

BASIC MANUAL

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This guide explains how to use the basic functionalities of the PlayBox software modules.

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The information herein is subject to periodical changes without notice. They will be incorporated in new versions of the manual.

Please check the PlayBox website regularly for Advanced User Manual updates: www.playbox.tv > Support tab > Download section > PlayBox Literature.

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Dear PlayBox customer,

Thank you for purchasing our product! We would like to assure you that you have chosen the most cost effective and versatile TV automation system on the market. As always, we are trying to stay close to our customers' needs, making sure they all receive adequate support and satisfaction. Your opinion about our product is an exceptionally valuable source of information to us. The ease of working with the **PlayBox** products results mainly from the suggestions and comments of our current respected customers.

This manual is structured into several chapters, each aiming to ease the use of our products in the separate workflow stages of the broadcast workflow. We hope you will enjoy working with it, and we are anxiously looking forward to receiving your feedback.

Pease send your questions, suggestions, and assistance requests to: support@playbox.tv

General feedback: playbox@playbox.tv

Helpdesk fax number: +359 2 9717700

PLAYOUT

AirBox provides the playout part of the TV workflow. Depending on your needs, you can combine it with other PlayBox modules to fit best into your specific workflow requirements. Below, you will find a description of the two basic modes of operation. They can also be combined with each other to achieve better results.



Interactive Operation

The interactive mode of operation involves an operator that will control the playout system manually. This will allow last minute playlist editing and schedule re-ordering on the fly.

Building playlists in AirBox

A. Adding media files:

- ✓ Right-click in the playlist and select Add/Insert > Media files;
- ✓ Browse for the folder that contains the media files;
- ✓ Select the one you need. In case you want to insert more than one file, hold down the **<Ctrl>** key while clicking in them;

✓ Press **Open** to load the files into the playlist;

OR

✓ Drag and drop database entries from the *DataBox* grid to the *AirBox* playlist grid.

OR

- ✓ Drag and drop media files from Windows Explorer to the playlist grid.
- B. Adding dummy clips to preserve some space for expected media files
- ✓ Right-click in the playlist and select Add/Insert > Dummy clip from the drop-down menu;
- ✓ Specify the properties of the expected file (*Title*, *File* name, *In* and *Out* time code) in the clip properties dialog;
- ✓ Click **OK** to insert it in the playlist
- C. Adding live streams (available only with the PRO option!)
- ✓ Right-click in the playlist and select Add/Insert > Live stream;
- ✓ Specify the Stream properties and click OK to insert the live stream in the playlist.
- D. <u>Adding events</u> (external device control events are available with the PRO option only!)
- ✓ Right-click in the playlist and select Add/Insert > Event > and select the event you need;
- ✓ Specify the event's parameters and click **OK** to apply. The event line will appear in the playlist.

To save the playlist, press the **Save as** or **Save** button above the playlist grid.

Building playlists in ListBox

You can also create playlists in *ListBox* while *AirBox* is playing on air:

- ✓ Go to **File** menu > New to start *ListBox*;
- ✓ Use Windows Explorer to open the folder that contains the media file(s) you want to insert in the playlist;
- \checkmark Select the file(s) you need and drag them to the playlist grid.

OR

- ✓ Right Click in the playlist and select Add/Insert > Media files from the drop-down menu;
- ✓ Browse for the folder that contains the media files;
- ✓ Select the one you need to insert. In case you want to insert more than one file, holed down the **<Ctrl>** key while clicking in them;
- ✓ Press Open to load the files into the playlist.

- ✓ If necessary, insert live streams or dummy clips the same way as in *AirBox*.
- ✓ To save the playlist, go to File menu and select Save as or Save playlist.

NOTE: Make sure the file paths in the playlist created in ListBox are visible the same way from the AirBox server. Otherwise, the files will appear as missing!

TIP (!) Go to File menu > Export as Excel file to save the playlist in coma-separated value format.

Loading playlists in AirBox (*.ply & *.xml)

- \checkmark Press the **Load** button and browse for the playlist you need to open. OR
- ✓ Go to **File** menu and select Append playlist to add a playlist at the end of the currently loaded one.

OR

Go to File menu and select Insert playlist to insert a playlist above the currently selected line.

Tab-delimited Text files as Playlists

You can import OML text files as playlists. The delimiter can be a tab, a coma or a semicolon symbol.

- ✓ Go to **File** menu > Import playlist....
- ✓ Select the *Template* to be used for "translating" the text. If there are no templates in the list, click *More* to open the Template builder:
 - Name the template and specify the delimiter (coma, semi-colon or tab), then load a sample text file;
 - Specify the number of lines to skip in the beginning (if necessary);
 - Right-click in the columns headers and assign their content
 - Press Save and Close the Template builder window.

TIP (!) You can check if your text complies with the currently loaded template by pressing the *Validate* button in the template builder dialog. ✓ Specify the loading method (Load/Insert/Append).

NOTE: Load will replace the currently loaded playlist; Insert will insert the tab-delimited playlist above the currently selected line; Append will add the tab-delimited playlist to the end of the currently loaded one.

✓ Browse for the file to be imported and click OK to execute the import.

Preview and non-destructive editing - the Clip Trimmer

In AirBox:

- ✓ Make sure the Clip Trimmer is enabled in **Options** menu > General > ☑Use Clip Trimmer.
- ✓ Double-click in a clip to open the Clip Trimmer;
- ✓ Select the *In* and *Out* points using the position marker or in the relevant time code box and click *OK/Apply* to enter the changes in the playlist.

In ListBox:

- ✓ Right-click in a clip and select Edit... from the drop-down menu or press <Alt> + <Enter> on your keyboard.
- ✓ Select the In and Out points using the position marker or in the relevant time code box.
- ✓ Click Apply to enter the changes in the playlist.

NOTE: The Clip Trimmer is not included in AirBox Light Edition.

Splitting a clip into parts

In Clip Trimmer, you can also split a clip into several parts:

- ✓ Place the cursor in the desired position and push **Split** . Repeat as many times as necessary.
- Click **OK**. Each new section will form a separate row in the play list. You can play them separately, change their order, insert other clips between them, etc.
- ✓ Use the **Export** button to create new file(s) out of selected sections.

WARNING! Please note that we do not recommend using the Clip Trimmer while the server is on air.

Playback control

You can push the playback control buttons to control the playout or use the provided short keys.



The **Return** button is active only after a **Jump** operation. Use it to go back to the point in playback before the jump.

Use the **Cue** button to pause the playback on the first frame of the currently selected clip.

NOTE: The execution of this command may vary according to the hardware decoder! Please contact support@playbox.tv for advice.

External Device Control - the Clipboard

NOTE: This option is a paid Add-on, part of the PRO option!

- ✓ Go to View menu > Clipboard;
- ✓ Select the mode of operation when pressing a clipboard button:
- Execute to perform events right away,
- Insert to insert event lines in the playlist,
- ✓ Set the position for inserting event lines:
- to insert as next item to be executed;
- to insert at the end of the playlist;
- ✓ Right-click in a button to assign an event to it;
- ✓ Specify the event properties in the relevant dialog and click **OK** to apply.
- ✓ Push the relevant button to execute the event assigned to it.

Logo Insertion

In *AirBox* stand-alone, you can save up to 16 static logo presets and use them later during playback.

- ✓ Set your logos in **Options** menu > **Logo**;
 - Select the desired logo preset (one to sixteen), click *Load* and browse for the relevant image.
 - Click **Open**. The image will appear in the preview area.
 - Below, you can view and change its position in the screen.
 - If the image has an alpha channel, define the Matte color in the relevant field.

- Click **Apply** to save the logo in the selected preset position.
- ✓ Open Clipboard in View menu and assign logo on/off events to the buttons;
- ✓ Push the relevant buttons to show/hide the logos you need.

OR

✓ Use the commands menu to show logo presets through clicking in the logo presets list.

TIP (!) To your convenience, their shortcuts are shown besides – **Ctrl+#**. To switch logo presets, hold down the <Ctrl> key, enter the desired preset number and release the <Ctrl>.

Dynamic graphics insertion

✓ Use the clipboard to control single *TitleBox* objects if *TitleBox* is running in Net control mode.

OR

Operate *TitleBox* manually to start and stop the objects you need.
 Please check the TitleBox Interactive operation section on page 26.

Moving the footage to the local hard drives

- ✓ Run *SafeBox* in General mode;
- ✓ Specify the Source location on the remote storage and assign a Destination location on the local hard drive;
- ✓ Run *Safe Box* manually or leave it to operate in automatic mode.

Remote Playout Control

Multi AirBox Manager is a web server application. It was designed to control multiple *AirBox* channels from within the same user environment or from a remote location – *MAM* supports a web-based interface from which web users can control all AirBox channels included in the *MAM* Monitoring list, depending on their user rights.

✓ In *AirBox*, go to **Options** menu > **Settings** > **General**. ☑Check *Enable IP Remote Control*.

NOTE: Only channels with this check enabled will be visible in *MAM*!

- ✓ Start *MAM* and add channels in the monitoring list by pressing ≥.
- ✓ Go to **Options** menu > **Web users** and define user names, passwords, and control rights. Click **OK** to apply
- ✓ Add playlists and folders in the content bin below.

NOTE: Only these objects will be visible from the Internet!

✓ To connect to *MAM* from the internet, type the *MAM* IP address in the address bar of your browser. Use your user name and password to access the web interface.

TIP (!) You can group/ungroup *AirBox*es in the monitoring list by right clicking in them and selecting a group from the drop-down list. Thus, all commands that are sent to a channel that belongs to a group will be applied to all other channels in the same group.

IMPORTANT: *MAM* uses UDP port 8080 or TCP port 80 for communication. Make sure it is not used by other programs! Most antivirus applications prevent *MAM* from proper operation!

Automated Operation

The automated mode of operation does not require any human attendance during playback. The operator should only build the playlists and save them to the daily playlist folder. *AirBox* will load and play them back automatically.

Building daily playlists in AirBox

- ✓ Make sure you have specified a daily playlist folder in **Options** menu > **StartUp** options.
- ✓ Create your playlist and go to **File** menu > **Save daily playlist**
- ✓ Specify the desired start time and date and click **Save**

WARNING! Do not leave the last created playlist loaded in *AirBox*! This might result in non-correct execution of other daily playlists. Make sure to load the playlist that should be executed next before you leave!

Building daily playlists in ListBox

When *ListBox* is on a remote PC:

✓ Create daily playlists using network paths to the media files.

WARNING! Do not use mapped drives! Use only real network paths!

✓ Run SafeBox in playlist mode to copy/move the playlists and the content for them to ONE destination folder on the playout hard drive.

When *ListBox* is on the same PC:

- ✓ Go to **Tools** menu > **Options** and browse for the same daily playlist folder as specified in *AirBox* **Options** menu > **StartUp**.
- TIP (!) If there are more than one AirBox channels on the server, use the Share daily playlist settings list.
- ✓ Build your daily playlists and save them.

Automated Playlist & Content replication



SafeBox can copy or move playlist files, along with all the footage associated to them, to ONE destination folder.

- Open the options dialog and make sure *SafeBox* is running in Playlist mode. Click *OK*.
- Add the daily playlist folder (located on the remote PC) in the Source locations list.
- Add the daily playlist folder (located on the AirBox machine) in the Destination locations list.
- ✓ ■Assign the relevant Source location

to the corresponding Destination location.

Each time a new playlist file appears in the source location, it will be copied to the destination folder, together with all the content included in this playlist. The file paths in the copied playlist will be amended accordingly to correspond to the new location of the files.

Automated Control of External Devices

NOTE: This is a paid Add-on, part of the PRO option!

- ✓ Open **Options** menu > **Modules** > Remote tab.
- ✓ Select the module you need (i.e. Matrix switcher, GPI output) and enable it (double-click in the No (to the right) to turn it into Yes).
- ✓ Right-click in the playlist and select Add/Insert > Event > Matrix switcher.
- ✓ Specify the command parameters and click **OK**.
- ✓ An event line will appear in the playlist. *AirBox* will execute it at reaching this point in the playlist.

Automated Graphics insertion

NOTE: This is a paid Add-on, part of the PRO option!

- ✓ Open Options menu > Modules > Remote tab.
- ✓ Select the TitleBox NetCtrl Output line and enable it.
- ✓ Press **Configure** the set the parameters of the UDP communication and click **OK** when ready.
- ✓ Right-click in the playlist and select Add/Insert > Event > TitleBox NetCtrl Output.
- ✓ The Net Control Wizard will guide you through the command setup. Several lines will appear in the playlist after clicking *Finish*.
- TIP (!) If you use a few graphics projects, you can create complex events to control them. Thus, the graphics control events will appear as one line in the playlist.

Playlist info in graphics - Graphic rules

NOTE: Graphic rules are not available in *AirBox Light Edition*.

The information contained in the playlist can be passed to *TitleBox*, to display it automatically as the playback proceeds.

- ✓ Go to Options menu > Graphic rules
- ✓ Check
 ☐ Use Graphic rules for current AirBox.
- ✓ Specify the conditions for sending the commands to *TitleBox* and create the relevant actions.

TIP (!) If you need additional fields in the graphic rules (different from the available playlist columns), use the Metadata tab in the clip properties dialog. Then, add new value presets in the Graphic Rules dialog.

NOTE: Be careful not to create conflicting rules!

WARNING! It is not recommended to use Graphic Rules and TitleBox net control in the same time!

WARNING! It is not possible to use more than one TitleBox project at a time!

Automated VTR control

- ✓ Open **Options** menu > **Modules** >Remote tab.
- ✓ Select the VTR Control plug-in and enable it.
- ✓ Press **Configure** to specify the connection COM port and some VTR-specific settings. Click **OK** to apply.
- ✓ Right-click in the playlist and select Add/Insert Event > Complex item > Custom Complex event.
- ✓ Create a new complex event preset:

- In the Beginning events list, insert a VTR event and a Matrix switcher event (optionally, you can insert graphics control events, too).
- If there is In and Out time code in the VTR control event, insert ending events as well (such as Matrix control and graphics control logo, TitleBox net control events).
- \checkmark Click OK a complex event line will appear in the playlist. AirBox will execute it at reaching this point in the playlist (taking into account the specified offsets, if any).

NOTE: This option is a paid Add-on!

TIP (!) The created complex event will appear in the list of presets for later use: right-click in the playlist > Add/Insert Event > Complex item.

Fixed Start time

- ✓ To fix the start time of a clip in the playlist:
- ✓ Right-click in the clip row and select Properties.
- ✓ In the Fixed-time tab, specify the start time parameters. The settings in this tab are of higher priority than the default ones in **Options** menu > **Fixed-time event**.
- ✓ Click **OK** to apply.

NOTE: The default start tolerances are 10 seconds earlier and 30 seconds later! If you want the change them, go to **Options** menu > **Fixed-time event**, or use the Custom tolerances spin-box in Clip properties > Fixed-time tab.

WARNING! When using fixed start times in a daily playlist, it should not go beyond midnight!

Fixed time Jumps - Bookmarks

To make AirBox jump to a line in the playlist at specific time,

- ✓ Right-click in this line and select Insert > Bookmark
- ✓ Specify the bookmark name and tick **I** Time zone.
- ✓ Specify the *From* and *To* time and click *OK*.

The Jump will be executed at the end of the time zone (i.e. in the To point).

NOTE: The above description is valid when there are no DTMF or GPI commands assigned to bookmarks!

Automated video resizing

NOTE: Hardware dependent feature!

- ✓ Open Options menu > Modules > Remote tab.
- ✓ Select the Video ResizeCtrl Output and enable it.
- ✓ Press **Configure** to create a list of resizing presets. Click **OK** to apply.
- ✓ Right-click in the first video you want to resize and select Insert > Event > Video resize Ctrl Output.
- ✓ Select the Video Resize Preset you need from the drop-down list. If there are no presets in the list, press **Setup** to define them.
- ✓ Click **OK** to insert a resize event line in the playlist.

NOTE: This is a paid Add-on, part of the PRO option!

Playback Control through DTMF tones

DTMF tones input on the PC audio card can be used for playback control:

- ✓ Open **Options** menu > **Modules** > Remote tab.
- ✓ Select the DTMF Input plug-in and enable it.
- ✓ Press **Configure** to specify the audio device for receiving the DTMF tones and the command to be executed at receiving certain DTMF sequence.
- ✓ Click the white sheet button to add each command to the list.
- ✓ Click **OK** to apply.

NOTE: This is a paid Add-on, part of the PRO option!

Playback Control through GPI input

GPI pulses input on the PC COM port(s) can be used for playback control:

- ✓ Open **Options** menu > **Modules** > Remote tab.
- ✓ Select the GPI Input plug-in and enable it.
- ✓ Press **Configure** to specify the COM port for receiving the GPI pulses and the command to be executed at receiving certain GPI pulse.
- ✓ Click the white sheet button to add each command to the list.
- ✓ Click OK to apply.

NOTE: This is a paid Add-on, part of the PRO option!



Asset Management - DataBox

Using *DataBox*, you can create database of all the footage you have (media files, tapes, DVDs, etc.).

To add a new entry:

- ✓ Run DataBox
- ✓ Go to **Depinions** > Database tab and browse for the database to open. The default database is located in the *DataBox* program directory. Click *OK* to load it.
- ✓ If the database grid is not visible, press the *Grid* button to view it.
- ✓ In the tree-view to the left, select a category to which the new record will belong.
- \checkmark Use Windows Explorer to drag-n-drop the file into the database grid. OR
- ✓ Press the **New Record** button. Fill-in the metadata in the Properties dialog.
- ✓ Click **OK** to apply.

Remote access to the database

If the database is shared among several users, it must be stored in a folder with full access rights. Make sure to share the folder as is, i.e. do not use Windows simple sharing. Thus, the database-containing folder should be shared as **PC name\Hard drive letter\Database_Folder**, NOT as **Database Folder on PC name**.

WARNING! Do not use mapped drives to access the database! Use only real network paths!

Playout redundancy

- ✓ Start the BackUp *AirBox*;
- ✓ Go to **Options** menu > **Mirror Mode** > **Configure...** and set the backup according to your needs (enable switcher control, playlist synchronization, create backup group, etc.)

TIP(!) To create a group of Backup channels:

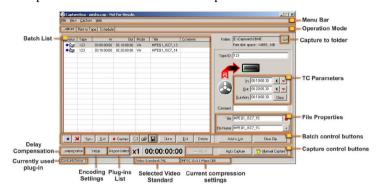
- Type the same Group ID in all backup *AirBox*es that should belong to this group.
- Check the two options below (Notify, Listen or both):
 Notify means that the current Mirror will send information to other channels in the group if its playout status changes.
 Listen means that the current Mirror will start playing as well in case it receives such a notification.
- ✓ Click OK to apply.
- ✓ Go to Options menu > Mirror Mode > and select Full or Idle mode:
 - In Full mode, the Backup AirBox is always playing the same content parallel to the Master.
 - In Idle mode, the Backup AirBox is just listening to the Master AirBox activity and start playing only if the Master AirBox stops responding.

Both modes have their advantages and disadvantages. Please, check the Advanced User's manual for details. You can download it from our website – www.playbox.tv > Support tab > Download section> PlayBox Literature

NOTE: This is a paid Add-on.

CONTENT INGEST

CaptureBox provides the ingest part of the TV workflow. Depending on your needs, you can combine it with other PlayBox modules to fit best into your specific workflow requirements. Below, you will find a description of the two basic modes of operation.



Interactive Operation

In manual capturing, there is no need to control the VTR. All you have to do is connect the video source to the encoder, specify the folder for storing the captured files, name the file and start capturing.

Manual Capturing

- ✓ Make sure the video source is connected to the hardware encoder inputs.
- ✓ Press the **Setup** button to specify the encoding format and compression type. Click **OK** to apply.
- ✓ Specify the capture-to folder and the *tape ID*; enter *Title* and *File* name in the relevant fields below.
- ✓ Press *Manual Capture* to start the encoding.
- ✓ Press **Abort** to stop the encoding.

TIP(!) If you assign some duration in the Time code parameters field, *CaptureBox* will stop capturing automatically.

Capturing an IP Stream

- ✓ Make sure to select the IP Capture plug-in:
 - Press Device select
 - Select one of the IP Capture plug-ins
 - Click OK
- ✓ Press **Setup** and specify the host address and the port for receiving the stream. Click **OK**.
- ✓ If the incoming stream is MPEG2 Transport Stream, Press **Stream** *Filtering*:
 - Select the filtering type and proceed accordingly
 - Check Use IP Streaming to send the captured stream to the network.
 - Check \(\overline{\ove
 - Click OK
- ✓ Press *Manual Capture* to start capturing.

Automated Operation

CaptureBox can control external devices automatically to ingest the required content:

Batch capturing

In this mode, *CaptureBox* controls a VTR to capture the clips defined in a batch-capturing list.

NOTE: When the VTR control is performed through the PC COM port (i.e. when not using firewire), you will need an RS 232 to 422 converter and a direct cable to connect it.

- ✓ Go to **File** menu > **RS422 Config**... and specify the COM port for communication to the VTR and the command response times valid for this particular device.
- ✓ Create a batch-capturing list:
 - Specify the capture-to *Folder* and the *tape ID*;
 - Enter the In and Out time code. The duration will be calculated automatically.
 - Type a *Title* and a *File* name in the relevant fields.
 TIP(!) You can lock the title to the filename by pressing the padlock button to the right.
 - Press Add to List.

TIP(!) You can edit an entry later: select its line in the batch list and press the *Edit* button.

✓ Press **Capture** to start capturing the batch.

CaptureBox will notify the operator to change the tapes when necessary.

Tab-delimited batch-capture lists

CaptureBox is capable of importing tab delimited text files as batch capture lists. The delimiter can be a tab, a semicolon or a coma symbol.

- ✓ Click the **mport** button and specify the template to be used during the import.
- ✓ If there is no template in the list, press **More** to create them (check page 9 in the Playout section for detailed procedure).
- ✓ Browse for the text file to be imported and click **OK**.
- ✓ Press **Capture** to start capturing the batch list.

Schedule capturing,

In this mode, *CaptureBox* can control an external switcher to capture incoming feeds in a time-based schedule, according to the PC system clock.

- ✓ Go to the Schedule tab and browse for the capture-to folder.
- ✓ Select a *Channel* from the drop-down list.
 - If there are no channels in the list, press the **Channel Setup** button
 - Double-click in a channel line to name it.
 - If you are going to capture more than one channel, select the Switcher to be used from the drop-down list to the right.
 - Press *Edit Switch* to specify the input that receives the currently selected channel and click *OK*.

NOTE: You cannot Control more than one switcher at a time!

- Click **OK** to close the Channel Setup dialog.
- ✓ Specify the *Start* and *End* time, and the scheme of repetition (once, daily, or weekly).
- ✓ Give the file a *Title* and a *Filename* and *Add* it to the Schedule capturing list.
- ✓ Press **Arm** to activate the schedule.

TIP (!) If you want to capture manually, press **Crash capture** to start immediately or **Prepare Capture** to get ready for manual capturing.

Print-to-Tape

Use this mode if you want to take the video from a file to a tape or to preview a newly captured file.

Printing a video file to a tape

- ✓ Make sure the VTR is connected to the PC COM port
- ✓ Press **Setup** to specify the video standard and fields order if necessary;
- ✓ Press to browse for a file to be added in the print-to-tape list. If the audio is in a separate file, browse for it using the relevant button below.
- ✓ If you want to record only a part of the file, specify the *In* and *Out* point in the relevant filed
- TIP (!) You can use the slider below to locate the in and out time code. Press the relevant black arrow to apply the current position in the field. Pressing a red-arrow button will position the file play head (the slider) to the corresponding timecode, defined in the field.
- ✓ Specify the position of the record on the tape by filling-in the *Tape In* time code. The tape out time code will be calculated automatically, according to clip duration.
- **TIP**(!) Use the black arrow to the right to enter the current time code from the tape into the *Tape In* field. Press the red arrows to rewind the tape to the position specified in the relevant time code filed.
- ✓ Press **REC** to start simultaneously playback and recording.

Creating Print-to-tape lists

- ✓ Follow the procedure above, but press the *Add* button instead of *REC*. This will add the clip to the print-to-tape list.
- ✓ Repeat the procedure for each file you want to add in the list.
- **NOTE:** You cannot mix MPEG and DV compression in the same print-to-tape list!
- **TIP** (!) If you want to edit a clip from the list, double-click in its line. The clip parameters will be loaded in the relevant fields to the left. Do not forget to press the *Apply* button when ready!
- ✓ Press to save the list. You can load it later, using the Open playlist button.

Reviewing the captured content

You can check a file in the software preview window or through the video output of a hardware decoder (check the list of supported platforms).

- ✓ Make sure the video output of the decoder is connected to a monitor. Skip this step if using software-only preview;
- ✓ Browse for a file to load it in the clip properties area.
- ✓ Use the playback control buttons in the lower left corner to view it. If you want to play back more than one file, create a print to tape list. Press *Play All* in the lower right corner to view the whole print-to-tape list.

TIP(!) If you want to change the clips order, use the read arrows under the print-to-tape list

Compliance recording

CaptureBox Compliance is designed for low bitrate capturing for monitoring purposes. Currently it runs only on Black Magic Designs' DeckLink platforms.

Setting up a channel

- ✓ Press in the upper right corner to open the Options dialog.
- ✓ Press New Channel and type in its name and abbreviation (they can be used in file naming at your will).
- ✓ Select the DeckLink driver in the list below and click **OK**TIP(!) If you want to change the channel name, press

 Edit.
- ✓ Back in the Options dialog; specify the *Root folder* to save the captured files.
- ✓ Press to change the file naming pattern if necessary
- ✓ *CaptureBox Compliance* can delete outdated files or move them to archive storage. Set the action and outdate criteria in the bottom.
- ✓ Press **Close** when ready and press **Start** to initiate capturing.

Compression settings

If you need to change the bitrate or MPEG compression type:

- ✓ Press in the upper right corner to open the Options dialog.
- ✓ In it, press ____ to view the compression setting.
- ✓ Press **OK** and **Close** to apply the changes

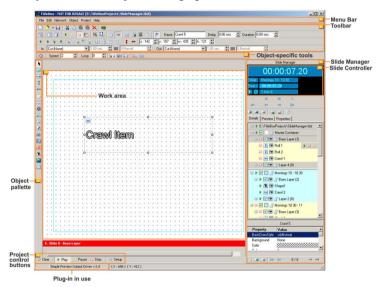
Splitting files

If you need to create separate chunks of files based on the system clock:

- ✓ Press in the upper right corner to open the Options dialog.
- ✓ In it, press ____ to view the compression setting.
- ✓ Check \(\subseteq Use \) file split and define the splitting interval
- ✓ Press **OK** and **Close** to apply the changes

GRAPHICS INSERTION

TitleBox is the graphics insertion tool in the PlayBox TV automation kit. It can be controlled manually or automatically and provides a huge variety of real-time object-editing options.



Interactive Operation

In this mode, an operator is needed to trigger the objects manually, using the main *TitleBox* interface.

Driver Setup

- ✓ Press to select the driver to be used for outputting the graphics
- ✓ Press in the bottom to change the driver settings if necessary (fields order, frame rate, etc.).

NOTE: The driver options vary depending on the hardware platform in use (please, check also the TitleBox platform comparison list in our website – www.playbox.tv Support tab > Knowledge base section> Comparisons).

Playout control buttons

✓ Use the buttons under the work area to control the entire project:

NOTE: You have to push the Play button to enable showing the graphics on the screen.

✓ To show a currently selected object, use the object control buttons situated in the toolbar above:

▶ w □ ti

NOTE: If the currently selected object belongs to a group of several objects, these commands will apply to all objects in the group.

Creating objects

- ✓ Start *TitleBox* and choose an object type from the object palette in the left
- ✓ Draw a rectangle in the work area to mark the object's position and size. You can move and resize it later if necessary.
- ✓ Make the settings in the object properties dialog and click **OK**. TIP (!) You can change most of the object's properties later, real time, even while on air.

Editing capabilities

You can move, resize and format the objects in real time, while they are shown on the screen.

NOTE: Some objects (rolls, crawls) do not allow unlimited resizing while played on air. Others (like sequences) depend on the original size of the images. Please check the advanced manual for object properties details. You can download it from our website – www.playbox.tv > Support tab

> Download section > PlayBox Literature.

Font formatting in Still Text, Rolls, and Crawls

- ✓ Double-click in a text-containing object to open it for editing.
- ✓ The last toolbar above will display the basic font-formatting tools.
- ✓ Drag the mouse over the text you want to format and use the toolbar above to change the font type, size, alignment, etc.
- ✓ Press the **F** button for advanced font formatting.

Creating and Editing Still Picture Objects

- ✓ Click on the Still Picture icon in the Object Palette.
- ✓ Move the pointer to the work area, hold down the mouse button and draw a rectangle to mark the position of your picture object. You can resize it later.
- ✓ In the Picture Properties dialog, choose a background colour. It will be visible it in case the image is smaller than the object's size.
- ✓ Click the Open image button, then browse for the desired image file and open it. Use the slides to the right to adjust the image blur, contrast, etc. The Anti-flicker option is designed for smoothing the high-contrast computer graphics when overlaying it over video. Change the *Vertical* value to prevent flickering of the graphics edges.
- ✓ Choose the layout from the drop-down list: when in Normal layout, the image will preserve its original size. The rest of the picture object will be filled with the selected background colour. If you select Stretch layout the image will resize parallel to object resizing.
- ✓ Click **OK**.
- TIP (!) If the image contains alpha, push the Draw alpha only button. Thus, you will be able to create a mask for any underlying object. Try to make effects this way! If you need to invert the alpha, open the properties dialog and click the relevant button. Click **OK** to apply the changes.

 TIP (!) Use the global *Alpha* slider to change the transparency of the whole object.
- ✓ To change the image in the object, double click to open the Properties dialog, push Open image and browse for the new picture file.

Creating an Analogue Clock Object

NOTE: This object displays the current system time. There is no option to change it in *TitleBox*.

- ✓ Click the Analogue Clock icon in the object palette and draw a rectangle;
- ✓ In the Background tab, load the Background image.
- \checkmark Go to the Hour tab and load the hour arm image. Move the centre mark so that it coincides with the arm's rotation axis
- ✓ In the Minute tab, load the minute arm image. Adjust the centre if necessary.
- ✓ In the Second tab, load the seconds arm and adjust the centre.
- ✓ Click **OK**

Creating a Digital Clock Object

- ✓ Click the digital clock icon in the Object palette and draw a rectangle in the work area.
- \checkmark Set the background, font type and size in the Properties dialog and click \emph{OK} .
- ✓ To change the clock's Mask:
 - Click once in the object to select it.
 - Select the new *Mask* from the drop-down list
 - Click the Update mask button. The output mask is updated.

The Digital Clock in Counter mode

Counting up

- ✓ Select the Digital Clock object and pick Counter mode from the drop-down list in the toolbar.
- ✓ Click the **Prepare** button and then click **Start**.
- ✓ Click the **Intermediate** button to view the intermediate time. The counter will continue working in the background.
- ✓ Click the *Intermediate* button once again to resume showing the elapsed time.
- ✓ Click the **Visible** button to hide/show the counter on the output.
- **Stop** the counter

Counting down

- ✓ Select the Digital Clock object and push the **Countdown** button.
- ✓ Set the initial time.
- ✓ Push Prepare and then Start. The counter will start counting down.
- ✓ Push Karan Stop.

TIP (!) On double-clicking in a digital clock object, the lowest toolbar will display all font-formatting tools available for text objects.

Creating a Sequence

- ✓ Click the Sequence icon in the object palette and draw a rectangle in the work area.
- ✓ Load a sequence of .tga files. Select a file to preview it in the right.
- ✓ Invert the alpha if necessary and click **OK**.

Creating a Banner

- ✓ Click the Banner icon in the Object palette and draw a rectangle in the work area.
- ✓ In the Banner List Properties, click the Add image button and open the images you wish. You can open them one by one, or all at once.
- ✓ Select an image and set its *Transition* mode and speed, and its layout (stretch, normal, tile).

✓ Click **OK**.

TIP (!) You can use the **Watch folder** button to create a slide show in your banner object.

Creating a Direct Show media object

NOTE: This object supports all direct-show compatible file formats, as long as you have the necessary filters installed on the PC.

- ✓ Select the object icon in the Object palette and draw a rectangle in the work area.
- ✓ Browse for a media file or select a capture device from the dropdown list.
- ✓ Click **OK**.

Creating a Macromedia Flash object

NOTE: You need Macromedia Flash player installed on the PC in order to display these objects.

- ✓ Select the object icon in the Object palette and draw a rectangle in the work area.
- ✓ Browse for the flash file or select a capture device from the dropdown list.
- ✓ Click **OK**.
- ✓ Adjust its properties in the lowest toolbar if necessary.
- ✓ Right-click in a flash object and select Property 2 to preview it in a separate window on your desktop.

TIP (!) Press to show the mouse pointer on the output. Press to change its color (black\white).

Creating Power Point presentation object

NOTE: You need a full Power Point version installed on the PC in order to display these objects properly

- ✓ Select the power point icon in the Object palette and draw a rectangle in the work area.
- ✓ Browse for the *.ppt file.
- ✓ Click **OK**.

WARNING! Do not minimize the main TitleBox interface while displaying a Power Point presentation – this will make it disappear from the screen!

Creating a Shape Object

- ✓ Select the shape icon in the Object palette and draw a rectangle in the work area.
- ✓ Change the shape properties using the last toolbar above.

Creating Browser objects

- \checkmark Select the browser icon in the Object palette and draw a rectangle in the work area.
- ✓ Enter the *URL* to open and click *OK*
- ✓ You can type a new address in the last toolbar above. Press **<Enter>** to apply.

NOTE: If the page contains links that open in separate windows, they will not appear in the browser object.

WARNING! Do not minimize the main TitleBox interface while displaying a Browser object – this will make it disappear from the screen!

Creating Screen Capture Object

- ✓ Select the browser icon in the Object palette and draw a rectangle in the work area;
- ✓ Drag the Screen Capture dialog to the part of the screen you would like to capture;

TIP(!) Use the buttons in the lower left corner of the Screen Capture window to show/hide the mouse pointer and to change its color.

Automated Operation

The objects can be triggered automatically from *AirBox* or from the *TitleBox* Scheduler.

Triggering objects from AirBox

AirBox and *TitleBox* could be on the same PC or on separate PCs within the same local area network. Please, contact your dealer or support@playbox.tv for setup advice if necessary.

Templates Export

The templates represent project "translations" necessary for *AirBox* to "understand" the *TitleBox* projects.

- ✓ Create your project in the main *TitleBox* interface.
- \checkmark When ready, go to **Network** menu and select **Export Project As Template**
- ✓ The shared network folder will open automatically, just give a name to the project and press Save.

WARNING! Do not browse for other folders in the Save Template dialog! This will make your project invisible for *AirBox* and you will not be able to use it for Net control!

NetControl mode

TitleBox must run in net control mode in order to "listen" to commands coming from *AirBox*.

✓ Go to **Network** menu and select **Net Control** to run *TitleBox* in this mode.

NOTE: While *TitleBox* is in Net control mode, you will not be able to edit your projects as the main interface is not active!

TitleBox Scheduler

When *TitleBox* is running alone, you can use its **Scheduler** to automate the graphics insertion:

- ✓ Create an object, right-click in it and select Add To Scheduler;
- ✓ In the Scheduler dialog, specify the cycling rules;
- \checkmark In the objects list below, \square check the box in front the object to enable its schedule;
- ✓ Press Activate to arm the Scheduler.

BEFORE CONTACTING SUPPORT

Please, check the section below before contacting our support team! Except for the troubleshooting, it contains a description of the information we need in order to provide you with high-grade and quick support.

Troubleshooting

In case you face some difficulties with your system, please consult with the table below before looking for technical support. It contains the most common problems, explanations of the reasons, as well as possible solutions:

General

Problem:	When launching a PlayBox module, it goes into DEMO	
	version mode.	
Possible Cause:	This means you have installed a wrong module version	
	(demo version) or you have no permission for running	
	this module.	
Solution:	_Verify the following:	
•	1. Did you install the "normal" module (not a Demo	
	version)?	
	2. Did you install everything under Windows	
	Administrator account?	
	3. Do you have license for this particular module? Please, download the standard version from the Updates	
	section of the PlayBox site (http://www.playbox.tv	
	Support tab > Download section> Software Updates).	
	This is a restricted area and you should login with your	
	password there.	
Problem:	When launching a PlayBox module, an error message	
	appears: "Program needs WIBU-BOX with 250525:	
	5259896".	

Possible Cause: 1. The program does not find its license hardware USB key (WIBU-BOX).

- 2. The WIBU driver is installed improperly or not installed at all; or the library wibukey.dll is not registered.
- 3. The PC USB port, where the key is plugged, is not recognized by the operating system (Windows) or it does not work.

Solution:

- 1. Plug the hardware key (dongle) into the PC USB port.
- 2.1. Install the WIBU driver. The WIBU drivers are available under Microsoft Windows 2000 Pro/XP Pro. You can download the drivers from the WIBU site: http://www.wibu.com

Be sure you work under Windows administrator account.

2.2. Register the Wibukey.dll:

Press Start button→Run command. Type "regsvr32" <file path> \Wibukey.dll", where < file path > is the location of Wibukey.dll (it should be <device>\Program Files\WIBUKEY\Bin).

3. Use another USB port or use a PCI USB controller.

Problem:

When launching PlayBox module, an error message appears: "Program needs WIBU-BOX with 2466:5259896".

Possible Cause: You are trying to run a Network version of PlayBox module with a "normal" (end-user) hardware USB key. These keys are for local use only.

Solution:

You have to install a "normal" module if you have an end-user, local key (transparent-green key). Please, download the standard version from the Updates section of the PlayBox site (http://www.playbox.tv >Support tab > Download section > Software **Updates**). This is a restricted area and you should login with your password there.

Problem: We cannot start a PlayBox module from the network. (We use a network hardware key).

Possible Cause: 1. You have not configured your WIBU- server machine (where the hardware USB key is plugged in) properly.

> 2. You have reached the maximum number of permitted PlavBox users/ modules.

Solution:

1. Configure your WIBU-server:

Go to Control Panel→WIBU-KEY→ Server and check "Access FSB" box.

From other computers – go to Control Panel→WIBU-KEY→Network→ ServerName/IPaddress and select the name of your WIBU-server.

In the "WIBU-KEY subsystems" field, order the subsystems like that: "WkNet"; "WkLAN"; "Local (Kernel)".

Restart the WIBU-Network Server (from Start →Programs→ WIBU-KEY →Network Server) so that changes can take effect.

2. Check the number of users connected to the server: Start→Programs→ WIBU-KEY →Server monitor, select View → User View and check the number of connected users.

AirBox

Problem:	_When we start AirBox for the second time (a second	
	AirBox channel) a message appears: "Reached	
	maximum running instances".	
Possible Cause:	You have no permission for starting a second AirBox	
	channel. Probably you have purchased only one AirBox	
	license.	
Solution:	This is a licensing issue. Each separate instance	
	(channel) of AirBox is licensed separately. This means	
	that if you need to run 2 AirBox instances (channels) at	
	the same time, you need to purchase 2 AirBox licenses.	
	Contact our Sales Department for more information	
	(sales@playbox.tv).	
Problem:	After plug-in the hardware USB key, AirBox freezes.	
	The video window of AirBox does not refresh properly.	
	(PCs with AMD processors).	
Possible Cause:	It is caused by a problem with the USB key and the	
	USB port appearing on the KT-133 VIA chip set. This	
	particular problem shouldn't arise with newer VIA chip	
	sets.	
Solution:	Add a PCI USB controller card at your machine.	
Problem:	Sometimes the clips are starting with wrong audio or	
	without lip-sync.	
Possible Cause:	You have included in the program a file, which does not	
	contain an audio stream.	
Solution:	Please, avoid using such files.	
Problem:	Sometimes after pressing the CUE button, a black	
110010111	frame appears, instead of the first frame of the clip.	
Possible Cause:	1. The clip begins with black frames.	
1 obbibie Cuuse.	2. At some hardware configurations, the CUE function	
	doesn't always work properly. It is machine-dependent.	
Solution:	1. Make sure, that the clip's first frame is not black.	
Bolution:	Edit the clip with Clip Trimmer, to trim the black	
	frames from the clip beginning.	
	2. Go to Options→ Settings dialog box → Cue Delay.	
	This option defines a small delay before pausing on the	
	first frame. Please, try to find the best one for your case.	
	inst frame. I lease, try to find the best one for your case.	

Problem: The HDV files inserted in the playlist are marked as

unsupported file format.

Possible Cause: Probably your AirBox is not HD-capable.

Solution: Upgrade to AirBox HD.

CaptureBox

In case you have some difficulties with the system, please consult with the section bellow before contacting us. It contains the most common problems, explanations for the reasons, as well as possible solutions:

Problem: When launching print-to-tape function, VTR does not start recording and shows error E-03 (only for Matrox DigiServer/SDTI).

Possible Cause: 1. VTR's input is not properly commutated.

Both devices are not properly connected into a closed circle (VTR→DigiServer and DigiServer→VTR).

Solution:

1. Make sure that the DigiServer's SDI/SDTI Out is connected to VTR's SDTI In.

2. Make sure the DigiServer's In is not commutated.

<u>Problem:</u> VTR is not reacting to the commands from CaptureBox control panel.

Possible Cause: 1. VTR's control cable is not commutated.

2. RS-422 / RS-232 converter is not supplied.

3. The VTR is in local control mode (Local indicator is on).

Solution:

1. Make sure the control cable is properly connected to both the VTR and computer.

2. Make sure the intermediate converter device is power-supplied (its adapter should be connected to the electrical network).

3. Switch the VTR control to Remote.

DataBox

In case you have some difficulties with the system, please consult with the section bellow, before contacting us. It contains the most likely problems, explanations for the reasons, as well as possible solutions:

Problem:	If we create a new record to the database from a PC over the LAN, a windows message appears: "Unable to complete network request to host. Failed to locate host machine. The specified name was not found in the host file or Domain Name Services".
Possible Cause:	This happens when the drive which contains the database file (DataBox.GDB) is not shared as a single letter coinciding with the logical device letter. This is a requirement of the Interbase engine.
Solution:	Make sure that the drive which contains the database file (DataBox.GDB) is shared as a single letter coinciding with the logical device letter. For example, if the database file is on C:\ProgramFiles\DMT\DataBox, the share name of this drive should be "c". Then the remote station will find the database.

IMPORTANT: If the information in this manual does not answer all your questions, please check our advanced user's manual as well. You can download it from our website – www.playbox.tv > **Support** tab > **Download** section > **PlayBox Literature**.

If you could not find a solution of your problem among the ones listed above, please describe it and send an e-mail to the following address: support@playbox.tv.

Please, check below the additional information you must provide in order to get speedy and efficient support.

PlayBox User Registration

Please note that our Company's policy is not to provide support to unregistered users! In case you have not registered yet, please do so at the first possible convenience. Visit www.playbox.tv, press Register now! and follow the procedure. Please note that only Licensed users have full access to all sections in our website.

PlayBox Doctor Report

The *PlayBox Doctor* gives the opportunity to generate easily complete problem reports. It is integrated in each *PlayBox* module. It can gather almost all the information needed for *PlayBox* support team in order to provide you with the prompt answers, without asking too many questions about your system configuration.

The fields you have to fill-



in are self-explanatory and the information is auto-collected at startup. You must fill in your name, e-mail, company and select your country from the list. The following two fields are filled in automatically. Choose the hardware platform you use in this module and specify the installed driver version. As soon as you have selected the relevant entries from the drop-down lists to the left, push the *Apply* button to insert this information in the report.

In the *Diagnostics* field to the right there is a list of the most common problems - you can choose one of them or you can describe your situation and queries manually in the *Additional information* field. Push the *Add* button to insert the problem description in the report.

Press this button to scan the entire system. The *PlayBox Doctor* will generate a list of all files stored on your HDD. Include this information in your *PlayBox Doctor* report if you suspect that some files might be disturbing the smooth running of the module.

PlayBox Files Scan If you scan *PlayBox* files and add this info to your *PlayBox Doctor* report, we could understand whether you have some missing DMT's files or you have some extra files that should not be in this patch on your computer. Sometimes these files could cause problems.

Using the *Get Filter* button, will add to your report information about the filters used in the running module.

When sending us screenshots, please, use the *Screenshot* button instead of sending us separately prepared pictures. Just press this button and *PlayBox Doctor* will minimize automatically. Then select the window you want to shoot and go on with the *PlayBox Doctor* report.

If you have problems with an MPEG file, press this button and browse for the file. Thus, we will receive information about its structure.

Attach any documents, pictures or files that you would like to send to us. If your attachments are bigger than 4 MB, please upload your files on our FTP. You will have to contact us on support@playbox.tv to get an up-loader name and password.

Automatically attaches the log files of the currently selected module. This helps us trace the history and behavior of this application.

The **Get Base** button is active only when you choose **DataBox** in the **PlayBox** module field. This provides us with information about the database open in your **DataBox** module.

NOTE: Do not forget to fill in your contact information and send us the generated report directly (if internet connection is available) or save it as a file and send it later.

Additional Information

Screenshots

Take screenshots of any error messages that might appear during operation. They carry valuable information that could help us in solving your issues more efficiently.

Steps to reproduce

Please, try to remember the steps before getting the error message or other issue. This will help our support team in reproducing your situation in the test lab.

Any detail, such as used file format, TV system (PAL/NTSC), external device brand, etc. is important to us.

Collect all the information requested in this section and send an e-mail to support@playbox.tv. Your request will be handled as soon as possible with the utmost attention by our support team.

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