Title: (avab)
Creator: Adobe Illustrator(TM) for Wi
CreationDate: (94-03-06) (18.56)

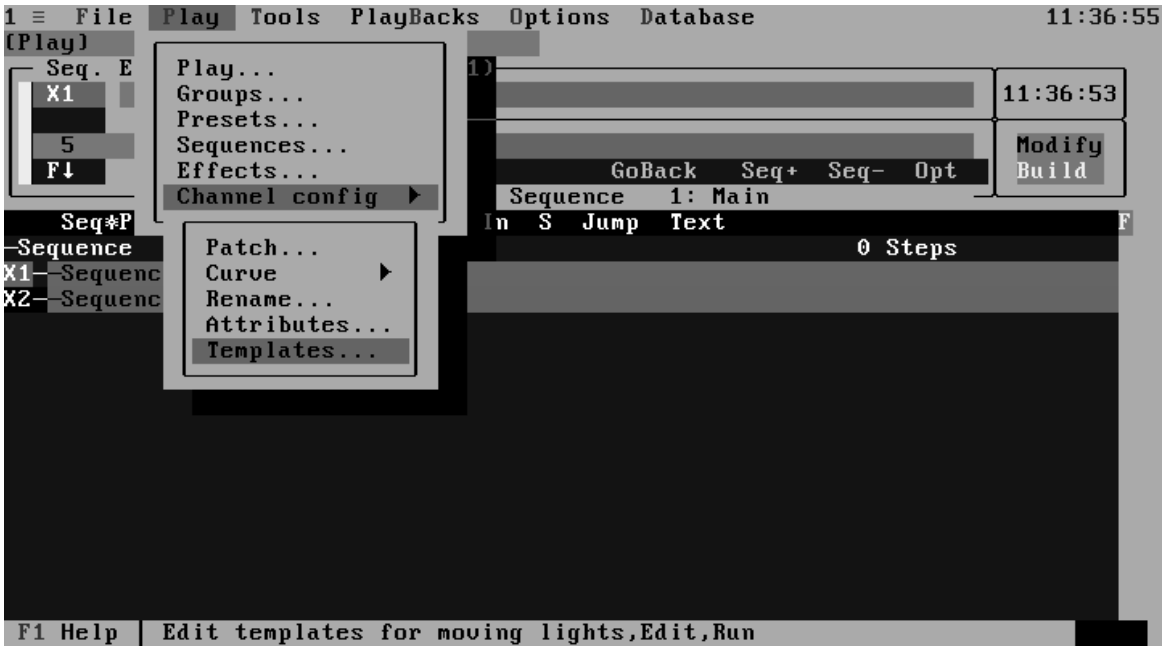
Whatós a template

A template is a description of the physical properties of a device. By making this description in the **VLC** program you will have control of the device in **VLC**.
The template will have all the information about how your device is to be controlled. Once the template is made the control of your device can be assigned to a channel by an attribute. Thereby freeing you of the wearisome task of having to remember which DMX channel controls what in your device.

How to make a template

1. Start the **VLC** program.

2. Go to Templates in Channel config. in the Play menu.



3. When in **Templates** press *Insert*. This will give a line saying **Mov templ 0 0 0 0**. Give the **Mov templ** an **ID** number that is 1000 or higher. **ID** numbers below 1000 are reserved for AVAB made templates.
This **ID** is necessary when you have more than one template for the VLC to be able to separate between the templates.
Press *Shift+Insert* (or **Insert subobject** in the **Local menu**) for inserting a subobject. The line should now read **Mov templ 1000 0 0 1**.

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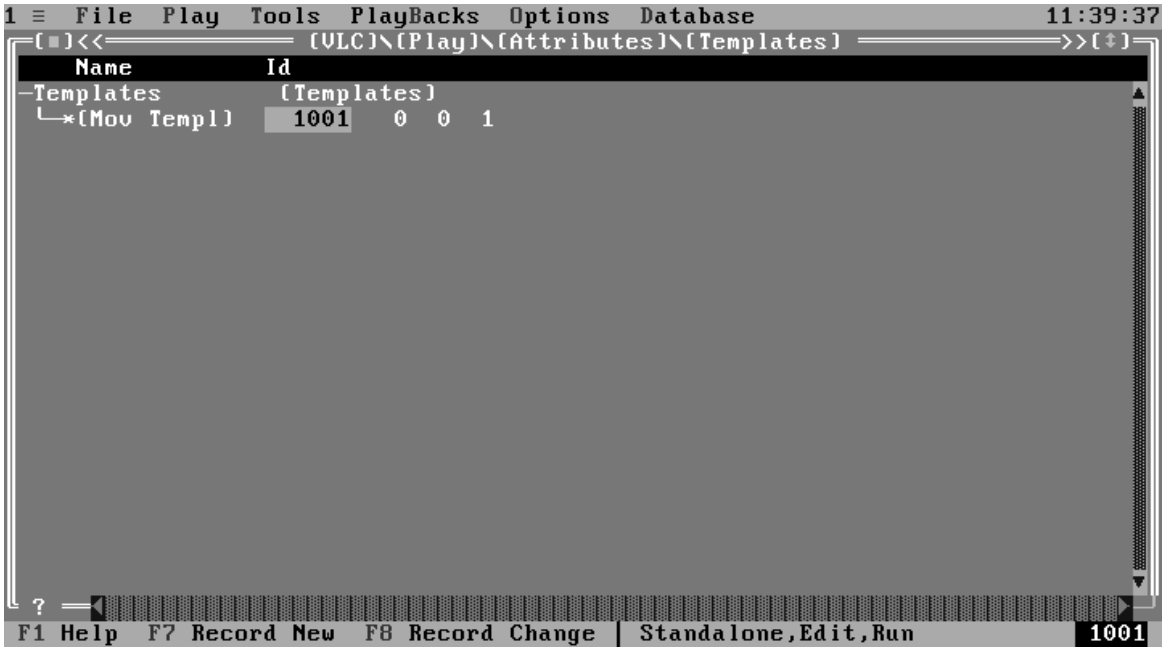
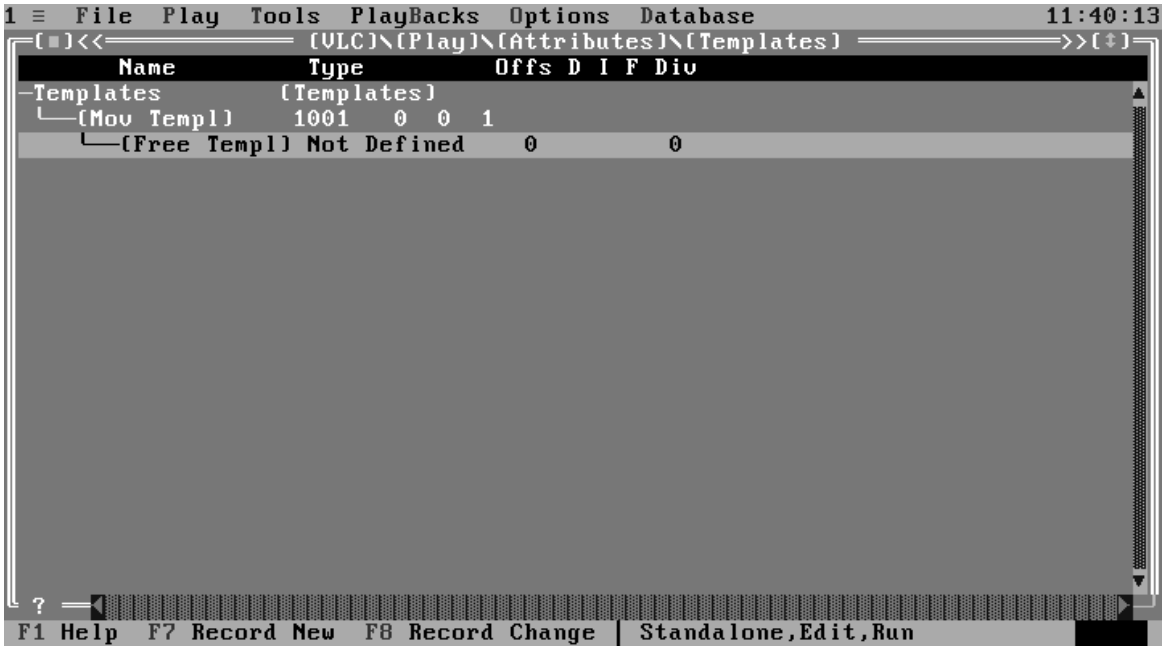


4. Expand the line to view the subobject by pressing *F9* or the **EXP/COMP** key on the console, or double-clicking on the star with the mouse.



5. Click on the **Not defined** square to choose the parameter your device is using.
These parameters are ~~assig~~predefined so that the **VLC** program will know how and what to control in your device.
You can also name the parameter by clicking on the **Free templ** square.

Most of the alternatives are self evident, like **Pan**, **Tilt**, **Focus** and so on.

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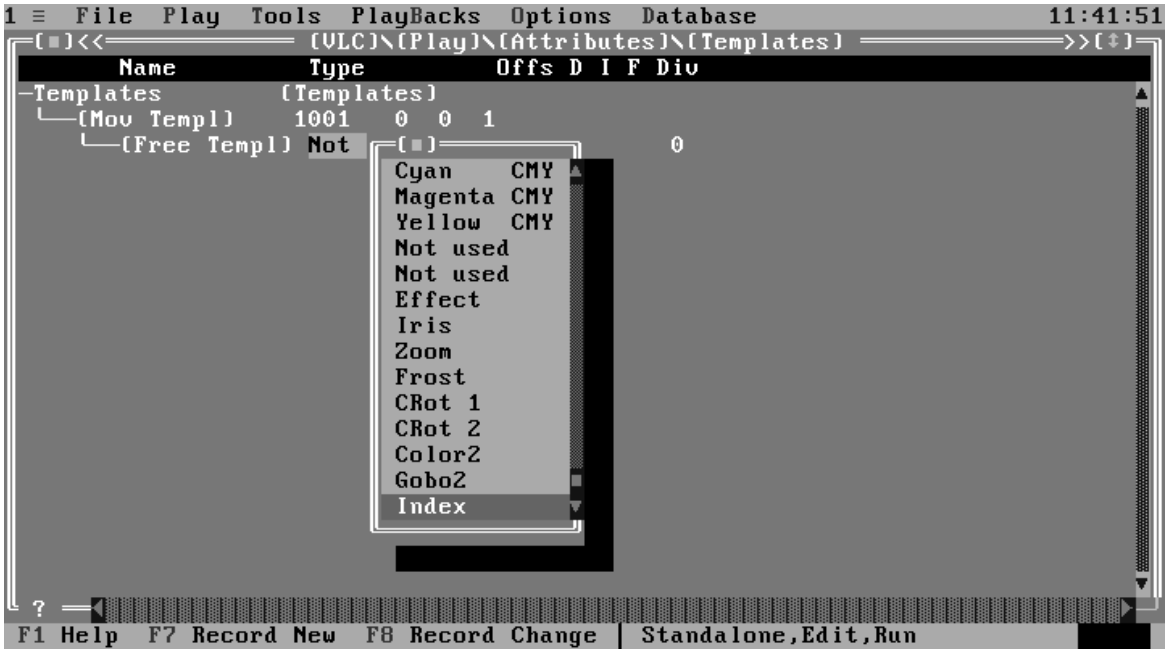
Color1 and **2**, **Gobo1** and **2**, and **Effect** are for controlling color, gobo or effect wheels.
Dimmer is for the devices that have a dimmer function. This parameter will connect the dimmer function to the channel that will be used for controlling the device.
System is not fully implemented at the moment.
RGB and **CMY** parameters are for controlling these particular color mixers.
CRot 1 and **2** is used when you have the rotation speed of a color or gobo wheel controlled from a different channel than the wheel itself.



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6. Insert as many parameters as you need and give the offset addresses they should have according to the manufacturer of the device. The offset addresses are the internal addresses your device is using for controlling its functions, **not** the DMX addresses.
VLC starts its offset count on 0, not on 1.
For example the VariLite5 uses internal addresses 1 to 7, where internal address 2 is for controlling **Pan** and internal address 3 is for **Tilt**.
This means that to control the VariLite5 in **VLC** you should give **Pan** the offset address 1 and **Tilt** the offset address 2.

There is a line of letters behind the offset address that you can tag by clicking.

F=fade, for having a fading movement between positions. Since the device is controlled by DMX it will have 256 possible positions for each of its parameters. To avoid a ~~movement~~jump between two positions this provides a possibility to have a smooth fad~~e~~ing movement between these positions.

I=invert, 0 input is 100 output and vice versa. For example when ~~a shutter is closed on 0~~**Pan** goes from left to right with increasing input values for the parameter, and you would want it to ~~be open on 0.~~go from right to left.
You can obviously not change the way the device works, but by tagging **I** the output from **VLC** to the device will go from 100 to 0 when you input values from 0 to 100. This means that **Pan** will go from right to left with increasing input values for the parameter. This is useful when you have to place a device using **Pan** upside down or facing towards you, which will invert the normal behavior of **Pan**.

D=double precision, in case of 16-bit resolution of Pan and Tilt i.e. two DMX channels control Pan and two DMX channels control Tilt.

There is also a parameter that is called **Div**. This is for setting a dividing factor for the value incrementation speed of your joystick or mouse.
For example, when your device is slow or extremely fast you may have trouble controlling it with the joystick or the mouse. With **Div** you can downgrade the speed of your joystick or mouse and thereby enhance your control.
This only works when you have 16-bit resolution (the **D** tag).

In the case of **Pan** and **Tilt** it is wise to set the **F** tag (by clicking under **F**) so as to have a fading movement between two positions.

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```
1 ≡  File  Play  Tools  PlayBacks  Options  Database                    11:43:33
[■]<<═══════ [VLC]\[Play]\[Attributes]\[Templates] ═══════>>[↕]
        Name          Type          Offs D I F Div
-Templates          [Templates]
 └─[Mov Templ]     1001   0  2  3
    ├─[Free Templ] Pan            0     ↓   0
    ├─[Free Templ] Tilt           1     ↓   0
    ├─*[Free Templ] Color1        2         0
    ├─*[Free Templ] Gobo1         3         0
    └─*[Free Templ] Effect        4         0
 ?
F1 Help  F7 Record New  F8 Record Change | Standalone,Edit,Run              4
```

7. Insert subobjects (*Shift+Insert*) to the **Color** and **Gobo** and **Effect** parameters if they are to control color wheels etc. in your device. These subobjects are used when you want to have predefined subparameters for your wheels, for example fixed colors on your color wheel.
Expand the line to view the subobject by pressing *F9* or the **EXP/COMP** key on the console, or double-clicking on the star with the mouse.

```
1 ≡  File  Play  Tools  PlayBacks  Options  Database                    11:44:49
[■]<<═══════ [VLC]\[Play]\[Attributes]\[Templates] ═══════>>[↕]
        Name          Mode              ID Min       Max      M
-Templates          [Templates]
 └─[Mov Templ]     1001   0  2  3
    ├─[Free Templ] Pan            0     ↓   0
    ├─[Free Templ] Tilt           1     ↓   0
    ├─[Free Templ] Color1         2         0
    │  ├─[Pos Templ]  Not Def.          0   0($00) 255($FF)
    │  ├─[Pos Templ]  Not Def.          0   0($00) 255($FF)
    │  └─[Pos Templ]  Not Def.          0   0($00) 255($FF)
    ├─[Free Templ] Gobo1          3         0
    │  ├─[Pos Templ]  Not Def.          0   0($00) 255($FF)
    │  ├─[Pos Templ]  Not Def.          0   0($00) 255($FF)
    │  └─[Pos Templ]  Not Def.          0   0($00) 255($FF)
    └─[Free Templ] Effect         4         0
       ├─[Pos Templ]  Not Def.          0   0($00) 255($FF)
       └─[Pos Templ]  Not Def.          0   0($00) 255($FF)
 ?
F1 Help  F7 Record New  F8 Record Change | Standalone,Edit,Run              4
```

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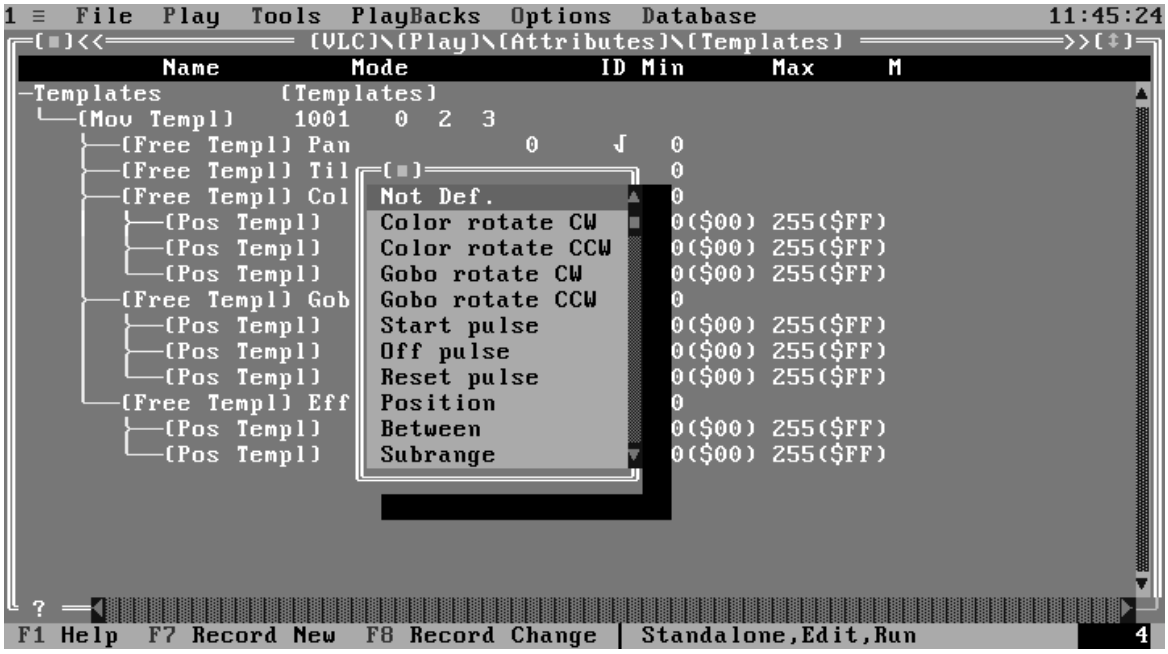
8. Click on the **Not def** square to list the alternatives.
The **Color** and **Gobo rotate** subparameters handle rotation of a wheel or of a particular gobo **Clock Wise** or **Counter Clock Wise**.
The **pulse** alternatives are not fully implemented at the moment.
Position is for giving a position on wheels etc.
Between is used when you want to have the possibility to scan through values between two defined **Positions**.
This is useful when your device has a color wheel where you have defined the Positions of the colors, and you would sometimes want to be able to get a mix of two adjacent colors on the wheel.
By defining the **Between** values you will have access to the values between two **Positions** when controlling your device.
Subrange is for when in one offset address you have control of several functions, like the Martin Roboscan 518 that uses one offset address for Lamp-On and for strobing. Then you have to make two parameters with the same offset address where the first one handles the lighting of the lamp and the second one has a subrange that controls the strobe.



9. On the **Pos Templ** line there are **Min** and **Max** DMX values to be assigned for each subparameter. The **Min** and **Max** values are represented in decimal figures, 0 to 255, and hexadecimal figures, ($00) to ($FF). To assign hexadecimal numbers to the subparameter type $ before the numbers.
The values for each subparameter are specified by the manufacturer of your device.

For a **Position** in the wheel type in the DMX values of that particular color or gobo or effect you want. The **Min** and **Max** values should be the same for a **Position**.
If you want to have the option of viewing the position between

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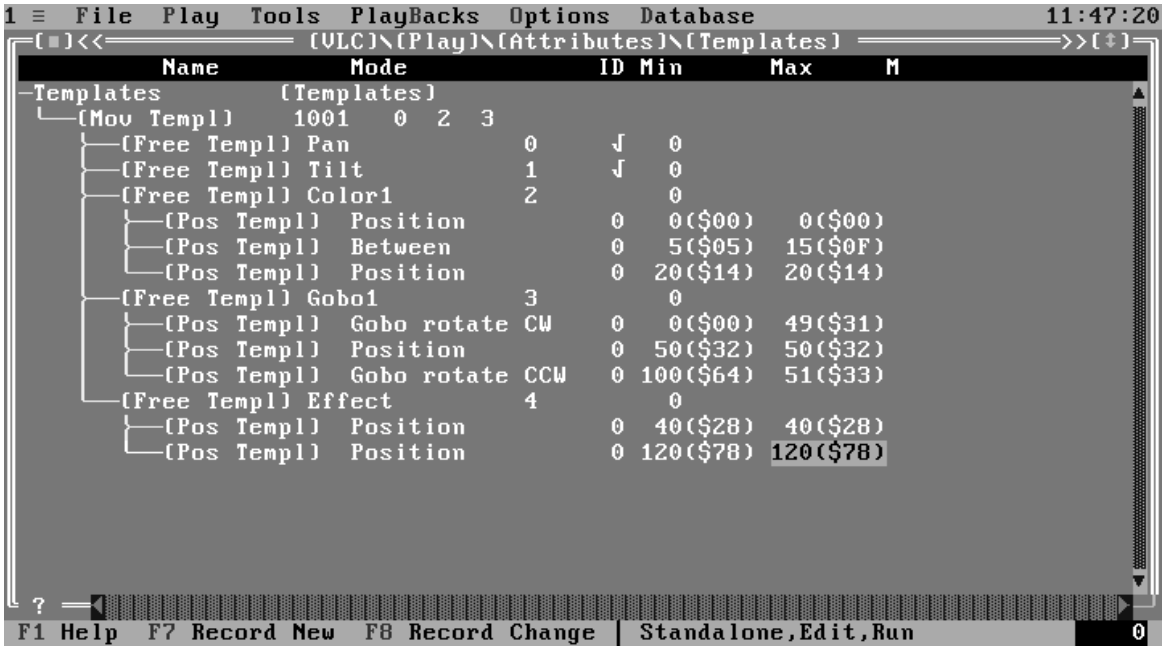
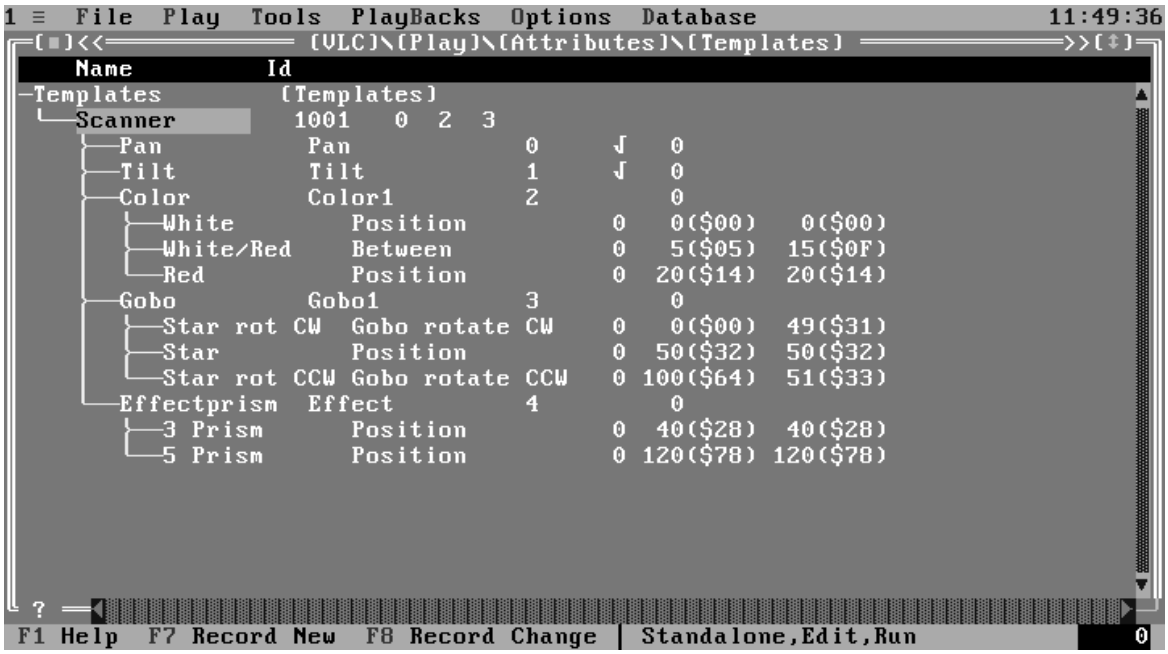
two colors in the color wheel use the **Between** alternative. The **Min** and **Max** DMX values can either be set for the range of values between two colors or for one value that will represent a half-color. The **Between** subparameters will not, as opposed to **Position** subparameters, be immediately accessible when controlling the device. (See **3.** in **How to control the device** below.)
For **Color** and **Gobo rotate** , assign the **Min** and **Max** DMX values for that particular rotation.
For **Subrange** , assign the **Min** and **Max** DMX values for the subrange the parameter will be using.

Make as many subparameters as you need and give them the right DMX values.



10. Name your device and its subobjects.



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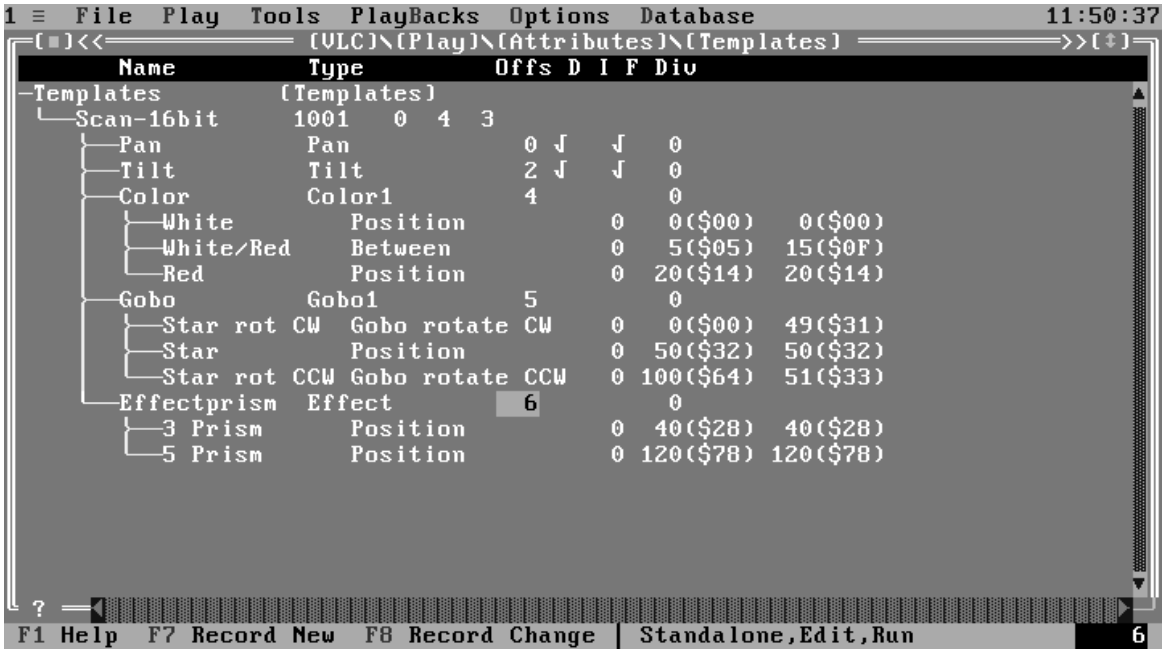
11. In the case of 16-bit resolution of the **Pan** and **Tilt** parameters, i.e. two channels each, use the **D** tag and make sure that you have the correct offset addresses, two offset addresses each.



Now you have a template.