

Karl Schneider – Rio
Marcel Bianchi and the first European electric guitar

« As he walked by the streets of Basel in 1944 he saw in a music shop window a hollow body guitar with a built-in pickup, a copy of the Gibson played by that American musician he had already heard many times: Charlie Christian. He also bought a black lap-steel built in Zurich, another copy of American Rickenbackers and Gibsons. Bringing them back to France at the end of the war, he was the first French guitarist to play on electric guitars.” Phil Dubois, November 18th 2003 <http://minilien.fr/a0lopn>

Even before we started to work on the book “Guitares Jacobacci, un atelier de lutherie à Paris “ we knew that the guitar that Marcel Bianchi was holding on the first Major Conn RV advertisements issued on Jazz Magazine in 1957 was not a Jacobacci.

Not only being such a great luthier and an excellent connoisseur of American brands, Roger Jacobacci was a key authority on European guitar makers of the 50s. As we asked him in April 2005 about Marcel Bianchi’s guitar, he answered with no hesitation “they were Rios, made in Switzerland”.

Searching for another guitar, Sacha Distel’s own Jacobacci R. Gimenes, we met Simon Lustigman in January 2008. A professional musician in Paris and Radio-Luxemburg in the 50s and 60s, he was befriended with all the fellow musicians of the time and was also a sale person at the Major Conn shop, rue Dupperé in Pigalle. As we showed him the picture of the guitar player with the fringed jacket he unfortunately didn’t recognize him but confirmed that the guitar was indeed a Rio, made in Switzerland.

We decided to search for a Rio guitar, triggering alerts on Ebay and sites most likely able to house one: France, Germany, Switzerland and Austria. We didn’t have to wait for too long and bought the first Rio for the “Musée des Musiques Populaires”, museum of popular music in Montluçon, France, a lap-steel, Hawaiian Electric guitar, by the end of February 2008. By chance the seller lived in the very town of the luthier, Riehen, near Basel, giving his name in the auction text : Karl Schneider! As we all know, Swiss are meticulous people and we quite easily Googled to Herr Schneider’s family tree. We finally got in touch with Mrs Elsbeth Vocat-Schneider and Mr Dieter Schneider, daughter and son of Karl Schneider in December 2009. K. Schneider’s workshop was unfortunately destroyed by a fire in 2007 but E. and D. Schneider memories still remain, they have kept pictures as well as catalogs and D. Schneider is running a web site dedicated to his father’s work <http://minilien.fr/a0lopo> and <http://minilien.fr/a0lopq> <http://minilien.fr/a0mw73>

Karl Schneider, a violin and stringed instruments master luthier, was born in Heibronn, Württemberg, Germany on August 4th, 1905. He trained as an apprentice to master luthier Paul Meinel in Basel, Switzerland from 1920 at the age of 15. His apprenticeship went to an end in 1923 but he stayed at the P. Meinel workshop at least until 1928. He married Marie Wenk in Basel on July 30th 1931. 2 children were born to the couple: daughter Elsbeth Vocat-Schneider, born in 1937 and son Dieter Schneider born on April 28th 1944. The couple settled around 1935 at N°43 Oberdorfstasse in Riehen, Mrs Schneider hometown and then in July 1945 at N°50 Mohrhaldenstrasse.

He designed and sold as soon as 1944 under the Rio brand a range of Hawaiian and Spanish electric guitars as well as a very innovative solid body electric guitar : guitare électrique de Jazz – Elektrische Jazz-Gitarre N°130. Both its shape and its lap steel heritage remind of the Rickenbacker Electro Spanish, issued ca. 1935, a derivative of the lap-steel that followed the “frying pan”. It’s somehow hard to figure how K. Schneider could have been aware of such a confidential instrument. By some funny coincidence, Adolf Rickenbacker was of Swiss origin! Model N°130 predated anyway for several years both Merle Travis guitar built (circa 1947) by Paul Bigsby as well as Leo Fender’s Broadcaster (circa 1950).

When Marcel Bianchi, playing at the same period in Switzerland both with the Jerry Thomas Swingtette and the Fred Böhler Orchestra bought one Rio guitar, brought it back to Paris at the end of the war, he aroused interest of others top players such as Django Reinhardt, Jean Marco (singer and guitarist with the Jacques Hélian Orchestra, who died before his time in a car crash, being replaced by Marcel Bianchi), Paul Piguillem, of Les Guitars Unlimited fame (who in turn took Marcel Bianchi seat in the Jacques Hélian Orchestra in 1957) and Saranne Ferret.

K. Schneider opened a shop in 1947 at N°18, Rössligasse then moved in 1950 at N°1, Bahnhofstrasse. A family business, he hired Mrs Marie Schneider as well as his daughter, Elsbeth Vocat and son in law, Jean-Pierre plus colleague luthier Charles Buser. Industrial competitors will have to wait the mid 50s to fill the gap, but against mass produced German (Framus, Höfner) then Japanese electric guitars in the early 60s, K. Schneider gave up electric guitars making focusing on making, maintaining and restoring violins, cellos and classical guitars. Karl Schneider died in Riehen on June 26th 1998, the essential part he played in the European electric guitar history has not being acknowledged.

Is the Rio the first European electric guitar ?

A patent had been applied for in France under n°673.375 on August 3rd 1928 by Robert Kapp, titled “Method and instruments to produce musical sounds” where an electro-magnetic pickup is described as well as its reverse operation and under n°686.683 on December 16th 1929 by Gabriel Dimitriu “Electric Violin transmitting sound toward loud speakers” stating that “ the appliance could be used on any stringed instrument”, but little is known whether any instruments or even prototypes were ever built. When Marcel Bianchi bought his own, Europe, plunged in the darkness of WWII had others concerns than making electric guitars.

Except maybe for Sweden, a neutral country as well as Switzerland, and Herman Carlson’s Levin guitars. No mention however is made of the Wingtone pickup on a Levin catalog before 1950. <http://minilien.fr/a0lnex>

In Germany, having exhibited an electric Hawaiian guitar with an American pickup in the Leipzig fair in 1937, Wenzel Rossmesl and his son Roger electrified in 1945 the guitar they just built for German guitar legend Coco Schumann, a survivor from Auschwitz-Birkenau, another Charlie Christian admirer, with magnets and coils from military surplus headphones. <http://minilien.fr/a0lney>. C. Schumann , asked in an interview whether he had the first electric guitar in Europe, answered “as far as I know, I was the first one”. Not granted! In France, the first pickups dedicated to the guitar were engineered by Jean Guen in 1946 then marketed under the Stimer brand from 1948. They were floating pickups, like the American DeArmonds, that were certainly available by that time from Major Conn , who was to sell in

the early the 50s the RV (Radio Video) pickups built by Steve Brammer. Little is known about pickups mounted on Favino guitars of the 50s.

So yes, Karl Schneider's Rio, marketed as early as 1944 does seem to be the first European electric guitar. If we don't know for whom Karl Schneider built his first electric guitars, a close look at them leaves few doubts about the fact that he had in hands a Gibson Electric guitar. Did some American musicians still tour in Switzerland, another neutral country, at least at the beginning of the war? Was some Swiss guitar player able to buy one? As on Marcel Bianchi record cover picture, the pickup of the first ones is adjustable, using 3 screws located under the pickup and bears the two flat, rectangular magnets found on Gibson Charlie Christian pickups. The guitar is blond when the Gibson ES-150 only exists in sunburst finish. May Karl Schneider have had his inspiration from a fancier ES-250, available in blonde with block position markers? Size and scale, different from the ES-150, are close to the Rio's one, except for the number of frets (19 for the ES-250), body width (17" for the ES-250) and top timber (spruce for the ES-250).

Electric Rio Jazz guitar model N°260 circa 1952

The guitar, that was in Austria, was bought on Ebay Germany in November 2009. It is exactly the same as Sarane Ferret's own guitar. The maple veneered headstock is bound with a single white binding. It bears Rio logo #3. The truss rod is the one patented by K. Schneider in February 1948 with the adjustment screw on the headstock. The neck is made out of one piece of maple with a separate, glued heel. Rosewood fretboard with 20 frets; no zero fret and block Pearlloid markers at 3rd, 5th, 7th, 9th, 12th and 15th frets. The body, made of maple plywood, is bound with single white bindings, underlined by black inlaid bindings as found on violins, on arched top and back. The top is straightened by 2 parallel spruce braces. Unlike Marcel Bianchi's guitar, this one's pickup doesn't have the 2 flat, rectangular magnets as on Gibsons but 6 independent, cylindrical magnets inserted in the plastic, faux tortoise shell bobbin drilled holes. Even with a less bulky pickup, the 3 screw mounting remains. It is housed in a hexagonal maple plate bound with a white binding. One volume and one tone control with American IRC pots, made on the 31th week of 1949 and the 19th week of 1948 date the guitar after 1949. They wear hexagonal, black Bakelite knobs. The jack socket, now on the treble side of the body was once at the body bottom, inserted in the tailpiece (see Marcel Bianchi picture), like on ES-150 (it might have been as well a threaded coaxial socket). The pickguard is made out of maple, bound with a laminated white, black binding. The bridge is rosewood, adjustable in height with a white plastic nut. The tailpiece, L-5 like, is made of two brass parts, one gold, the other chrome plated. The guitar bears number 5 2330 inside on the heel which may stand for 1952, 330th instrument made.

Size 41 ½ " x 16 ½ " x 3 ½ "

Body 21 " x 16 ½ "

Scale 25 ½ "

Jazz guitar N°160.

Although the guitar bears inside a « GRANDO MADE IN SWITZERLAND » label, we do believe that it is of Karl Schneider's hand and precede the previous one. Both rosewood veneered, white bound headstock, reminding of 20s Gibson L-5 snake heads, lack of truss rod, 20 frets, f-holes size and positioning, rosewood plywood, white bound guard shape and

trapeze tailpiece are the same as on the picture on the catalog. White binding around fretboard, separate, glued to the neck heel, underlined body binding and bridge are the same as on the previous guitar. Although this one, body and top made of solid maple and spruce, was born acoustic, a small wood cube behind left f-hole plus a small hole drilled in the guard testify it once had a pickup mounted in bridge position. Block markers at 5th, 7th and 12th fret only.

Size 41" x 15 3/4" x 3 3/4"

Body 20 3/4" x 15 3/4"

Scale 25 1/2"

RIO Hawaiian electric guitar N°120 circa 1948

Shape and features of both this guitar and the next one are reminiscing of late 40s Gibson BR-4. 6 strings. The body is made out of mahogany, bound with multi-layer white, black, white, black, white binding. Fretboard (as long as an Hawaiian guitar has a fretboard) is out of clear Plexiglas. The body is hollow, shut by a bolt-on back, giving access to electronics. The single coil pickup is hidden, as well as the cast aluminum bridge/tailpiece under a removable, gold painted Plexiglas cover, bearing Rio logo #2. Knobs, also made out of gold painted Plexiglas, are like the ones found on Gibsons of the same period. The whole electronic and tuning pegs are the same as on model N°260. The threaded coaxial socket is on the bottom treble side. Pots allow dating the instrument after august 1948.

Size 31 1/2" x 8 1/2" x 1 1/2"

Scale 22 1/2"

RIO Hawaiian electric guitar N°110 circa 1954

Close to the previous one, but with a simple white binding around the body and a grey coat painted under the Plexiglas board. A cast aluminum piece is holding both electronics and the bridge/tailpiece combination. Cover and removable back are gone. Knobs and Rio logo #3, at the top of the fretboard, are the same as on model N°260

Size 31 1/2" x 8 1/2" x 1 3/4"

Scale 22 1/2"

RIO Hawaiian electric guitar circa 1956

No model number. Straighter, and even more for the Hula model pictured on the same flyer, the shape reminding of those of 50s Gibson Centuries. Made out of a single piece of beech wood, the guitar is of very basic construction. Stencilled binding and Rio logo #3 are drawn by contrast between mahogany finish and yellow varnish. The fretboard is in cream colored Plexiglas. Electronics, including 1 pickup, 2 INGELLEN, 1956 Viennese 0.5MΩ pots plus one big paper 0.025 μF STANDARD condenser are mounted, along with the cast aluminum bridge/tailpiece combination, on a single chromed metal plate. A cream Plexiglas cover, held by the pots nuts, hides and protects the whole assembly. Knobs are the same as on model N°260.

Size 31 1/2" x 7 3/4" x 1 1/2"

Scale 22 1/2"

Stanislas Grenet and Marc Sabatier

Translated with John Pohlman (Johnny Distortion)

Thanks to Elsbeth Vocat-Schneider, Dieter Schneider, Jean-Jacques Filippi, Jean-Louis Francillard, John Pohlman, Charles Schaettel, André Sévenier and Le Musée des Musiques Populaires

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Tuzet J.B. - Jazz manouche, la grande aventure du swing gitan - Didier Carpentier – 2007

Wheeler T. - American Guitars –Harper & Row 1982

All the Internet links are available on the Rio Gitarren Guitares page at
<http://minilien.fr/a0lopb>

Youtube.com

Rio guitars are very well pictured in” Big Bands” movies, very popular in France in the late 40s, early 50s Marcel Bianchi - Hubert Rostaing orchestra - La route du bonheur - 1953
<http://minilien.fr/a0l0ox> - Jean Marco - Jacques Hélian orchestra: Pigalle – St Germain Des Près (1950), Musique en Tête (1951) and Tambour Battant (1953). <http://minilien.fr/a0l0oz> and <http://minilien.fr/a0lop1>

Discography

The Exciting Electric Guitar of Marcel Bianchi, The Hawaiian Guitar Of Marcel Bianchi, The Swingin' Guitar Of Marcel Bianchi Djaz Records

Pictures captions

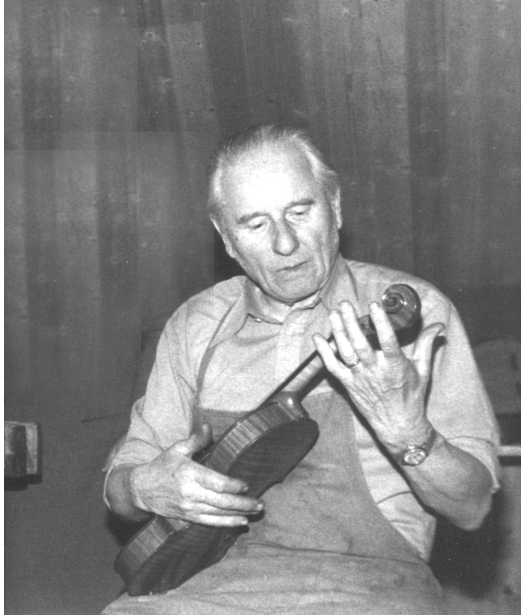


Photo 01. Karl Schneider, violin, viola and cello maker, 1975. Courtesy of the estate of Karl Schneider-Wenk, Riehen. Photo X.

Nr. 248509

Klasse 53c



SCHWEIZERISCHE EIDGENOSSENSCHAFT
EIDGENÖSSISCHES AMT FÜR GEISTIGES EIGENTUM

PATENTSCHRIFT

Veröffentlicht am 2. Februar 1948

Gesuch eingereicht: 2. Februar 1946, 12 1/2 Uhr. — Patent eingetragen: 15. Mai 1947.

HAUPTPATENT

Karl Schneider, Riehen (Schweiz).

Saiteninstrument.

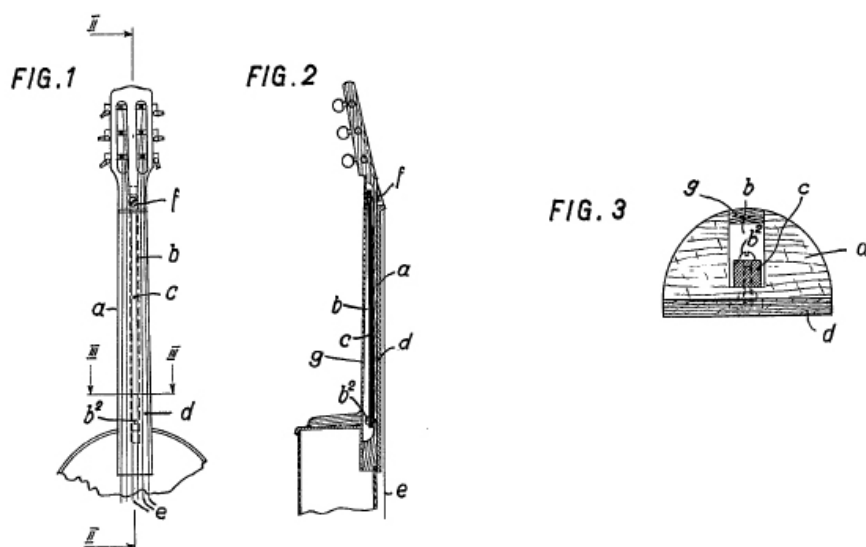


Photo 02. Patent #248509 granted in Switzerland to K. Schneider. Neck reinforcement rod for stringed instruments – 1948



No. 130

Elektrische Jazz-Gitarre.

Beliebtes kleines Luxus-Modell in braun, *breiter* weisser Rand, Palisander-Griffbrett mit Einlagen und breiten Neu-Silber-Bünden, Saitenhalter vernickelt, verstellbares Magnet-Agregat mit abgestufter Tonabnahme, Lautstärke-Regler und Tonblende.

No. 130

Guitare électrique de Jazz.

En vogue, petit modèle de luxe en brun avec *large* bord blanc, touche en palissandre avec sillets et larges liens en nouvel argent, teneur de cordes nickelé, aimant-agregat mobile avec diminution graduée du ton, réglage du hautparleur et sourdine.

No 130

Photo 03. Rio Gitarren Guitares catalog circa 1948. Guitare électrique de Jazz N°130. The body is the same as on Rio Hawaiian electric guitars but with a fretted neck. Elsbeth Vocat-Schneider : "... made in the early 40s in his workshop in our apartment living room. Avoiding vibrations, the model was discontinued after Fender and Gibson guitars became widely available". Courtesy of the estate of Karl Schneider-Wenk, Riehen. Photo X.



Photo 04-1. Guitare de Jazz Rio modèle N°260 circa 1952. Courtesy of the Musée des Musiques Populaires 2009.20.3.



Photo 04-2. Single coil pickup, similar (bobbin, 6 cylindrical magnets) to those found on Gibson lap-steels between 1951 and 1956 and on Rio lap-steels, but with a higher resistance (9.52 k Ω , vs. ca. 8k Ω on Gibsons). Set with 3 screws, in a triangle layout, allowing height adjustment. Metal plate craftsmanship is at Switzerland's best level. Courtesy of the Musée des Musiques Populaires.

Jazz-Gitarre. No. 250

Grosses Luxus - Modell, Ahorn braun, patent. Hals mit verstellbarer Stahleinlage, breiter weisser Boden und Deckenrand, Kopf und Griffbrett mit Rand, solide Einzelmechanik.

No. 260
Wie No. 250. Ahorn hell, geflammt, jedoch mit extra *breitem* Boden- und Deckenrand und schwarzer Filet-Einlage.

No. 270
Wie No. 260. Vogelaugenahorn hell.

Guitare de Jazz. No. 250

Grand modèle de luxe en érable brun, col breveté avec sillet mobile en acier, large fond blanc et bord supérieur, tête et touche avec bordure, chaque mécanique à part très solide.

No. 260
Comme No. 250, en érable clair, flammé, mais avec fond extra *large* et bord supérieur, sillet en filet noir.

No. 270
Comme No. 260, en érable moucheté clair.

No. 260



Photo 04-3. Rio Gitarren Guitares Catalog circa 1948. Courtesy of the estate of Karl Schneider-Wenk, Riehen. Photo X

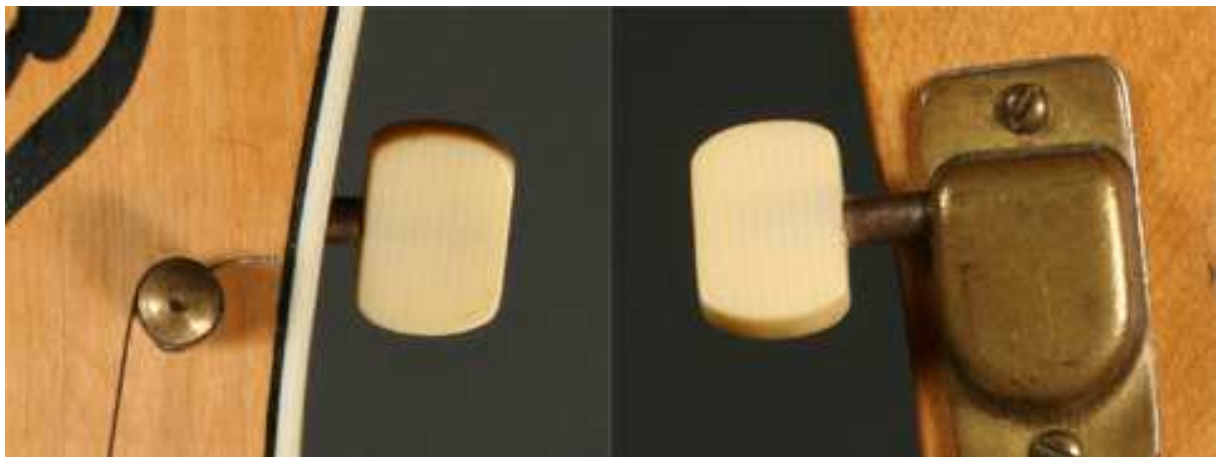


Photo 04-4. Jazz guitar N°260 tuning pegs. Courtesy of the Musée des Musiques Populaires.



Photo 05-1. Jazz guitar N°160. Courtesy of the Musée des Musiques Populaires.



No. 150

Jazz-Gitarre.

Kleines Modell, Ahorn braun, patent. Hals mit verstellbarer Stahleinlage, weisser Boden- und Deckenrand, gewölbtes Palisander-Griffbrett mit Einlagen und breiten Neu-Silber-Bünden, solide Einzelmechanik.

No. 160

Wie No. 150, Ahorn hell, geflammt, jedoch *breiter* weisser Boden- und Deckenrand, schwarze Filet-Einlage und Griffbrett mit Rand.

No. 150

Guitare de Jazz.

Petit modèle en érable brun, col breveté avec sillet mobile en acier, fond et bord supérieur blanc, touche courbée en palissandre avec sillets et larges liens en nouvel argent, chaque mécanique à part très solide.

No. 160

Comme No. 150, en érable clair, flammé, mais plus *large* fond blanc et bord supérieur, sillet en filet noir et touche avec bordure.

No. 160

Photo 05-2. Rio Gitarren Guitares catalog circa 1948. Courtesy of the estate of Karl Schneider-Wenk, Riehen. Photo X



Photo 05-3. Jazz guitar N°160 tuning pegs. Courtesy of the Musée des Musiques Populaires.



Photo 06-1. Rio Hawaiian electric guitars N°120 (top) et N°110 (bottom). Courtesy of the Musée des Musiques Populaires 2009.20.1 et 2009.20.2.

Rio

110

120



Nr. 110

Elektrische Hawaii-Gitarre, braun mit weißem Rand, neuestes verstellbares Magnet-Agregat mit abgestufter Tonabnahme, Lautstärkereglern und Tonblende.

Nr. 120

Dito, braun mit breitem Rand, Griffbrett und Agregatschutz aus Plexiglas, Einzel-Mechanik.

No. 110

Guitare électrique hawaïenne, brune avec bord blanc, tout nouvel aimant-agrégat mobile avec diminution graduée du ton, réglage du haut-parleur et sourdine.

No. 120

Dito, brun avec bord large, touche et agrégat-protecteur en verre incassable, chaque mécanique à part.

Photo 06-2. Rio flyer circa 1952. Courtesy of the estate of Karl Schneider-Wenk, Riehen. Photo X



Photo 07-1. Rio Hawaiian electric guitar circa 1956. Courtesy of the Musée des Musiques Populaires.

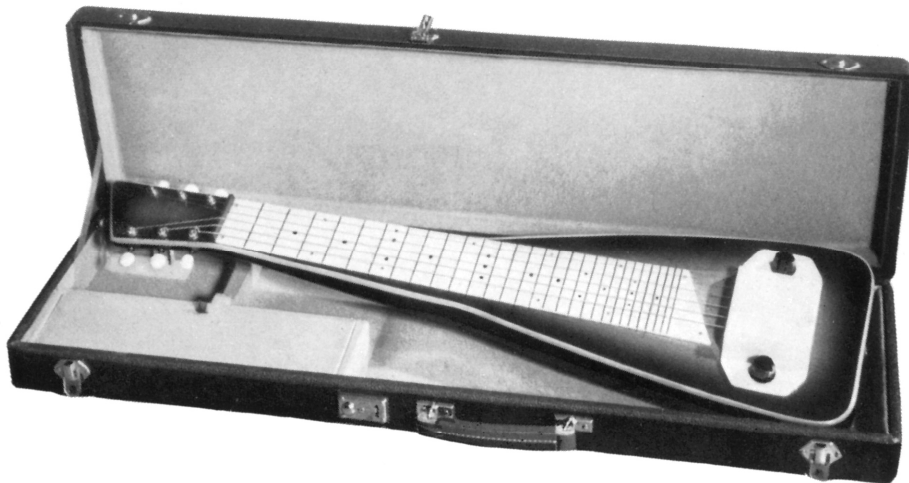


Photo 07-2. Hawaiian guitars flyer circa 1955. Courtesy of the estate of Karl Schneider-Wenk, Riehen. Photo X.



Marcel Bianchi
Stéphane Grappelly
Michel Legrand (Pedersen, basse)
jouent sur
RV
GUITARES ÉLECTRIQUES
MICROS AMPLIS
★ Garantie absolue
★ Label de qualité
RV équipe les grands professionnels
★
MAJOR-CONN
3, rue Duperré, PARIS (9^e) - TEL 75-24
Catalogue illustré sur demande

Photo 08. Jazz Magazine N°27 mai 1957. Courtesy of J.L. Francillard. Photo X



Photo 09. Django Reinhardt at the 1st Festival International de Jazz in Nice in February 1948. The Rio guitar probably belonged to Pierre Cavalli, on the same bill, the same day with the Francis Burger Orchestra. Courtesy of J.L. Francillard. Photo X. The photo is also available, larger, from Getty Images <http://www.gettyimages.fr/detail/92543112/AFP>



Photo 10. Swiss guitar player Pierre Cavalli in 1948 also played a Rio with the Fred Böhler Orchestra, with whom Marcel Bianchi used to play during the war. Jazz Hot magazine 1949. Courtesy of André Sévenier. Photo X.

MARCEL BIANCHI

vol. 11

CARAVAN

fox

CHRISTINE

valse

EL RELICARIO

paso-doble

DANS LE MAQUIS

valse



disques
vogue

EPL. 7.454

Photo 11. Marcel Bianchi. The original pickup has been replaced by a RV Tonemaster pickup made by Steve Brammer. Vogue EPL 7454. Courtesy of the Musée des Musiques Populaires. Photo X.



Photo 12. Unknown guitar player. The picture belonged to Rosine and François Charle's collection. Courtesy of the Musée des Musiques Populaires. Photo X.



Photo 13. The picture was posted on the Jacobacci Yahoo! group in April 2006 by Jean-Jacques Filippi. It has been shot at « La Vieille Cave » in Algajola, Corsica, in 1963 or 1964. Sarane Ferret's sideman plays Sarane's own Rio. S. Ferret is pictured along with René Mailhes and Magda Schneider on Jean-Baptiste Tuzet's book, *Jazz manouche, la grande aventure du swing gitan*, playing the same guitar <http://minilien.fr/a0mw6h>. Courtesy of Jean-Jacques Filippi. Photo X.

RIO

Photo 14 : Rio logo #1



Photo 15 : Rio logo #2



Photo 16 : Rio logo #3

dansons avec Denise Vanène

et **MARCEL BIANCHI**

1. **MY HEART BELONGS TO DADDY**, fox - 2. **THE KEY TO LOVE**, fox
du film: "Le millionnaire" du film: "La garçonnière"
3. **C'EST MON GIGOLO**, slow - 4. **MISTY**, slow

**SPECIAL
DANSE**

disques
vogue

EPL. 7 846



Photo 17 Marcel Bianchi's other guitars. Being born in Marseille, M. Bianchi played a Carbonell during the 30s <http://minilien.fr/a0ln3f>, as well as a Selmer. In addition to the Rio and the double-neck lap-steel (which might have not been a Rio) he bought in Switzerland, he played at least, all along the 50s and early 60s on a Super de luxe, a Royal, a Hawaiian electric guitar and a Texas, both crafted by the Jacobacci family for the Major Conn shop, as well as an Epiphone Al Caiola. Pictured here is a Royal, with fancier gold plated hardware. Vogue EPL. 7 846. Courtesy of André Sévenier. Photo André Nisak.

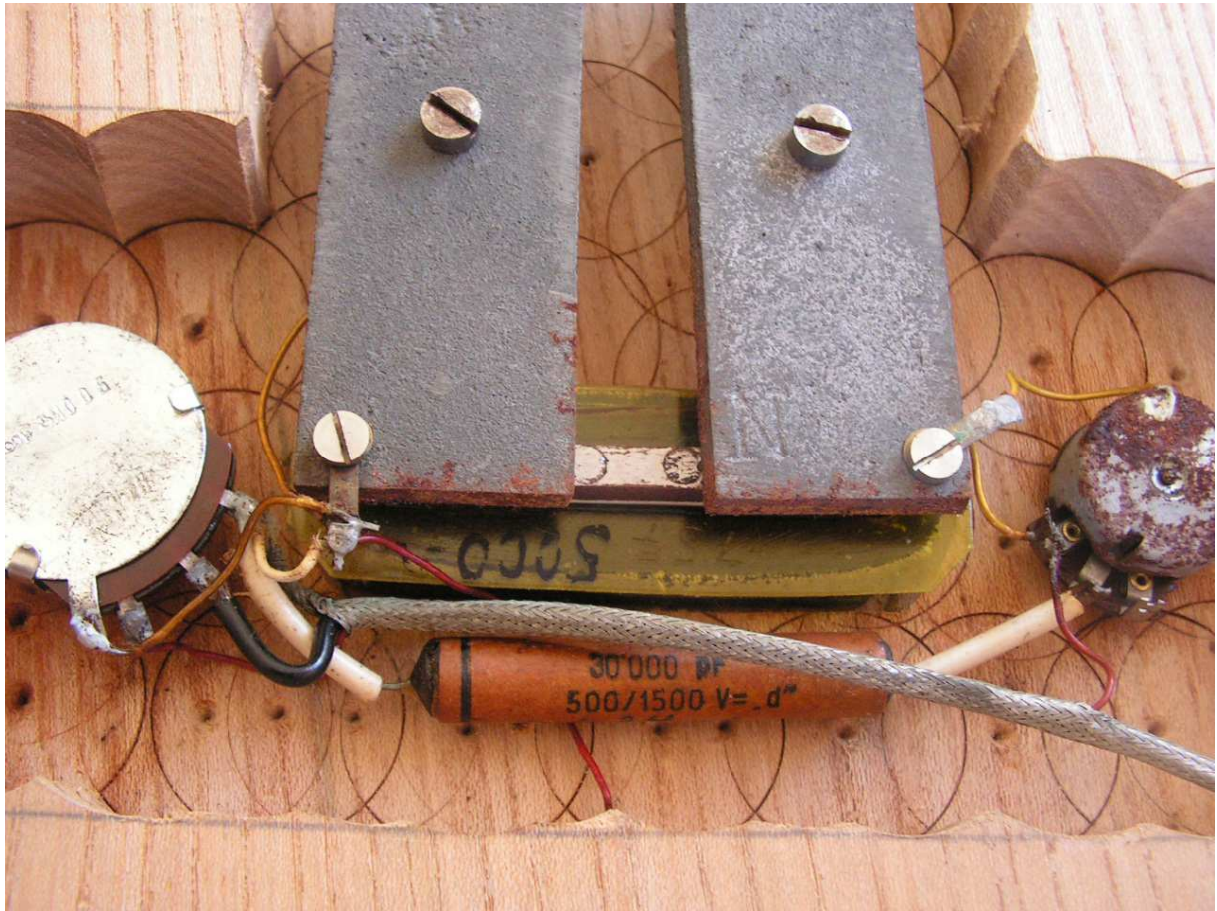


Photo 18 : A late 40s N°110 Hawaiian guitar pickup. Please note the two rectangular, flat magnets as found on Gibson C. Christian pickups. Private collection. Photo courtesy of Thomas Haacke



Photo 19. Roland Lobligeois (b), Marcel Bianchi (g) Jacques Bratti (acc) circa 1956 in Charles Schaettel - *De Briques et de Jazz* - Atlantica, 2001. Photo X



Photo 20. The Hula Hawaiians, from Basel, Switzerland. The blonde guitar is probably a Grando. Courtesy of the estate of Karl Schneider-Wenk, Riehen. Photo X.



Photo 21-1. Hula Hawaiian guitar. Photo courtesy of John Pohlman (Johnny Distortion)



Photo 21-2. Hawaiian guitars flyer circa 1955. Courtesy of the estate of Karl Schneider-Wenk, Riehen. Photo X.



Photo 22-1. Hawaiian guitar N°138 (although the guitar is fretted). Photo courtesy of John Pohlman (Johnny Distortion)



No. 138 **Hawai-Gitarre.**

Mahagoni naturbraun, helle Decke mit Rand, Metall-Saitenhalter und verstellbarer Steg, Brand-Malerei (Sujet Cow-boy).

No. 139 **Konzert-Gitarre.**

Wie No. 138, aber mit braun-weißem Doppelrand und Palisandersteg ohne Brand-Malerei.

No. 138 **Guitare hawaienne.**

En acajou brun naturel, dessus jaune clair avec bord, teneur de cordes métallique et chevalet mobile. Pyrogravure (sujet Cow-boy).

No. 139 **Guitare de concert.**

Comme No. 138, mais avec double bord brun et blanc, chevalet en palissandre sans Pyrogravure.

No. 138

Photo 22-2. Rio Gitarren Guitares Catalog ca. 1948. Courtesy of the estate of Karl Schneider-Wenk, Riehen. Photo X



Photo 23. Rio electric guitar. The pickups are the same as on Hawaiian N°110. Photo courtesy of John Pohlman (Johnny Distortion)