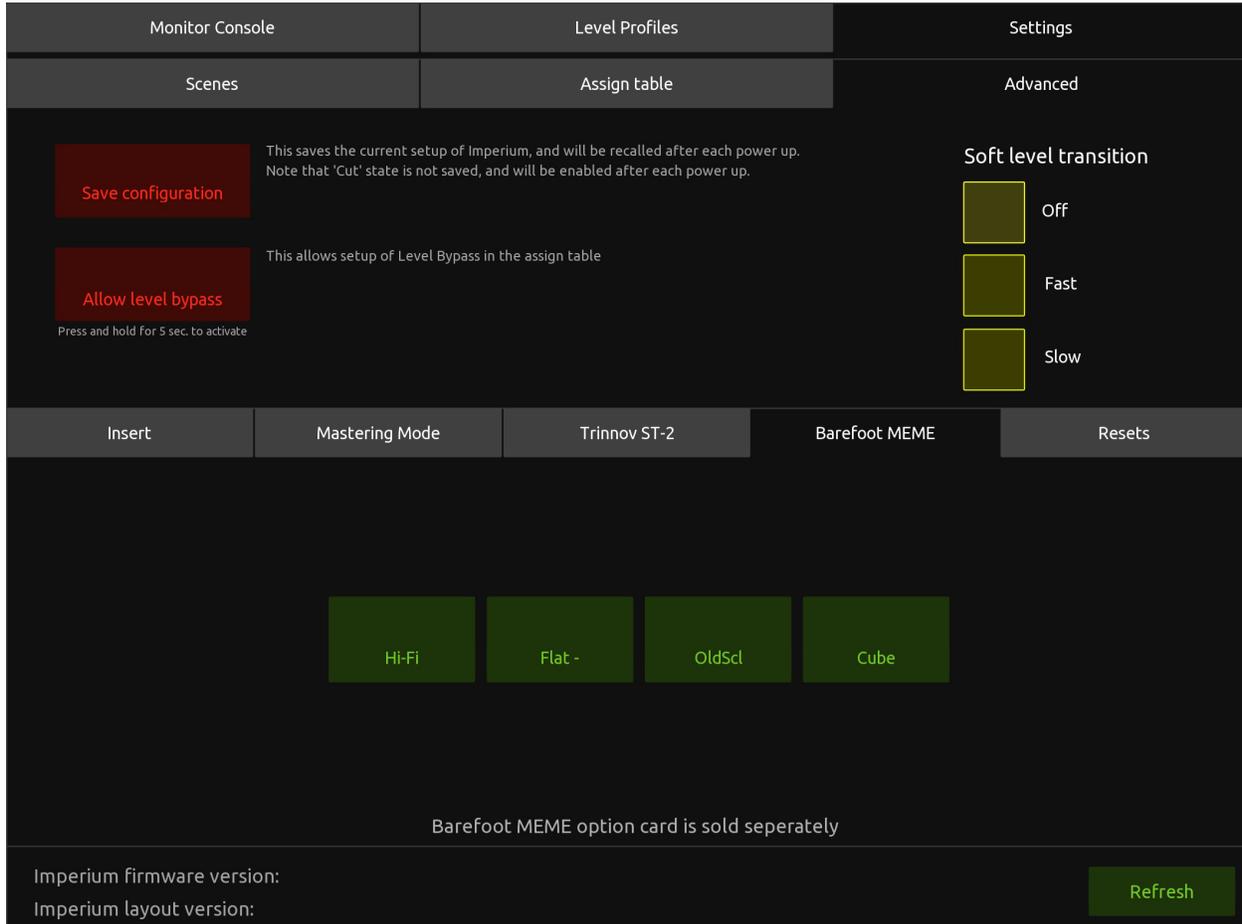
Imperium layout version:

The **Trinnov ST-2** sub sub tab lets you remote control your *Trinnov ST-2* system directly from the *TouchOSC Imperium Layout*. Please note, that a special control cable is required for the Imperium to communicate with the *Trinnov ST-2*. Please refer to the *Trinnov ST-2* documentation and <https://2400audio.com> for further details.

Barefoot MEME sub sub tab

NB! This feature is only relevant if you are using compatible *Barefoot Audio* monitors and the *Barefoot MEME option* is installed in your Imperium.

For details, please visit <https://2400audio.com>.



The **Barefoot Meme** sub sub tab lets you remote control the selection of *Barefoot* sound profiles directly from the *TouchOSC* Imperium Layout.

Resets sub sub tab

We call it “*Resets*” because we may add more reset options in future firmware updates. For now, only a complete factory restore is implemented. In case you need to reset your Imperium to the factory settings, this is where the party’s at.

The screenshot displays the 'Resets' sub-tab in the Imperium NG 4.0 interface. The top navigation bar includes 'Monitor Console', 'Level Profiles', and 'Settings'. Below it, a secondary bar shows 'Scenes', 'Assign table', and 'Advanced'. The main content area is split into two columns. The left column features two red buttons: 'Save configuration' (tooltip: 'This saves the current setup of Imperium, and will be recalled after each power up. Note that 'Cut' state is not saved, and will be enabled after each power up.') and 'Allow level bypass' (tooltip: 'This allows setup of Level Bypass in the assign table. Press and hold for 5 sec. to activate'). The right column has a 'Soft level transition' section with three yellow buttons: 'Off', 'Fast', and 'Slow'. At the bottom of the main content area, a row of tabs includes 'Insert', 'Mastering Mode', 'Trinnov ST-2', 'Barefoot MEME', and 'Resets'. The 'Resets' tab is active, showing a red 'Factory reset' button (tooltip: 'This resets all user settings, incl. scenes and level profiles. Reboots the Imperium after reset. Press and hold for 2 sec. to activate'). At the very bottom, there are fields for 'Imperium firmware version:' and 'Imperium layout version:', with a green 'Refresh' button to the right.

Touching the **Factory reset** button for at least two seconds erases all user settings and returns the Imperium boot state to the factory settings.

Warning! This operation cannot be undone!

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