



### Basics:

Simple Sync is a companion to the PlaybackPro Plus application. It controls multiple computers running PlaybackPro Plus simultaneously (sync roll).

It utilizes Apple's Bonjour technologies for easy discovery and communication over TCP/IP networks (ethernet, etc.). Simple Sync acts as a command Server, while instances of PlaybackPro Plus act as Clients.

### Controls:

**(1) Sync Type:** Determines how PlaybackPro Plus clients are cued (See Network Synchronization later in this section).

**(2) Client List** - List of connected PlaybackPro Plus Clients.

**(3) Show Controls** - These controls affect Take, Goto 10, 20, 30, and Kill on all PlaybackPro Plus Clients.

**(4) Setup Button (in PlaybackPro Plus)** - Alters remote settings for PlaybackPro Plus Clients (currently, Remote Name).

**(5) Remote Popup (in PlaybackPro Plus)** - Selects remote control service. Select Simple Sync to lock this instance of PlaybackPro Plus to a running instance of Simple Sync. Select No Remote to unlock.

Alphanumeric values can be typed into the keyboard to load clips by Clip Number into Preview on all PlaybackPro Plus Clients.

### Network Synchronization:

Video playback on the Macintosh platform is based on the machine's internal clock. When playback on multiple machines begins at the same time, synchronization will be maintained (even if a lack of resources forces dropped frames). Therefore, sync-rolls require that playback begins at the exact same time on each machine.

**Direct Command:** Using Direct Command Sync setting sends commands directly to all PlaybackPro Plus Clients. While this is the easiest method (and suitable for most

applications), network delays can potentially create slight differences in playback start times (particularly when large numbers of machines are connected).

**Clock Sync:** Clock Sync tells all PlaybackPro Plus Clients to perform commands at a specific time in the very near future (as determined in the Delay Popup Menu). This is very accurate, but requires that all local clocks be synchronized.

Internal clocks on the Macintosh platform can be synchronized using NTP (Network Time Protocol). NTP (client) is built into Mac OSX and is accessible via the 'Date and Time' section within System Preferences. To synchronize clocks, enter the location of the time server (Apple time-server, other internet time server, NTP server on local network, or other Macintosh acting as NTP server) into the 'Set Date and Time Automatically' section and confirm the checkbox is enabled.

### Setting up Mac time server:

The NTP.conf file can be used to configure any Mac running OSX into an NTP time server (typically the machine running Simple Sync).

- 1) Place the NTP.conf file into Home Directory (ie. along with Documents Folder, Desktop Folder, etc.).
- 2) Open Terminal Application.
- 3) Type 'sudo cp ntp.conf /etc'  
sudo = validate as admin  
cp = copy file  
ntp.conf = file name in current directory  
/etc = directory to place file to make active
- 4) Enter administrator password.
- 5) On all Client machines check the 'Set Date and Time Automatically' checkbox and enter the IP address of the time server into the field.
- 6) Reboot all client machines.

### WARNING

Mac OSX supports network multihoming. Multihoming allows computers to have multiple simultaneous network connections (ie wireless and ethernet).

It is very important to only have a single point of connection between Simple Sync (Server) and PlaybackPro Plus (Clients) when synced together.