Ian Shepherd's

Perception AB

Quick-Start Guide

MeterPlugs

Welcome to Perception AB

Thanks for upgrading to the new version of Perception!

The plugin has been re-written from the ground up to be simpler and more streamlined, with zero latency – meaning no more waiting for playback to start – and brand new features for use when mixing. Now you can bypass your entire mix with a single click, loudness-matched and sync-corrected!

This short guide assumes you already have some experience using the original version of Perception (Perception v1) and aims to get you up to speed with the new interface and features as quickly as possible. If you're just getting started, we recommend you read the full manual instead, which includes much more information about how the plugin works, what to listen for when using it, and how to interpret the results.

What's Changed?

If your main interest is mastering, don't worry, you can use Perception AB in exactly the same way you always have. There are several big changes from Perception v1 though, and we'll describe each of them here.

Only One Plugin

Rather than having separate Source and Controller plugins to choose from, Perception is now integrated into a single plugin, called Perception AB.

When you first insert the plugin, you're prompted to select its type: Pre or Post. These are essentially the same as Sources and Controllers from v1. The change in terminology aims to be more intuitive for new users, and reflects the additional flexibility of the Post instances when used in mixing.

Choosing Pre creates a "Source" instance, to be placed at the beginning of any processing chain you want to bypass. Selecting Post creates a "Controller" instance, to be placed at the

end of the processing chain.

There are two types of Post instances: Post Master instances, which work in almost exactly the same way as Controllers from v1, and Post Channel instances, which are designed to be used in mixing. Post Channel and Post Master instances have slightly different functionality, as we'll see.

New Design

Perception AB has a fresh, new look and some important changes to the layout. We'll look at all these in more detail, but we'll start with the most obvious: we've removed the Bypass button.
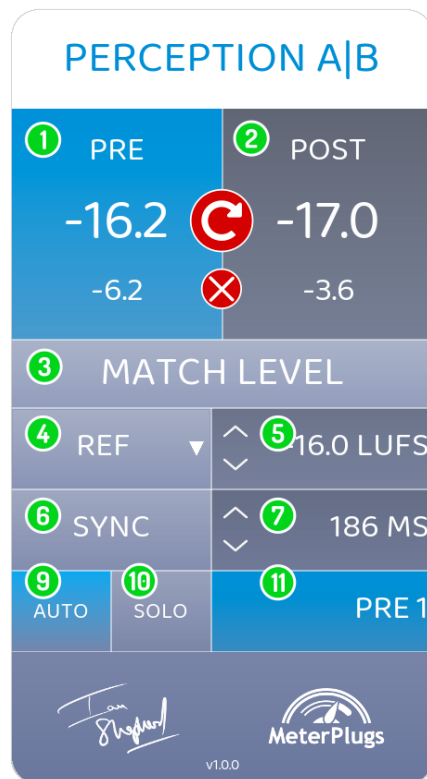
Perception AB User Interface

Rather than having a separate Bypass button, Perception AB has clickable Pre and Post panels. Click on either one of the panels to toggle between listening to the Pre instance (the "before" part of the signal chain) or the Post instance (the "after" signal). The highlighted panel indicates which of the two you are currently listening to. You can even close your eyes and click

the panels to make "blind" Pre/Post comparisons easily, without having to look at the screen or move the mouse.

New Pre instances will assign themselves an available number automatically while new Post Channel instances will search for unpaired Pre instances, and pair with the first one that they find. Alternatively, you can adjust these values by hand if you prefer.

When you click Match Level (3), the loudness of both the Pre and Post audio will be matched. There are now three different ways to determine how this matching is done:

- **Ref**: A reference loudness of your choice, similar to Perception v1
- **Pre**: The loudness of the Pre instance, measured at the beginning of the signal chain
- **Post**: The loudness of the Post instance, measured at the end of the signal chain

This choice can be made using the Reference Level Mode drop-down (4). Post Channel instances default to Post mode while Post Master instances default to Ref mode and -16 LUFS.

Stackable Tracks in Mastering

In Perception v1, it wasn't possible to "stack" tracks and switch between them to make comparisons between masters - they needed to be spaced out or "staggered" in the timeline and played back individually.

With Perception AB, comparing stacked tracks is now possible. You can use the new Solo Mode (10) to choose which Pre instance you want the Post Master instance to "listen to." The active Pre Selection (11) can then be changed using the arrow icons or typing in the desired value, allowing you to switch seamlessly between multiple mastered songs. (If you're comparing alternate masters of the same song, they need to be time-aligned with each other for this to work.)

Mixing

One of the most requested features for Perception was the ability to use it on individual channels in a mix. With Perception AB's zero-latency, this is now possible. Using it in a mix is simple: just add a Pre and Post pair to any channel in your mix, at the beginning and end of the

processing chain. You can then switch between the Pre and Post audio of the channel, within the larger context of the mix.

Unlike the mastering workflow, where you have a single Post instance and several Pre instances, the mixing workflow requires pairs of Pre and Post instances that can be bypassed individually.

As soon as you add a new Post Channel instance, it will automatically find a suitable Pre instance to pair with, but you can also edit the Pre Selection by hand.

The latency of each pair is calculated automatically, meaning you will only need to click Sync (6) if you add or remove processing that changes this, for example by adding or removing a plugin. In most DAWs this auto-sync takes place when you start playback, but in some cases it will happen as soon as you add the instance, for example in Pro Tools and PreSonus Studio One. The Post instance will mute playback during syncing, which will result in some channels dropping out of the mix until it is complete.

After playing audio for a few seconds you can click the Match Level button and compare Pre/Post audio as usual, loudness-matched within the context of the rest of your mix. You can also add Pre/Post Channel pairs to every channel in the mix that you want to check, and toggle each of them individually, or you can switch all of them to Pre simultaneously with a single click of the Bypass All button (8).

For example, you might start by adding a Pre instance to the first insert slot in the processing chain of the guitar channel in your mix. Next, add a Post Channel instance at the end of the chain on the same channel. The new Pre and Post instances will pair themselves automatically, and you can then click Match Level and compare them as you like by toggling between Pre or Post in the Post Channel window. If you add additional Pre/Post pairs, for example for the bass channel and drum bus, you can then use each Post Channel instance to Match Level and compare the Pre and Post audio individually, or click Bypass All to hear the overall effect of the changes to all these channels.

This effectively creates a Perception AB "sub-group" within your mix, enabled whenever you

click Bypass All, allowing you to assess the benefits of processing on multiple channels at once, without being fooled by the "loudness deception," within the context of the rest of the mix. So in the example above, you can make a loudness-matched, sync-compensated comparison for the whole rhythm section.

You can even bypass your entire mix with a single click, by adding Pre/Post pairs to every channel (see *Bulk Insertion* below).

Bulk Insertion

Perception AB makes it easy to add Pre and Post instances "in bulk." This is useful if you would like the option to bypass the entire mix at once, or quickly compare the Pre and Post audio of any channel in the mix, without having to add plugins to each one individually.

To achieve this, simply insert Perception AB on as many channels as you would like, and hold down the Shift key when selecting either Pre or Post Channel. The menu will display "PRE (ALL)" or "POST CHANNEL (ALL)." All unassigned instances will switch to either Pre or Post Channel mode. Pre instances will automatically assign themselves a number, and Post instances will look for suitable Pre instances to pair with.

Make sure you insert the Pre instances first. They need to be assigned and numbered before you bulk-insert Post Channel instances. You should always bulk-insert the same number of Pre and Post instances to ensure consistent pairing. Any Post Channel instance that is bulk-inserted but can't find an available Pre instance to pair with will remain unassigned.

When inserting new instances in bulk in this way, Perception AB will do its best to link Pre/Post pairs in a logical and consistent way. In our tests this functionality is working well, but since the plugin has no way to know exactly which Pre you would prefer to link to which Post instance, you may need to edit some of the auto-assignments by hand.

Whether you choose to add instances to your mix on a per-channel basis or in bulk, you are likely to get the results you want most easily by being systematic and consistent. For example, always initiate the bulk insertion for both Pre and Post instances from the same mixer channel, and always add the Post instances immediately after setting up the Pre instances. This helps

avoid possible confusion due to adding or removing channels, or moving them in the mixer, for example.

Match All Levels

To loudness-match all the currently active Pre and Post loudness levels at once, hold down Shift and click Match Level. Shift+clicking the Refresh arrow and Clear (cross) icons will similarly affect all instances.

More Details

Hopefully the brief overview above will enable you to get up and running quickly. Here are a few more tips that you may find useful:

One Project at a Time

Some DAWs allow multiple projects to be open at the same time, but Perception AB has no way of knowing which project a Pre or Post instance belongs to. This opens up the possibility that multiple Pre or Post instances might assign themselves the same number, or instances from one project might be paired with instances from another. This may result in unpredictable behaviour, so we recommend you don't use this approach when using Perception AB. For the most reliable, predictable behaviour, only open one project using Perception AB at a time.

Reference Level Mode

Choosing Ref mode from the drop-down menu enables you to match the loudness of both the Pre and Post audio to any LUFS level you choose, exactly as it used to work in Perception v1. By default this value is set to -16 LUFS, which will often cause a drop in the level you hear. This may be fine for mastering, but is often undesirable if you're using Perception AB while mixing.

For this reason, Post mode is the default Reference Level mode for Post Channel instances. This mode changes the Pre loudness to match the current Post loudness, ensuring that you won't hear a change in the monitored loudness when you click Match Level. However it might also result in a large loudness increase to the Pre audio, which could cause clipping. This is unlikely to be an issue when mixing, but is something to be aware of during mastering.

The Pre mode is provided for completeness - it changes the Post loudness to match the Pre loudness when you click Match Level, which ensures the plugin will never cause clipping.

To avoid confusion, we recommend you use a consistent Reference Level mode throughout a project. This usually means always using Post mode when mixing and either Post or Ref mode when mastering.

Loudness Display

Rather than displaying the "DIFF" value from Perception v1, Perception AB now displays the level-matched loudness of both the Pre and Post audio, in large print, plus the current offset from their original values, below. We suggest keeping the Pre and Post loudness within at least 0.5 dB of each other to ensure reliable comparisons. Loudness measurements can be re-initialized with the "Refresh" arrow icon, and the current level-matched values can be cleared by clicking the cross icon, clearing both the Pre and Post gain offsets to zero.

We have removed the PSR readouts (Peak to Short-term Loudness). Since Perception's original release we have developed the popular Dynameter plugin, which provides a far more detailed, intuitive, accurate and effective way of assessing the micro-dynamics of your audio.

No Snapshots

Talking to our users, we found the snapshot feature of Perception v1 was very rarely used, so it was removed to allow more scope for the extra functionality in Perception AB. If you need the snapshot capability, Perception v1 can be installed alongside Perception AB and used for this purpose.

Conclusion

Thanks for reading! Hopefully this short guide has provided all the information you need to start using Perception AB as quickly as possible. Please check the full manual for more details, or email us at contact@meterplugs.com if you have other questions or technical problems. We hope you enjoy using Perception. If you do, please tell your friends!