FUJINON'S PREMISTA ZOOM IN THE CRAZY CHARLIE SERIES

Adriana Bernal: To begin, tell us, what is the series about and what OTT is it for?


Cinematographer Alfonso Parra AEC, ADFC

Alfonso Parra: The series tells the life of Carlos Ledher, a famous Colombian drug dealer of German origin. His professional career began at a very young age in Miami and New York, and then from Colombia, together with Pablo Escobar, he became one of the largest drug exporters to the US, first marijuana and then cocaine. The series recounts his life using the book Crazy Charlie: *Carlos Lehder, Revolutionary or Neo Nazi* by Ron Chepesiuk as a reference and is a VIX+ production commissioned from Caracol TV. We have shot in Miami, New York and finally a large part in Colombia, in Girardot, Bogotá and the coffee zone among others. The series has many action scenes, chases, cars, shots, etc. Basically, what is already classic in this type of stories that tell the life of drug traffickers. In the series, as it could not be missing, there are love stories and the fight between the antagonists, Ledher the drug dealer and Lewis the policeman determined to stop him and not always understood by his police colleagues.

AB: Can you tell us a little about the image that you proposed for the series?

AP: We have shot the series in FF 5.7K with 2:1 aspect ratio at 23.98 fps with the Venice I camera and Fujinon Premista zoom lenses and occasionally Sigma Cine FF lenses. I have gotten used to shooting in FF, I like the image quality that is obtained, higher resolution, which means more texture and, in my opinion, a feeling of a more organic image. It was clear to me that the series should be FF and also do the color correction in HDR from ACES. It also seemed to me that the somewhat more panoramic 2:1 aspect ratio than the usual 16:9 helps to give more dynamics to the action scenes, of which there are quite a few, and in general a more "accentuated" image. However, the most important decision was to choose Premista zoom lenses as the main lenses for the entire series, in which we have shot with two units. We have used the set of three Premista series zooms on each unit, the 19-45, the 28-100, and the 80-250mm. They are FF zoom, that is, they cover the diagonal of the 5.7K sensor that we have used. Of course, not only do you have to cover the diagonal, but you have to do it with sufficient quality, both in resolution, light uniformity or chromatic aberrations, among other considerations specific to the lenses.


JC Vásquez director and Alfonso Parra AEC, ADFC cinematographer

AB: Did the director support the use of zooms as the main lens in the series?

AP: Absolutely, from the moment we proposed the use of zoom, the director supported the proposal and a large part of the staging that he designed already considered the use of zoom as a fundamental part of the language of the series.

AB: Despite the fact that it helps to shoot a lot faster, many cinematographers do not think about zooming for series because they still have the idea that with prime we have better quality or because the weight and size of good zooms make the camera on an unmanageable object. Tell us why you decided to go with the Premista zooms to film Crazy Charlie?

AP: The decision to use the Premista zooms arose solely from a narrative consideration and not so much from thinking about how fast it is possible to shoot with zooms instead of with prime lenses. I base of the opinion that there is no such thing as a time saver, as changing prime lenses takes less time than calling the actor on stage or putting the finishing touches on makeup and costumes. On the other hand, it is true that the Premista has reduced the weight a lot, just to make a comparison, the 28-100mm weighs 3.8 kg while an anamorphic 50mm S35 weighs 3.6 kg of course the zoom is longer in length, 225mm compared to the 195mm of an anamorphic, but as you can see it is not a notable difference either, so really from this point of view they are not unwieldy, but rather within the normal parameters of a professional prime series production. But returning to the considerations that led us to decide on the Premista. On the one hand, the bulk of the series takes place in the 70s and 80s, a time when zooms were widely used by cinematographers seeking to take advantage of what it allows, beyond the obvious condition of varying the size of the frame without moving the camera, for example, Kubrik's narrative/visual proposals when using the zoom in The Shining from 1980, or in Barry Lyndon from 1975 or Andrei Tarkosky's Stalker from 1979 among many others. It is true that later the zoom fell into disuse and disrepute mainly due to the abuse that was made of it, especially in the world of TV where using it implied not only changing the viewing angle but also neglecting the framing. I think that nowadays it is not seen that way anymore and incorporating the zoom into the set of lenses is commonplace.

Premista zoom 28-100mm T 2.9 with Sony Venice

If you agree, I'll give you a specific example of how I think zoom affects the narrative of the series. We made a shot where Ledher walks down the corridor of the jail, when they lock him up for good. He is accompanied by two guards, who with him arrive at the cell, open the cell door and Ledher enters, the guards close the door and it has a small opening at the height of the face with bars where Ledher leans looking out the hall. The final frame of the shot is Ledher's face behind the bars seen from the corridor. In this plane we close the zoom towards his face from a more general frame size where the guards can be seen.

What does the different zoom allow me instead of a fixed focal with a Dolly that approaches?

When I zoom in on the actor's face, I am changing the angle of view and depth of field. When I change the angle of view I am changing not only the field of view that the lens can cover but also the relative appearance of the distance between the various terms. Thus, when closing the zoom on the actor's face, the space seems to fall on top of the character, bringing the different terms closer, as if the space were swelling around him, as Pasolini points out "the zoom, with its long focal that stick to things stretching them out like overblown loaves"[1]. That is to say, the prison "swallows him up". The space/image (I use this term recalling the idea of Vincent Pinel that "in the zoom the movement is not made in relation to its subject but in relation to the image")[2] thus acquires a double meaning, on the one hand of extension of the emotion of the character, but also, of the meaning that all of us as spectators give to prison: a closed place, as if the space were closing in on one, so it participates in a double condition that unites the sensation of the character, of loss of freedom, loneliness, oblivion and the sensation of the prison space that closes, engulfs the character, thus reaffirming in the viewer's mind their own feeling about what prison means and that it is the result of all its symbology in our culture: from cinema, painting, music videos or literature.

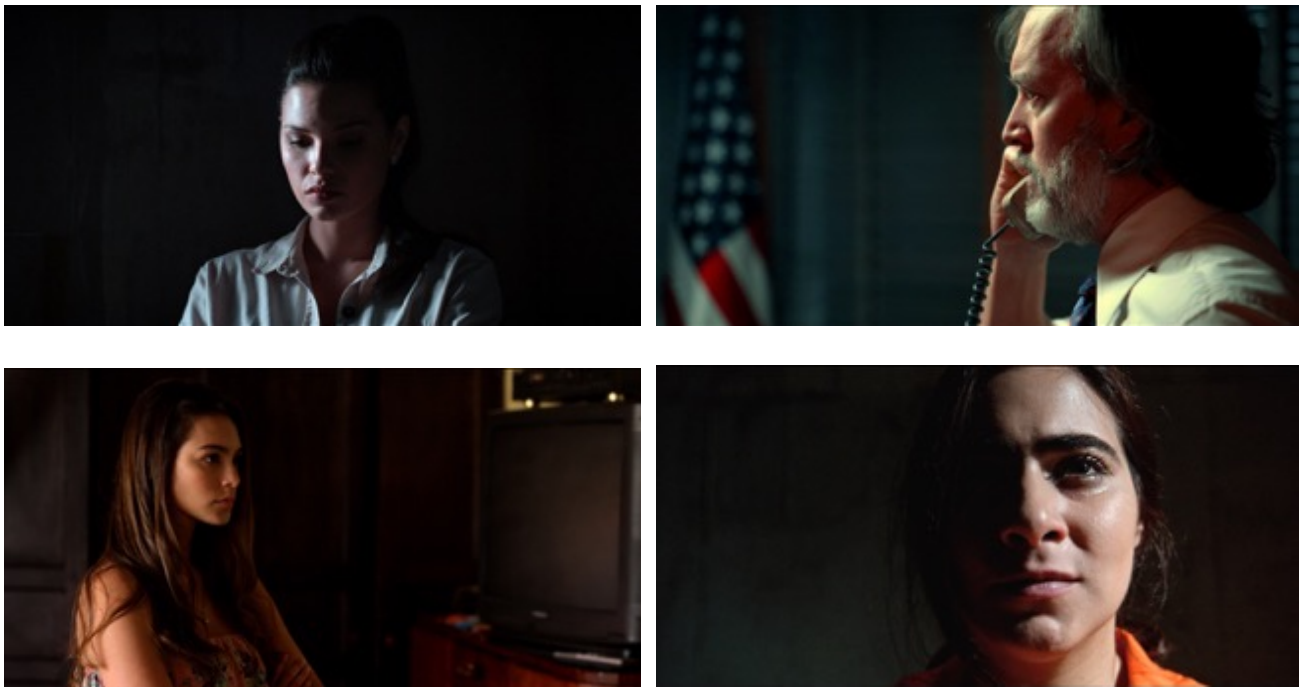
Car Grip. Premista 28-100m y 19-45mm with the final lateral shot

In addition, closing the zoom clearly calls the attention of the viewer, as when you underline the sentences of a text with a yellow marker, that is, "look here" without options to distract the gaze elsewhere in the frame. If I approached Dolly with a prime lens, I would be modifying the distance between the actor and the camera, but I would not be modifying the angle of view of the lens and would also be modifying the depth of field. The angle of view of the prime does not change, even if I get closer with the dolly, only the space around it disappears as the camera gets closer. This implies accentuating the emotional condition of the character, what she feels, what she thinks, and the space is somewhat relegated, separated. And in both cases the depth of field changes, but by different variables. If we remember the formula of the Dof we will see that this depends on the focal length (f), the diaphragm (N), the focus distance (u) and the circle of confusion (c) according to the formula: $\boldsymbol{Dof} \approx \frac{2u^2Nc}{f^2}$. When using the zoom, we are varying the focal length, $\boldsymbol{Dof} \approx \frac{2u^2Nc}{f^2}$ while when using the prime lens, we are changing the focus distance $\boldsymbol{Dof} \approx \frac{2u^2Nc}{f^2}$ This difference also creates a different feeling in how the terms lose their sharpness.

Another way of managing the zoom that we have used a lot is to open or close it while moving the camera, either in Dolly, in crane and even in steady. Here we are changing the focal length, and therefore the angle of view and the depth of field, but above all the perspective. With this we make the space around the characters more or less visible, but changing not only what is seen in the painting but also how the apparent distance between the different terms and between them and the actor is modified. We give new meaning to the space/image, approaching the actor or moving away from it. I think that with this we make the space something significant based on the feeling of the character, his physical situation in the space, his emotional situation and sometimes his psychology. In addition, the change in perception that is generated by moving the camera makes it possible to build the space to a large extent, giving it presence and preventing it from merely becoming a background.

AB: I've used these zooms myself and really like the smooth, yet sharp image they give. Tell us about the most technical characteristics of these lenses, their resolution and their texture.

AP: The condition, the personality of the zoom if you will, is closely related to its technical characteristics, if not the same, since how the zoom is designed and how it is manufactured is how the image projected on the sensor looks like. For this reason, the first thing I look at about the lens is how it behaves considering different aspects, which are basically the resolution and its component texture, light uniformity, aberrations of all kinds: chromatic, Seidel, etc., equally the bokeh, the breath or the handling of the zoom with all the accessories that we use regularly. When shooting the FF, I need, as I told you, not only to cover the diagonal of the sensor, but also to have a good resolution that allows us to have images with detail and texture, and this is closely related to the design of the zoom and the quality of its crystals. The truth is that the Premista have a great resolution, more than what the sensor can represent, but above all and as you say, however they are soft, especially for faces. They give you a lot of sharpness in the details and yet the overall impression is not "clinical". We have published a test on two of the zooms in: https://www.alfonsoparra.com/index.php/opticas/evaluacion-y-estudio-fotografico-de-los-zoom-premista-28-100mm-y-80-250mm-de-fujinon-para-cinematografia-ff where you can see in detail the MTF curves obtained considering the set of elements involved in the image. And it should be noted that the resolution is very similar both in the center as at the edges.



Skin tones are closely related to the MTF curves of the zooms, the sharpness they can show in the finest details, and the micro contrast they handle.

The light uniformity is frankly good and the differences are irrelevant in daily shooting, although they can be seen on the cards, as is the vignetting that is not noticeable either. Chromatic aberrations are sufficiently corrected and are generally insignificant and only in some focal length are they observable if one looks closely at some area of the image. So, I can tell you that they are excellent lenses in all the parameters that we have measured and observed. But I want to highlight two aspects that have been fundamental for the choice of the Premista, which are their excellent behavior with the veil, the flare and the color.

Premista 28-100m. The blacks appear clean and well-trimmed even with high light sources in relation to very dark areas.

AB: Regarding color, I know that you started from a reference to Ektachrome that was so popular in the 70s and 80s. Tell us how the zooms behave with respect to color? When you did the tests to establish the look of the series, did you use the zooms?

Ektachrome 100 reversible material

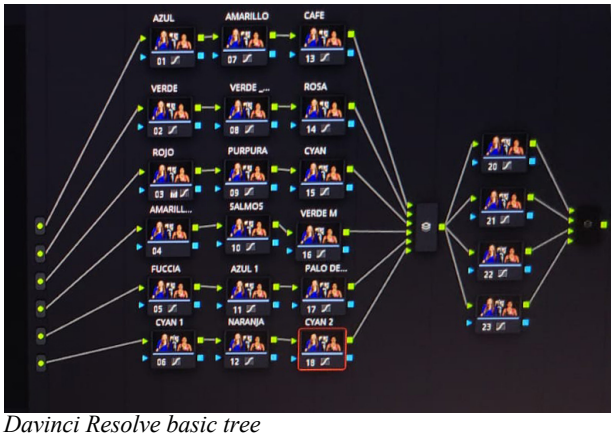
AP: As I was saying, those characteristics of the Premista that have to do with contrast, veil and color are decisive for the creation of the image of the series. Just as I wanted to use the zoom in the way it was done in the movies of the 70s and 80s, it seemed consistent to use the Ektachrome reference for the color and contrast of the series. That is, referring to the current Ektachrome 100 for which time has not passed. I wanted to escape from the vintage tone that the old Ektachrome could have. To achieve that colorimetry and considering our limitations, it occurred to me to photograph a color chart and skin tones with Ektachrome 100 in different light conditions, direct sun, shade, sunset and indoors with artificial light. We did all of this in NY and there we revealed it and digitally scanned it in 4K resolution and in 709 color space.

Skin tones and color chart with different color temperatures and contrast. Ektachrome 100 scan.

Tests with Venice Slog3.cine and zoom Premista.

Outdoor Technicrome Lut Test

On the other hand, I shot with the zoom and the Venice the same card with different color temperatures and we passed it through ACES with the ODT 709. What Jorge Román, the colorist, did was compare the scanned Ektachrome material and the one from Venice using the vectorscope and waveform monitor, so that the material shot with Venice was corrected color by color on the chart to bring it to the Ektachrome tone; so, we had all the hues in that color space looking like the Ektachrome scan. We converted that tree that we created in Davinci to an HDR Rec 2020 (limited P3D65) PQ 2084 space, visually adjusting the colors and on all skin tones. The results seemed satisfactory enough to us. And of course, we also gave it the contrast of the reversible material, which in Ektachrome is very high. And there the Premista are fundamental, because even though they are soft, they show a very clean black, and a very low level of veiling. The Premista handles high contrast great even with flare. And, on the other hand, in terms of color, the Premista are neutral, with no deviations towards warm or cold and in all the focal lengths and between the same zooms there is no difference between their characteristics, with which the colorist has not had Instead, apply the "Ektachrome" tree and make the usual corrections, ignoring differences in tone introduced by the lenses. It is also important to highlight that the chromatic aberrations in the 80-250 mm are insignificant and in the 28-100 mm only at focal length 100 it can be observed if one carefully observes certain areas of the image, and it can be described as moderate; in the rest of the focal lengths, they are irrelevant or very low as I have already told you before.



Davinci Resolve basic tree

AB: How versatile are zooms? How many lenses should you have to cover an acceptable focal range? How heavy are they?

AP: Super versatile, we have used them on the Steady, on cranes, even on moving carts with no problem. We have used them in the tropical heat of Miami and in the rainy hills of Armenia, from sea level to more than 2000 meters of altitude. All the zoom has worked perfectly, not only in what has to do with the lenses but also all the mechanical parts, the focus, zoom and diaphragm rings that have always been with motors to control them. With the zooms we were able to cover FF from 19mm to 250mm, more than enough focal lengths to cover the daily needs of production. As for the weight, we already mentioned above that they are not excessive and that did not imply any special consideration when shooting.



AB: Do these lenses offer any type of geometric aberrations, taking into account the chosen format?

AP: Regarding geometric aberrations, both pincushion and barrel distortion are irrelevant in the 28-100mm and 80-250mm zooms, however, with the 19-45mm barrel distortion is more noticeable, especially in the longer focal lengths. short, although within normal margins. I have shot scenes inside the car with the 19mm and the distortion does not cause any problem, although it is true that in some circumstances, for example, when filming the interiors of small planes, I have used Sigma cine FF lenses together with the Rialto given the narrowness of the same.

Ledher jail. Overhead shot. Premista 19-45. Focal 19mm T 2.9

AB: How was the use of the zooms in relation to the prime sigma?

AP: In some shooting situations, such as in cars, I have used the zooms outside, front and side, and also the Sigma with the Rialto inside and there is no problem in matching them, this shows the exceptional quality of the Premista. I had already tested this combination in a previous production and it went very well.

AB: And what did you think of the opening of the T 2.9 diaphragm having so many nights and twilight scenes?

Persecution. Zoom Premista 19-45mm with Rialto on car-grip

AP: In fact, the maximum aperture value of the zooms is 2.9 with the exception of the 80-250mm, which when it is at very long focal lengths is 3.5 and the truth is, working on those scenes that you mention at 2,500 ISO I have not had any major problems, in fact, I have worked most of the night scenes at almost T 4, to give you an example, in the night cars I have used a lot of Nanlite Litolite 5C and I put them at 1% or 2% intensity working with T 2.9, the same with the Astera tubes that worked them at 50% of their maximum intensity.

AB: Now that shooting with anamorphics is so fashionable, I would like to ask you what you think about the use of anamorphic lenses in series. When is it justified and when is it not? Did you think about shooting the series in anamorphic?

AP: Filming with anamorphics is something that has belonged par excellence to the cinematographic world, that of movies for the big screen, and I think that in many cases they are used in series, not so much because of the narrative condition they impose but because they give it an appearance reminiscent of the screen of a movie theater and because, as Godard points out, “the scope is a too sentimental format”[3]. It is not necessary to remember the importance of the aspect ratio for the composition of the image and therefore for the visual character of the series and ultimately for its narrative condition. That's why it's crucially important to choose anamorphics based on the storytelling and not just the aesthetics they generate, something that I don't think happens often. In addition, you have to take into account not only the aspect ratio that you get from shooting with anamorphics, but also the depth of

field they generate, as well as geometric distortions, resolution, breathing or luminosity. For me, the narrative condition is the only one that determines my choice of anamorphic lenses or not. Sometimes I have considered that the narration should be in 2.39:1format but not with anamorphic lenses but with spherical ones and use an FF format that allows me to crop the 2.39:1. For example, when I need to give an epic character to the space that interacts with the characters and that is part of them, the 2:39 format works very well. It is true that with the anamorphic lens I use the entire sensor, which implies more resolution, but it is also true that the anamorphic lens has a lower resolution than the spherical ones. And I have also always been concerned about how the frame inputs and outputs are with anamorphic lenses versus spherical ones and I think it has to do with geometric aberrations and lens breathing when the focus moves. When an actor leaves the frame with an anamorphic lens, it suffers a slight deformation and in some cases even a loss of sharpness, which seems to me to reveal the lens, and I am obviously not referring to angular lenses. I don't know, it gives me the feeling that I'm passing from a real, truthful or other unreal space and this has to be handled from the narrative point of view and in relation to editing. Let's not forget that the objective of the anamorphic ones was to be able to use the entire surface of the negative to later extract the panoramic aspect ratio (scope) and for this one had to give up the resolution and luminosity of the spherical ones and accept a greater number of aberrations of all type, and although at present the anamorphic ones give a very high quality, the same condition of origin continues. What I mean is that in exchange for having a very landscape aspect ratio, a certain optical quality was given up. But currently we don't need to do this because of the high resolution cameras work with, so you can get the anamorphic aspect ratio but with spherical lenses. Another thing is that we like the elliptical flare, or the distortions that these lenses create, but in this sense we are talking about aesthetic decisions, which can sometimes be narrative, but in many other cases not. And answering your last question, the truth is that I didn't think about the anamorphics for the series, it seemed to me that they were "too sentimental" for the story.

AB: How do you relate those inputs and outputs of the frame that you indicate with the breathing of the lenses? Do the Premista breathe when moving the focus?

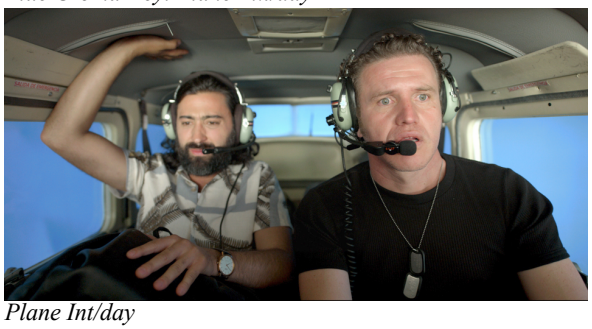
AP: In a lens that breathes, when you vary the focus, the size of the frame varies and that makes the tool that is optics visible, something that we cinematographers usually don't like, because it can distract the viewer (even if they are not aware of it). of narrative discourse. In this sense, it can be said that the Premista do not breathe, in the 80-250 there is no change in the frame when you focus, in the 28-100 there is a very slight breath, barely perceptible and the same happens with the 19-45mm. The illusion for the viewer is that he knows that what he sees is just an image, a trick, but he accepts that truth and then believes that what happens on the screen is true. Any technical condition that destroys that veracity has to be handled with great care.

Premista 28-100mm con Venice. Carey Hu first camera assistant NY

AB: How has the handling of the zoom been from a practical point of view? Did you handle it or the camera operator, or the first assistant camera?

AP: I have managed the zoom from the DIT station using the Tilta Nucleus M control and also the Preston system, normally in agreement with the camera operators, although sometimes I also use the zoom without warning them, which surprises them and leads them to correct it incorrectly. The framing is quick and that has been something widely used in the proposal for the assembly of the series, which has degrees of "impreciseness", slowed down, accelerated and other similar techniques that give the image a certain "madness" that fits very well with the character of Carlos Ledher and his life. In the series we have used a lot of the steady cam and eventually the camera on the Easyrig where we have normally used the 19-45mm, also controlling the zoom myself.

Blue Croma Key. Plane Ext/day



Plane Int/day

AB: Being a period series, I guess you've had to handle a lot of VFX effects, how do the lenses influence the effects?

AP: In fact, we have done many chromas in the studio, but also in light aircraft, commercial planes and cars, among others, as well as digital effects to highlight fires, smoke or gunshots, and also 3D models interacting with real spaces. For all these effects, there is something that is decisive for their good execution, which is the resolution of the lenses and the resulting acutance of the image. For the resolution, the quality of the lenses is essential, since they have to resolve the finest details with the highest possible contrast and this is important, for example, when making Chroma Keys.

Original *Final composition without color correction*

Shot with Premista 28-100mm zoom. Car modeled in 3D and integration by Laburo digital.

Of course, it is equally important to have a sensor with the highest number of photosites that yields an image with the highest number of pixels; In our case, the image we recorded is 5.7K in FF, which allows the quality of the chromas to be guaranteed in that sense. The Premista, any of the three that make up the game, distinguish very well the finer lines that are placed in front of a chroma, for example, the hair of an actress or the edges of the clothing, which allows the image to have a very good contrast between different details of the image, either in brightness, texture or both. The Premista and 5.7K sensor combination has guaranteed us good results in post-production.

AB: Another aspect is how the lens flares are, taking into account that in current productions the flare is one more tool to create dramatic sensations in the viewer.

The focus is on the illuminated part of the face, note the blur of the gun in the foreground as well as the illuminated curtain in the background

AP: In this sense, we have been quite conservative and we have not used this resource on a recurring basis, although I have to tell you that the Premista has a flare with some blue and cyan "pearls" with elliptical and aligned shapes that are quite beautiful. I think a couple of times I let you see this flare created by the sun and flashlights in some shots.

AB: How is the bokeh? How did you like blurs?

AP: Bokeh largely depends on the sheets that make up the iris and its position within the zoom design. Premista has a 13-blade iris which allows for a smooth blur, without “edges”, with the edges of objects progressively blurring organically with the rest of the image. The appreciation of all this is somewhat subjective, but if you compare lenses you come to appreciate those slight nuances of the blurs, how the limits are expanded in their blurring process, how are the edges of those blurs, harder or softer. Bokeh is a term that includes a certain subjectivity, so, from my taste, the blur of the Premista seems certainly "*delicate*".

AB: Lastly, could you give us your overview of the Premista zoom as a way of closing the interview?

AP: For me, the Premista are more than just glasses, holding them, holding them in my hands generates respect in me and, if you want, an emotion that translates into admiration, because what I have in my hands is not only a tremendously precise object in its construction, but rather an object loaded with the accumulated knowledge of generations of human beings, from the first polished quartz crystals of the Assyrian empire to Einstein, passing through Galileo, Kepler, Descartes or Newton, among many others who, with their work, laid the steps that lead to these zoom with which I create the images for the viewers.

1. Cited by Dominique Villain in his book The cinematographic framing of the text L´expérience hérétique de Pier Paolo Pasolini
2. *Cited by Dominique Villain in his book The cinematographic framing of a text by Michel Chion, Cahiers du cinema, August 1983*
3. Jean-Luc Godard. *Think between images*. Intermedio Ed.

Acknowledgment: Amparo Gutiérrez, Ramses Larrotta, Giovani y Víctor Forigua, Julio Sosa, Jenny Pimiento, Shin Tagawa, Víctor Ha, Anthony Quintero, Juan Pablo Bonilla y Jorge Román
* Video https://vimeo.com/807712012
* *All images are courtesy of* VIX+ *and* Caracol TV

Technical information
Camera: Sony Venice I
Sony FX3
Resolution: 5.7K 2.1
Fps 23.98
Lens: Zoom Premista 19-45mm, 28-100mm and 80-250mm
Sigma cine lenses FF T 1.5

Have collaborated