



**HAMSTEAD**  
SOUNDWORKS

# SUBSPACE

INTERGALACTIC DRIVER



# Thank you for purchasing this Hamstead Soundworks **SUBSPACE**

Subspace allows you to craft your perfect drive sound without losing any character or low frequencies from your original signal. You'll be taken on a journey from clean boost with tone shaping, to warm vintage valve style overdrive, through to defined distortion and all the way to glitchy oversaturated fuzz. In this booklet you will find an overview of Subspace's controls and features, as well as example settings to get you started.

  
PETER HAMSTEAD

# CONTROLS

## TONE

Controls the level of high frequencies in the Drive Circuit.

## GAIN

Controls the level of gain in the Drive Circuit.

### THE DRIVE CIRCUIT



## BASS

Half of the EQ Circuit. Adds or cuts 18dB of bass frequencies.

## TREBLE

The other half of the EQ Circuit. Adds or cuts 18dB of treble frequencies.

The indents mark the centre point, with flat EQ response.

### THE EQ CIRCUIT

## PARALLEL

The input signal is split by a buffer going into Subspace; unlike a blend control 100% goes to the EQ & Drive Circuit and 100% goes to the Parallel control. This is your pure signal unaffected by the Input Pad Switch or any other circuitry. Blend in your dry signal up to unity at the centre indent, or boost with up to X2 gain after the 12 o'clock position.

## LEVEL

Controls the output level of the PR, EQ and PO circuits. Be careful as there is potentially +38dB of boost available, so start with the level low and increase to the desired volume.

### C1 • C2 • C3

Selects between the three clipping modes in Subspace.

**C1** position gives symmetrical clipping for consistent, classic pedal drive tones.

**C2** position is asymmetrical clipping affecting only half the signal. This can create transparent low gain drive, add clarity and defined attack to heavy drive sounds, or even create glitchy fuzz tones.

**C3** position uses two clipping circuits to give very natural amp-like drive and distortion, with incredible dynamic range and touch response.



### X1 • X2 • X5

Selects the input gain level.

**X1** keeps the input level the same without boosting.

**X2** doubles the input level for subtle level and gain boost.

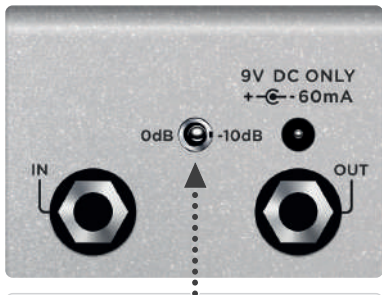
**X5** boosts the original input level by five times for massive headroom in Clean Boost mode, or lots of saturation in the Drive Circuit.

### PR • EQ • PO

**PR** places the EQ Circuit Pre (before) the Drive Circuit for amp like & saturated drive.

**EQ** puts Subspace in Clean Boost mode, bypassing Tone, Gain, & C1•C2•C3 controls.

**PO** places the EQ Circuit Post (after) the Drive Circuit for studio style EQ control.



### INPUT PAD SWITCH

Selects the input level into the Drive and EQ circuits of Subspace. 0dB is standard unity gain, and engaging the pad switch drops the input signal by -10dB. Pads are often used for high level sources such as active basses, but this can be used very effectively for low gain drive sounds, or changing the feel of the saturation on high gain tones.

### INPUTS

**Power:** 9V DC **ONLY**, 60mA +- (centre negative)

**IN:** Mono instrument input.

**OUT:** Mono signal output.

### SPECIFICATION

**All-analogue design**

**Dimensions:** 70w x 130d x 65h mm  
(excludes feet)

**Weight:** 550g / 1.2lbs

**Input Impedance:** 500K Ohms

**Output Impedance:** < 300 Ohms

Subspace features an optical OptoKick footswitch designed by our friends at TheGigRig, for silent and reliable switching.

POWER UP ON



POWER UP OFF

### Internal switch selects Power Up mode:

When Subspace is powered up it can be set to ON (standard setting when shipped) or BYPASSED. If used with a switching system such as TheGigRig Quartermaster or G2 we recommend setting to POWER UP ON, whereas if used alone or with other in line effects we recommend POWER UP OFF.

## EXAMPLE SETTINGS

These example settings are designed to show you the wide variety of sounds achievable with Subspace.

The settings have been tested with a wide range of guitar, bass and amp combinations, however you may need to make some slight adjustments to suit your particular set-up.

We recommend that you use each setting as a starting point, and then tweak the controls to explore further.



### DEFINED DISTORTION

Aggressive distortion while retaining loads of clarity and punch.

Set INPUT PAD switch to 0dB.



### WARM DRIVE

Amp-like breakup with touch sensitive dynamics and the purity of your original tone.

Set INPUT PAD switch to 0dB.



### LOW MIDS GAIN

Add growl in the low mid frequencies for a full drive tone.

Set INPUT PAD switch to -10dB.



### FUZZ WITH PARALLEL CLEAN

Rich, smooth fuzz with attack and note definition by mixing in some Parallel dry signal.

Set INPUT PAD switch to -10dB.





### HIGH-MID BREAKUP

Get Texas style breakup in the high mid frequencies with a touch of dry signal, just like the classic sound.

Set INPUT PAD switch to -10dB.



### GLITCHY FUZZ

Slam the input stage to overload the Drive Circuit into splatty and glitchy fuzz territory.

Set INPUT PAD switch to 0dB.



### VINTAGE OVERDRIVE

Classic touch responsive gain, like a lightly driven valve amp.

Set INPUT PAD switch to 0dB.



### DARK DRIVE

Take modern or bright tones back to a time before HiFi and digital modelling - to old school overdrive.

Set INPUT PAD switch to 0dB.



### **EXPERIMENT START POINT**

Use this setting with the experiments found on the following pages to explore the depths of Subspace.

Set INPUT PAD switch to 0dB.

## EQ CIRCUIT

The **EQ** circuit in Subspace provides 18dB of cut and boost over the **TREBLE** and **BASS** frequencies. The **EQ** parameters have been set to give everything from subtle to pronounced boost and cut, so explore the extremes of the controls to see what they can do. We have engineered Subspace to not lose any low frequencies, so when the EQ controls are set to 12 o'clock, your signal will be unchanged without any low end loss.

### EXPERIMENTS

1.

- Set Subspace to **Experiment Start Point**
- Turn both **TREBLE** and **BASS** controls fully clock wise (to the right)
- Select **PO** and **C1**
- Slowly increase **LEVEL** to the desired volume and experience mid-scooped gain
- Try different combinations of **PR/PO** and **C1•C2•C3** and different **GAIN** levels

2.

- Set Subspace to **Experiment Start Point**
- Turn the **BASS** control fully anti-clockwise (to the left) and the **TREBLE** control to the 10 o'clock position
- Select **PO** and **C1**
- Slowly increase **LEVEL** to the desired volume and experience mid-boosted gain
- Try different combinations of **PR/PO** and **C1•C2•C3** and different gain levels

## PARALLEL CONTROL

The **PARALLEL** control in Subspace uses a buffer to take 100% of the pure input signal and route it in parallel to 100% of the input signal going to the Drive or EQ Circuits. This means that you can blend in your original signal, or boost it up to X2 with any Drive or EQ setting.

### *EXPERIMENTS*

- Choose any of the example settings in the manual
- Experiment with taking out the **PARALLEL** signal by turning it fully anti-clockwise (to the left) and increase **LEVEL** control to compensate overall volume
- Try adding in **PARALLEL** signal by turning the control up to unity at 12 o'clock, or boosting by up to X2 after the 12 o'clock position and decrease **LEVEL** control to compensate overall volume

## FREQUENCY SPECIFIC CLIPPING

The **PARALLEL** control can be used with the Drive Circuit to clip specific frequency ranges in Subspace. Try the experiments below to experience Frequency Specific Clipping.

### *EXPERIMENTS*

1.
  - Set Subspace to the LOW MIDS GAIN example setting
  - Set the **LEVEL** control to fully anti-clockwise (to the left)
  - Set the **PARALLEL** control to 12 o'clock (unity gain)
  - Slowly blend in the **LEVEL** control to add clipping in only the Low Mid frequencies
2.
  - Set Subspace to the HIGH MID BREAKUP example setting
  - Set the **LEVEL** control to fully anti clockwise (to the left)
  - Set the **PARALLEL** control to 12 o'clock (unity gain)
  - Slowly blend in the **LEVEL** control to add clipping in only the High Mid frequencies

## **PR • EQ • PO SWITCH**

1. **EQ** selects the EQ Circuit, bypassing the **TONE**, **GAIN** and **C1•C2•C3** controls. Use this setting for clean boost, guitar/amp tone sculpting, and clean gain to push your amp into overdrive.
2. **PR** engages the **GAIN**, **TONE** and **C1•C2•C3** controls and places the EQ Circuit **Pre** (before) the Drive Circuit. Any boost or cut with the **TREBLE** and **BASS** controls will increase or decrease the gain in those frequencies going into the Drive Circuit. This adds or cuts gain and saturation, potentially slamming 18dB of gain into it for saturated fuzz tones, or cutting bass and treble for mid-boosted drive.
3. **PO** engages the **GAIN**, **TONE** and **C1•C2•C3** controls and places the EQ Circuit **Post** (after) the Drive Circuit. Post sculpts the drive sound like a studio style EQ and does not effect the gain of the Drive Circuit.

## **EXPERIMENTS**

- Set Subspace to an example setting of your choice
- Change between **PR** and **PO** settings to hear the different tonal characters
- Try with other example settings

## LEVEL

This controls the output level of the Drive and EQ circuits in Subspace. Be careful as it has 38dB of volume boost available from the original signal. When engaging the effect, start with the level control low and increase to the desired volume.

### **EXPERIMENT**

- Set pedal controls to **Experiment Start Point**
- Select **PO** on the EQ switch, clipping mode **C2**, and boost to **X5**.
- Set your amp to a low volume level. Finally *very* slowly increase the **LEVEL** control to see how much volume Subspace has on tap. You can increase the volume even more by adding in your original signal with the **PARALLEL** control

## GAIN

There are a lot of drive options available in Subspace, and this controls the amount of gain in the Drive Circuit. The drive character varies with the different clipping (**C1•C2•C3**) modes, **PR** or **PO** mode, and saturation from the input gain **X1•X2•X5** switch.

### **EXPERIMENT**

- Choose a drive setting from the **Example Settings**
- Try different settings on the **GAIN** control, exploring minimum to maximum
- Be sure to adjust the **LEVEL** control accordingly. Remember that extra gain can often add extra volume!



## TONE

The **TONE** control is an LP filter (high frequency cut) in the Drive Circuit. Although both the **TONE** and **TREBLE** control affect the high frequencies, they operate in different ways. This means that they can be used very effectively together.

### **EXPERIMENTS**

- Set Subspace to the **Experiment Start Point**
- Select **PO** and **C3**
- Turn the **TONE** control to 9 o'clock (to the left) and the **TREBLE** control to 3 o'clock (to the right)
- Increase the **LEVEL** to the desired volume
- Experience crisp highs with your drive and extra clipping in the high frequencies!
- Then reverse the **TONE** and **TREBLE**, with the **TONE** at 3 o'clock and the **TREBLE** at 9 o'clock
- Experience smooth highs with your drive with less clipping in the high frequencies!

## WARRANTY & SUPPORT

Hamstead Soundworks warrants the product to be free from defects in material and workmanship for a period of five (5) years. Potentiometers and switches are covered for one (1) year. If the product fails within the warranty period, Hamstead Soundworks will repair or, at our discretion, replace the product at no cost to the original purchaser. The terms under this warranty do not affect your statutory rights and shall be governed by and construed in accordance with English Law.

This warranty covers defects in manufacturing discovered whilst using this product as recommended by Hamstead Soundworks. This warranty does not cover loss or theft, nor does the coverage extend to damage caused by misuse, abuse, unauthorised modification, improper storage, lightning or natural disasters.

The warranty is activated on the date of purchase. If your product was not registered at the time of purchase you may register through our website. Please register your product within 30 days of purchase. This warranty is non-transferable.

To register your product and find full details and conditions please visit:

[hamsteadsoundworks.com/warranty](http://hamsteadsoundworks.com/warranty)

For troubleshooting guides and technical support, please visit:  
[hamsteadsoundworks.com/support](http://hamsteadsoundworks.com/support)



This device has been tested and complies with the EMC Directive:

EN55103-1:2009 Environments E1, E2 & E3.

## COMPLIANCE DECLARATION

This equipment has been tested and complies with the limits for a Class B device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving aerial
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help





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