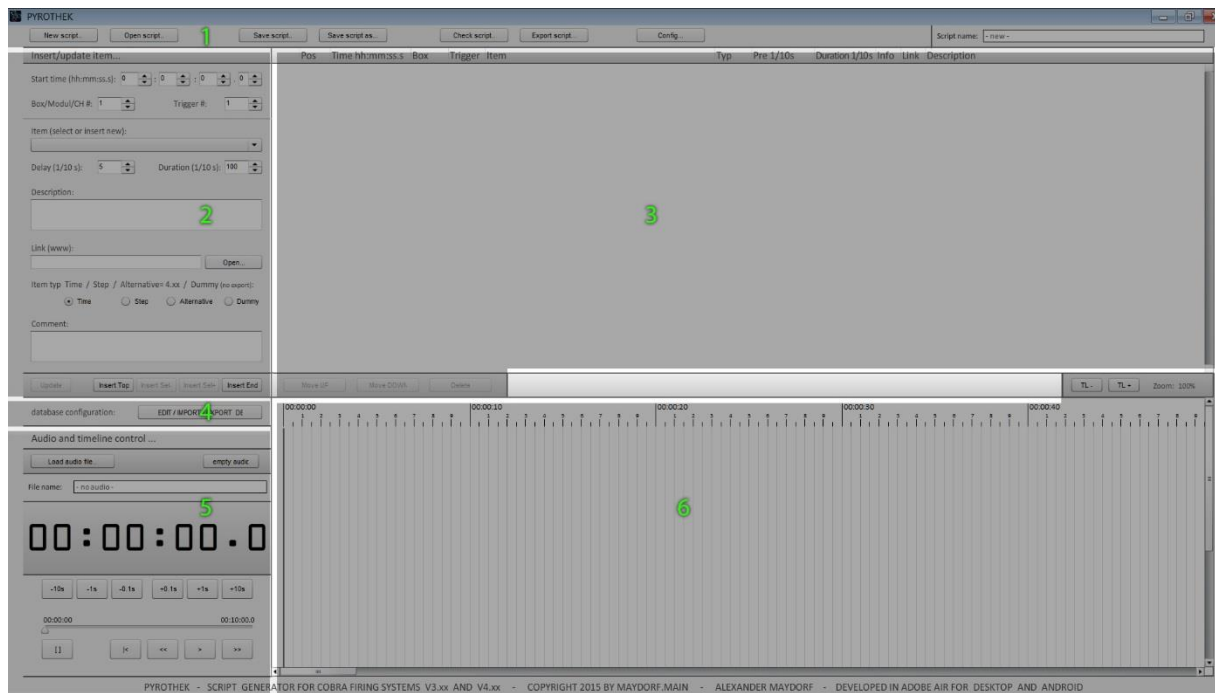


PYROTHEK – USER MANUAL 1.65

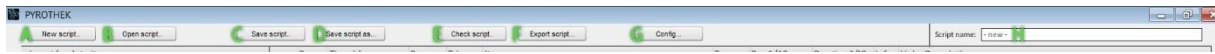
It's so simple – let's start:



The main screen is divided in 6 major parts. Each part has his own functionality and is 'separated' from the others. Keep this separation in mind and you will understand some operations faster.

- 1 the main menu bar
- 2 the item edit and insert part
- 3 the item and cue list
- 4 the database call button
- 5 the audio and timeline controller
- 6 the timeline

1 Main Menu Bar



The title bar includes 7 buttons. Each performs easy program operations.

- A ReStarts the program. Clears the item list, timeline, audio settings ...
(H will show “- new -“)
- B Open a saved script file. Scripted files (*.scp) includes item/cue-lists and audio settings. Saved items are separated from the database. So if you open an old script file and some items are maybe not found in the database anymore – no problem – the items will listed correctly. If you want to save the items again in the database – just double click the item in area “3” – than click “UPDATE” in area “2”. A window will pop up and ask you, if want to save the item in the database – just click “yes”.
- C Save a script file. If you not already gave a name, it will ask you for a new filename. There is a bug in ADOBE AIR which hides the given file extension. Please use “*.scp” as file extension – this helps you opening a file.
- D Save a script under a given name.
- E If your script is ready or almost – you can check the script against simple errors. Because the script editor not allows a lot of errors – mostly the script is well formed - only some error will tested and shown. Also – if you have only green lights: Check the script in a pre-run at your R182 before firing!
- F Export you script to an USB drive or any other storage. More information about exporting later.
- G Opens a configuration screen with some more basic settings.

2 Main Menu Bar

Insert/update item...

Start time (hh:mm:ss.s): 0 : 0 : 0 . 0

Box/Modul/CH #: 1 Trigger #: 1

Item (select or insert new):

Delay (1/10 s): 5 Duration (1/10 s): 100

Description:

Link (www): Open...

Item typ Time / Step / Alternative= 4.xx / Dummy (no export):
 Time Step Alternative Dummy

Comment:

Update Insert Top Insert Sel- Insert Sel+ Insert End

Inserting a new item is very easy. Just select the time position – where you like to insert the item.

The time code will show hours – minutes – seconds and 1/10 seconds.

To adjust the values you can insert values directly or use the arrows at each box. You can also click 11 times at the last right box to adjust 1 second and 1 1/10 second. Every time when you reach a limit - 59 seconds or 59 minutes or 9 1/10 seconds – it will increase all other values to the next correct time Code.

Select a box/modul/channel number and a cue number. The box channel number is the channel of each R18M. The cue is a number between 1 and 18 for each cue at each channel.

Give the item a name.

To show the item correctly – enter an ignition delay time and the duration time of the effect. The delay time means the time – after ignition through the R18M – until the effect is shown. The duration is the time the effect is visible. So – if you have an shell bomb – there maybe is a short delay while the quick fuse is burning and then followed by the lift off - all together you may have a delay about 3.5s – then the effect is visible for another 3 seconds. Delay=35 / Duration 30 (values in 1/10 . seconds). Later in your timeline you will see the item with a total length of 6.5s – the first 3.5s are brown colored.

You can input some more descriptions to the item. For instance when you not using a single item – I often have sub-groups of items – connected with a fuse – and only one e-match. So descriptions can help you...

You can insert a link to a video file or website or.... Video files with extension mp4, mov, avi, mpg, 3gp or flv will be played in the built-in video player. If you link to a web file – but don't want that is played in the built-in player – just add "/" at the end.

Selecting the item typ. The basic function is a normal item "T" – time controlled. If you like to use STEP mode in combination with sub timelines in your script – you need the "S" button. Just build your list. If you export now in STEP & TIME mode – every cue needs to be started by pressing STEP

button – like normal STEP mode. If you change the type of one item in the list to “S” – it will be automatically fired after the previous item. The time will be calculated from the previous item to the item type “S”. So if you have an item at 00:00:19.0 and a second at 00:00:21.0 and you set the second item to type “S” – it will be automatically fired 2 seconds after the first item – which you fired by pressing STEP. You can add a third or more items type “S” and they all will fired automatically after the last type “T” item.

If you use firmware 4.xx you can set type “A”. These item will be added to the script in order you put them in the timeline (always sorted by time!). The time position themselves does not matter. In firmware 4.xx you can define a button which fires an alternative item or with every push to the button the next item in the list... This function is helpful: imagine you have a show running and some effect does not ignite. Skipping the effect will destroy your whole choreography – instead of skipping just press the defined alternative button and an effect – placed somewhere – while start and fill the time until your script normally continuous.

In some cases you may be like to insert some item, which are ignited by connected fuses or whatever – but have no channel or cue at a R18M. Just select type “D” dummy. These item will not exported to the script and they will not noted while error checking.

There is an additional field for more comments. The comments will directly shown in the timeline while hovering with the mouse over the blue “INFO”. I use these comments for information about the show or script – not the item!

You have 4 possibilities to insert the item: If you have selected an item at area “3” (item/cue list) you can press UPDATE – and the selected item will overwritten by the values in area “2”.

You can press one of the INSERT buttons to place a new item to the list – at the beginning/top – at the end/bottom, before a selected item in area “3” or after...

Once the item is insert – it suddenly appears in the timeline “6” too.

If you insert a item the first time – a popup window will appear and ask you – if you want to save the item in the database. The only difference between saved items – is the item name. So choose good item name, which really let you identify your item – like SB 6 Golden Willow – for a “6” shell bomb with golden willow effect. After saving an item in the database – the item is available for quick select at the item title field.

Filling the database is a basic step for better work later.

3 ITEM / CUE LIST

Pos	Time hh:mm:ss.s	Box	Trigger	Item	Typ	Pre 1/10s	Duration 1/10s	Info	Link	Description
001	00:00:00.0	00	01	Goldene Dahlie	T	5	250	LINK	INFO	große goldene Dahlie
002	00:00:02.0	00	02	Goldener Wirbel	A	10	250	LINK	INFO	große goldene Dahlie
003	00:00:06.0	00	03	Silber Wirbel	T	5	200	LINK		silberner Wirbel Aufstiegt
004	00:00:08.0	00	08	Silber Wirbel	T	5	200	LINK		silberner Wirbel Aufstiegt
005	00:00:10.0	00	04	Kometenschweif	S	10	100		INFO	Kugel mit Schweif
006	00:00:15.0	00	05	Kometenschweif Silber	T	10	100		INFO	Kugel mit Schweif
007	00:00:20.0	00	06	Silber Wirbel	D	5	200	LINK		silberner Wirbel Aufstiegt
008	00:00:21.0	00	07	Silber Wirbel	T	5	200	LINK		silberner Wirbel Aufstiegt
009	00:00:25.0	00	09	Silber Wirbel	T	5	200	LINK		silberner Wirbel Aufstiegt

The item/cue list will show you, your inserted item as a list with all important information. The first unnamed column indicates the ignition state. If the time at control “5” is reached – the box will appear red to indicate – it is fired.

The position is just a number. Please keep in mind: The export will always sorted by time! But if you work with alternative items – you can put them at the end or at the beginning – just where you like to see them.

All other values are corresponding to the item insert area “2” (PRE means delay).

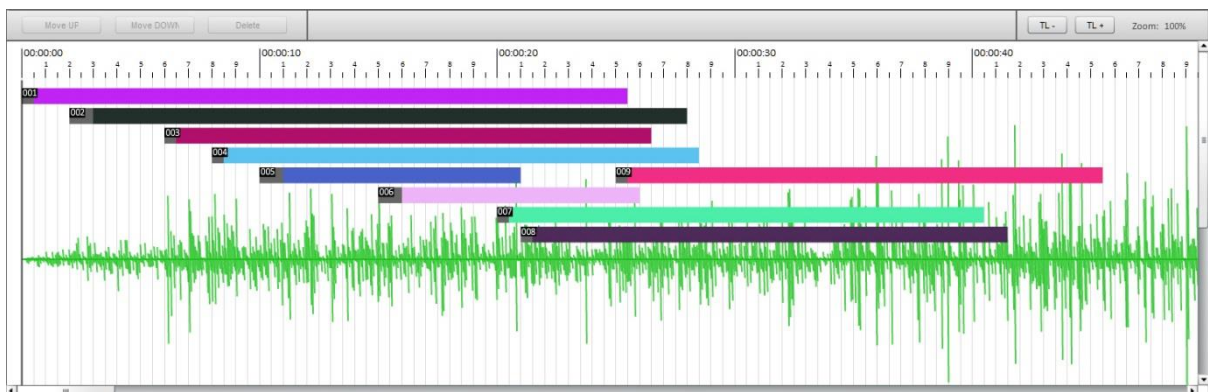
The blue INFO or LINK button will show you – here is a link available or more information. Just click on LINK or hover with you mouse over INFO.

The last column will show a colored field. The color will corresponding with the item in the timeline “6”. The colors will be chosen by random when you first start the program. Sometime it’s not the best choice... just visit the CONFIG menu “1-G” and press ReColor – a new color map will generated. Do this so often you like until you find a map which you like. The new map will be used for new and old saved script.

Click an item will select it. You can see the selection in timeline “6” too. Double click an item will also select it AND load it to insert area “2” – for updating or make copy of it.

At the bottom of the item/cue list you will find 3 buttons. You can move a selected item up and down in the item/cue list – you also can delete an item from the list/script/timeline.

6 TIMELINE



The timeline will show you each single effect. You can easily identify each item with the corresponding color and list position number. If the upper right corner you see to buttons – here you can zoom in and out. The zoom will only work in horizontal direction – so you always just compress the time. The timeline moves items to fit spaces:

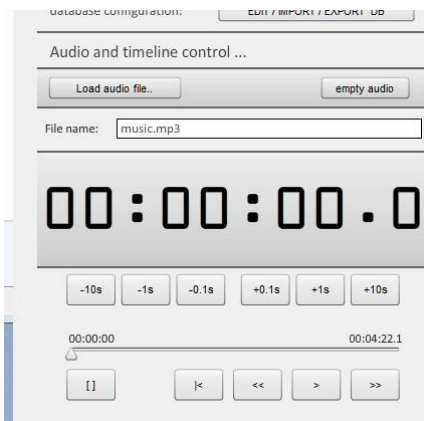
It was a fight ;-) Showing each item in a separate row or filling spaces with arranging the item... After building a script with 50 items it was clear... the sometimes more difficult view with arranged items was the better choice instead of long long list, where you have to scroll...

Click an item to select it, double click it to load it into insert area “2”.

(!) If you select the item by clicking it at the timeline – you can now move the item by using the arrow keys to left or right. With every key press the item will be moved 1/10 seconds to left or right. The value will suddenly updated in item/cue list and script. This makes arranging easy and fast! (press shift + arrow to move 1 second)

If you have an audio file loaded – you can see the spectrogram behind you items.

5 AUDIO TIMELINE CONTROL



Here you can control playing the timeline. It works like a simple audio or video player. Just press “>” for play and you can see the timeline indicator running. If an item start point is reached you can see the corresponding indicator in the first column in item/cue list “3” – appearing read – which means it’s fired.

With the slider you can run and jump, with the buttons you can tune step by step.

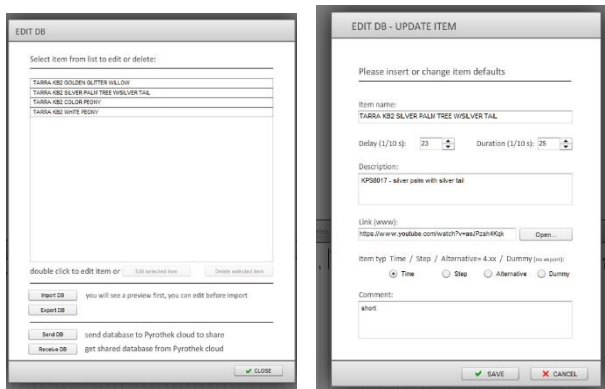
If no audio file is loaded – the slider and all buttons are using the maximal length of the timeline (default 10 minutes). You can change this value at configuration menu 1-G.

If an audio file is loaded – the length of the audio file builds the base for the timeline. First I was not sure, if this is enough, because maybe you have a final effect after a song. Of course it will work – but you can’t easily test it here. But later I realized, that all my songs I use – are prepared in some audio software – because it’s a mix of different songs or I need some more space at the beginning or whatever. Instead of a lot programming to place the audio file at any position at the timeline – you have to prepare your music in any audio software and put some space at the beginning and end – if necessary...

If you like to delete the inserted audio file – just press “empty audio” in the upper right corner.

The audio player works perfect with MP3 files. Maybe there are some compression and file standards which are not supported – but at this time – I did not found one.

4 DATABASE



In area “4” you can reach the database editor.

In the first appearing window you can see a list of all your saved items.

If you click an item to select it – the delete and edit button will be enabled.

Just click the delete button to erase the entry from the database or click edit to change some values of an item.

If you double click an item – an editor will appear, where you can make changes to the saved version of the item. The function and values are the same like in area “2”.

Lower left you have 2 buttons to IMPORT or EXPORT a database. Please choose “*.db” file extension for saving/exporting. You can manage as many database files as you want – but you only load/import one! Since v 1.6 you can append database files and build larger databases from different smaller ones. First the import/export function was just to bring items from one installation to another – or from device to device. Later I generated different databases for different kind of shows. If I prepare a small consumer firework – I don’t need 6” shell bombs...

Before the import of new data starts – there is a preview window. Here you can walk through the whole database. Any change you make here – is saved – also if you delete an item. If you finally click IMPORT – the data with all your changes will be imported.

Take care of the “APPEND” checkbox! Is this checked your import will be added to your existing database. If you uncheck this option – your current database will be overwritten by the new import data!

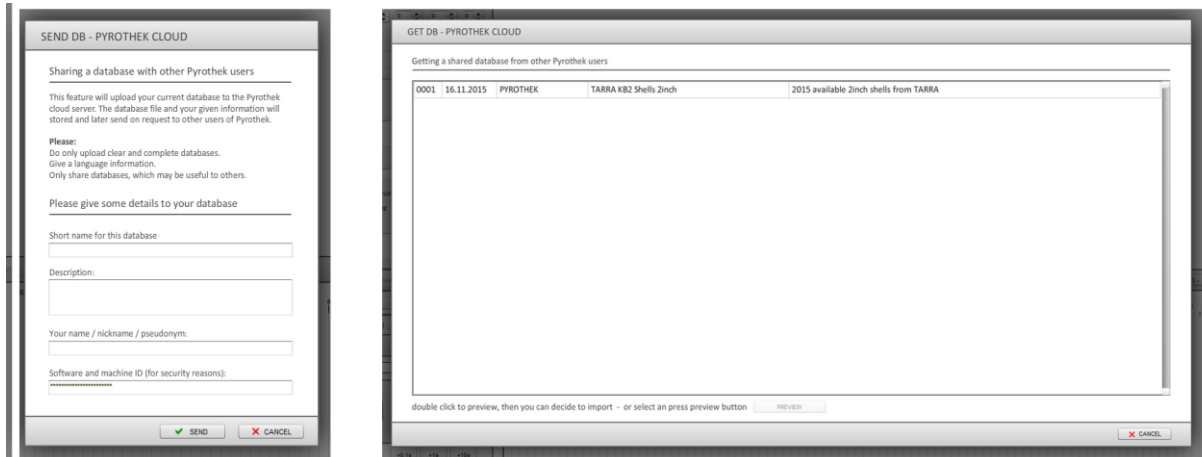
Entries which already exist will be renamed like Windows does by adding (1), (2),

The database or the saved item in the database – are not connected to your script files! So anytime you open a script file – the information about an item will only be read from the script file! So maybe you have an item in your script, which is with this syntax or values not in your database – but you will never have a “out of time” script file – which can’t find the item, because you changed the database!

New in v 1.7:

Finally I also included a cloud server for sharing databases.

Now it's possible to share own databases or load databases from other users.



The upload (left) is very easy:

- give your database a descriptive name
- describe your database a little bit more closely
- tell other users a name or nickname

...click "SEND"!

The database will be uploaded and published immediately. Please, do not upload trash! I don't like to cancel this function or check any upload before I publish it.

Right side – you see the Download area. It's a list with descriptions of any uploaded database.

If you like some entry – just select it and click "PREVIEW" or double click it and the preview window will open. The following window will work like the IMPORT preview I described above:

Walk through the items of the database, make changes if necessary or delete items – then IMPORT!

Take of the "APPEND" function!

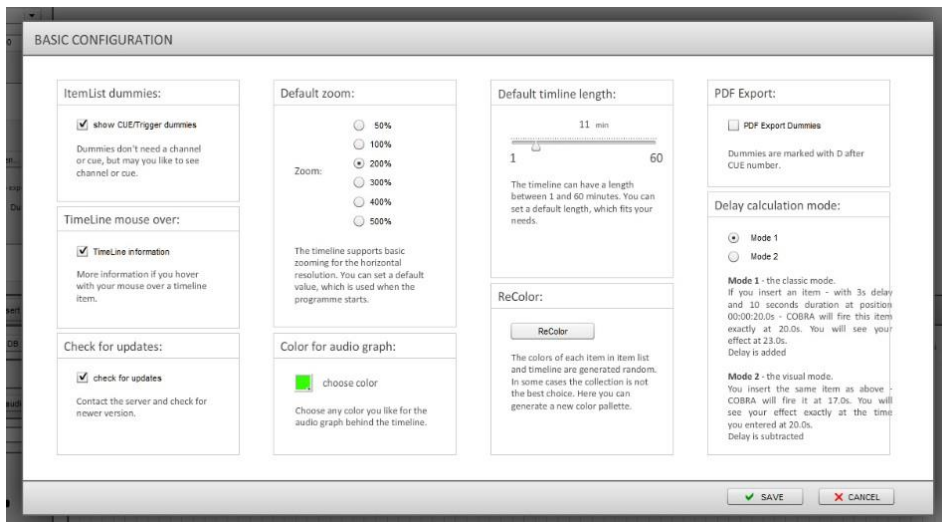
1-G CONFIG

It's growing up...

ReColor – generate a new color map for items.

Zoom – select a default zoom value for program start.

Timeline length – select a default length of your timeline. Always use a value that is not much higher than your real show. It's easier to navigate through the timeline, when it's shorter.



The little information at the right side is more a place holder for coming adjustable values. But it also describes something I tried to describe earlier in this manual... ;-)

UPDATE: 1.5 /1.6

Lower left – you will find 2 new options: One is controlling the mouse-over effect at timeline window. If you don't like the information which appear, if you hover with your mouse over an item in the timeline, you can turn off this function here.

We also check for updates now. If you don't like – you can turn this off too. Be happy with your old and buggy version... ;-))) Now you can also change the color of the audio graph in background.

UPDATE: 1.7

“show CUE/TRIGGER dummies”

Since you can work with dummies – for items you not firing by COBRA but like to see in the timeline – sometimes it's a little bit confusing – if this items still have a cue number and channel. So – with this function you can enable or disable – showing this information.

“PDF EXPORT”

Select if you like to see dummies in your PDF export or not.

“Delay calculation mode”

Okay – I designed the program like this:

I have an item – a 6” shell. The effect is 5 seconds visible (duration) and the shell need 4.2 seconds to reach the sky (delay).

Now I put this item somewhere at the timeline. I select a time nearby my current timeline position.

Then I use the arrow keys to place the item at the exact position. (normal arrow key: +/- 0.1s / arrow key with shift: +/- 1.0s).

So – if I like to see my item exact at 30.0s on the sky – I have to place it at 25.8s.

$25.8s + 4.2s \text{ (delay)} = 30.0s$

This is “Mode 1”.

Maybe you know exactly – what time you like to see an item. Or you just like to forget about taking care of delay times. Then use “Mode 2”.

Same shell bomb as above: 6” – duration 5.0s, delay 4.2s – item on sky: 30.0s.

Now just select 00:00:30.0 for insert time and insert the item.

The item will automatically placed at 25.8s at timeline – starting with the grey delay. The effect/duration (colored part) will start at 30.0s for another 5.0s duration.

But: In the item list and everywhere – all times will be handled as “effect visible” times. So in your item list you will still find 30.0s for the 6” shell bomb.

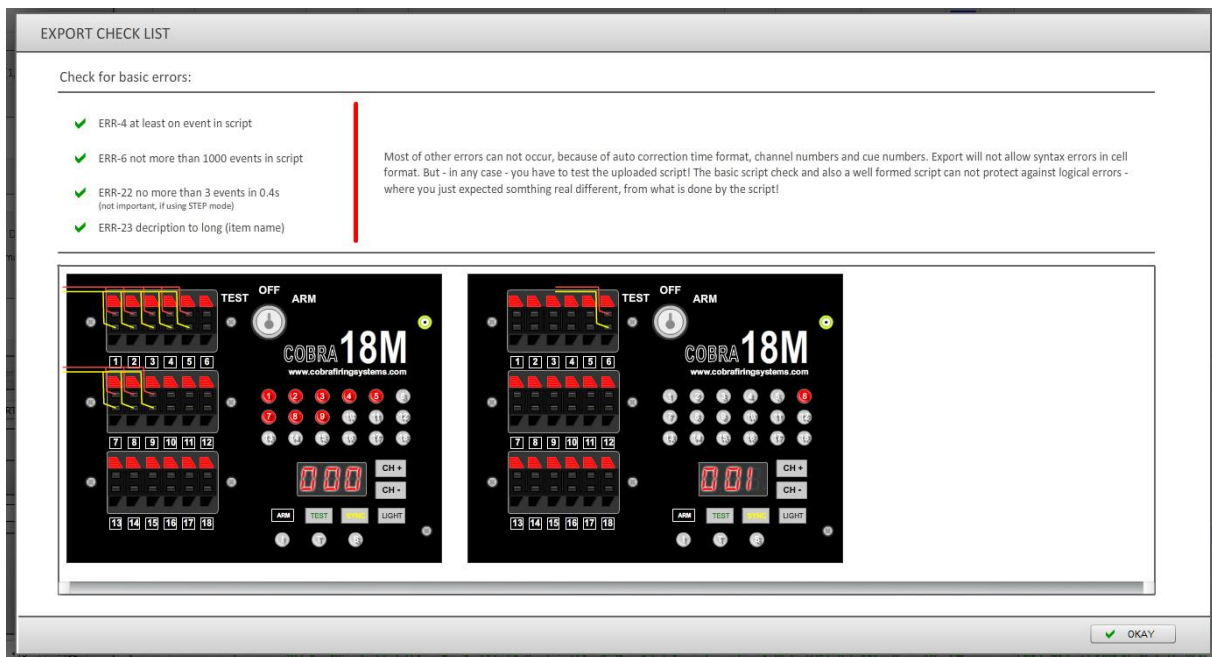
The correct times will be calculated when exporting!

1-E ERROR CHECKING

Because the software at all builds a well formed script, we check only some basic errors – humans can make.

Error checking is not a guarantee for a working script! Always try your script after uploading to the 18R2. Never run a script without a test disarmed!

NEW – with version 1.5:



WYSIWYG – used units will be shown at check window. The channel is set to the value you selected and all triggers/cues are shown, which used in your script. They are indicated by the LED light and a “cable” at the output panel left.

The units are fully operating – so maybe in another update I build in a complete simulation of the whole script!

1-F EXPORT

YES – there is also an export function for scripts.

EXPORT EXCEL CSV

Please select file features - STEP 1 TO 5:

1 Hardware version: 3.xx 4.xx

2 Script flow: Time only, all cues are fired by selected time from timeline
 Step only, cues are fired by pressing STEP button
 Time & Step, cues are fired by STEP button, sub cues supported

3 Trigger Channel: Trigger Button: Confirm Button: Return Channel: Alternate But:
4.xx: Deadman 4.xx only

4 insert description text (if available) after each cue event in script file
 insert info text (if available) after each cue event in script file

5 create new file or appen to existing file: new append
(multi scripts in one file are supported, but choose unique triggers!)

EXPORT CANCEL

First of all: I don't support all functions of firmware 4.xx, some values are given/set as default.

Export works in 5 little steps:

1. Choose your firmware: the script syntax is a bit different in 4.xx, there are also some more features
2. Choose how your script will be run in the 18R2

TIME only – the standard – all items/cues will be exported in order by time and will be fired automatically by time

STEP only – if you like to hold the control in your hand – in STEP mode you have to press STEP button each time you want to fire the next timeline event. The export is still made in order by your timeline settings! If you have in your item/cue list an item at position 2 with 00:00:10.0s and an item at position 3 with 00:00:05.0s – the last item will be fired first, because it will be exported first (order by time!).

STEP & TIME – the tricky mode. This mode is perfect if you have sub timelines. So maybe you have 3 major parts in your show. Each part you can start with a single press the STEP button. But after pressing the STEP button, a little timeline will start and will automatically fire some more items/cues time specified times. To control this feature it is important that you understand the sub timelines. Every normal item type "T" will exported as "STEP" item – you have to press STEP to fire it. If one of your type "T" items is followed by an item type "S" –

this item will be fired automatically. The delay is the same time between the “T” item and the “S” item. More items can follow – the time will always calculated the same way.

3. Select basic values to start the script and make additional function work.

I always choose a channel. Later if you like to start a script you have to set this channel at your 18R2.

Choose a trigger button. After (if you) you select your channel you have to press the selected button to start the script. The combination of both makes it a bit more secure to find and start the script – of course you have a security key – but maybe the developer forgot about this... ;-)

You can select another button which you have to press in combination with the second one. More difficult – remember – you have a key!

DEADMAN button and functionality: with all respect - I can't say anything to this. Maybe there is this one lonely guy somewhere on an island far faraway – who needs this stu..... There are much more interesting function I miss – but ...later!

The return channel means, when your script is finished the R182 will jump back or jump to this channel. This is helpful, when you work with more than one script at one time. So you fire your first script – it ends – and brings you direct to the next channel where you push the trigger button to start the next script. If you make real big shows this helps you to have smaller and easier script.

You can also use the TIME & STEP mode the generate the same effect.

The alternative button defines a button you have to press to fire items/cues you have marked as type “A” alternative. These are fillers or replacements for problems during your show. It's a good function!

4. If you still be a Excel or editor friend, you can let the program insert all your descriptions and comments to the script. Each item/cue row will be followed by your description. I don't know if the COBRA ANDROID App will read comments – but they are in the file – be happy with it...
5. Since you can have more than one script in your COBRA you need to store more than one script in one file. The append feature helps you to generate these files. Every time you choose append and an existing file – the “END” command will removed – the new script will be added and the “END” command will be insert again – but at the last position. To make sure that this works – you have to select a unique combination of channel and trigger buttons for each script.

Just press export – use the one and only acceptable filename “cobra.csv” and export your script. Save it to an USB drive, upload to your 18R2 and try it!

That's all for the moment.

More features will come. If you have any ideas and wishes – just tell me.

E-Mail: app@pyrothek.com

TO SCOTT:

Maybe some ideas just to think about:

More and more features are coming to your great COBRA system.

In my eyes it gets harder and harder to configure, setup or change basic stuff or coming functions.

I remember my RFID readers, BARCODE readers or telephone systems. Why not using the numbers to enter codes for adjusting values.

Like:

STEP	Button -	to enter setup mode
1234	Button -	to enter light brightness setup mode
5	Button -	the new value for brightness
STEP	Button -	to confirm

....

To have all in this format – changes are easy and clear. Now I have to think about button combinations, holding times and and and...

Imagine, how easy it is to setup any coming feature....

And – the first thing I missed:

If I select a time delay for AUTO-FIRING – for instance 60s ...

I start AUTO-FIRING from 1 to 18...

Now I watch my show and now - I LIKE TO USE THE STEP BUTTON, to shortcut the running time!

So I can make a simple show without a script and can use the fabulous 18R2 as a stopwatch to decide when to start the next cue.