SOFTRON
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OnTheAir WebLink

User Manual

OnTheAir WebLink User Manual

Contents

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About OnTheAir WebLink

OnTheAir WebLink is an on-screen solution that displays webpages in broadcast format. Built to output web pages in video standards, even as you multitask in other applications. Leveraging the video engine of OnTheAir products, WebLink supports external keying and resolutions up to 8K.

Simplicity

Standard solution in most of TV broadcast is using an entire computer to play just one webpage. It is also risking embarrassing operating system alerts or pop ups while playing. OnTheAir WebLink addresses these issues. The User Interface has been designed to be easy to use. It is the key of OnTheAir WebLink's success.

Flexibility

OnTheAir WebLink comes with four channels, allowing multiple webpage outputs, each with their own settings. Broadcast dynamic web pages into video standards like SDI, HDMI, or SMPTE 2110, using supported devices. Or simply output to NDI. OnTheAir WebLink supports HTML 5 transparent backgrounds, perfect for web-based graphic engines like Overlays.uno by Singular. Or use background settings to add a background to existing pages.

Security

OnTheAir WebLink is based on a macOS architecture which is known for reliability and flexibility. All solutions developed by Softron Media Services are fully tested and approved before released. Prompt and personalized support is also what we do best.

OnTheAir WebLink is a very intuitive program with a lot of features and functions. What follows is a brief explanation of how to use the application, beginning with installation instructions, followed by a description of the User Interface and then with instructions on how to get the most from the application.

In addition to this user manual, you can also find a lot of information:
- on our website: www.softron.tv; at the bottom of the OnTheAir WebLink page you find:
    - http://softron.tv/downloads: to download the latest version of Multicam Logger.
    - Tech Specs: where you will find recommendations on what you need, what drivers to use, what video cards and codecs are compatible, etc.
- in our Release notes.
- on our support desk, there a lot of information is available in the help center.
- on our YouTube channel,
- and don't forget to follow us on Twitter and Facebook for the latest Softron news.

SOFTRON
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OnTheAir WebLink User Manual

What's New in OnTheAir WebLink?

This is the first version of OnTheAir WebLink available. It currently comes with the following limitations (there will soon be new versions that will improve these):

- No audio output yet, which can create an issue if you try to record, from direct link, in MovieRecorder. It won't start the recording. To record, remove all audio tracks from your custom AVPreset.
- Some videos will not play. OnTheAir WebLink currently does not play proprietary codecs such as H.264.

While the following limitations won't be changed in future releases, as it's inherent to how OnTheAir WebLink works:

- For obvious copyright reasons, it is not possible to play protected content from OnTheAir WebLink. You won't be able to play protected videos on YouTube (note that some videos are not protected), nor play videos on VOD services. This limitation will be there with the release version.
- OnTheAir WebLink uses an embedded browser. There may be limitations logging into some websites. For example it is not possible to log in to any Google service (including YouTube). This limitation will be there with the release version.

To see the latest news, improved features and all the details, go to our Softron website.
If you want to submit a request, contact our support team, always ready to help you!

OnTheAir WebLink User Manual

Software Installation

OnTheAir WebLink can be downloaded directly from our <u>Downloads page</u> on our Softron website. It will download as a zip file that when opened will reveal the OnTheAir WebLink application file.

Upon installation the application will be in Demo Mode. In Demo Mode, the application will be fully functional, but a blue demo frame will be output every few seconds. So you can test it to make sure it works for you, but you won't be able to use it in production.

First Start

1. Start the application: **Double click on the OnTheAir WebLink icon** in your Applications folder

2. When prompted with the message "The "OnTheAir WebLink.app" is an application downloaded from the Internet. Are you sure you want to open it?", Click on **Open**.

3. A license agreement window will open. Enter your First and last name and a valid email address. Tick the check-box and click on "**Accept**"

4. Enter an **admin password**, to install the required components

5. **If you have a dongle connected** to the computer with valid licenses for OnTheAir WebLink, the application will start right away.

6. **If you do not have a dongle connected**, a license window will open to offer you 3 choices:

   - **Register:** if you own a serial number, click on this button and follow the procedure to activate it. You can read more about the activation procedures on our support desk.
   - **Buy:** if you don't have a serial number, but want to buy one, click on that button.
   - **Demo:** if you want to try the application in DEMO mode, click here. In DEMO mode, MI Replay can only create new Live sessions, it can not reopen an archived session. When a new Live session is created, there will be blue frames recorded in the files as well as blue frames outputted to the outputs.
   - Note that the license window will only open the first time you start the application. If you want to add a license, and upgrade or option later on, you can access the license window in the Menu "OnTheAir WebLink > Licenses…"

7. That's it — you are ready to use OnTheAir WebLink!

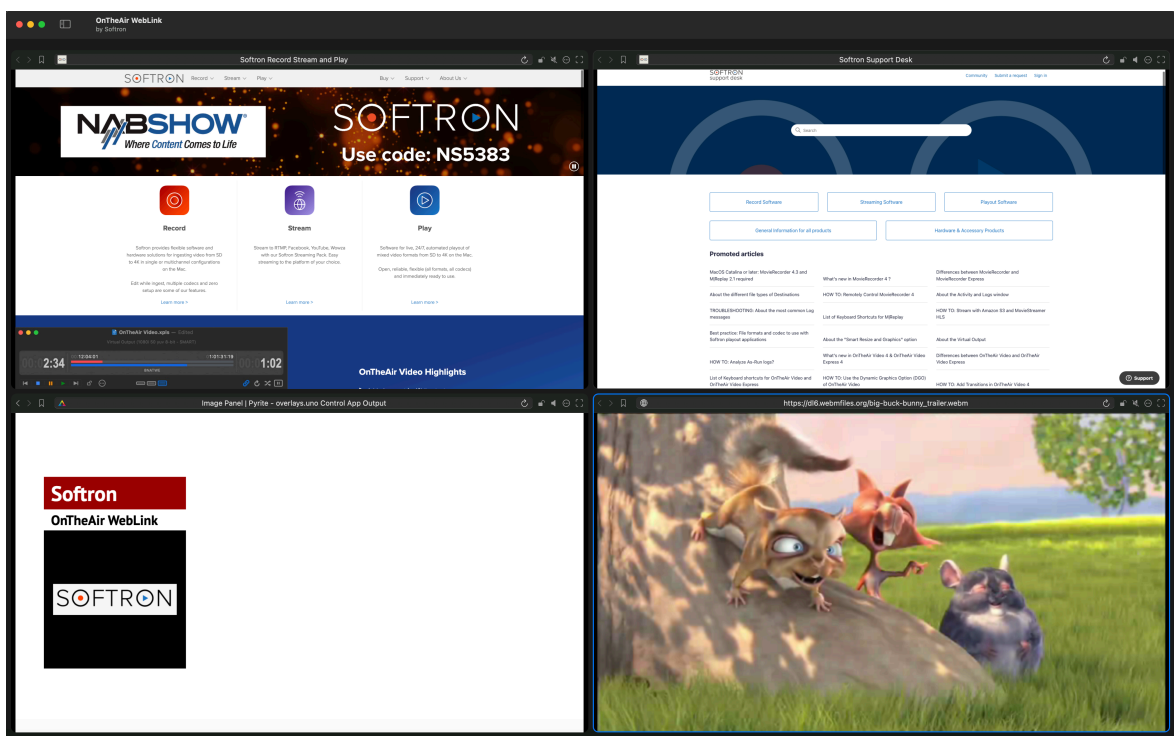# OnTheAir WebLink User Manual

1. Overview of OnTheAir WebLink

The OnTheAir WebLink User Interface has one main window with two areas:
- the **Viewers** (on the right where you can view your four outputs))
- the **Bookmarks Pane** (the side-bar on the left, where you can add bookmarks to your favorite web pages),
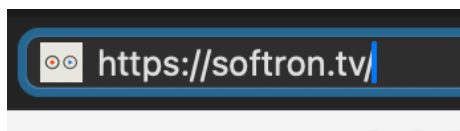
1.1. The Viewers Area

It shows the four channels/outputs available with your OnTheAir WebLink License:

First, click on the "Gear" icon to select the output you want to use for each viewer. The output settings is explained in the next chapter "The Output Settings".
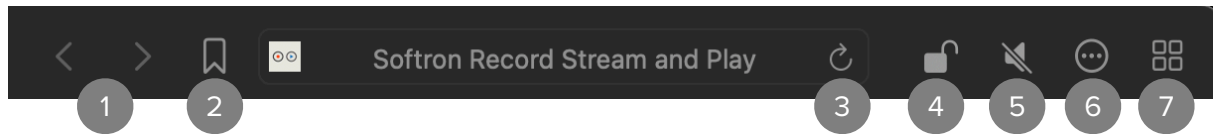
Then simply click in the URL field and enter a URL to start browsing (and outputting) that webpage: :

OnTheAir WebLink User Manual

Here's an explanation on the other buttons at the top of each "Viewer":

1 **< >:** To show the previous or the next page.

2 **The Bookmarks list:** Select a Bookmark you have previously set, or create a new one. See "The Bookmarks Window".

3 **To refresh** the webpage.

4 **To Lock/Unlock:** When the viewer is locked, you won't be able to interact with the webpage, and you won't be able to enter manually an URL, you will "just" be able to select a different bookmark. This is useful for some workflows when you don't want accidental clicks to happen in the page. Or if you don't want someone to accidentally change the url, and only go to validated pages.

5 **Mute/Unmute** the webpage. It only affects the audio preview on your Mac, it won't affect the audio from the output.

6 **Output Settings:** Explained in the next chapter "The Output Settings".

7 **Enter or Exit Full Screen:** If selected, OnTheAir WebLink will show the corresponding window in full screen, and it will be the only viewer seen in the user interface, but all 3 other viewers will continue to output. Click back on the four square icon to view all four viewers again.
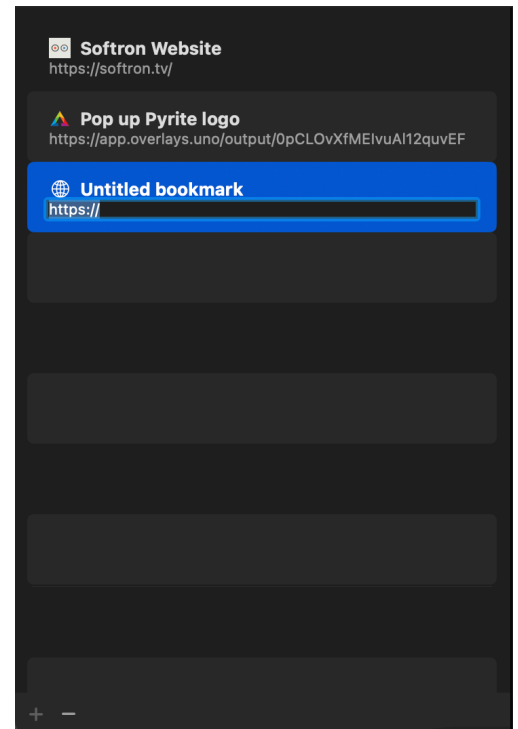
1.2. The Bookmarks Sidebar

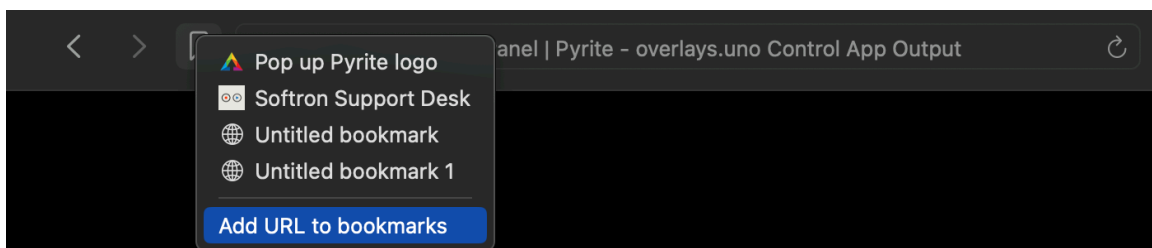If this sidebar is not open, just click on this logo at the left of the Toolbar:

You will see the list of the bookmarks. It allows you to save shortcuts to webpages and add them to your outputs quickly:

- To add a new one, just press on the "+" at the bottom of the sidebar.
- You can then enter the URL you want and change the name of the Bookmark.
- To add it to the outputs, just drag and drop the bookmark to one of the four channels.
- To delete a bookmark, press on the "-". It will remove it from the list.

As seen in chapter "The Main Window", you can also select a Bookmark directly next to the search bar of each channel/output:
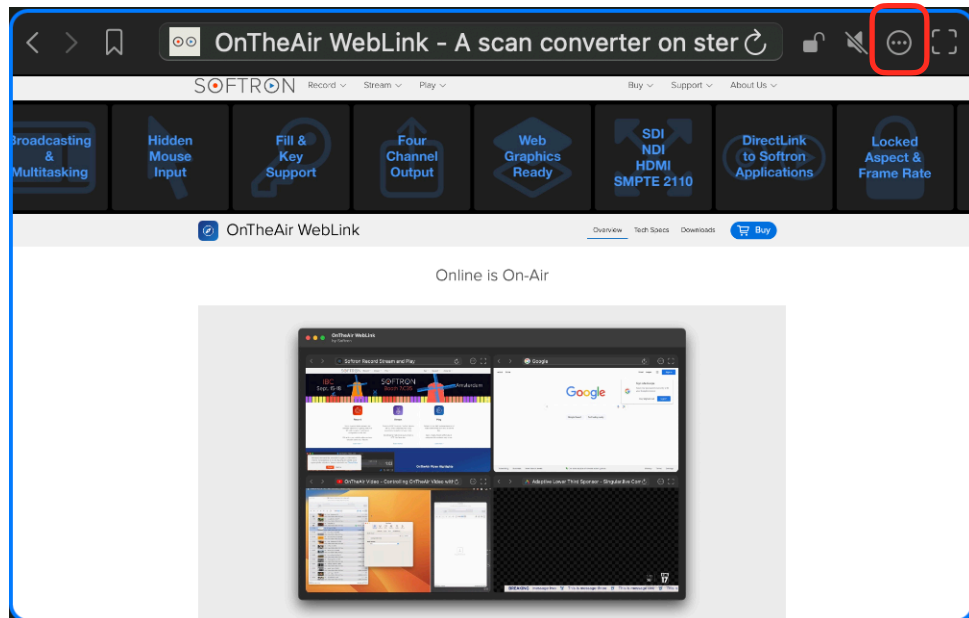
When you click on the logo, the list of the Bookmarks will appear. You can also automatically create a Bookmark from there by clicking on "Add URL to bookmarks". It will use the currently selected URL and create a bookmark from it.

OnTheAir WebLink User Manual

2. The Output Settings

Each of the four Viewers can output a web page to a different output. There are three kinds of outputs: Local Outputs, NDI Outputs and Virtual Outputs. To set up an output, click on this icon:

2.1. Generic settings for all outputs type

For each viewer, you can first set:
- A "**Title**". If you use our "Direct Link" feature, this is the name of the input you will see in our other application. Then depending on the output you choose, you will have different settings.
- A **Background:** If enabled, a background with the color chosen will be added. If disabled, the background will be transparent. I you are working with "standard" webpages, we recommend leaving the background option enabled, and white. Indeed some parts of the webpage may be transparent otherwise and you would have some weird black areas. You should only change the color, or set it to transparent for specific uses. See the chapter "Transparent Background" for more information.
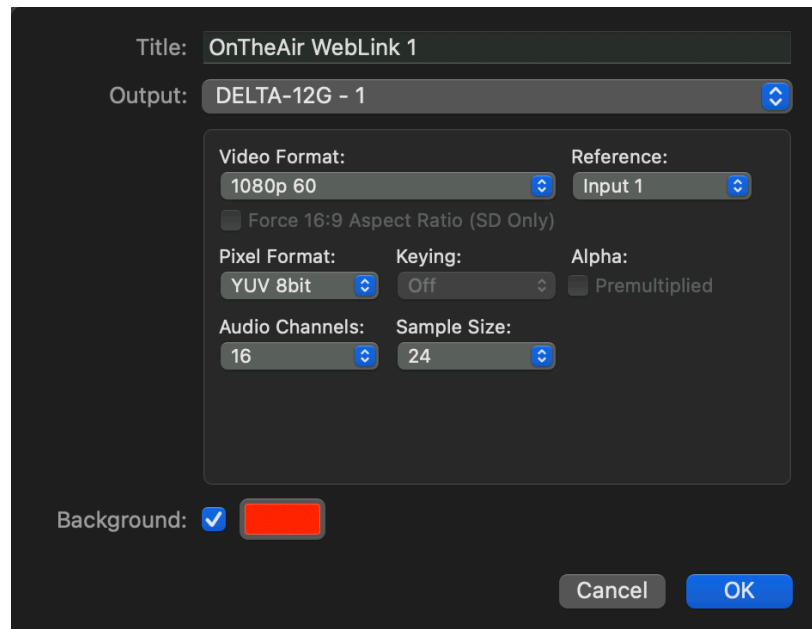
2.2. Local Outputs

Local Sources are **video devices that are connected directly to your Mac**. You can connect most AJA or Blackmagic-Design devices, as well as our M|Family devices (M|8e, M|8i, M|4e, and M|4i). No matter the type of device that you connect, one license of OnTheAir WebLink allows to you output up to four webpages. Note that some devices can have multiple inputs and outputs, while others have just one.

2.2.1. "Blackmagic Design" Outputs

With **Blackmagic Design**, the popup to set up the outputs should look something like this. You can change:

- **Output:** Which output of your Blackmagic video card you want to use.
- **Video Format:** From here you may select the format you would like to play out your clips. The list is quite extensive, ranging from SD to 4k. Depending on your video card.
- **Force 16:9 Aspect Ratio:** with SD format only.
- **Pixel Format:** You may choose either YUV 8 bits, YUV 10 bits or ARGB as your Pixel Format.
- **Keying:** With ARGB Pixel Format only. Explained in chapter "Transparent Background". When Premultiplied Alpha is enabled, it applies the transparency (alpha) to the color of the graphics. When disable, the outputting is straight.
- **Audi Channels:** You may select 1, 2, 8, 16, 32 or 64 audio channels.
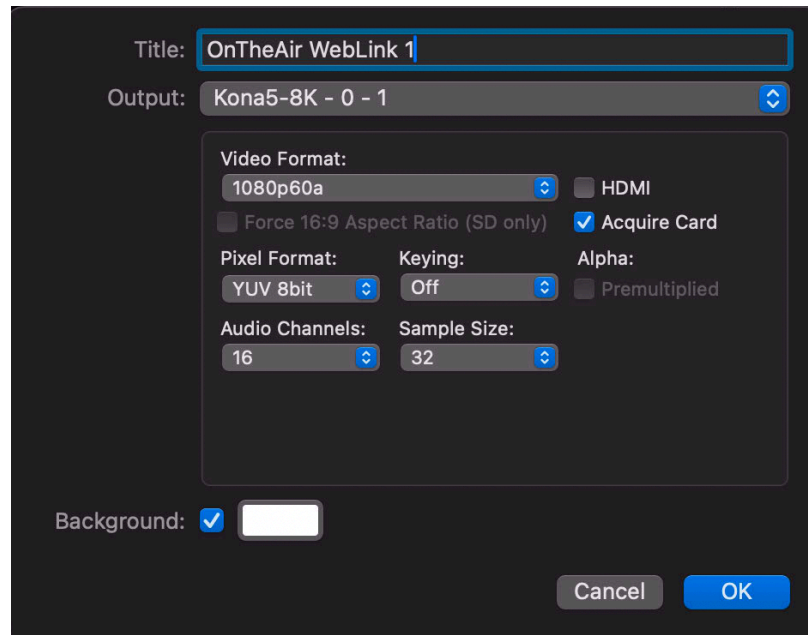- **Sample Size:** Your Sample Size may be either 16 or 32 bits per package.

If you need to change other settings than the ones shown there, use the "Blackmagic Desktop Video Setup" application.

2.2.2. "Deltacast" Outputs (Hardware Bundles)

If you are using one of our hardware bundles (M|8i, M|8e, M|4i, M|4e,...), they use a Deltacast card for which.

- **Output:** Which output of your Deltacast card you want to use.
- **Video Format:** The format you would like to play out your clips. The list is quite extensive (60 different formats), ranging from SD to 4k. Depending on your video card.
- **Reference:** Select the reference Input of your Deltacast Card.
- **Force 16:9 Aspect Ratio:** with SD format only.
- **Pixel Format:** You may choose either YUV 8 bits, YUV 10 bits or ARGB as your Pixel Format.
- **Keying:** With ARGB Pixel Format only. You can select internal or external (used to set key/fill). Explained in chapter "Transparent Background". When Premultiplied Alpha is enabled, it applies the transparency (alpha) to the color of the graphics. When disable, the outputting is straight.
- **Audi Channels:** You may select 1, 2, 8, 16, 32 or 64 audio channels.
- **Sample Size:** Your Sample Size may be either 16 or 32 bits per package.

You can find a lot of information about Deltacast card on our Support desk. Such as:

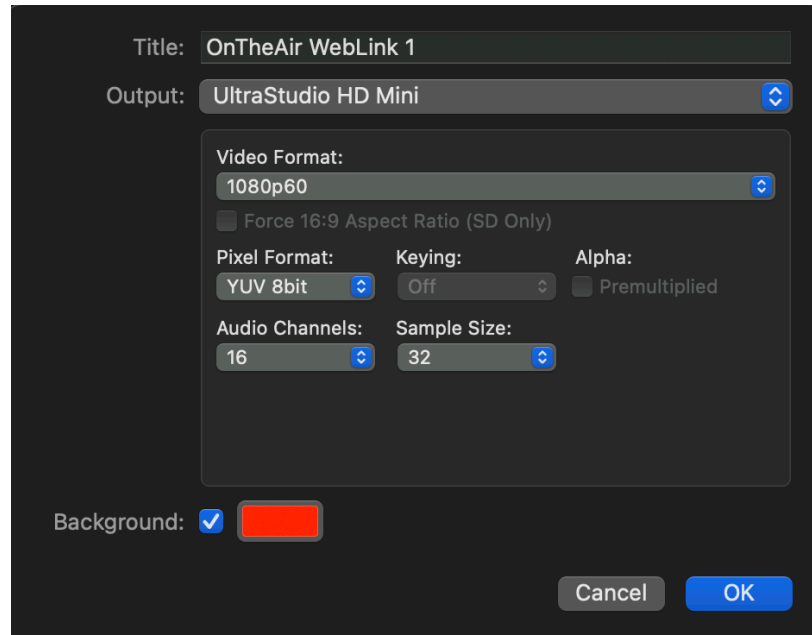- HOW TO: Know which version of Deltacast Drivers is installed

- HOW TO: Update the firmware on a Deltacast card

- HOW TO: Change the configuration of some Deltacast cards

2.2.3. "AJA" Outputs

With **AJA**, the popup to set up the outputs should look something like this. You can change:

- **Output:** Which output of your AJA card you want to use.
- **Video Format:** The format you would like to play out your clips. The list is quite extensive (60 different formats), ranging from SD to 4k. Depending on your video card.
- **HDMI**: Enable if you are using HDMI output with your AJA card.
- **Acquire Card:** When the option is enabled, the application will have an exclusive use of the whole card (and not only the connector that it uses) and will not let other applications use it. More explanation here.
- **Force 16:9 Aspect Ratio:** with SD format only.
- **Pixel Format:** You may choose either YUV 8 bits or ARGB as your Pixel Format.
- **Keying:** With ARGB Pixel Format only. You can select internal or external (used to set key/fill). Explained in chapter "Transparent Background". When Premultiplied Alpha is enabled, it applies the transparency (alpha) to the color of the graphics. When disable, the outputting is straight.
- **Audi Channels:** You may select 1, 2, 8, 16, 32 or 64 audio channels.
- **Sample Size:** Your Sample Size may be either 16 or 32 bits per package.

You can find a lot of information about AJA card on our Support desk. Such as:

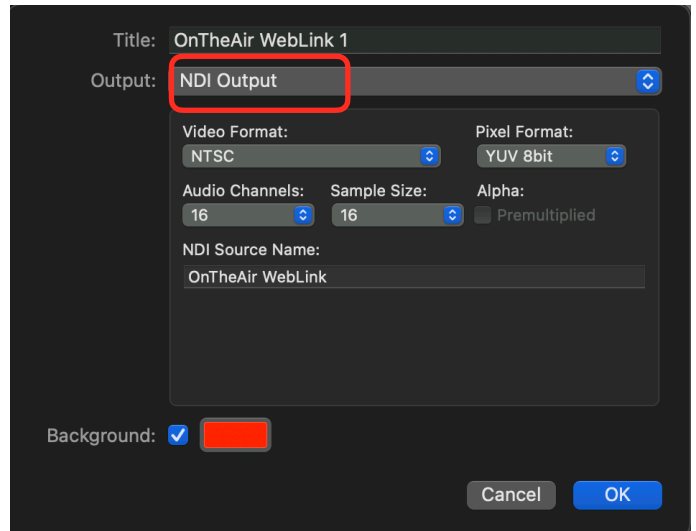- Recommendations on using AJA devices our ingest applications

2.3. NDI Outputs

OnTheAir WebLink is compatible with NewTek's Network Device Interface, or NDI®, allowing you to broadcast over IP, via an Ethernet cable. You can change:

- **Output:** Which output of your Deltacast card you want to use.
- **Video Format:** The format you would like to play out your clips. The list is quite extensive (60 different formats), ranging from SD to 4k. Depending on your video card.
- **Pixel Format:** You may choose either YUV 8 bits or ARGB as your Pixel Format.
- **Audi Channels:** You may select 1, 2, 8, 16, 32 or 64 audio channels.
- **Sample Size:** Your Sample Size may be either 16 or 32 bits per package.
- **Alpha:** When enabled, allows you to premultiply the alpha.
- **NDI Source Name:** The name set for this NDI output when seen by another software.
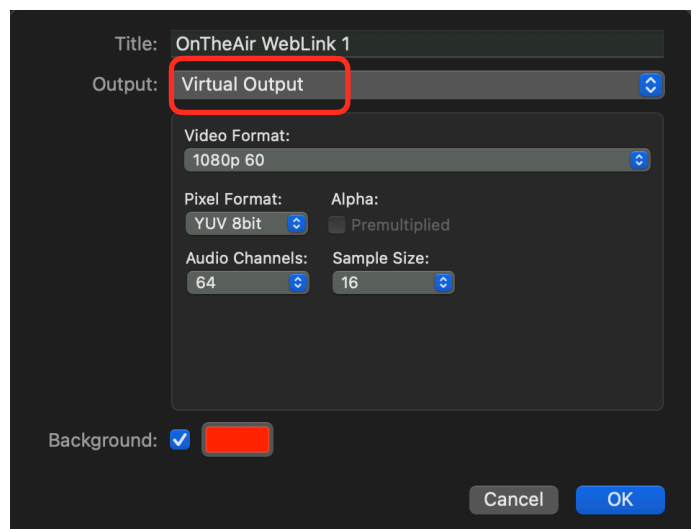
2.4. Virtual Outputs

This output will always be there, even if you have no real physical output. As its name implies, this is a virtual output, meaning that it does not go out to any physical output. So why is it there if it does not output ?
It can be used for 2 things:

1. **To run tests** : if you have no video output device, you can select that Virtual Output.
2. **For Web TVs, streaming only** who don't need a physical video output, you will select the Virtual Output, and then start a MovieRecorder application on the same computer. OnTheAir WebLink will be seen as a source thanks to the "Direct Link" Exclusive technology.
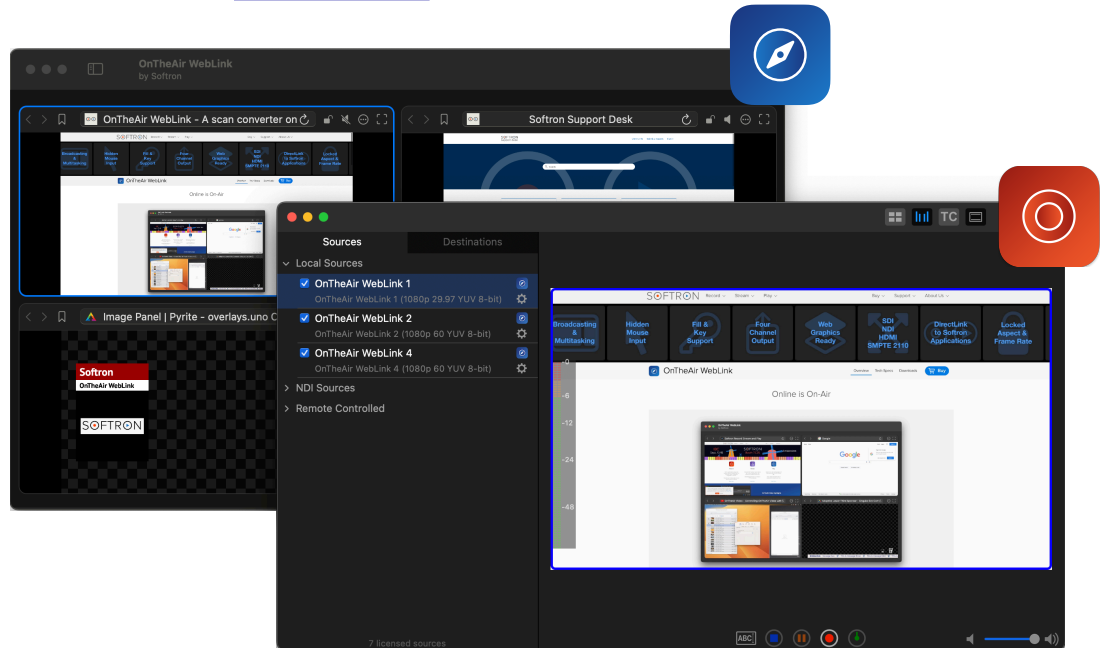
OnTheAir WebLink User Manual

3. Using Direct Link

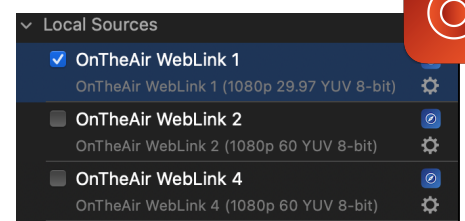The "Direct Link" developed by Softron allows you to:

- Record or stream the signal that is played by OnTheAir WebLink without the need of a video input device. This can be very useful for Web TVs that need to stream their signal.
- It can also be used just to "preview" the signal that is getting out of OnTheAir WebLink.

Here is a Direct Link example: one of the OnTheAir WebLink output used as a source in another of our software MovieRecorder:

For the Direct Link to work, you need to be running OnTheAir WebLink and MovieRecorder 4 on the same computer (It also work with OnTheAir Video or OnTheAir Node).

- Start OnTheAir WebLink and MovieRecorder
- Start playing in OnTheAir WebLink
- You should see them show up in the list of Sources in MovieRecorder 4. They will show the name you have set in the titles of each viewer.
- Enable the checkbox in front of the source that you want to use
- That's it ! You can use that as any other source in MovieRecorder to either record or stream.

Note that:

- The direct link does not work between different computers, it **only works between applications running on the same computer**.
- The OnTheAir WebLink engine must be initialized to be able to use the direct link and see it as a source in MovieRecorder.
- You can start OnTheAir WebLink after MovieRecorder, and you should see them showing up in the Sources list of MovieRecorder when you start playing.

Again, the "Direct Link" should not be confused with the "Virtual output", which is a kind of virtual playback device when you don't want to use a "real" video output. You can read more about the differences between the the "Virtual Output" and the "Direct link".
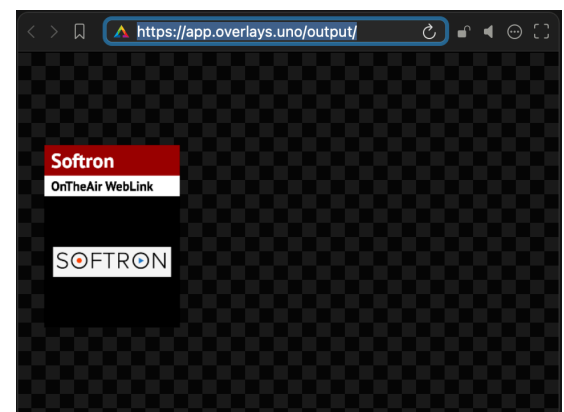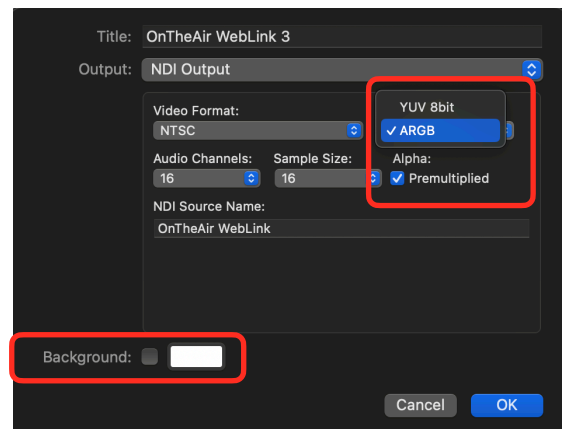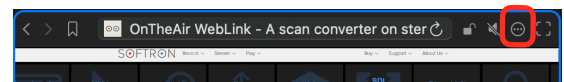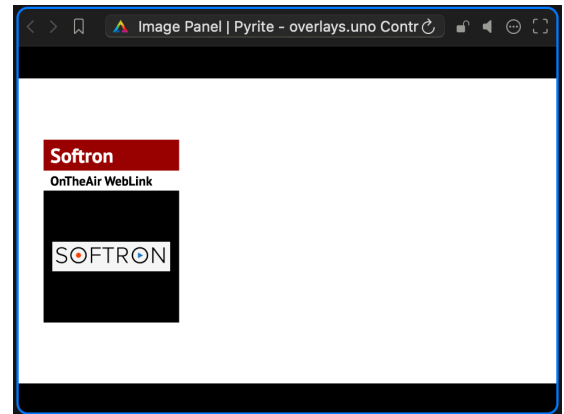
4. Using Transparent Background

OnTheAir WebLink supports HTML 5 transparent backgrounds, perfect for web-based graphic engines. It means you can use the four channels as graphic outputs.

4.1.   How to Set Up ?

- First, create a graphic in your live graphics platform. Use its URL on one of your four OnTheAir WebLink Channel. Here is an example of a graphic created with Uno Overlays, used as an output in OnTheAir WebLink.

- Now, you need to remove the background. Go to the output settings of the channel.

- Then, disable the **Background option** at the bottom left of the output settings.
- You also have to put the Pixel Format to **ARGB**. When Premultiplied Alpha is enabled, it applies the transparency (alpha) to the color of the graphics. When disable, the outputting is straight.

- If you look at the channel, you can now see that the background has been removed. Only the graphic will be visible in the output.
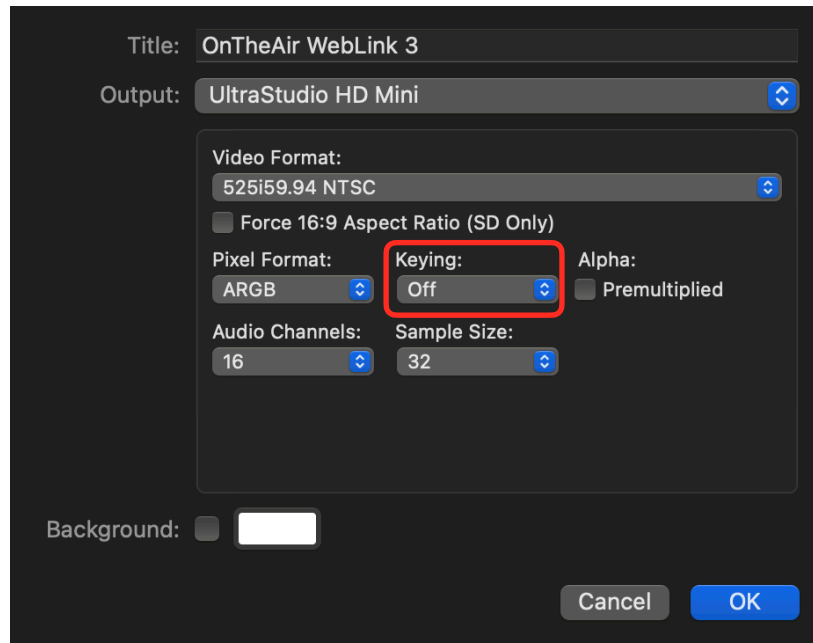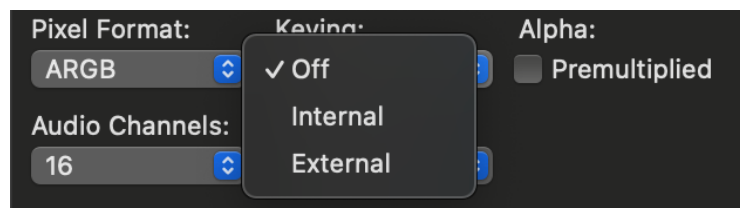
4.2. Keying for Local Outputs

As seen in the chapter "The Output Settings", all local outputs (Blackmagic Design, Deltacast and AJA) have the "**Keying**" option. Here is an example with a Blackmagic card, note that this option is available with the other video cards:

Note that Keying is only available with **ARGB Pixel Format**. You have two options:

- **Internal:** the video card receives the input signal and overlays the graphic on top of that incoming signal, and outputs the result It's the video device you use that does the keying.
- **External:** the video card generates both fill and key signals. Keying will be made by an external keyer (for example in your video mixer). This option is what most users need for their setup and for those who use video switcher.

An **NDI Output** is always External. It is sent out to your network. You can then pick it up from softwares, hardwares that receive NDI signals. Here also you have the choice to enable premultiplied alpha.

5. When Something Goes Wrong...

While we strive to ensure that OnTheAir WebLink be as stable a platform as is humanly possible, there is a lot of interaction between our software and other pieces of your workflow (your MacOS, video card drivers, switchers, etc.), and so we must constantly evolve our product to adapt to changes made in those applications. As such, bugs do sometimes sneak up on us. Should any issues arise while utilizing OnTheAir WebLink, the first place to look for answers to potential causes is our white pages on our Softron Support Desk website.

And also keep in mind that for the life of the product, your application includes free support. The best way to reach us is via "Help > Contact Softron Support" in the user interface of the application (see below for image). Through that button you can collect the technical logs from the application and open a support ticket on our Support Desk. It is important that when opening a ticket that you supply as much information as possible, including the date and time of the incident(s).