Broadcast Pix Commander ™

Manual





Now **EVERYONE** can create great Live Video

Broadcast Pix Commander Systems

With Broadcast Pix Commander™ EVERYONE can create a great multi-camera production. It features an intuitive touch-screen interface that controls robotic cameras and other inputs, name titles, topic tiles, clips, graphics and effects. Commander is great for a wide range of productions in corporate, government, education, house of worship and live events.

Commander comes pre-loaded with titles, clips and preset camera positions. Lower third templates have been provided and projects have been configured for convenience. There are 8 'Name Titles', 1 'Date Title', 9 'Topic Titles', 2 still graphics and 1 Logo, all of which are easy to be modify with custom information. In addition, this guide assumes robotic Sony PTZ cameras are installed and configured (Panasonic PTZ cameras may also be used as described below).

Section 1: How to Install and Set-Up Commander

This section walks through how to get started. For additional detailed instructions, especially on how to configure the video and camera settings, please refer to the full Owner's Manual found under the Help, User Manual menu in the Broadcast Pix Switcher application.

Section 2: How to Operate Commander

Section 3: How use Your BPNet Cloud Portal

Section 4: Commander Options

Broadcast Pix Commander User Guide - December 2016.
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Section 1: How to Install and Set-Up Commander

To Attach Your Audio:



1. All Commander Systems allow for external audio, like from an audio mixer, to be embedded in the video output which can be recorded and/or streamed. Attached the supplied breakout cable to the back of the Commander system, as shown on the right.

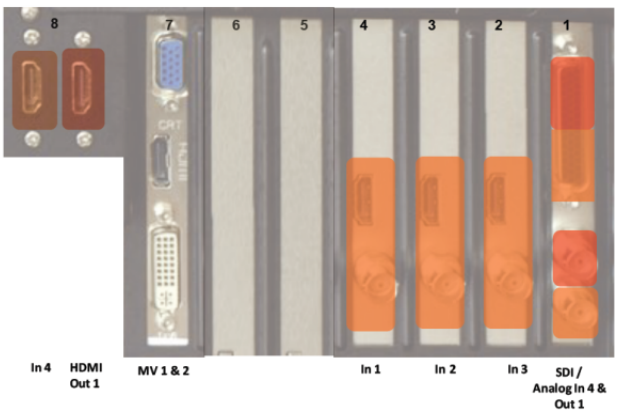
2. Insert Line Level Balanced ¼" cables from your audio mixer to the breakout cable labeled **#14 Audio 1 In and #15 Audio 2 In.**

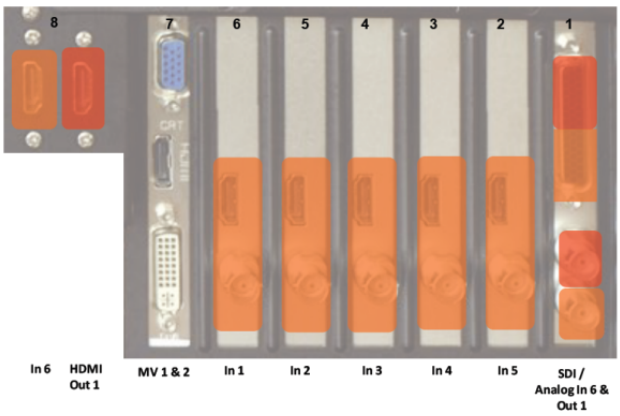
3. Ensure that there is a valid video signal attached to one of the video **Inputs** on the last I/O card**,** either on the breakout cable for analog video or using the SDI/HDMI ports.

4. Once you have attached and configured your cameras turn on your system.

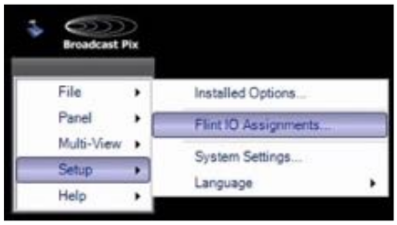
To Attach Your Video:

1. Attach your cameras and other **video inputs** to the back of the Commander system. The Commander 4 & Portable have 4 inputs, as shown in light orange at the left, and the Commander 6 has 6 inputs, as shown on the right. **Video outputs** are shown in dark orange.



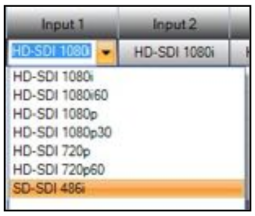


2. Once the system is turned on, the correct format for each input must be selected in the **Setup, IO Assignments, Input Assignments** menu, once the Broadcast Pix Switcher application is launched, as shown on the right.



3. To attach IP inputs, use either NIC port ensuring that the Commander system is on the same network/subnet as the camera/source.

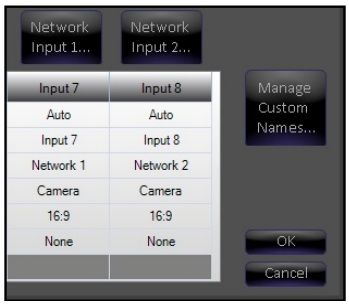
   Click on the **Network Input X** button, as shown on the right, to configure streaming sources.



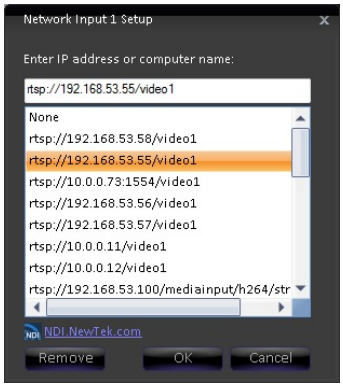
4. In the Setup window enter the IP address of the camera, as shown on the right.

   If Sony cameras are used the following IP address structure can be used:
   rtsp://XXX.XXX.XXX.XXX/video1

   If Panasonic cameras are used the following IP address structure can be used:
   rtsp://XXX.XXX.XXX.XXX/mediainput/h.264/stream_1

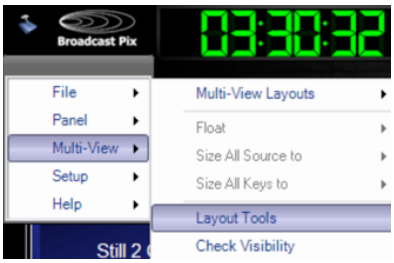


5. Click on the **OK** button in both the Setup window and IO Assignments window to apply the settings.

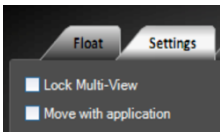


To Adjust Audio Levels:

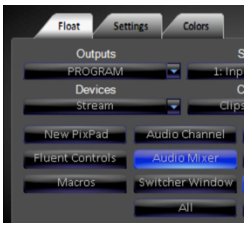
1. The audio coming into the Commander system will need to be configured and the volume levels may be adjusted. Click on the Broadcast Pix Logo and select **Multi-View** then **Layout Tools,** as shown on the right.



2. Select the **Settings** tab, and de-select **Lock Multi-View,** as shown on the right.

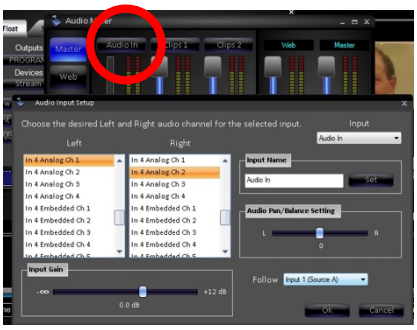


3. Select the **Float** tab, and click on the **Audio Mixer** button, as shown on the right.

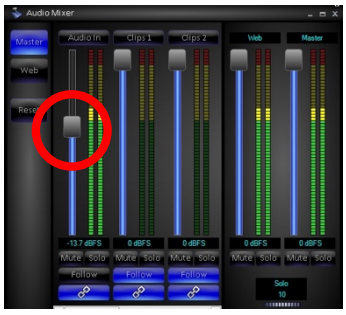


4. The Audio Mixer will open, click on the **Audio In** setup button. Ensure that the Left and Right audio channels are mapped to the correct channels where the audio is inputted, usually **In 4 (or 6) Analog Ch 1 and Ch 2,** as shown on the right.

5. Click on the **OK** button to close the setup window.



6. If audio is present, the VU meter will be moving. Move the Audio In **slider** up/down to adjust the volume, as shown on the right. If no audio is present ensure that there is a valid video signal attached to the input card where the audio is connected.

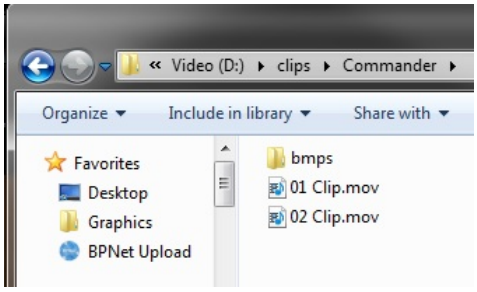


7. Click on the **X** on each opened window and setup screen, to use the Commander layout.

To Add Your Clips:

1. If clips are desired to be played, such as for an opening or closing sequence, they may be added to the system, up to 2 clips may be played in Commander.

2. Once a clip has been created using a proper .mov format (see table below), copy the file to the D:\Clips\Commander folder, as shown on the right. Ensure that the file name is “01 Clip.mov” and/or “02 Clip.mov” and overwrite the existing file(s).



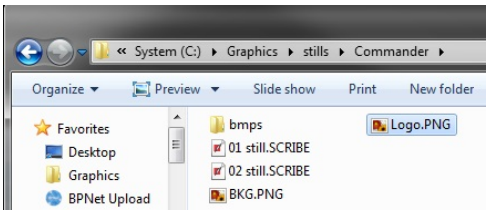
Support file formats and resolutions:

Resolution	Frame Rate	Aspect Ratio	Codec	Extension
1920x1080i (HD)	29.97/25	16x9	Apple ProRes PX	.mov
	29.97/25	16x9	Apple ProRes LT	.mov
	29.97/25	16x9	Apple ProRes 422	.mov
	29.97/25	16x9	Apple ProRes HQ	.mov
	29.97/25	16x9	Apple ProRes 4444 (+ alpha)	.mov
	29.97/25	16x9	Avid DNxHD 100 / 85 (+ alpha)	.mov
	29.97/25	16x9	Avid DNxHD 145 /120 (+ alpha)	.mov
	29.97/25	16x9	Avid DNxHD 200 /185 (+ alpha)	.mov
	29.97/25	16x9	H.264 (max 100 mbits/s)	.mov or .mp4
	29.97/25	16x9	Motion JPEG	.avi

To Add Your Logo:

1. If a logo is desired to be displayed, such as for a channel identification, it may be added to the system.

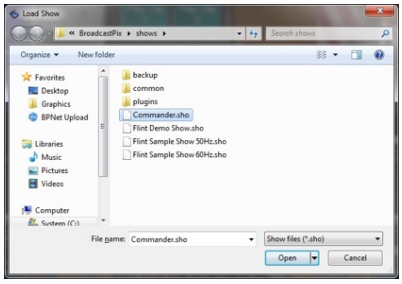
   Once a still graphic has been created using the proper .png format with an alpha channel (please refer to the owner’s manual for more specifics on format), copy the file to the C:\Graphics\stills\Commander folder, as shown on the right. Ensure that the file name is “Logo.png” and overwrite the existing file.



To Set-Up Commander for Your Titles and Cameras Presets:



1. Launch the Broadcast Pix Switcher application. **Double-click** the Broadcast Pix Switcher icon on the desktop, as shown on the right.

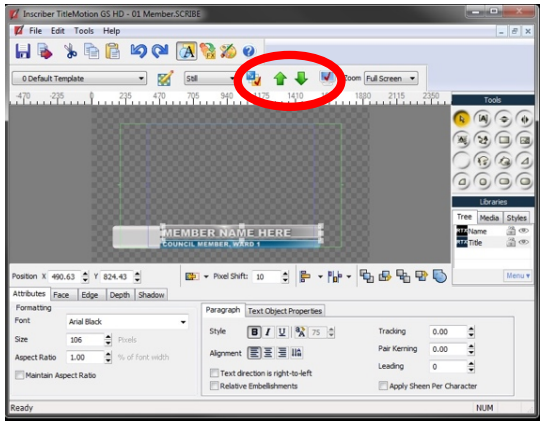


2. In the Load Show dialog box, click on the **Commander.sho** file and select the **Open** button, as shown on the right. A layout will open showing cameras and other setup functions.

Modifying the Graphic Templates for Your Content:



1. On the BPView PixPad, click on the **CG 1** button, it will illuminate blue, as shown on the right.



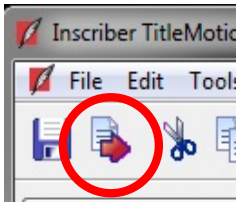
2. With the mouse, **Right-click** the desired 'Name' graphic, the title editor will open.

   Using the **green navigation** buttons, click through until the top line is selected.

   Enter the desired name of the person or group.

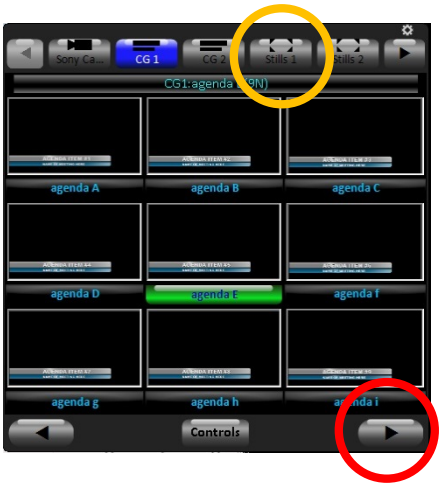
   To rename to the bottom line, use the green navigation buttons again and then type the person's title, or other desired subtitle, if any.

   The background image, logo and other attributes may be changed like font style and color, however that is not covered in this guide.



3. Once the graphic has been modified, click on the **Quick Scribe Export** button, as shown on the right.

The graphic has been updated. To modify the other ‘Name’ titles simply right-click the other files and repeat the steps above.



4. The ‘Topic’, ‘Date’ and ‘Still’ graphics may also be modified. Using the grey navigation buttons on the PixPad, circled in red, you can select different pages, find the **Date** and **Topic** templates and repeat the steps above.

   For the Still graphics, select the **Stills 1** button in the PixPad, circled in orange, and repeat the steps above.

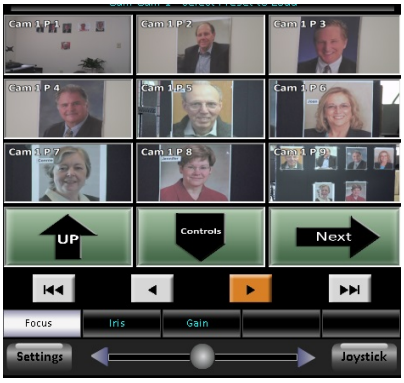
5. To hide the title editor window, click on the **Minimize** button, as shown on the right.



To Save Your Camera Presets:



1. If robotic cameras are installed and configured, on the BPView PixPad click on the **Sony Camera Control** button, it will illuminate blue, as shown on the right. If Panasonic cameras are installed, click on the Panasonic Camera Control button and follow the same steps below. To find this buttons it may be necessary to scroll using the arrow button to the right of the button illuminated in blue.



2. Commander has 8 presets that are pre-mapped, which are the first 2 for each robotic camera, in the 4-camera template. The 3-camera template has 3 presets for each robotic camera and the 2-camera template has 4 presets for the two cameras.

   Select the **Cam 1** button in the PixPad, it will change showing the available presets, as shown on the right.

3. Select the **Joystick** button, it will illuminate blue and the PixPad will show a virtual joystick, as shown on the right.

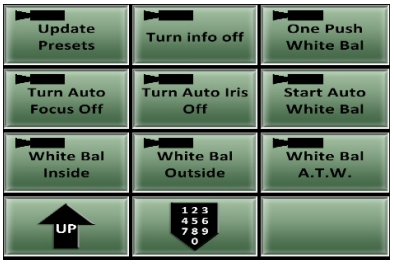


4. To move/pan the camera left or right, use the left and right arrows. To move/tilt the camera up or down use the top and bottom arrows. You may use the source monitors on BPView to view the camera positions, as shown on the right.

5. To zoom the camera in or out, use the magnify less and magnify more icons.

6. To change the focus, iris and/or gain, use the selector buttons on the bottom of the PixPad to select which function you would like to change, the example on the right shows Focus, then use the arrows on the bottom to adjust.

7. Once the camera has been positioned to the desired location, select the **Joystick** button to hide the virtual joystick.



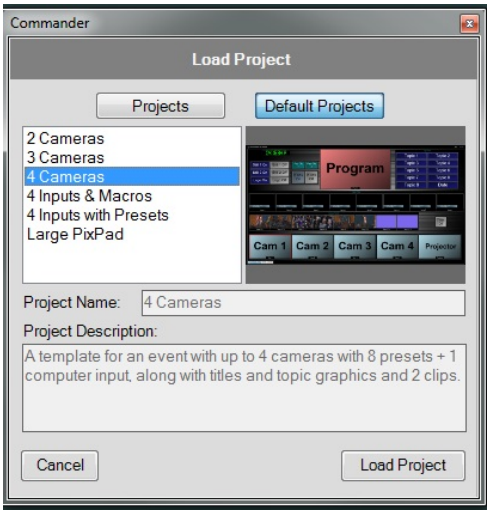
8. In the PixPad, select the **Controls** button. The PixPad will change, now select the **Update Presets** button, as shown on the right.

9. The list of available presets will appear. If any have already been saved a thumbnail may appear. Select the desired preset to save, for example Preset 1. Then click on the **Save Preset 1** button, as shown on the right. The thumbnail will update showing the newly saved location, as shown on the right.



Repeat the steps above for the rest of the presets for each camera. To return back to the main selection of cameras select the Sony Camera Control button and select the other cameras.

Section 2: To Run Commander:



1. Once the title editor window has been minimized, the Commander screen will be visible. Click on the **Default Projects** button in the Commander Load Project window, as shown on the right.

2. There a total of 6 Default Projects that may be used with your Broadcast Pix system, however the 3 projects are designed for Commander.

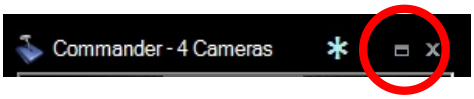
   The **4 Cameras, 3 Cameras** and **2 Cameras,** projects are pre-configured based on the graphic templates and camera presets mentioned above.

   The 4 project assumes 4 cameras & 1 other input
   The 3 project assumes 3 cameras & 1 other input
   The 2 project assumes 2 cameras & 1 other input

   Select the desired project and click on the **Load Project** button.

   The Commander window will populate, to close the Project window click on the **red X** in the top corner.

   If more cameras or a different layout is preferred, the BPCommand option must be installed.



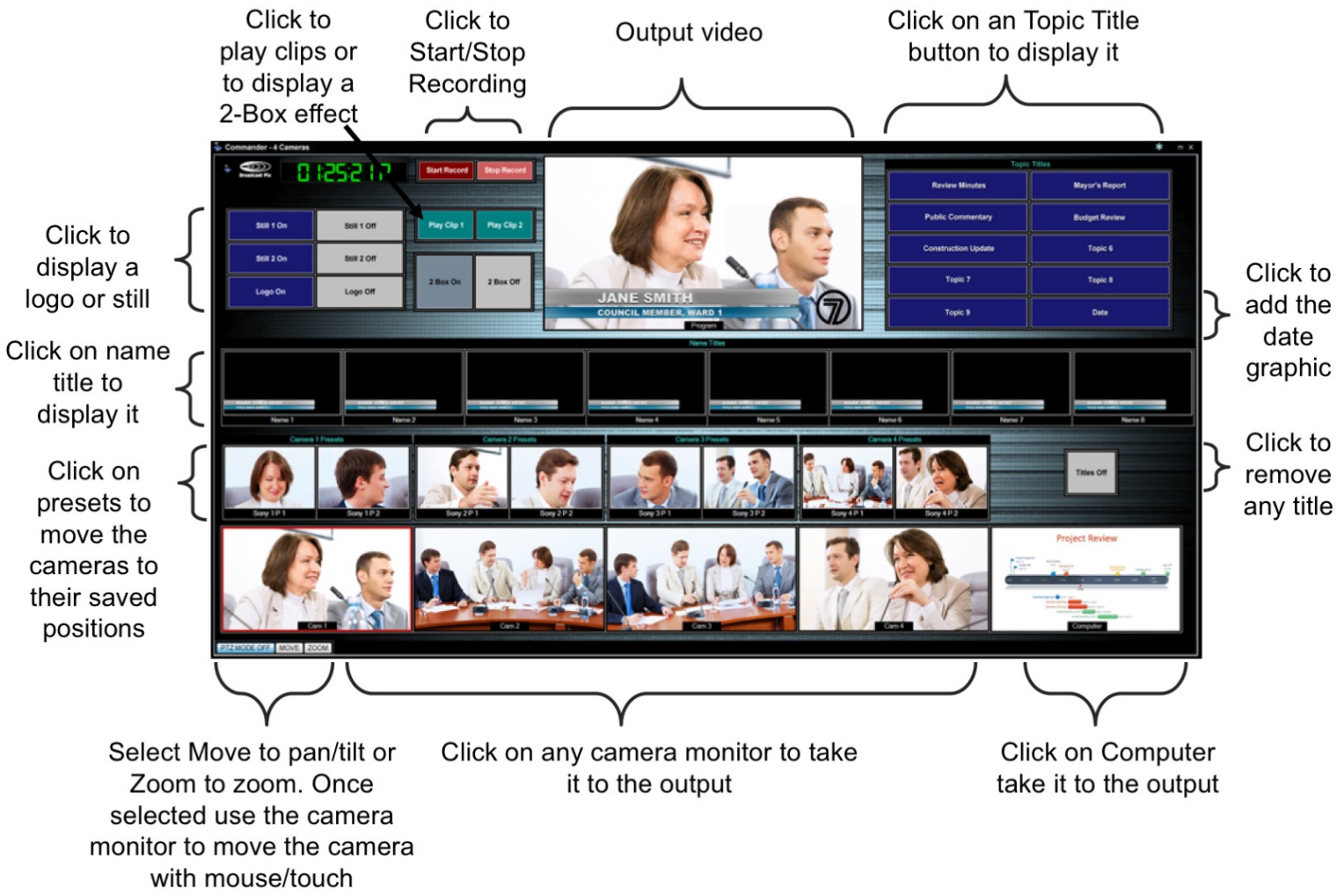
3. The Commander window is designed to fill the screen, but can adapt to any resolution. To maximize the window, click on the maximize icon, as shown on the right.

   The Commander window can be used in a single or dual monitor configuration, on a single monitor it will cover the PixPad, to use a second monitor, simply drag the Commander window to the second monitor and then maximize it.

   You are now ready to start experiencing Broadcast Pix Command™

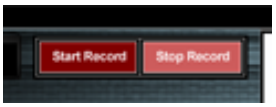
Broadcast Pix Commander™ Operation

The operation of Commander is summarized in the diagram below. The video output will appear in the big window at the top. Touch any camera on other input in the bottom row to take it to the output. Add titles on top by touching them, and removed by the title off button. Reposition a camera by touching its preset. Cameras may also be manually positioned or zoomed by turning on the controls in the lower left corner, and then touching the camera window. In the top right a split screen 2-box effect can be turned on or off, clips can be played and still graphics or a logo can be turned on or off. The following diagram shows the 4 camera + 1 computer input template.



Section 3: How use Your BPNet Cloud Portal

1. The Start Record button allows for the main output to be recorded locally on the Commander system. Once the recording has stopped, it will start to push the recorded file up to BPNet, into your cloud library (after you have registered for BPNet and set up your portal).



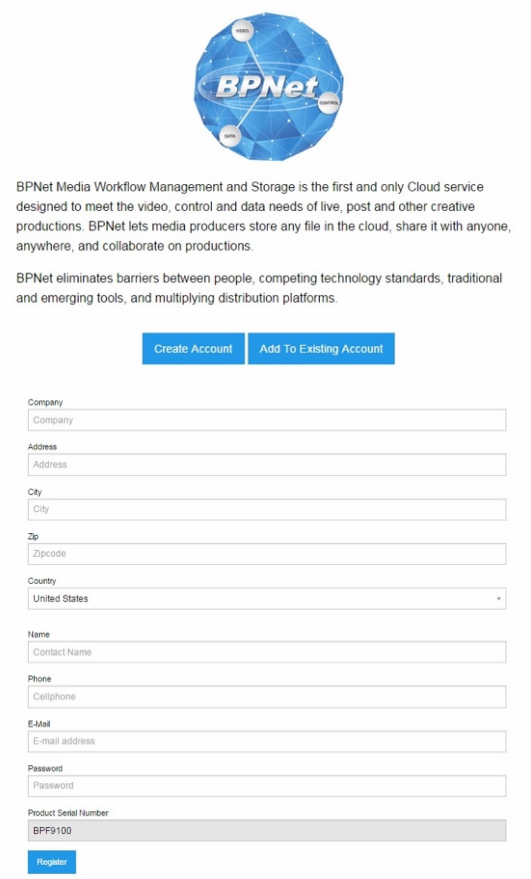
To Register for BPNet:

1. To ensure that this process executes properly, you must connect the system to the Internet and register the Commander system with BPNet. On the desktop of the system, double-click the **Register Switcher** icon, as shown on the right.



2. A web browser will open, click on the **Create Account** button as shown on the right.

3. Enter the required fields and click on the **Register** button, as shown on the right.

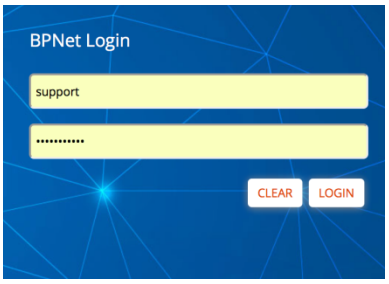


An email will be sent to the email address entered, open the email and **Verify** the account, following the emailed instructions.

Once verified, dropping any content into the **BPNet Upload** folder on the Desktop will automatically transfer it to your BPNet Inbox. In addition, the content on the Commander system will be removed.

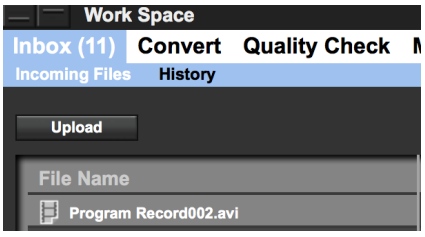
To Create & Share your BPNet Web Portal:

1. Open a web browser (can be down locally on the Commander system or any other computer connected to the Internet).



2. Navigate to **bpnet.broadcastpix.com** and **login** using your credentials, as shown on the right.

3. Once logged in, click on the **Inbox** tab in the Work Space section, as shown on the right.



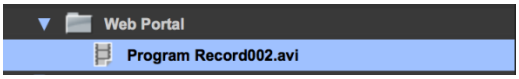
4. All recorded files will have a file name as 'Program RecordXXX.avi' select the file and **drag** it into a folder in your main library on the left.

5. It is recommended to create folders in your library, as they can be used as a Web Portal for video on demand files. Click on the **New Folder** icon on the bottom of the toolbar, as shown on the right, and drag any content into it.



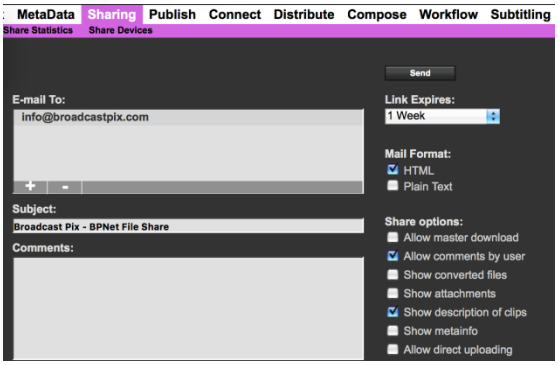
6. Any file or folder may be renamed by double-clicking on and renaming the file/folder.

7. To create a share of the folder for people to view, select the folder in the library and click on the **Share** tab in the Work Space section, as shown on the right.



8. Click on the **+** icon to add an email address for the share. A custom Subject and Comment may also be entered, if desired.

9. Various options may be enabled/disabled under the **Share options** section. Select the desired options.

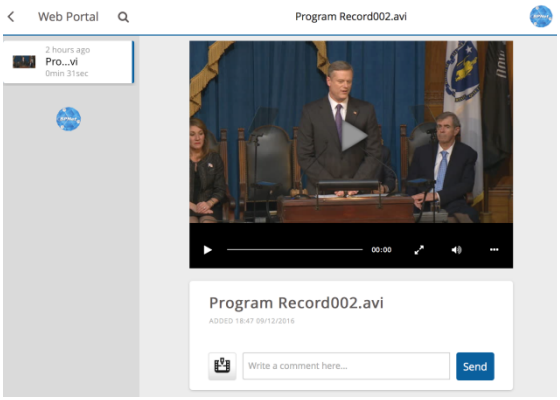


10. Once the share is ready to be sent, click on the **Send** button.

    There are unlimited amounts of share links, providing numerous ways to share your content for viewing.

11. The link has been sent and can be used as a URL on a webpage to grant access for your web portal, as shown on the right.

12. There are many other features and functions of BPNet, please contact Sales for more information.



Section 4 Commander Options

Commander is a very complete system, but does have a few options to further enhance it.

More BPNet Cloud Storage

Commander Systems include 25GB of storage for hosting recorded productions in the cloud portal. This can hold many hours of productions if they are resized to a small HD size. More storage is available with this option.

BPCommand Toolkit for Customization

Commander Systems have a selection of templates. These templates may be customized or new ones built using the BPCommand toolkit option. For example, templates with more or fewer camera presets, titles, clips and effects may be created.

Remote Titling CG Option

Commander uses a built in CG (Character Generator) to create titles, and so title creation must be done on the Commander system. The Remote Titling CG Option enables titles to be created elsewhere on another windows system and moved to the Commander system over the network. For operation of this option see the additional CG license section of the owner's manual.

Automate Titling from a Database Option

Title entry can be automated by connecting it to the database. For operation of this option see the Rapid CG section of the owner's manual.