

The Raffin 20/78 Concert Street Organ A Profile

Gordie Davidson

This Crank Organ Digest Series article provides an up, close and biased profile of my Raffin 20/78 concert street organ. This instrument is the flagship of the superb line of 20-note organs built by Josef Raffin, Uberlingen, Germany. It is without doubt one of the most versatile 20-note organs available today. Perhaps this article will inspire some of you would-be authors to write about your own particular instruments.

My organ was the first imported Raffin 20/78—there are about six units in the USA as of this writing. As the name implies, this is a concert street organ, not a belly organ or bauchorgel. The resemblance to a Raffin 31-note is virtually identical, particularly with the cases (**Figure 1**). The 31-note model is seen on the left with 16 melody flutes whereas the 20-note model is seen on the right with 11 melody pipes. The 31-note and 20-note Raffin concert street organs are remarkably similar with their registers as well. If you're thinking about buying a Raffin 31-note, please read on. I know of a few 31-note owners who might have purchased a 20-note had they known the likeness of arrangements and sounds.



Figure 1. The Raffin model 31/119 on the left is similar in size to the author's 20/78 on the right.



Figure 3. A view of the brass on/off stops for the six melody registers.

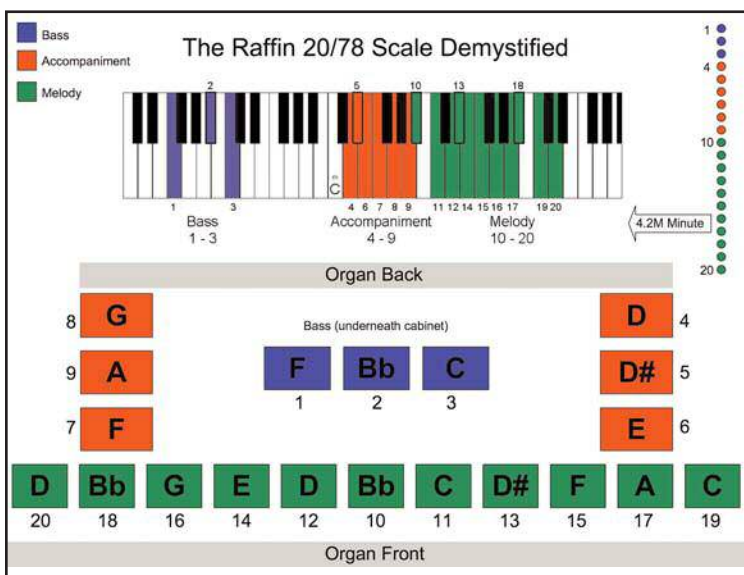


Figure 2. The illustrated Raffin 20-note concert scale and the model 20/78 pipe schematic.

Specifications:

For new readers, the 20/78 designation refers to the scale (20 notes) and total number of pipes (78). The actual breakout of the 20-note scale is depicted on a piano keyboard (**Figure 2**). There are three bass notes, six accompaniment notes and 11 melody notes (3+6+11=20 notes). You can also see (Figure 2) where the individual notes are located within the organ case as well as their position on the tracker bar. The 11 melody notes are exposed on the front (**Figures 5, 7 & 8**). The remaining five melody registers lineup directly behind the front flutes (**Figures 4 & 6**). The organ is equipped with six controllable melody registers or ranks (sets of pipes). The user controllable on/off stops are located on the left



Figure 4. A top view of 20/78 case without the cover. There are good views of melody and accompaniment pipes as well as the crank handle with twin cams to the lower bellows.

side of case (Figures 3 & 12). From front to rear, the melody registers are configured accordingly (Figures 4 & 6):

- Register 1 - 11 Concert Flutes (front exposed) (Figure 8)
- Register 2 - 11 Bourdon Flutes (Celeste) (Figure 8)
- Register 3 - 11 Violins (Figure 8)
- Register 4 - 11 Clarinets or Trumpets (Figure 8)
- Register 5 - 11 Wooden Piccolos (Figure 9)
- Register 6 - 11 Metal flutes (rear) (Figure 9)



Figure 6. A good view of the melody registers, accompaniment pipes and roll frame.

The three bass notes are doubled pipes (two per note) located under the main case (Figures 9 & 12). The six accompaniment pipes are located in the main case, three on the left and three on the right (Figures 2, 4 & 7). The 20/78 organ itself weighs about 110 pounds. In summary, there are 66 melody pipes plus six accompaniment pipes and six bass pipes for a total of 78 pipes.

There are two large bellows that feed a common air reservoir. Of interest, Raffin provides a control lever (Figures 4, 10 & 11) that allows the user some artistic expression: to increase or decrease pressure from the reservoir, or create a tremolo effect to all registers by pulsating the lever.

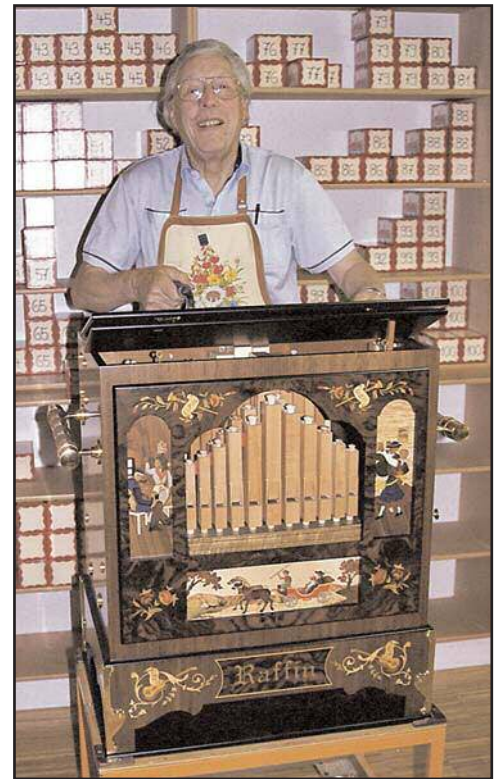


Figure 5. The 20/78 with builder, Josef Raffin. Notice the 11 exposed concert flutes—the three inlaid panels can be custom fitted with different scenes



Figure 7. A front view with façade removed. Notice the bellows, 11 concert flutes and the accompaniment pipes (three on the left and three on the right).

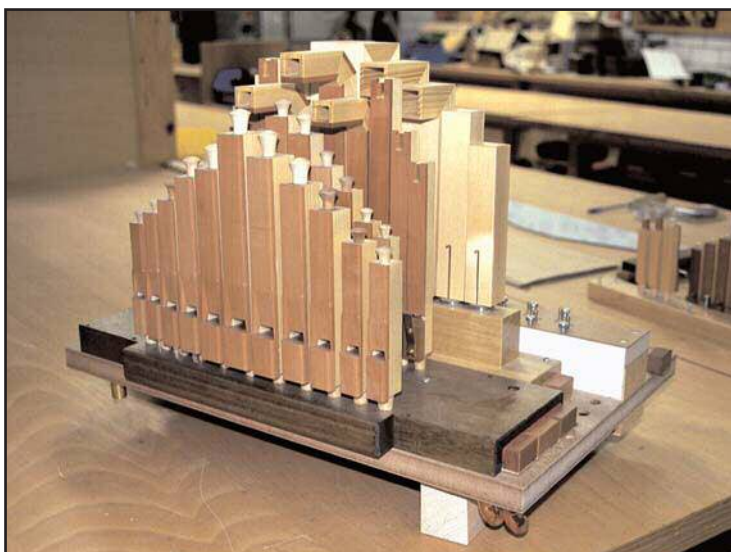


Figure 8. A view of melody registers on the Raffin workbench. Notice the wire tuning sliders for the reeds on the rear clarinets.

Options:

The Raffin 20/78 concert street organ as configured with inlaid veneer case, organ cart with rubber-treaded wheels, rain cover, packing and shipping would cost approximately 12,000 Euros today. Options include:

1. Metal trumpets instead of wooden clarinets (more expensive)
2. Model 20/67 without last register of metal flutes (less expensive)
3. Painted case instead of inlaid veneer (less expensive)



Figure 9. The rear view of case with the access cover removed. There are good views of the metal flutes and wooden piccolo registers. Two bass pipes can be seen under the case.

My organ and cart were air shipped to Kansas City International Airport. The packaging included two large, heavy-duty corrugated boxes with extensive foam inserts. All came through in great shape without customs fees.

Operating:

If you like things that are fully automatic, this is **not** the instrument for you. Conversely, if you're the creative or artistic type, you just might have fun with the Raffin 20/78. Why? The six controllable melody registers (**Figures 3 & 12**) provide for many user-selected combinations of sounds. The "bread and butter" pipes for Raffin organs are the front, wooden, concert flutes (**Figures 5 & 15**) combined with the second rank of Celeste flutes (**Figure 8**). The second rank is tuned slightly higher to the



Figure 10. A view of the tracker bar with the standard 20-note roll in place. The volume control lever (pressure regulator) is just left of the roll (circled in photo).

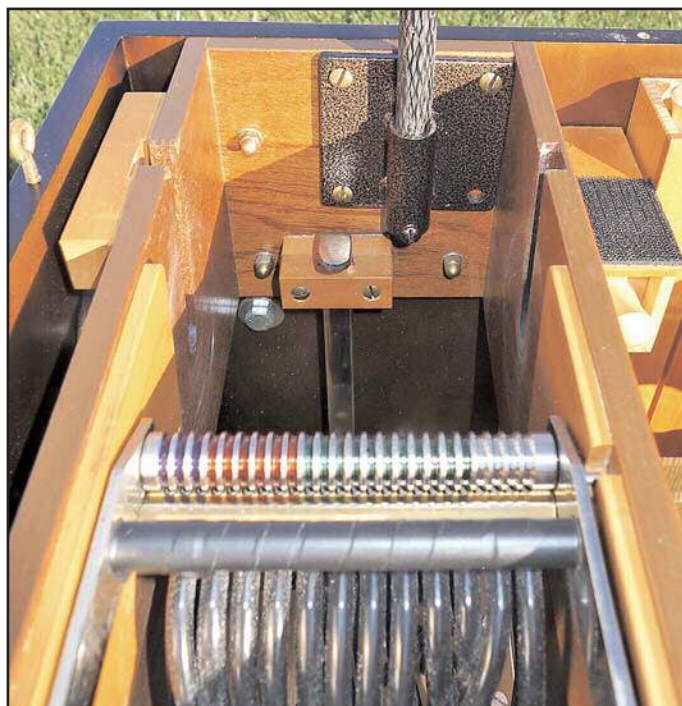


Figure 11. Another view of roll frame without roll. The volume control lever is just below the umbrella holder. The tracker bar is color coded as in Figure 2—this facilitates on-site explanations to inquisitive observers.



Figure 12. The organ cart is shown with the storage drawer extended. It has the rubber-treaded wheels and suspension (larger wheels are available).

front, which creates a tremolo or pulsating sound. Over the years, I have settled in with certain combinations of sounds. I always use the front flutes. My favorite register combinations by preference are 1&2 (flutes/Celeste flutes), 1&3 (flutes/violins), 1&5 (flutes/piccolos), 1&6 (flutes/metal flutes, 1&4 (flutes/clarinets), 1, 3&5 (flutes/violins/piccolos). For classic arrangements, 1&6 sound particularly nice. The clarinets are loud and provide a dynamic, spectacular, penetrating sound; use sparingly on marches and lively tunes (not with Silent Night or Amazing Grace).

For uncertain grinders, Raffin prints suggested combinations on their music rolls. I cannot overemphasize the importance of being able to user-control the registers and volume. When performing in a close, indoor environment, I can close the top and use flutes only to minimize volume.

One of the down sides to an organ this size is portability. All my gear (Figure 14) readily fills my Toyota 4Runner. My act is known in the industry as a “grounds attraction.” Once on site, it is difficult to move: one does not readily stroll with a Raffin 20/78. This is where the busker and belly organs shine with portability. It takes about 20-30 minutes to load and unload all my gear, depending on parking and performance site distance.

Tuning:

All organs require periodic tuning; the Raffin 20/78 is no exception. The main challenge to any organ’s tuning is the ambient temperature. I have found over the years that the



Figure 13. Josef Raffin, 77, delivers the 20/78 concert street organ to the author.

organ holds tuning quite well. I have performed pretty much at all temperatures (let’s just say the organ seems to survive better than me). The reeds of the clarinets require adjustments with temperature changes of +/- 20 degrees. I will not address the specifics of tuning, but will emphasize the importance of having any instrument in tune with

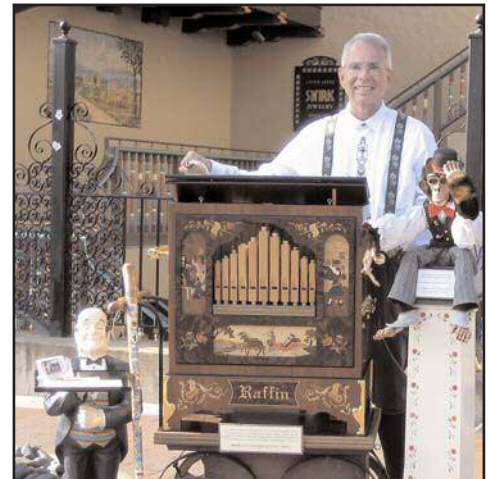


Figure 14. The author with full performance regalia on the Country Club Plaza, Kansas City.

itself. Do not use an electronic tuner for each pipe. I recommend you tune the front flutes to pitch, then tune everything else to these by ear (it just works with a good tuning roll).

There you have it: a profile of the gold standard for 20-note concert street organs, the Raffin 20/78. If anyone is considering the purchase of this model or another, please do not hesitate to call me or even grab a flight to Kansas City for a complete, half-day, hands-on session with this magnificent instrument. Thanks for reading this—stay in tune!

Raffin organs and rolls can be purchased directly or through US reseller, Hal O’Rourke. For more information on the Raffin 20/78 see Hal O’Rourke’s ad in the back pages or www.halor.com. The official Raffin factory web site is www.raffin.de in both German and English”

Gordie Davidson is a retired army engineer officer currently working as an army civilian at Fort Leavenworth, Kansas. His interest in mechanical music began in 1981 with his assignment to the Berlin Brigade. He has performed professionally in and around the Greater Kansas City Area since 1995. He and his wife Sue, reside in Lansing, Kansas. His web site can be found at www.streetworkgrinder.com