

# Hiro4XprssnMagic

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## Welcome to H4XprssnMagic!\*

This program is a free-standing application. To fully use it you need DAZ's Hiro 4 and the Michael 4 Morphs++ pack. (The Hiro4 figure has all the required head morphs except EyesSide-Side and EyesUp-Down and therefore will not by itself automatically point the eyes for some of these eye xprssns.)

H4XprssnMagic lets you copy into Poser or DAZ Studio the morph dial settings from any combination of the 68 eye and 109 mouth poses – giving you over 7,400 combinations! Existing head position or face-shaping dial settings on the figure will not be overwritten by these expression settings.



\* This Adobe Acrobat file is easier to read on-screen if you select “Continuous” from the View menu above. Also turn on “Show Bookmarks” in the Windows menu, so you can quickly jump to a topic.

## Installing the Files

Place the **H4XprssnMagic** file anywhere you find convenient (some PC configurations will not let the application execute in certain locations or external drives (see the [File List](#) at the end of this guide, if you have difficulties).

The pose files **INJ M4EyesMove.pz2** and **REM M4EyesMove.pz2** are installed in the library Pose : XprssnMagic, but can be moved to any location in the Pose library.

## Preparing the Hiro 4 Figure

To fully use Hiro4XprssnMagic, you must inject the Michael 4 head morph dials **EyesSide-Side** and **EyesUp-Down** into the Hiro 4 figure. These morphs are included in the **Michael 4 Morphs++** pack.

You can use Hiro4XprssnMagic with the Hiro 4 figure alone, however, those eye poses marked with an asterisk (\*) that point the eyes up-down and side-side will **not be fully applied**.

If you do not want to inject all the M4 Morphs++ morphs, I have included the pose file **INJ M4EyesMove.pz2** to **inject only these two dials** (**REM M4EyesMove.pz2** removes the dials).

*Note:* The injection file will **not** work until you have installed the M4 Morphs++ pack and run the "Update Michael 4 Base" file.

## Using H4XprssnMagic

**Launch** the program by double-clicking the Hiro4XprssnMagic icon.

1. At the opening screen click the "Run Hiro4XprssnMagic" button.
2. Click one of the eye expressions on the scrolling list at the left. The top half of the preview face frame in the center will show your chosen eye pose.
3. Click one of the mouth expressions on the scrolling list at the right. The bottom half of the preview face frame will show the mouth pose.

4. Click the “Front < > Side” button below the center preview image to see the expression combo from the side. Click the mouse button again to return to the front view. (Some of the eye and mouth previews do not match exactly at the eye/mouth line in the preview window; the actual morph will of course be smooth.)

**Front < > Side**

5. Click and hold the “Toggle to Neutral” button to compare the xprssn combo with the neutral face. Release to return to the combo view.

**Toggle to Neutral**

6. When you get a combined expression that you want to transfer into the Hiro 4 figure, make sure you press the “**Copy to Clipboard**” button (otherwise you will paste any previously selected morph settings).

**Copy to Clipboard**

### Using with Poser

1. **Launch Poser.** (Some older computers may not be able to run both programs at the same time. Just close Hiro4XprssnMagic; the information will remain in the Clipboard.)
2. In Poser, load a Hiro 4 figure and **select the head.**
3. Select **Edit | Paste** from the menu (or use the keyboard paste command Control-V) to set the morph dials that will create your chosen expression.
4. If the new xprssn combo does not appear, click on another body part, then back to the head, to force the screen to redraw – some versions of Poser can be quirky about refreshing the screen properly.
5. You can now fine-tune the dial settings, if you want to adjust the expression. This may be necessary when the figure’s face has been significantly morphed or if you want to add some asymmetry to the expression.

## Using with DAZ Studio

XprssnMagics work by copying to the system clipboard the head dial settings for the selected eye-mouth combos. At this time there is only one way to paste the clipboard's data to the head of a figure in DAZ Studio - the script **XprssnMagic Importer** by Guandalug la'Fay. (See [DAZ Studio Script](#))

1. Follow the script's installation directions.
2. In Hiro4XprssnMagic, select an eye-mouth combo, click the "Copy to Clipboard" button.
3. In DAZ Studio select the head of a (prepared) Hiro 4 figure.
4. Run the XprssnMagic Importer script.
5. Click in the script window and paste.
6. Click the "Apply" button. The window will close and the xprssn will be applied.

## The "Neutral" vs. "NoChange" Poses

At the top of the eye and mouth pose lists are both a neutral pose, which sets all that list's expression morph dials to zero, and a no change pose (a grey image with "No Change" text), which does not copy any settings for that list's expression dials. Together, they give you greater control of Hiro4's expression morphs.

- The **eyesNeutral** pose allows you to **zero** any eye expression settings on the figure, independent of your choice on the mouth expressions list.
- The **eyesNoChange** pose leaves an existing eye expression **unchanged**, while allowing you to set a new expression for just the figure's mouth.
- The **mouthNeutral** pose allows you to **zero** any mouth expression settings on the figure, independent of your choice on the eye expressions list.
- The **mouthNoChange** pose leaves an existing mouth expression **unchanged**, while allowing you to set a new expression for just the figure's eyes.

## Auto Zero Set of Some Dials

Be aware that the NoseWrinkle morph and the M4 Morph++ pack's six full face morphs (happy, sad, afraid, disgusted, angry and surprised) are automatically set to zero whenever you paste from M4XprssnMagic (even if NoChangeEyes and NoChangeMouth are selected), since pre-existing settings on these dials would alter both your chosen eye and mouth xprssns.

If you want, you can add a setting to any of these dials after applying the xprssn. The dial's value will be set back to zero if you paste in another xprssn.

The 16 speech **viseme** morphs are set to zero **only** by the mouth xprssns; they are not affected by the eye xprssns.

Face-shaping and head positioning dials will be unaffected by a pasted xprssn.

See the [H4XprssnMagic Morph Dials](#) lists at the end of this guide for complete information.

## Why So Many Combinations?

We humans are sensitive to extremely subtle differences in expressions, conveying a wide range of emotions. Simply setting a smile morph on the mouth of figure, for example, usually does not give a believable, realistic smile. In fact, a smile without even the smallest change in eye expression gives us the feeling that the character's response lacks warmth and authenticity (which may occasionally be the effect you're after).

Seldom are our expressions perfectly symmetrical on the right and left sides, and the asymmetry of these poses also can convey emotional subtleties.

By having many variations available you can create an expression that fits a particular situation. You also can avoid using the same stock expression on all the characters in a scene or on one figure in a series of images or an animation. Also, one variation of an expression may look better from a particular angle than another. More extreme expressions may be needed for a full-body or distance shot or cartoon situations.

You may have to experiment to find the expression that sets the mood you want for your character. Of course, you can further adjust the expression in Poser or DAZ Studio and save it in the library for future use.

## The Names Are Guides Only

Don't rely too much on the eye and mouth names when creating your expressions. Sometimes we convey complex or conflicted emotional messages by "mismatching" expressions on the upper and lower halves of our faces.

You will find that using a "smile" expression will give your characters a very different mood when teamed with an "angry" or "suspicious" eye setting than it does when used with a "happy" or "stare" one. A silly smile can turn sinister when paired with a particular eye pose.

## Animation

### Interpolation

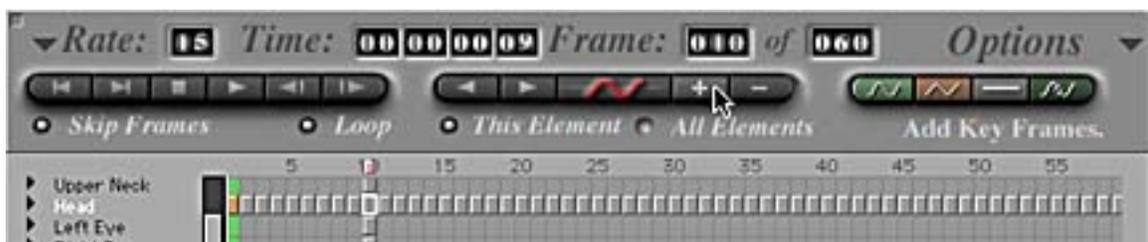
There are several choices for animation interpolation in Poser, which determines how changes between two poses are made. Poser's default animation interpolation is Spline (green frames in the Animation Window). Spline interpolation gives a more natural curve between poses, but often causes an overshoot of the settings at one or more points in the animation. This can be confusing and difficult to control, especially for new animators.

When you paste the H4XprssnMagic expressions to a figure in Poser, the animation interpolation for the head is set as **Linear** (orange frames). The interpolation settings of the figure's other elements will remain unchanged.

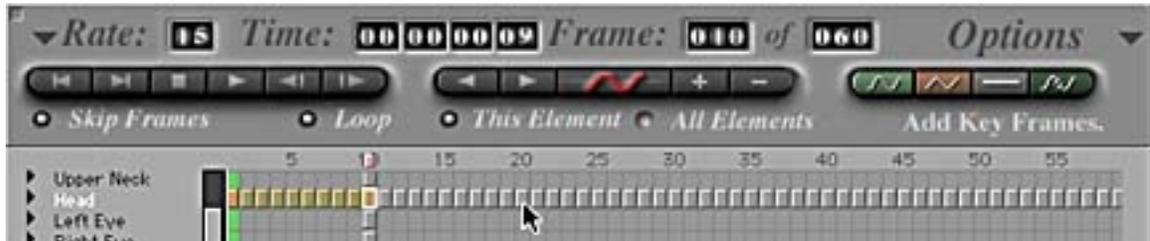
### Adding Expressions

To add expressions to an existing animation, open the Animation Window.

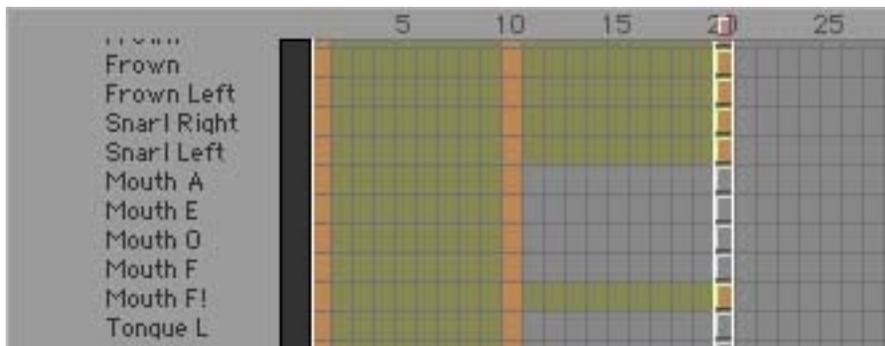
- If you want to maintain the character's existing expression until a specific frame, click that frame in the Head channel for the figure, and click the "+" (Add Keyframe) button. (Make sure the small button "This Element" is clicked, so you don't affect any other elements.)



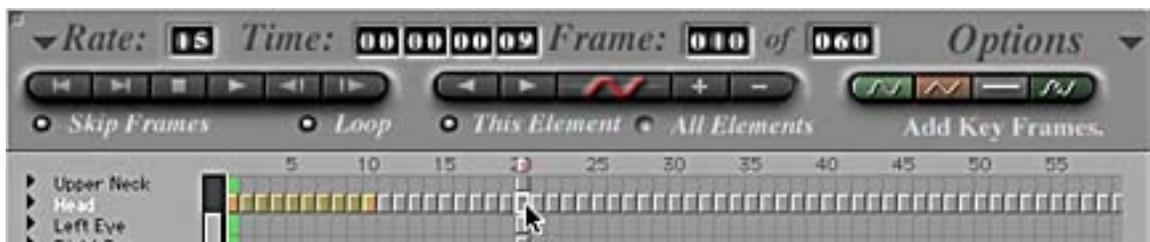
- Then click the frame where you want the H4XprssnMagic pose to be fully applied, and paste it in.



- The pasted pose will set keyframes in the channels affected by the expression you chose. It will not affect any settings in other channels.

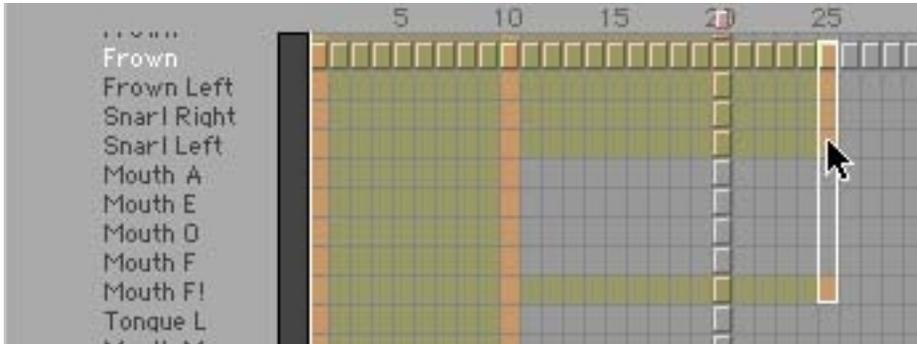


- If you want the new expression held until a specific frame, click that frame and set another keyframe.



- Repeat for the next expression.
- The speed with which each new expression appears will depend on the number of frames between keyframes, and the frame rate of your animation.

- To fine-tune the animation's timing, you can move a keyframe, by clicking and holding over it until the crossed-arrows cursor appears, then dragging to a new position.



## H4XprssnMagic Morph Dials

The following 148 morphs are used by H4XprssnMagic. When you apply a H4XprssnMagic xprssn to a Hiro 4 figure, any existing settings for only these dials will be overwritten. Any dials not listed will be unchanged.

\* *NOTE:* The Hiro 4 base figure does **not** have the morphs EyesUp-Down and EyesSide-Side, which are required to properly position the eyes and move the eyelids for some of the H4XprssnMagic eye xprssns. (These two dials are included in the Michael 4 Morphs++ pack.)

### Michael 4 Eye Expression Morph Dials (25):

(LacrimalSizeR,L are not set, but EyesSide-Side automatically adjusts them)

* EyesUp-Down	* EyesSide-Side	
BrowUp-Down	BrowInnerUp-DownL	EyeLidBottomUp-DownR
BrowUp-DownR	BrowSqueeze	EyeOpen-CloseL
BrowUp-DownL	EyesSquint	EyeLidTopUp-DownL
BrowOuterUp-Down	EyeSquintR	EyeLidBottomUp-DownL
BrowOuterUp-DownR	EyeSquintL	CheeksEyeFlex
BrowOuterUp-DownL	EyesOpen-Close	CheekEyeFlexR
BrowInnerUp-Down	EyeOpen-CloseR	CheekEyeFlexL
BrowInnerUp-DownR	EyeLidTopUp-DownR	

### Hiro 4 Eye Expression Morph Dials (33):

BrowBashfulL	BrowBashfulR	
BrowConfoundedL	BrowConfoundedR	
BrowIndignantL	BrowIndignantR	
BrowInnerUpL	BrowInnerUpR	
BrowOuterDownL	BrowOuterDownR	
BrowOuterUpL	BrowOuterUpR	
BrowPeevedL	BrowPeevedR	
BrowPerplexedL	BrowPerplexedR	
BrowSmilingL	BrowSmilingR	
BrowTroubledL	BrowTroubledR	
BlinkCurveL	BlinkCurveR	
EyeWinceL	EyeWinceR	
EyesGlum	EyesIndignant	EyesLazy
EyesPeeved	EyesSarcasm	EyesSmile
EyesTroubled	EyesUpperFlat	EyesZen

### Michael 4 Mouth Expressions Morph Dials (61):

CheeksFlex	MouthOpen	TongueLength
CheekFlexR	MouthOpenWide	TongueWidth
CheekFlexL	JawIn-Out	TongueThickness
CheeksCrease	JawSide-Side	** IY (Eat)
CheekCreaseR	LipsPart	** IH (It)
CheekCreaseL	LipsPartCenter	** EH (Ed)
CheeksBalloon	LipsPucker	** AA (Odd)
CheeksBalloonPucker	LipsPuckerWide	** OW (OAt)
MouthSmile-Frown	LipTopUp-Down	** UW (tWO)
MouthSmile-FrownR	LipTopUp-DownR	** ER (hURt)
MouthSmile-FrownL	LipTopUp-DownL	** S (Sea)
MouthSmileOpen	LipBottomUp-Down	** SH (SHe)
MouthSmileSimple	LipBottomUp-DownR	** F (Fee)
MouthSneer-Pout	LipBottomUp-DownL	** TH (Theta)
MouthSneer-PoutR	LipBottomIn-Out	** M (Me)
MouthSneer-PoutL	LipBottomIn-OutR	** T (Tea)
MouthSide-Side	LipBottomIn-OutL	** L (Lee)
MouthNarrow	TongueSide-Side	** W (We)
MouthNarrowR	TongueUp-Down	** K (Key)
MouthNarrowL	TongueBaseUp-Down	
MouthCornerUp-Down	TongueTipUp-Down	

\*\* *NOTE:* The 16 speech **visemes** are merely combinations of other mouth morphs and they are not used by A4XprssnMagic. Their dial values are **set to zero** by the **mouth** xprssns. However, you can use an eye xprssn with viseme settings by choosing an xprssn in the eye list and “**2 NoChangeMouth**” in the mouth list. (If you choose “1 NeuralXprssnMth” the visemes will be set to zero.)

#### **Hiro 4 Mouth Expressions Morph Dials (22):**

MouthBashful	MthConfoundLeft	MthConfoundRight
MouthDisappointment	MouthDisgust	MouthFurious
MouthGlum	MouthLaugh	MouthOpenRound
MouthShock	MthStrainedSmile	MouthTroubled
OpenMouth	PsstLeft	PsstRight
Smile	SmileOpen	SmileAngleL
SmileAngleR	SmileLeft	SmileRight
TeethOpen		

#### **Michael 4 Morph Dials Not Used – set to zero (1):**

H4XprssnMagic **automatically sets to zero** a value on the **NoseWrinkle** morph dial whenever you paste an xprssn, since a pre-existing setting on it will alter both your chosen eye and mouth xprssn. You can add settings for this morph after you paste an xprssn. The value is automatically re-set to zero when you paste another xprssn.

#### **Michael 4 Morphs++ Full-face Morphs – set to zero (6):**

H4XprssnMagic also **automatically sets to zero** any values on these six morph dials whenever you paste, since pre-existing settings on them will alter your chosen xprssn. (This will have no effect if you are using the Hiro4 Basic figure, which does not include these morphs, or if you do not have these Morphs++ morphs injected.) You can add settings for any of them to a pasted xprssn. Such values are automatically re-set to zero when paste another xprssn:

Happy      Sad      Afraid      Disgusted      Angry      Surprised

#### **Other (Unaffected) Morphs**

Settings on Hiro 4 Basic and the Michael 4 Morphs++ pack's **head position, scale and face shaping** dials will not be affected by Hiro4XprssnMagic.

#### **Expression-Enhancement Morph Dials (14):**

The Michael 4 Morphs++ pack includes several morph dials that are not used by H4XprssnMagic, but can be useful for enhancing an expression. I do not include them since they are often used to create various character faces, in particular older faces, where you would not want the dial settings to be over-written by an xprssn.

If you want, you can add settings for these dials after you paste an xprssn. Just be sure to **manually remove** them when you are done with the expression:

EyesPupilDilate	EyeWrinkleR	CheekDimpleCreaseL
NostrilsFlare	EyeWrinkleL	CheeksDimple
ForeheadWrinkle	NoseSide-Side	CheekDimpleR
ForeheadWrinkleR	NoseTwist	CheekDimpleL
ForeheadWrinkleL	CheeksDimpleCrease	
EyesWrinkle	CheekDimpleCreaseR	

## Pose Interference

Be aware that some careless creators of poses include all the head morphs in their poses, even if the expression morphs are set to zero. Using such a pose will overwrite a H4XprssnMagic xprssn you have previously applied to your figure. If you find this happening, first apply the body pose and then the H4XprssnMagic xprssn (which does not affect any head position settings or the morph dial settings of other body parts).

*Also:* Although the dial names of some figure's morphs are the same, the internal names are often different, explaining why expression poses for one figure are not likely to work for another.

## DAZ Studio Script

To use Hiro4XprssnMagic in DAZ Studio you must download the free script **XprssnMagic Importer** (© Guandalug la'Fay 2007) from:

<http://www.nightstone.com/~guandalug/DAZFreebies/>

## File List

Most users can place these two files anywhere convenient:  
H4XprssnMagicPC or H4XprssnMagicMac (free-standing application)  
H4XprssnMagicGuide.pdf (this Adobe Acrobat user guide)

These files can be moved anywhere within the Pose library:

Libraries : Pose : XprssnMagic:

INJ M4EyesMove.png  
INJ M4EyesMove.pz2  
REM M4EyesMove.png  
REM M4EyesMove.pz2

*Note:* Some PC security configurations will not let an application execute in certain locations or from external drives. First check that the location is not set for Read Only. Try moving H4XprssnMagicPC into the Programs folder.

International users may have to set their system to U.S. English or download the latest Shockwave Player from:

[www.adobe.com/shockwave/download](http://www.adobe.com/shockwave/download)

## **Thank you for purchasing H4XprssnMagic!**

At DAZ you will find XprssnMagics for other popular figures, including Michael 4 Victoria 4, Aiko 4, Sadie, Michael 3, Victoria 3 and Aiko 3 - and also M4HipHopMagic, which includes a wide range of full and partial body poses, and V4FaceMagic, which has 50 unique faces and 7 custom face morphs. Elisa Griffin / gryffnn