

HyperSynchron Manual

V. 2.0 - November 16th, 2018





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1 Introduction

Blackmagic Design HyperDecks are indispensable in daily work of most live producers. They are used for all kinds of jobs, recording of camera signals, player for vision mixers or special applications like instant replay.

HyperDecks have an advanced technology for recording devices, in terms of codecs as well as type of operation. The setup display of a HyperDecks looks more like a device from IT than “normal” decks do. The operation buttons and switches are reduced to a minimum, but on the other side you can extensively control HyperDecks remotely via networking.

Our app HyperSynchron does exactly this. All deck information provided by Blackmagic is analyzed and the deck is driven via available control commands. You may control and monitor up to 16 decks at once using the functions of HyperSynchron. It includes a smart deck supervisor, that permanently analyzes the information requested from all connected decks and presents the relevant part in a single display. It monitors if all decks are in the state requested and whether a deck’s remaining recording capacity gets below certain limits.

Such information is displayed graphically and optionally acoustically using spoken messages in clear English. That way you can connect the audio output of your iOS device to your Intercom system and can concentrate on your main job, e.g. vision mixing. In case you missed a message due to hustle and bustle in live operation, simply tap to repeat it.

HyperSynchron informs you about all problems causing that decks are not operating synchronously anymore, like “no disk inserted”, “no input at recording start” or “disk full”. So, main usage of HyperSynchron is to monitor the recordings of an event, although it contains versatile play functionalities as well.

The recorded clips on SSD / SD card are displayed and accessible in a list. Tapping on a list item lets the deck jump to the first frame of it.

You can format your storage media and set a base file name for recording.

You can fast forward and backward in clips using the Jog/Shuttle control. You decide whether you control all decks at once or only a single one.

In the single deck window, you can use all setup options provided by Blackmagic like recording options.

A very helpful feature is the integrated timer functionality. You can set a time for start (and optionally end) of recording, so the decks begin automatically to record. We all know how much hectic there is before a live event starts and to set all decks to record mode easily gets forgotten. That’s history now. The speech assistant informs you about a successful or unsuccessful start of recording.

Our new free app “**HyperSynchron One**” does all the same like “HyperSynchron”, but it only connects to one single HyperDeck. If you want to connect to more than one device at a time, simply upgrade to “HyperSynchron” via AppStore.

We are convinced that HyperSynchron makes you more efficient in your work!

1.1 Disclaimer

We developed HyperSynchron using all information given by Blackmagic Design. We tested it with all models of HyperDecks, a collection of routers and switches and a variety of Ethernet adapters for iOS devices for a period of more than a year in real live productions. During this period, we improved the software step by step.

Nevertheless, we cannot eliminate the possibility that und different circumstances, e.g. different network setups, errors in data transmission might happen. And HyperDecks are not 100% equal, sometime response times are changing between product series. We have tried to take all this into account.

A few errors possibly occurring at HyperDecks, e.g. “no input while recording” are not yet recognized and signaled from current HyperDecks, but we are in contact with Blackmagic and confident that such problems will be eliminated in future firmware releases of the decks.

For this reason, we deny guarantying a perfect functioning of HyperSynchron under all circumstances and you cannot make LivesSkills Menssen & Ebelt GbR responsible or liable for losses at a production.

Even if you use HyperSynchron, we recommend you from time to time take a look at the physical devices to check whether the data displayed on the iOS device screen is real and reflects the status of the decks.

2 Basics

Blackmagic HyperDecks are low cost recording devices using SSDs or SD cards for storage. You can do so in different formats and frequencies. The settings can be reached via a setup menu using the controls on the front side of the device. A good part of these settings is available via the Ethernet connection and provided in HyperSynchron.

HyperDecks contain state of the art connectors for Video In and Out (like HDSDI and HDMI) to connect deck and cameras to a vision mixer. These connections don't matter for HyperSynchron except that for recording a valid camera signal must be applied.

HyperSynchron of course needs a Wi-Fi or Ethernet connection to the decks in order to be able to communicate to them.

You can realize such a connection with a router connecting all devices including the iOS device. It can be your regular production network where your vision mixer is connected to. If this is the case, and it is an ATEM vision mixer, make sure the HyperDeck functionality on it is disabled, since HyperDecks only support single control connections. I.e. HyperDecks can't be controlled by HyperSynchron and ATEM mixer at the same time.

There are two ways to connect the app with HyperDecks:

1. Via Wi-Fi. You can use a router to connect the available HyperDecks via Ethernet LAN. And you connect the iPad / iPhone via Wi-Fi. In closed rooms this setup works quite well, but in event areas, where thousands of people use smart phones, transmitting data on the Wi-Fi frequencies, the system performance can drop dramatically.
2. Via Ethernet only. Since a few months Apple officially supports connecting iOS devices via adapters directly to a network using Ethernet technology. You must use a Lightning to USB adapter plus a USB to Ethernet adapter.

All you need in addition to this is a switch (instead of a router, which can be used as well).

Avoid any big data traffic in the same network, as it might influence the performance of the network and the response time of the HyperDecks.

Data traffic between ATEM switcher and the corresponding control panel (or Laptop program) has only minor influence. But for streaming and download of files you should use a separate network!

Find out more about it in the section "Connecting the network" below.

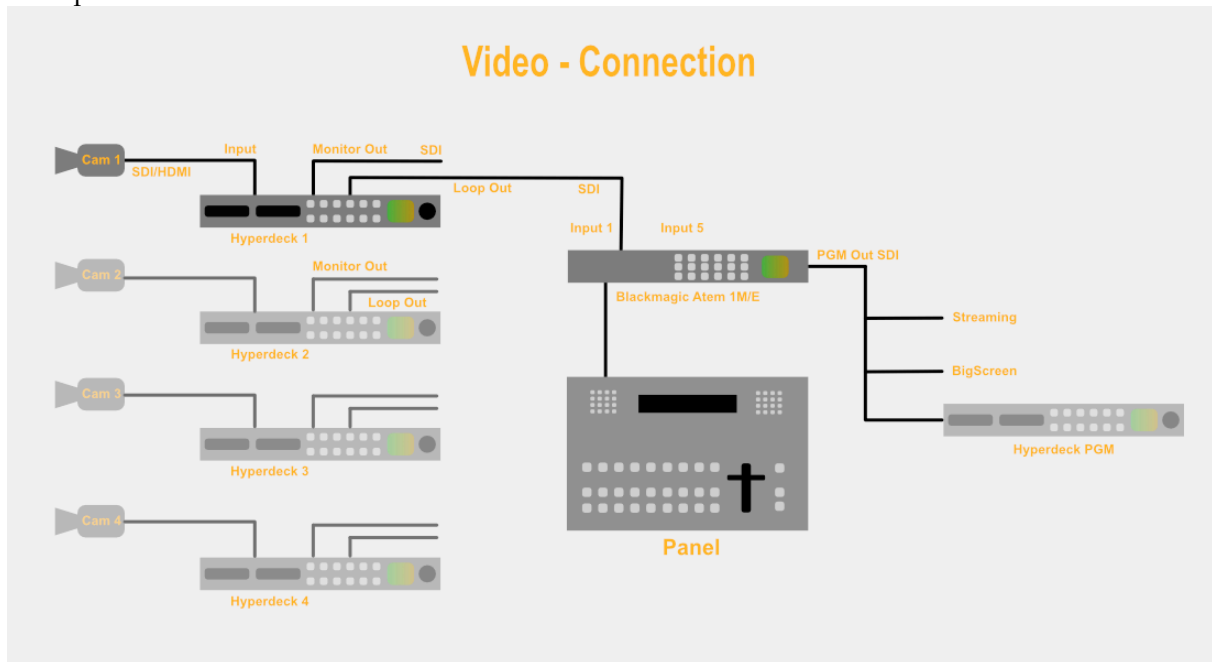
The app was optimized for the screen size of iPads (Version 4 and higher, iOS 10 and higher). But even iPhones 5S can be used providing nearly the same range of functions, but with less operating comfort. The app was tested with "HyperDeck Studio", "HyperDeck Studio Pro" and "HyperDeck Studio Mini", latest firmware versions (v. 6.0 as by June 2018).

All information here is valid for HyperDeck Studio, differences to HyperDeck Studio Pro and HyperDeck Studio Mini are noted where relevant.

3 Connecting video signals

Connect your cameras or your other sources with your HyperDecks using SDI or HDMI.

Example of a video connection with 4 cameras and an ATEM mixer



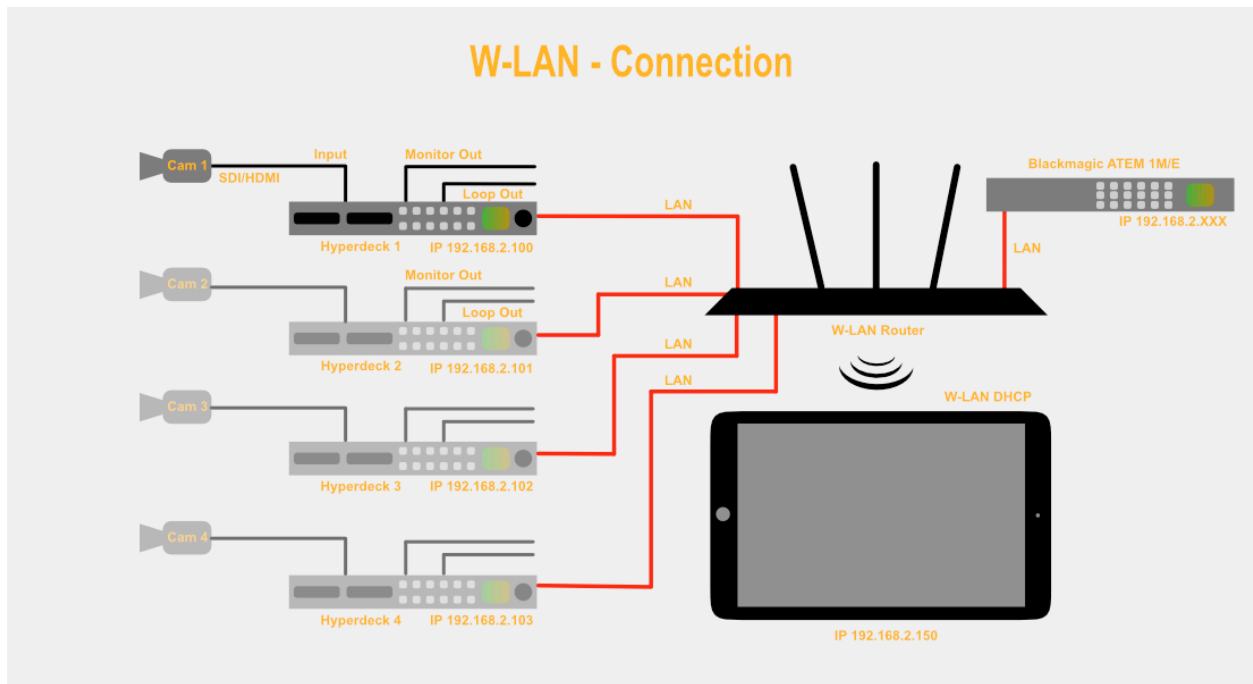
Connect the "Loop Out" output of the decks to the inputs 1-4 of your vision mixer, or to your monitors. Connect the "Monitor" outputs of the decks to your desired destination.

Before a completely new recording begins we recommend erasing the SSDs / SD cards you want to use for recording. Otherwise the timecodes of old recordings can generate confusion in the clip list.

4 Connecting the network

The HyperDecks have to be connected to the iOS device via Ethernet LAN or Wi-Fi. There are a few possible setups. In doubt contact your network administrator.

The easiest setup would be to have the HyperDecks connected to a router, where they get their IP address from the DHCP server. Secondly the iOS device would be connected via Wi-Fi and also gets its IP address from the DHCP server. This could be done in most of the standard networks in a company. To find the addresses of the HyperDecks you can use a tool like “Fing” (for iOS devices).



There are three problems with this setup:

- While Wi-Fi connections are more or less reliable in a typical office environment, this can be very problematic in an event situation, where thousands of mobile phones are polluting the frequencies.
- Since IP addresses assigned by a DHCP server can change, you have to find out the addresses of the HyperDecks from time to time and enter them in the settings section of HyperSynchron.
- In a mixed network with other Internet connections such as live streaming or downloads, communication between HyperDecks and iPad / iPhone can be slowed down and eventually you may miss frames (timecode is not adequate).

A Wi-Fi connection may be reliable to control 1 or 2 decks with HyperSynchron, but we don't recommend it for a live event.

For every problem, there is a solution:

Regarding a) connect the iPad/iPhone via LAN. iOS 10.3 and later officially supports this.

Regarding b) there are two possibilities:

1. Using a separate network with a **switch**. You can use a so-called "Ethernet Switch". Connect all devices via LAN cable to the switch. You have to manually assign a unique static IP address to each device, so you have to switch off "DHCP" for every device (HyperDecks, iPad/iPhone). In this setup you will typically have no access to the Internet. Suggested IPs: HyperDecks 192.168.2.100 - 192.168.2.115, iPad/iPhone 192.168.2.150. Set Subnet to 255.255.255.0 and Gateway to 192.168.2.1 on all devices.
2. Using a **router**. Good routers (e.g. FRITZ!Box) are able to split their address space (x.y.z.1 – x.y.z.255) into two areas: one with automatic address assignment (DHCP) and one for manually assigned addresses (fix IP addresses). Switch on DHCP on your iPad/iPhone, switch off DHCP for HyperDeck. Then manually assign a unique IP address for each Blackmagic device in the address space reserved for fixed IP addresses.
Example: if the base address of the router is 192.168.2.x set the DHCP address space to cover 1-199. Then iOS device will get an IP address from this range. Other devices in this network will continue to function. Then assign addresses from 192.168.2.200 - 192.168.2.215 for the HyperDecks. Set Subnet to 255.255.255.0 and Gateway to 192.168.2.1 on all devices. This should work.

But we have heard of routers that have connection problems when the Blackmagic devices are assigned addresses beyond the DHCP address space. In this case only a "dirty" workaround helps. Tell the router to use the complete address space (0-255) for DHCP but assign fixed addresses to the HyperDecks. Make sure to use high addresses (200 and higher) since the router manages the whole address space, but typically assigns low addresses first. Do this only if the correct setup does not work, because it can't be guaranteed, that the router is not assigning such a high address used for a HyperDeck to any other device. Then you would have a conflict and the communication would break. Set the iPad to use a DHCP server for assigning an IP address, don't use a static address here. Set Subnet to 255.255.255.0 and Gateway to 192.168.2.1 on all devices.

Regarding c) Use a network dedicated to your HyperDeck / HyperSynchron system.

To **connect your iPad / iPhone via LAN**, you need 2 adapters to setup such a connection:

- [Original Apple Lightning to USB 3 Camera Adapter](#). This adapter besides the USB socket has a Lightning input to connect an external power supply. Connect your iPad power supply here.

- a low power USB 3.0 Gigabit Ethernet / network adapter. Don't use the one from Apple, it requires too much energy and does not work.

Here are some models you can use:

a) for UK:

[CSL - USB 3.0 Gigabit Ethernet](#)

b) for Germany

[CSL - USB 3.0 Gigabit Ethernet](#)

c) for U.S.

[TP-Link UE300 USB-3.0-10/100/1000Mbit/s-Gigabit-Ethernet-Adapter](#)

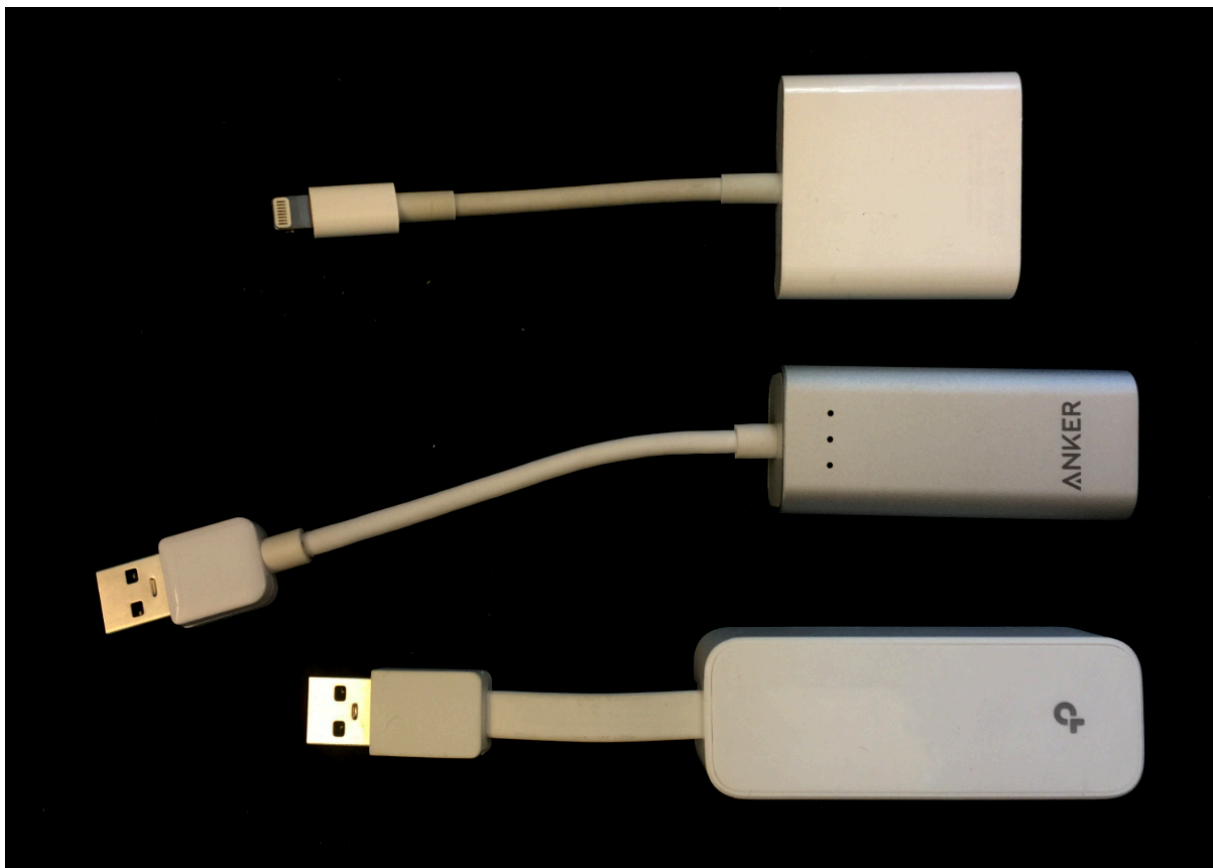
d) for U.S.

[Anker USB 3.0 auf RJ45 10/100/1000 Gigabit Ethernet Adapter](#)

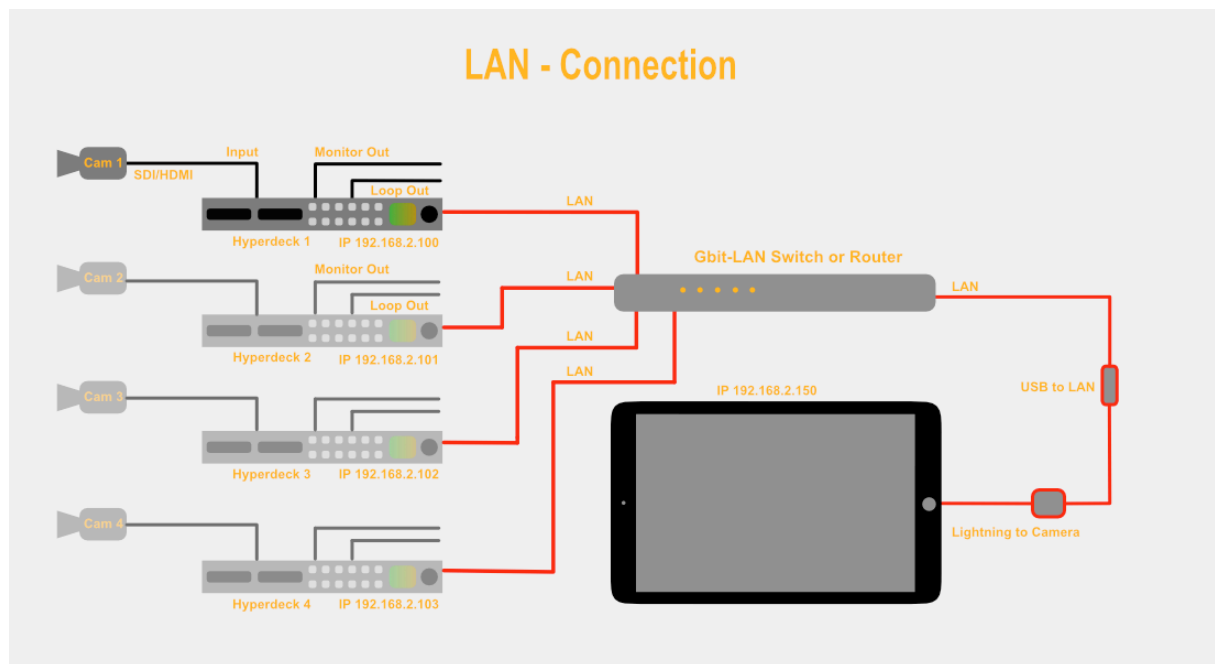
The additional (12W) power supply provides the energy for the Ethernet adapter as well loads the batteries of the iPad / iPhone.

As an alternative you can connect the Lightning-USB adapter to a powered USB hub. Then you can use any USB-Ethernet adapter.

New on the market are Lightning-to-Ethernet adapters which might be a good single device alternative.



Here you can find some more information on this topic:



4.1 Setting the IP address on HyperDeck

Set a fixed IP address in the HyperDeck. To do so, press the DISP button on the HyperDeck and navigate to item Setup → Ethernet using the jog dial and the SET button.

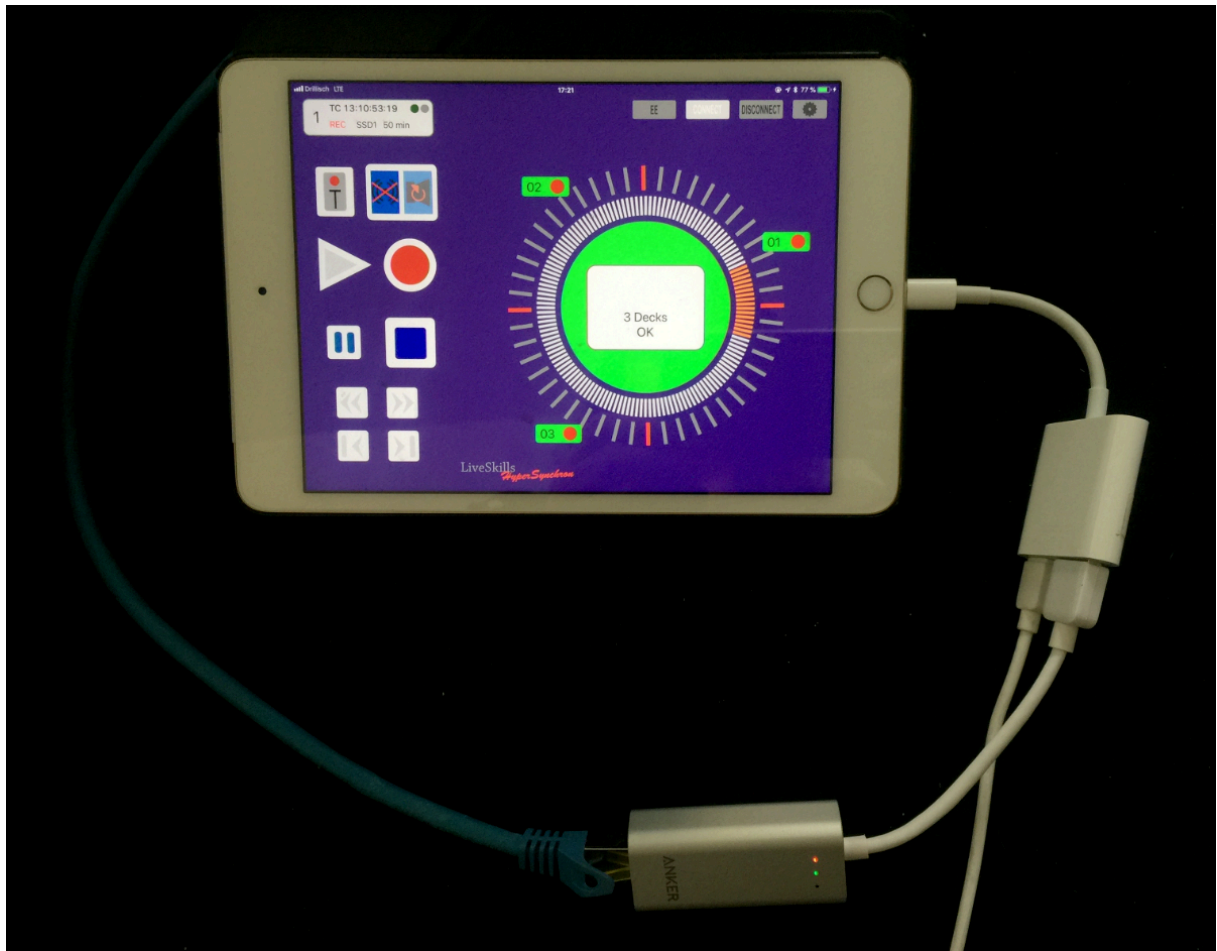
- First, switch off DHCP functionality of the deck
- Then enter an IP address, we recommend the range 192.168.2.200 – 215, because the ATEM switcher is originally mapped to 192.168.2.240. But it depends on the architecture of your local network. If you simply use a switch, you are free to use any IP address, so use the recommended ones.
- Set the Subnet to 255.255.255.0
- Set the Gateway to 192.168.2.1

For a dedicated events setup, *we recommend to simply use a switch or a router with many sockets (depending on the number of HyperDecks to connect), assign fixed IP addresses to each HyperDeck and connect the iOS device using the LAN adapter solution.*

This way you have a plug-and-play setup that requires no settings after making connections and no disturbing data flows from other devices or the Internet.



Example connection of multiple HyperDecks with an ATEM vision mixer (green cables) and a LAN network (blue cables)



The two adapters (top: CSL Ethernet adapter, below right: Apple Camera adapter)

4.2 Setting up iPad/iPhone with Ethernet connection

1. Open the “Settings” on your device.

It looks like this:

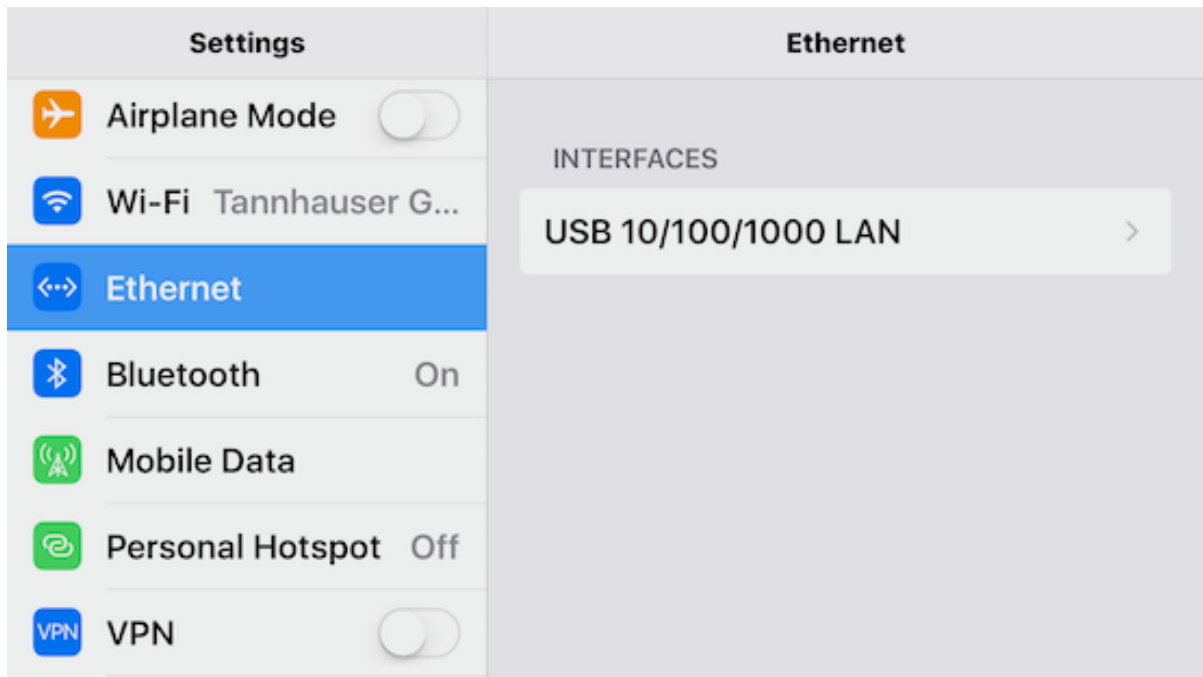


2. Connect the two adapters plus power supply mentioned above.

For a second a message might show up, that the adapter requires too much energy. It should disappear within a second and there should be a new menu item “Ethernet” below Wi-Fi:

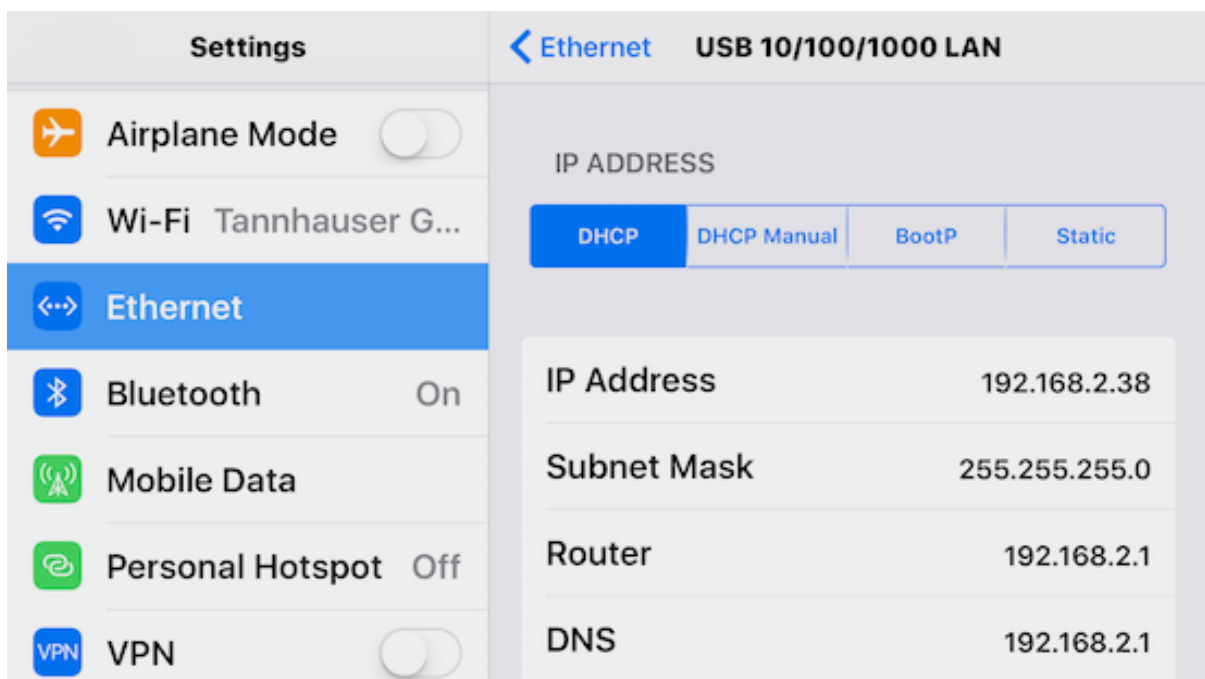


3. Connect the adapters with our network and open the “Ethernet” item:

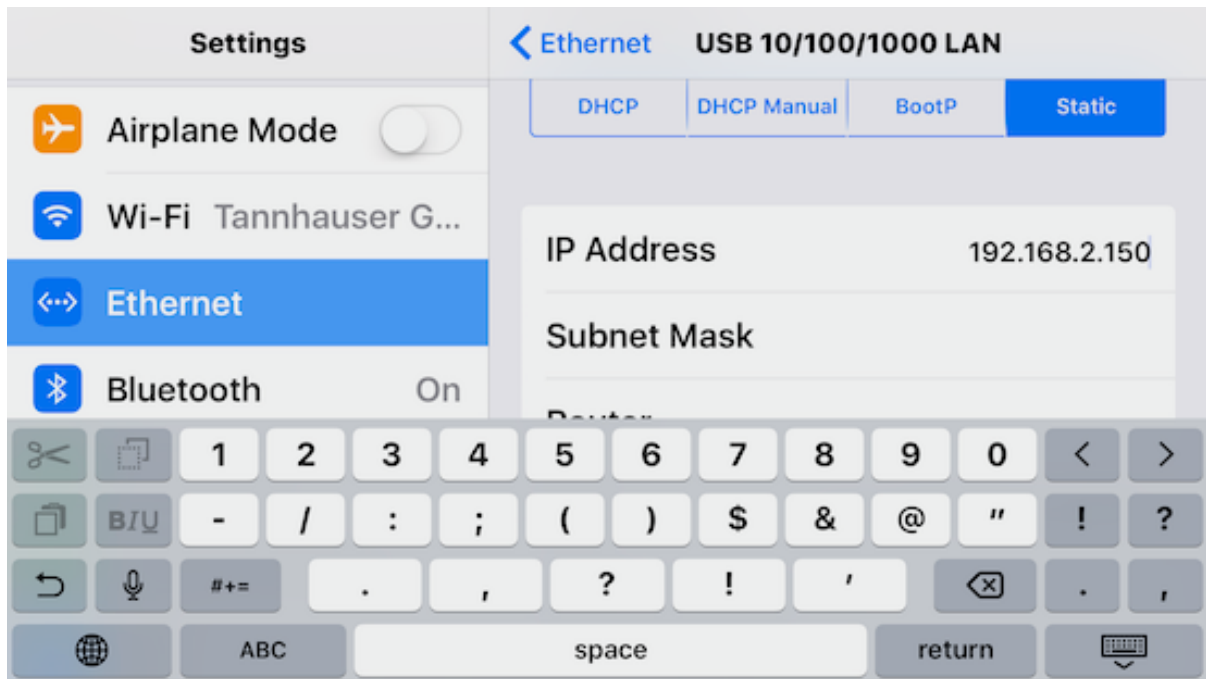


4. Switch off the Wi-Fi button.

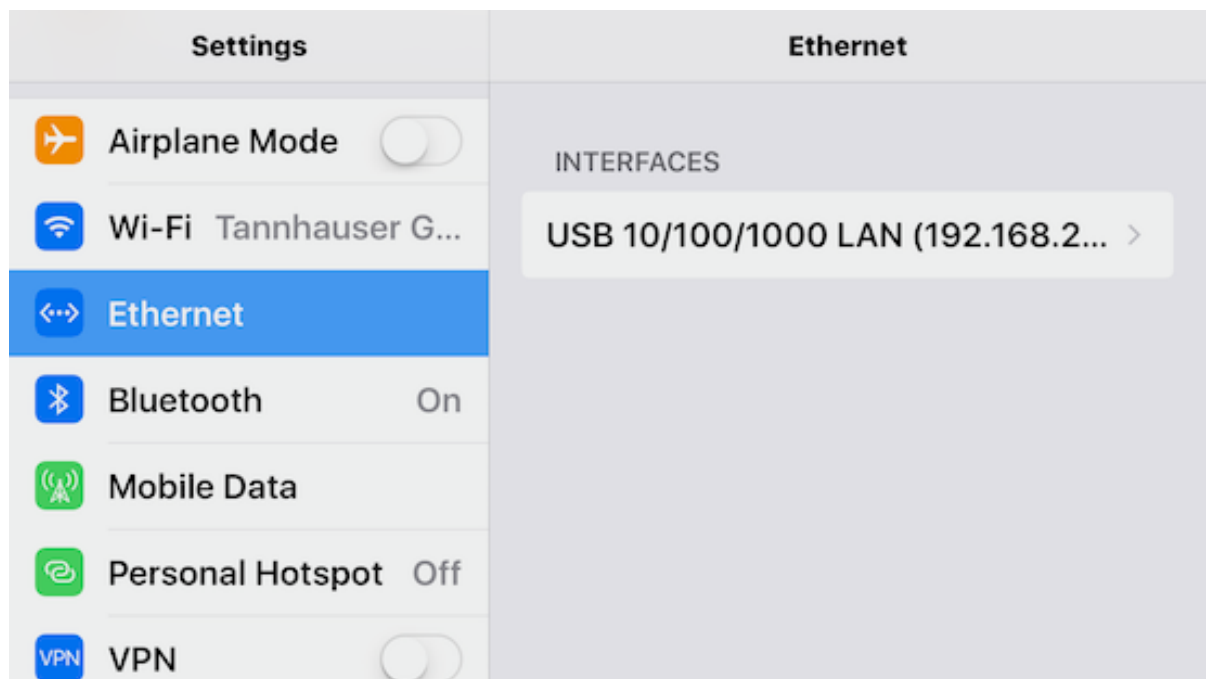
Click on the one item “USB 10/100/1000” (might have an IP address in brackets). It should look like this:



5. Depending on your network architecture (fixed IP addresses or not) you use “Static” or “DHCP”. For a setup with a switch or a router with fix IP addresses you click on “Static” and enter the IP address you want to use for the iOS device, e.g. 150:

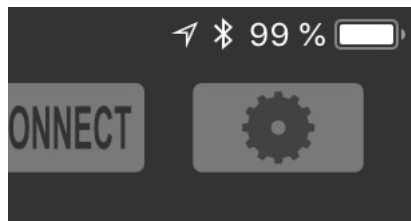


When you click on “Ethernet” again, you should see the option “USB10/100/1000 (192...)”. The IP address in brackets indicates that you are now connected in the local network using this IP address.

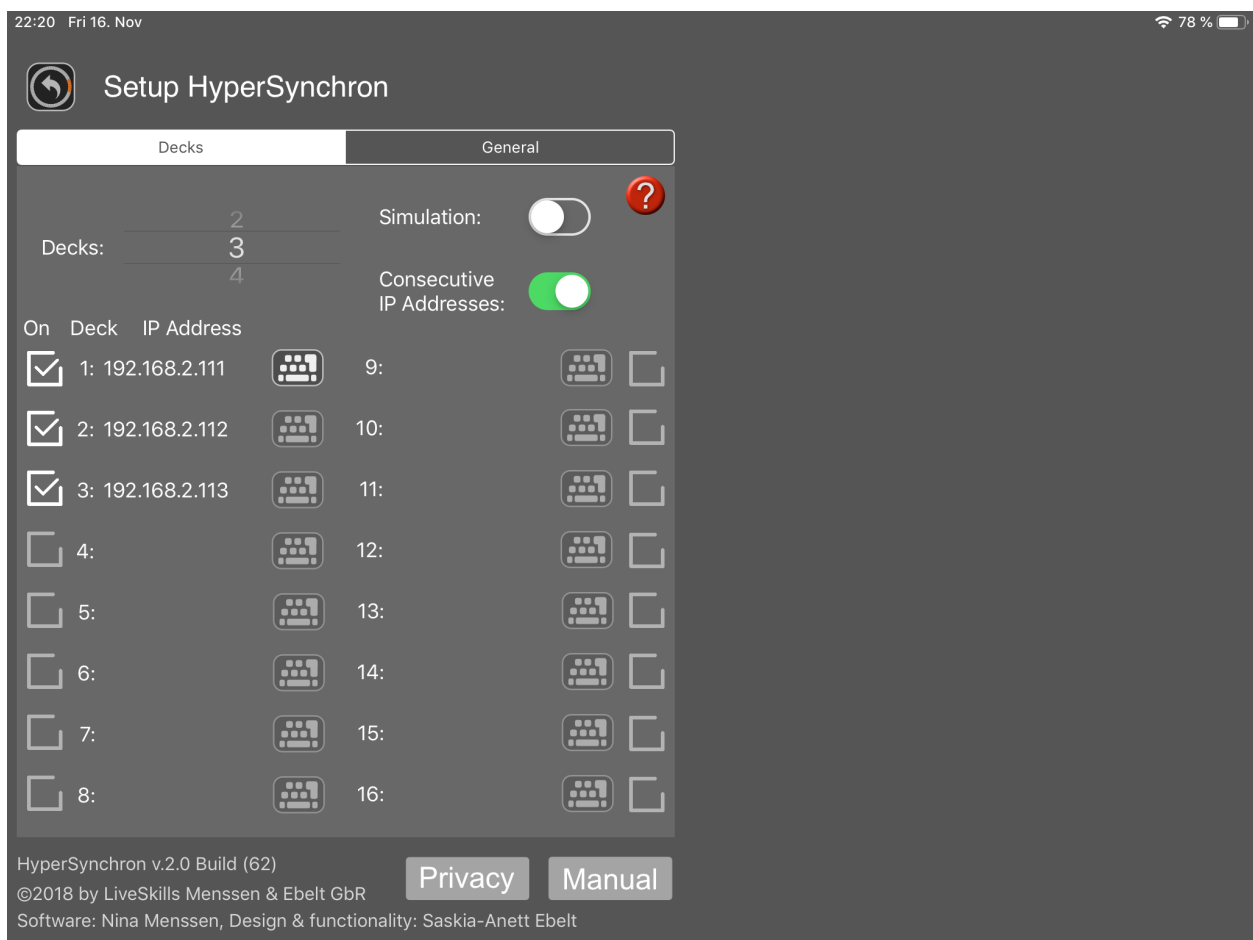


4.3 Setup IP addresses in HyperSynchron

After launching the app “HyperSynchron”, tap on the setup button in the upper right corner (you automatically get there when launching HyperSynchron for the first time):

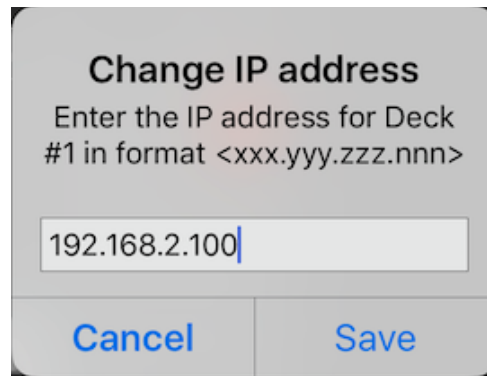


Select the “Decks” tab. You see this dialog:



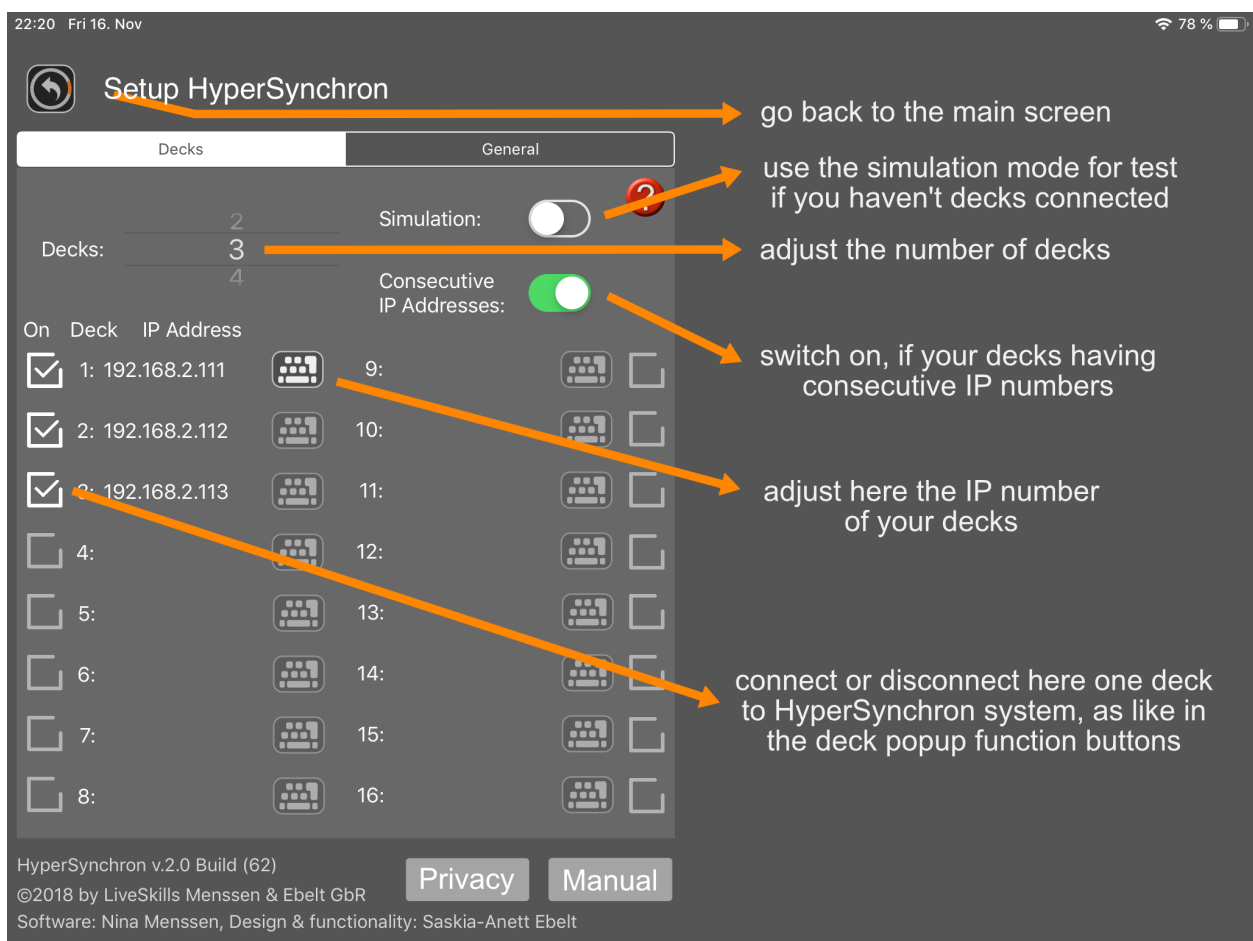
First, enter the number of connected decks (1-16). If you are using “HyperSynchron One” selecting more than 1 deck will present a screen to upgrade to paid “HyperSynchron”.

Now enter the IP address of the first deck by tapping on the “keyboard” symbol.



A dialog box titled "Change IP address" with the instruction "Enter the IP address for Deck #1 in format <xxx.yyy.zzz.nnn>". It contains a text input field with the value "192.168.2.100" and two buttons at the bottom: "Cancel" and "Save".

When you only have one deck, then that's all. If you have more decks enter the other IP addresses of the other decks. If you have assigned consecutive IP addresses as we recommend it, then all you have to do is make sure the option “Consecutive IP addresses” (just to the right) is switched on, then the other addresses are calculated automatically, and the other “keyboard” buttons are disabled. Here is such a setup with 3 decks (with enabled help overlay screen):



The image shows the "Setup HyperSynchron" screen with two tabs: "Decks" and "General". The "Decks" tab is active, showing a list of 16 decks. The first three decks are checked and have IP addresses assigned: 1: 192.168.2.111, 2: 192.168.2.112, and 3: 192.168.2.113. The "Simulation" toggle is off, and the "Consecutive IP Addresses" toggle is on. Annotations with orange arrows point to various elements:

- go back to the main screen (points to the back arrow icon)
- use the simulation mode for test if you haven't decks connected (points to the "Simulation" toggle)
- adjust the number of decks (points to the "Decks" dropdown menu, which is set to 3)
- switch on, if your decks having consecutive IP numbers (points to the "Consecutive IP Addresses" toggle)
- adjust here the IP number of your decks (points to the IP address field of deck 3)
- connect or disconnect here one deck to HyperSynchron system, as like in the deck popup function buttons (points to the keyboard icon of deck 3)

At the bottom, there is a footer with the text: "HyperSynchron v.2.0 Build (62)", "©2018 by LiveSkills Menssen & Ebelt GbR", and "Software: Nina Menssen, Design & functionality: Saskia-Anett Ebelt". There are also two buttons: "Privacy" and "Manual".

4.4 Simulation Mode

In the upper area of the settings window you can find a switch for setting the simulation mode for all HyperDecks. A device in this mode is simulated in the app, i.e. the app behaves as if the device was connected, but there is no communication to a real device.

The purpose of this mode is to give users the possibility to train and explore the functions of the app without having to connect the whole set of equipment.

5 User interface of HyperSynchron

5.1 Main screen

Let's walk through the main screen using the iPad layout shown below.

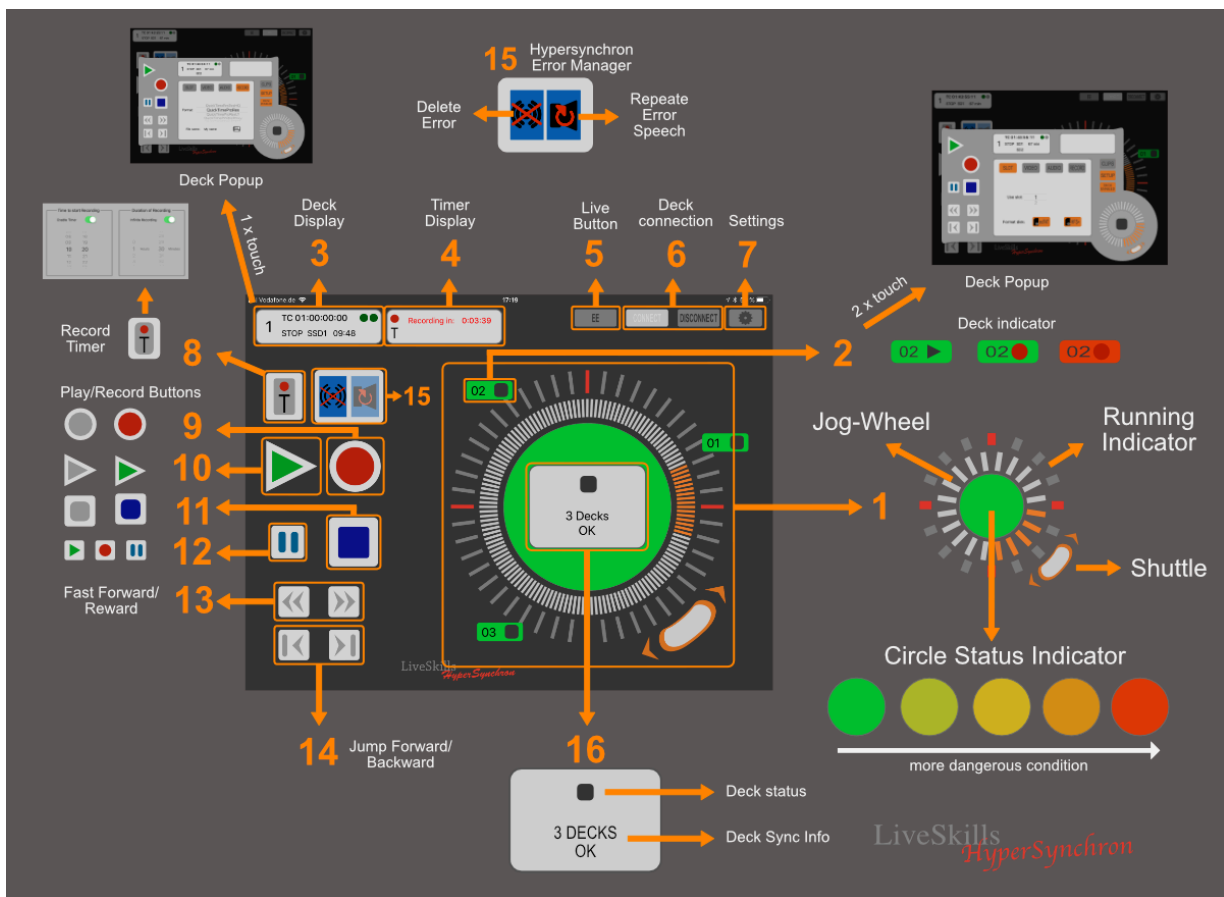
Central part of the main screen is the combined overall status and jog/shuttle tool. It consists of a circle where small status displays for available all decks are arranged around (2). The status displays indicate the connection status plus the play/rec/stop status of a deck.

The inner circle contains two controls:

- a) Shuttle – a control you can drag to change play speed between 25% and 1600% of normal speed, forward and backward
- b) Jog wheel – a control to use a dial motion to move through clips frame wise (it's the one with the orange section)

In between the two controls there is a motion circle, indicating the “movement” of the decks. So, for “play” mode e.g. it turns in normal speed, in fast forward it turns much faster, depending on the winding speed.

Main screen on the iPad:



The inner part of the circle (16) displays the synchronous action requested to perform for every deck, e.g. "Record" or "Play". It is indicated by a corresponding symbol and for "FFWD" and "FBWD" accompanied by the speed in percent (100% = play speed).

Below this icon an overall status message is displayed, like "5 Decks OK", indicating that 5 decks are connected and running synchronously. In this case the inner circle has a green background.

In case of any problems (actual or soon to come) the message changes and the background color changes (orange = warning, red = failure).

On the top left of the screen there is the deck status info (3). It shows data of the currently selected HyperDeck (tap on any of the small status displays (2) on the circle).

The data contains:

- current timecode
- slots status (green = contains SSD / SD Card, grey = empty)
- play / stop / rec status
- active slot
- remaining recording capacity

Next to it, there is the timer info (4). This display is only visible if there is an active timer. It tells you:

- how much time is left until a programmed recording starts
- recording duration (remaining duration if recording is active)

You can setup a recording by tapping on the Timer symbol (8). See chapter 6 for details on setting up a timer for recording.

Right to the Timer button you will find the smart error manager (15). By tapping on the left button, you can clear an error that you have recognized but cannot fix at the moment. When you have setup HyperSynchron to use voice output for error messages, tap on the right button to repeat the last spoken message.

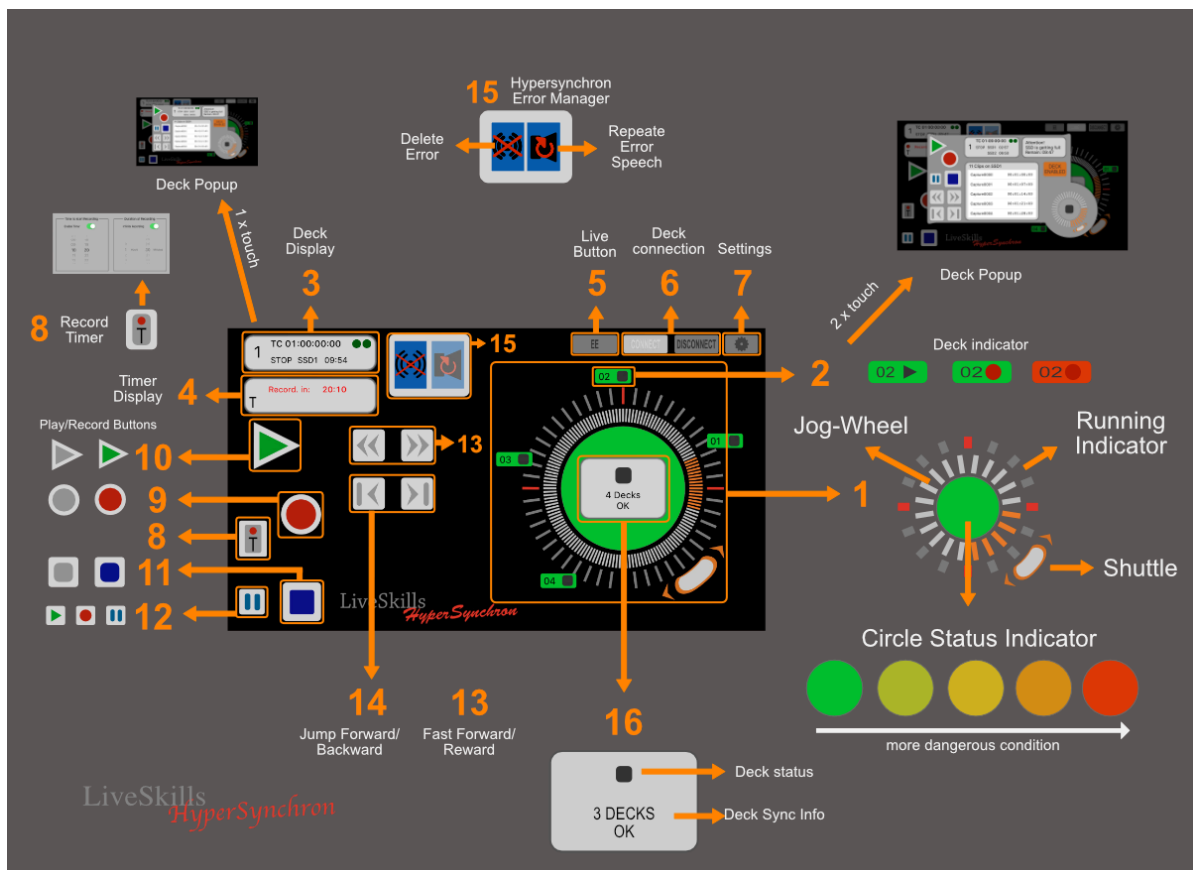
Below it, there are eight buttons (9 - 14) to control play / rec / stop / winding of the decks. When tapping any of these buttons, the corresponding action is sent to all connected decks at once. So, with a single tap e.g. on the record button (9) up to 16 HyperDecks start recording.

The pause button (12) is a "missing" button on the deck, that is only available if you put the deck into "VTR mode" in the settings section (chapter 8.2). If you tap on it, the current action (play / record) is stopped, until you tap on pause again or cancel pause mode by "stop" (11). The pause mode is indicated by a blinking pause symbol.

There are four more buttons on the top:

- the EE button (5) switches the live signal to the deck output
- the connect button (6) establishes connections to all decks (as configured in the settings)
- the disconnect button (6) closes all connections to HyperDecks
- The setup button (7) switches from main screen to settings area

Main screen on the iPhone 6/7/8/X/Plus:



Buttons and displays and their meanings:

Position	Function	Legend	Note 1	Note 2
1	Jog-Shuttle	Use the Jog-shuttle to playback your clips like a VTR	Running Indicator shows when one or more decks doing record or playback	Circle status indicator shows the summary state of all decks evaluated by the Intelligent error manager
2	Deck Indicator and general state	Shows the generally state of every deck and a play symbol	Single tap will display the deck data in the deck info window	Double tap will open the deck popup window
3	Deck status display	Shows all data for the selected deck	Single tap will open the deck popup window	
4	Timer display	Shows the selected record timer data		
5	EE-Live button	Switches the live signal to the deck output		
6	Connection buttons	Connects and disconnect the decks to HyperSynchron		
7	Settings button	Switch to the app settings		
8	Record Timer button	Opens the timer window		
9	Record button	Start recording instantly on all connected decks		
10	Play button	Start playing instantly on all connected decks		
11	Stop button	Stop record or play instantly on all connected decks		
12	Pause button	Paused the currently running record or play	Note: in play it will paused and start again on the same clip position	Note: in record it will stop and start again with a new clip
13	Rewind fast forward or reverse			
14	Jump track forward or back			
15	Smart error manager	Interface to control the error manager	Left button to reset all errors	Right button to repeat the last error speech
16	Generally state info	Shows the summary from the error manager		

5.2 Single Deck Popup Screen

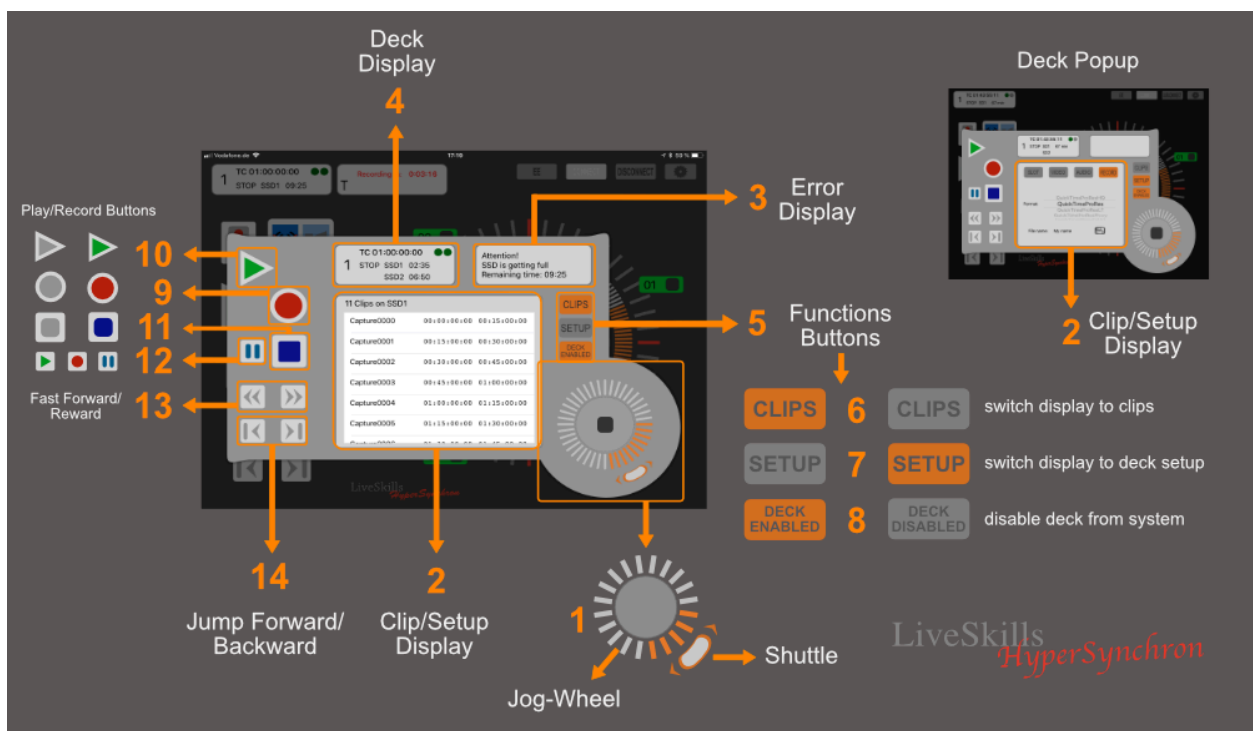
When double tapping on a deck indicator (2 on main screen) or single tapping on the deck status display (3 on main screen) a new controller pops up, which lets you control a single HyperDeck independently from all other connected decks.

It contains again play / stop / rec / winding buttons, which in this case are only applied to the selected deck. The number of this deck is displayed in extended deck status display (4 on deck popup below) in image below. It is an extended deck status because it has one additional line and displays the remaining time for each slot separately. You also have a shuttle and jog wheel control (1) which has no movement indicator like its big brother in main screen. Next to it, you have the error display (3) showing errors and warnings meant for this deck only.

In the middle of the screen you can see the list of clips (2) recorded before on this deck. It shows the list of clips on the storage media in the currently active slot. The currently active slot is indicated in (4) with the status string play / stop / rec info in front of the slot remaining time. Slot 1 is the upper one, slot 2 the lower one. In the graphic below the active slot is #1.

With the enable / disable deck button (8) you can tell HyperSynchron that this deck is “out of the game” and no longer should be monitored. You can do the same in the settings. After doing so HyperSynchron is no longer generating “out of sync” warnings for this deck.

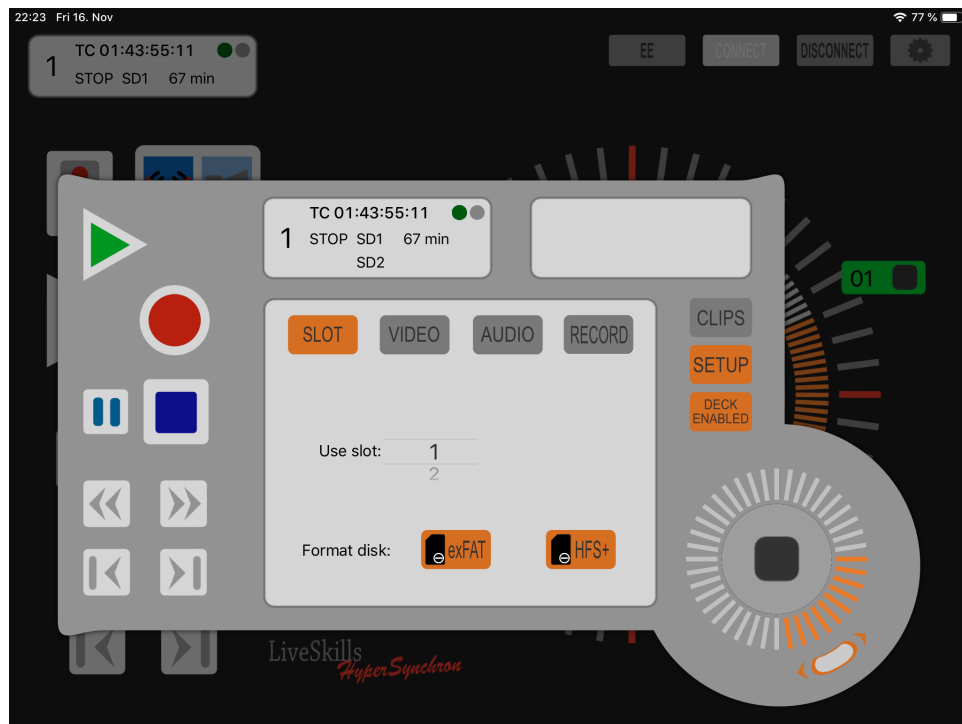
Deck popup on the iPad:



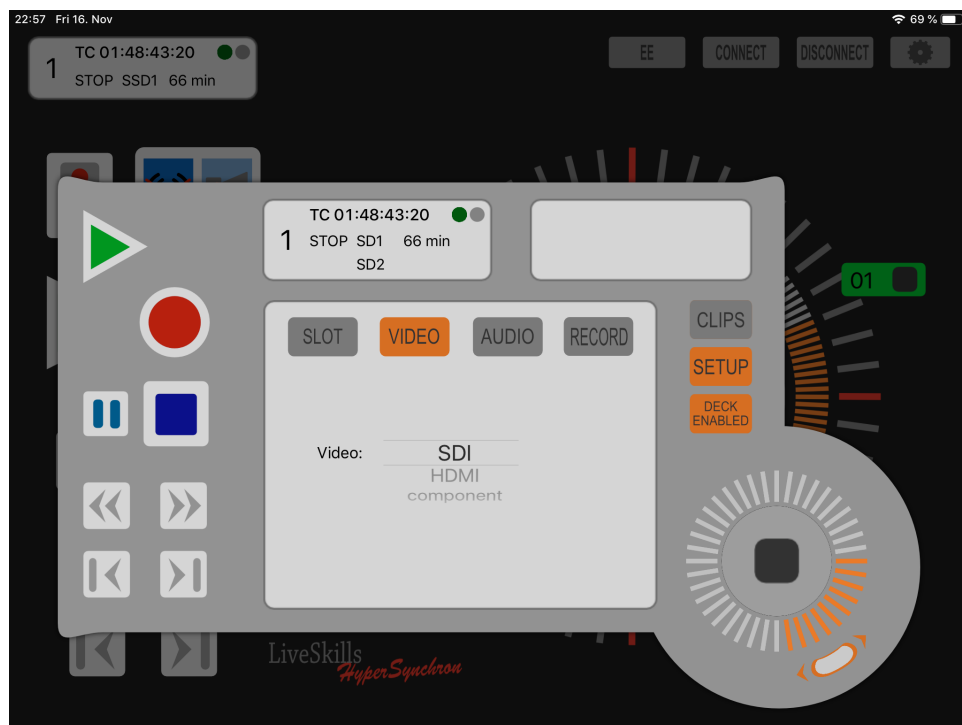
On the iPad you have two buttons that are not available on iPhone version, due to limited space on these displays. It is the buttons “Clips” (6) and “Setup” (7). With the latter you switch the central display (normally containing the clip list) to deck setup mode, where you can do some setup of the selected HyperDeck.

You can:

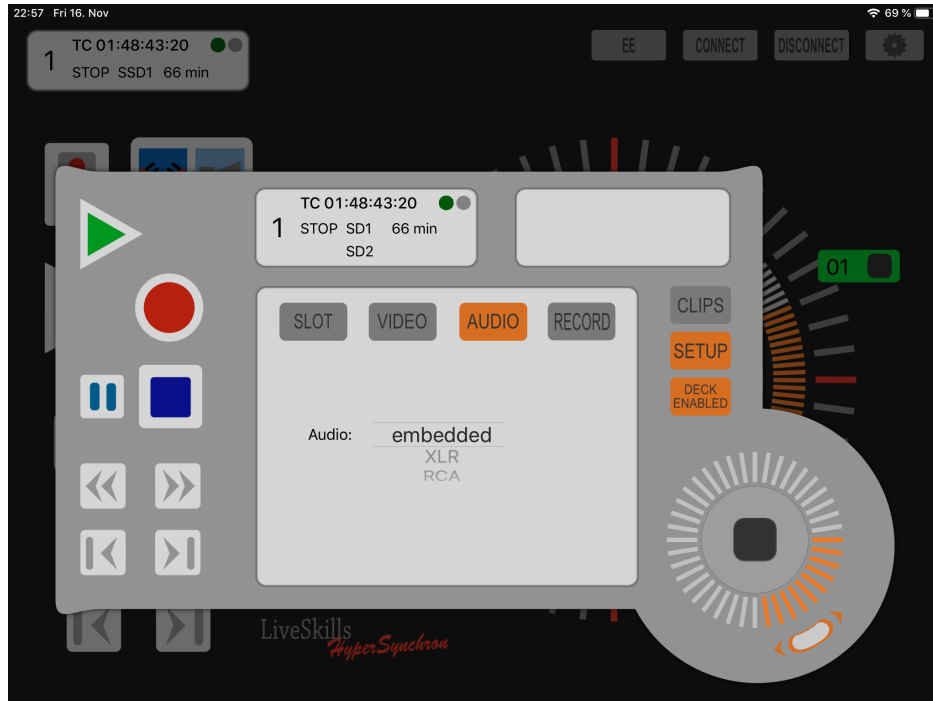
- Select the active slot (1 or 2)
- Format your storage medium in exFAT or HFS+



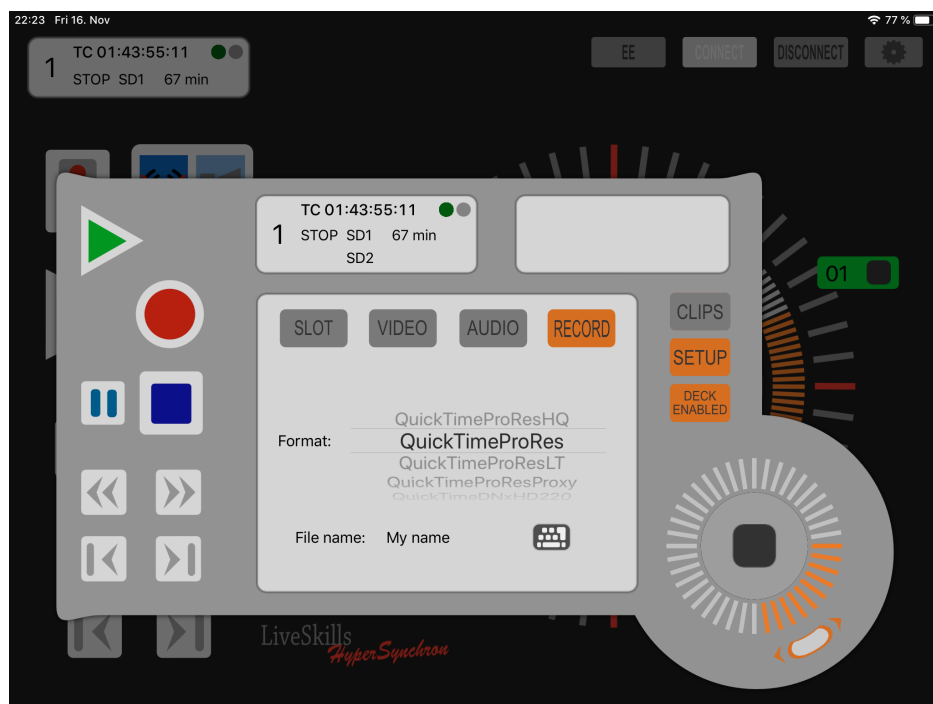
- Set video input (SDI / HDMI / component)



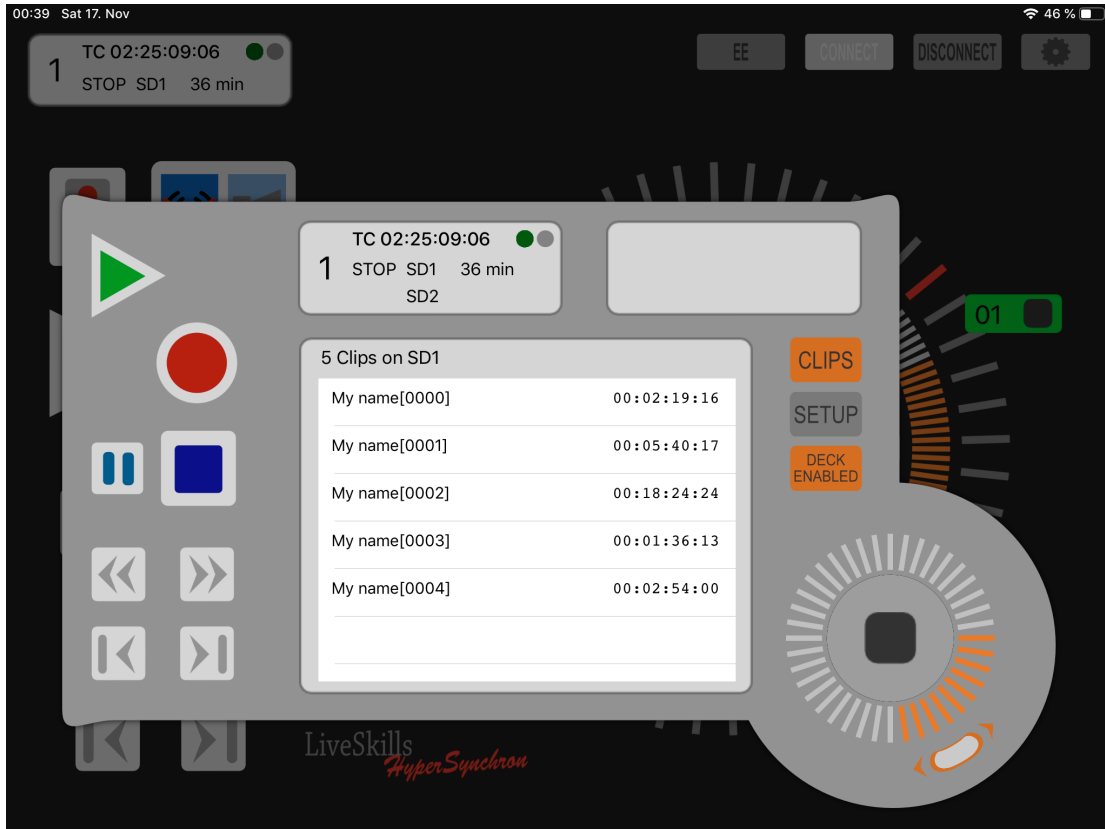
- Set audio (embedded / XLR / RCA)



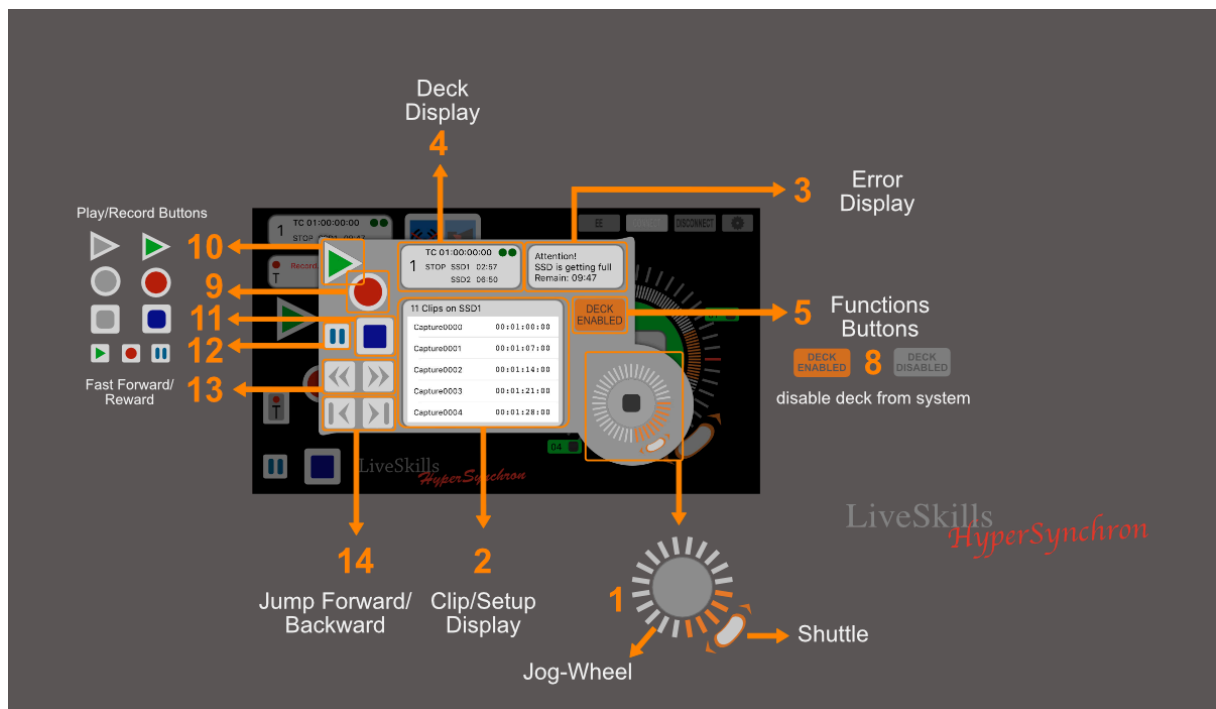
- Set record format (QT Uncompressed, QT ProResHQ, QT ProRes, etc.), (by changing between the three format families Prores, DNxHD and H264 in the moment of switching the HyperDeck will be completely disconnected from the app (because the device is rebooting), therefore you need to reconnect your decks in HyperSynchron)
- Set a base name for recording e.g. "My name[0001]" and so on, in contrast to the HyperDeck default name "Capture[0001]"



So, when setting “My name” as base file name, the clip list looks like this:



Deck popup on the iPhone 5s/6/7/8/X/Plus:

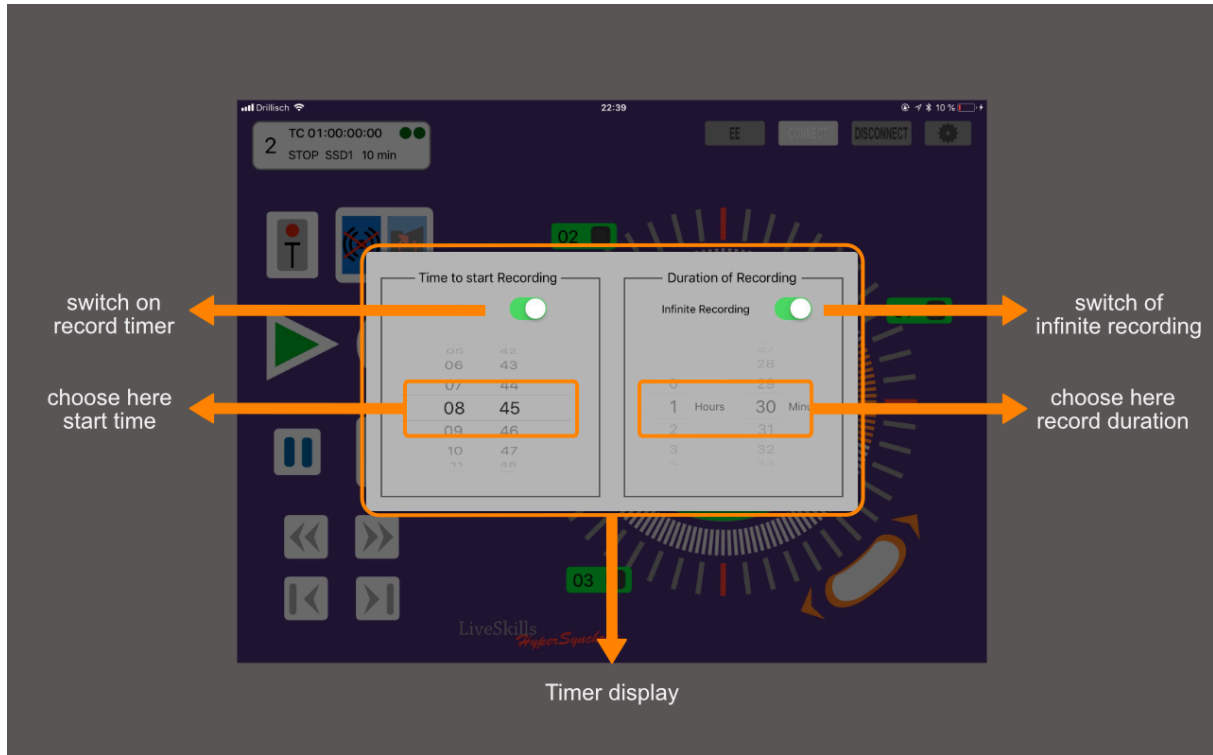


Buttons and displays and their meaning:

Position	Function	Legend	Note 1	Note 2
1	Jog-Shuttle	Use the shuttle to move fast forward or backward trough your clip	Use the jog wheel to move frame by frame trough your clip	
2	Clip Window	Displays the clips on the HyperDeck	In setup you can switch to the other memory slot	
3	Error display	Shows detailed error data		
4	Deck display	Shows all data for the selected deck		
5	Function buttons for clip/setup display	enable/disable deck		
6	Show clips	Show the clips contained on the SD-Card/SSD		
7	Show deck setup	Show deck setup to change settings		
8	enable/disable deck	Disable deck to divide it from the error manager and the deck control		
9	Record button	Start recording instantly on the selected deck		
10	Play button	Start playing instantly on the selected deck		
11	Stop button	Stop record or play instantly on the selected deck		
12	Pause button	Pauses the currently running record or play (only visible in VTR mode)	Note: in play it will pause and start again on the same clip position	Note: in record it will stop and start again with a new clip
13	Rewind fast forward or reverse			
14	Jump track forward or back			

6 Timer

HyperSynchron can automatically start and end recordings. This is to support you in those busy moments when a live production event is about to start, where one can easily forget to set the HyperDecks into record mode.



Open the timer window by tapping onto this timer symbol. In the window popping up you can set a time when recording shall start (local time). When this window opens, default recording time is always "infinite", i.e. until capacity is reached or recording is manually terminated. You may set a predefined duration after disabling the "infinite" option.

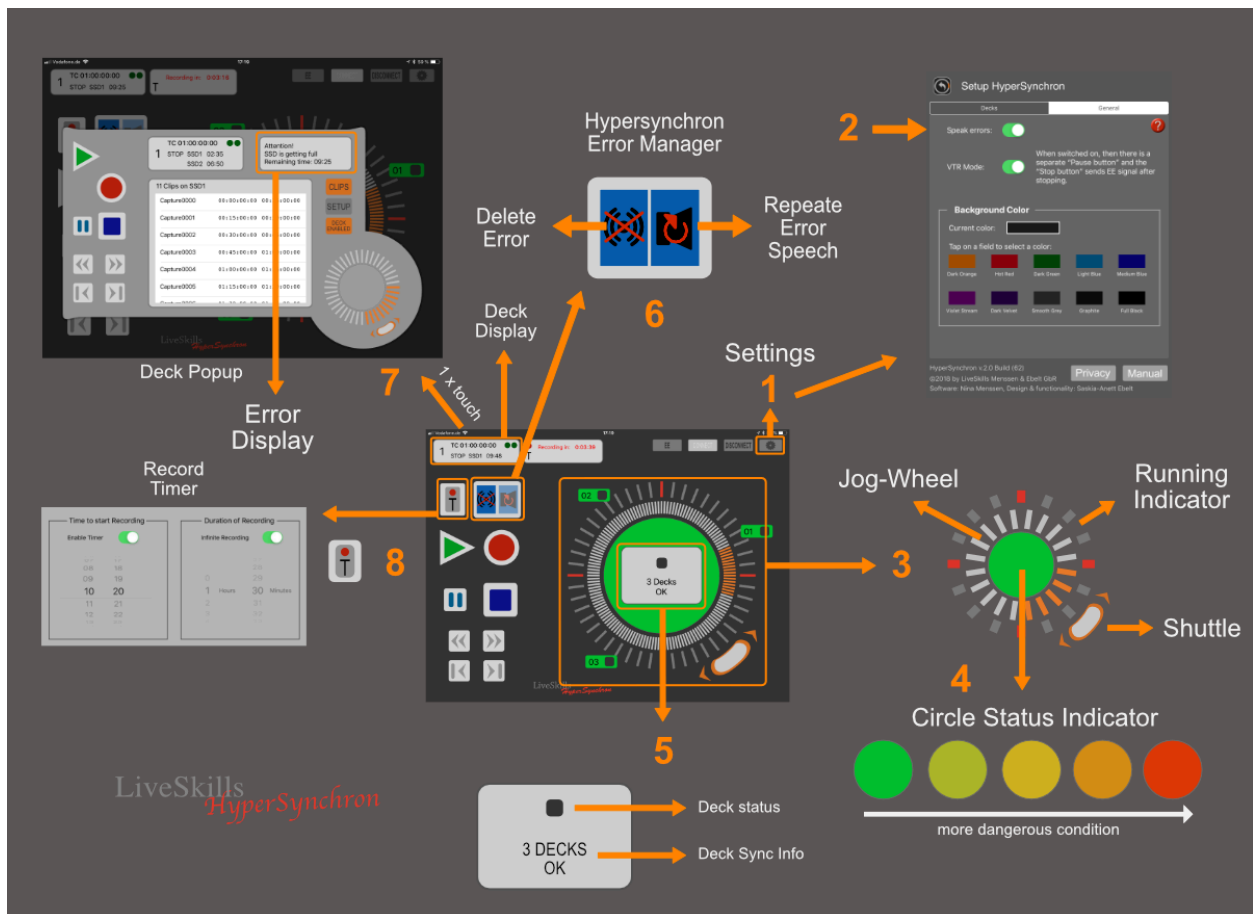
The automatic start and end of a timed recording is announced by speech manager if enabled.

Important: In order to be able to start recording, HyperSynchron must be the active app and the iPad / iPhone MUST BE NOT in standby mode. Switch off "Auto-Lock" in "Settings → Display" to avoid the iOS device to go into standby.

If for any reason the iOS device is in standby or HyperSynchron is in background, a notification shows up on the iOS device. If you then open HyperSynchron within 3 minutes after planned recording time, the recording is started automatically that moment.

To leave this dialog, simply tap outside the "Timer display" area.

7 Smart Error Manager



HyperSynchron contains a smart error manager. This semi-intelligent part of software was developed to continuously monitor all decks and extract a clear, easy to understand overall status display of the whole system with optional voice output in addition.

The philosophy behind it is to define the "good state" of the system as "all decks are synchronously working in the mode requested in the app, e.g. in "record mode". Every irregularity leading to asynchronous states is reported as error message. This happens even if the asynchronicity is caused by a user action, like pressing the stop button directly on a deck.

Besides those errors there is a cascade of warning levels indicating that the record capacity of one or more decks is tending towards zero. The 3 levels begin at 10, 5 and 3 minutes of recording capacity left.

The error manager is always active and does not need to be switched on. It displays problems visually and speaks error messages and warnings optionally, so you can focus on your job. The speech output (2) is the only option in the settings (1) for this functionality.

The most obvious visual effect is the "Circle Status Indicator" (4). It shows one of 5 different colors from green over yellow to red to indicate an overall status of the system and the connected HyperDecks. The more this status color tends towards red, the more the system is in danger to lose the wanted system (record) status.

The general status display (5) provides you a textual system status of the current operation of the decks.

The running indicator (3) quickly tells you whether one or more decks play back and in which speed.

The error manager also notifies you about the start and end of recordings, programmed with the Record Timer (8)

Detailed information and errors occurred for one deck can be displayed by opening the Deck Popup (7) belonging to a deck. You can do so by double tapping on a deck number on the circle (3). Alternatively do a simple tap on a deck, then basic information is displayed in the Deck Display and with a single tap on it (7) the Deck Popup is opened.

The error manager remembers the last spoken error message, which you can always repeat tapping on the repeat button (right button) of the Error Manager Tool (8). The left button allows you to reset the current error status, while you can still see this error in the Deck Popup error display.

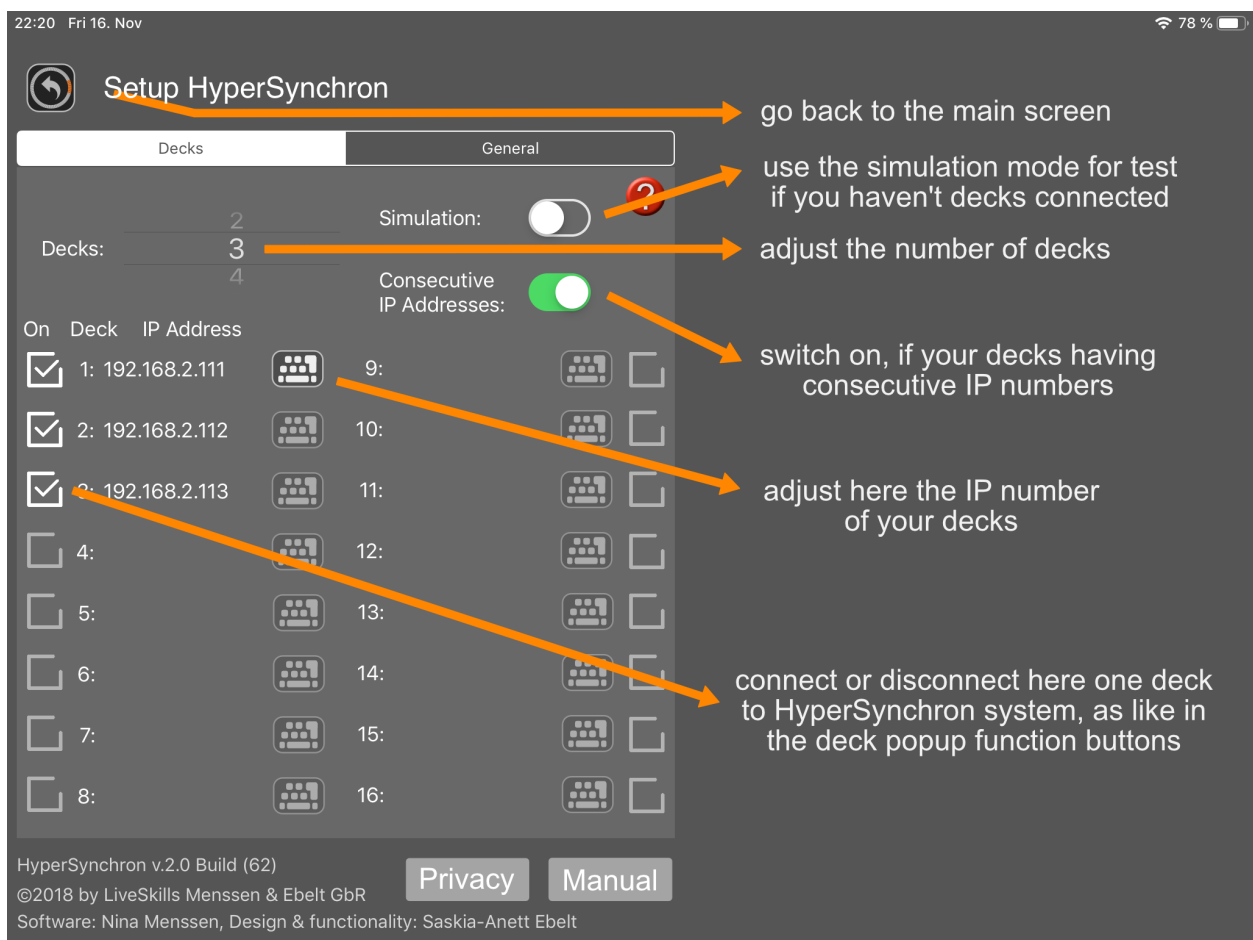
8 Settings

The settings window contains a setup area split into the two sections “Decks” and “General”.

Each section contains a red button with the “?” symbol. Tapping on it displays an overlay explaining the functionality of the setup items (see image below).

Each setting you do is stored and applied immediately.

8.1 Decks settings

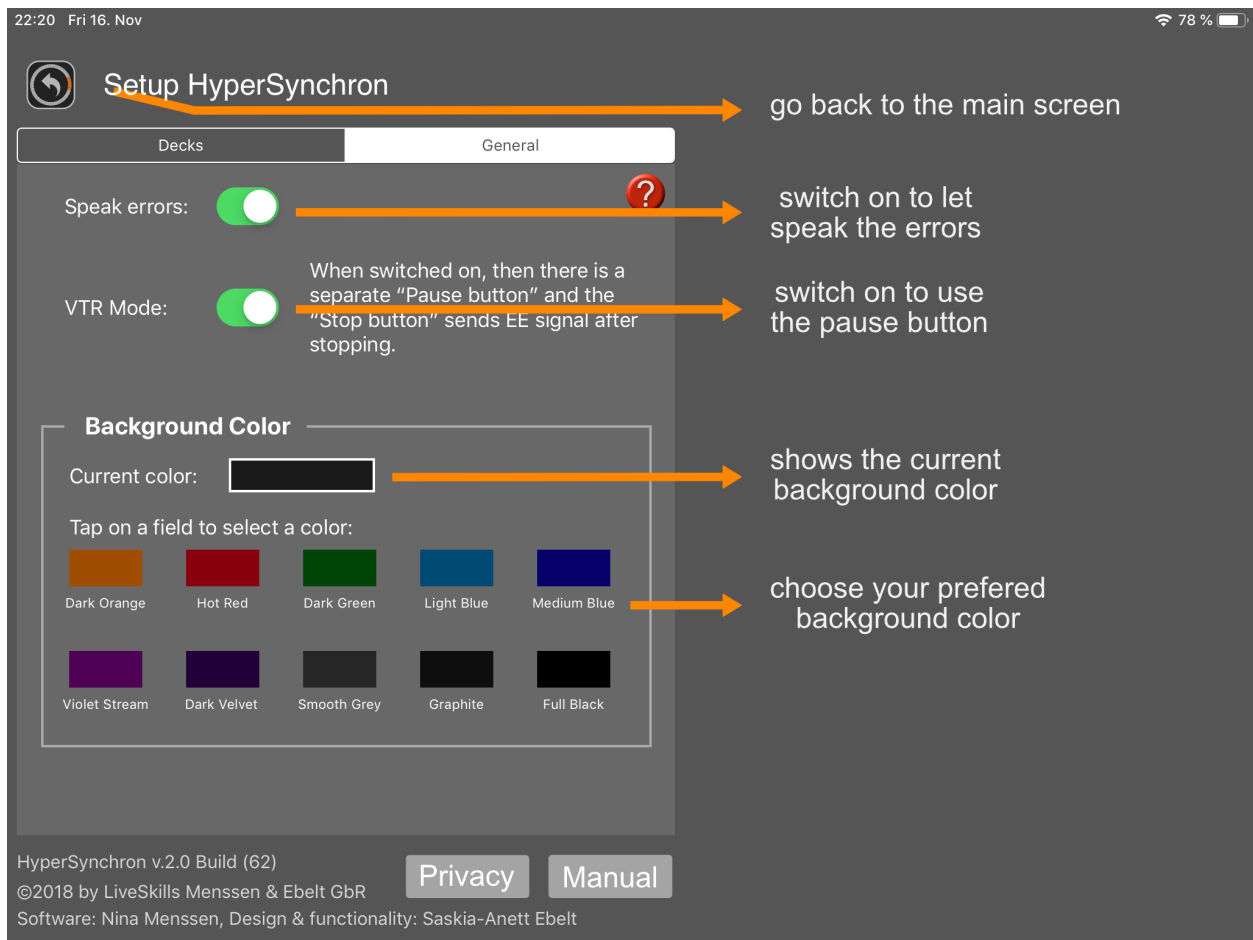


At the bottom you can find the version of your app.

The “Manual” button will open this manual.

The “Privacy” button displays our legal text regarding data privacy and describes which personal data is processed by LiveSkills Menssen & Ebelt GbR.

8.2 General settings



9 Last but not least: some important hints

Here are some basic rules for working with HyperSynchron:

- Use fixed IP addresses if possible
- Should a deck no longer accept commands, click "Disconnect" and re-connect again afterwards
- When using ATEM switcher, make sure it does not control the HyperDecks, since these devices accept only one connection at a time. And no other hardware or software may control the HyperDecks
- If you need to kill the app, don't worry, all settings will be stored and are available when you launch the app again