

**Congratulations on purchasing your new
YANKEE DOODLE
Pipe Street Organ!**



Now you can enjoy playing like Victorian street musicians; participate in family events, craft and art shows; and celebrate the holidays by performing for your parents and grand children!

This hand-cranking street organ was designed and made in the USA by Connecticut musical instrument maker Anatoly ZAYA-RUZO. This organ uses standard 20-note perforated 140 mm paper rolls, which can be installed and replaced in seconds. Every perforated roll holds up to 8 minutes of music. There are hundreds of rolls available from multiple online sellers.

This is a classical, portable street organ built in the spirit of artisanal woodworking and cabinet making. Its more modern features include:

- **Gear action.** There are five gears in the playing and rewinding mechanisms. These are made of plastic and never need to be oiled. This gear action is absolutely reliable and a hundred times more durable than more common belt actions.



- **One-movement PLAY/REWIND switch.** Just move the switch 1 inch to go from PLAY (towards the front panel) to REWIND (towards the back panel) and back.



Prior to playing your organ for the first time, carefully read these instructions. They address:

1. Taking care of your street organ
2. Anatomy of the street organ
3. Quick start
4. Tuning the pipes
5. Troubleshooting
6. Warranty information
7. Where to get more music rolls

1. Taking care of your street organ

Taking care of the organ is simple and intuitive if you remember two things:

- Your street organ is a musical instrument, like the piano, guitar or flute;
- Your street organ is made primarily of premium hard or soft wood.

Therefore:

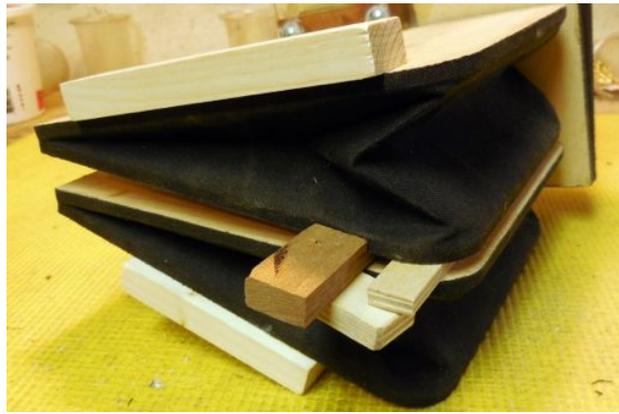
- Don't expose instrument to direct sunlight for a long time

- Don't play outside in rainy day or at high humidity
- Avoid dust, dirt, and water
- Use a plastic or fabric cover when not in use
- While cleaning the box be careful with pipes, their flue, lips and stoppers (see explanations below).

2. Anatomy of the street organ

The organ consists of several units:

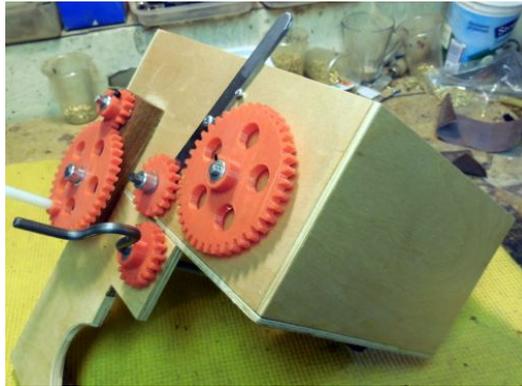
- Bellows . When turning the playing crank, bellows pump the air needed for the pipes to sound. The bellows are connected to the receiver.



- Receiver. With the help of a spring, the receiver collects air and keeps the pressure more stable and consistent. The receiver is connected to the pressure box.



- Pressure box . When the door of the pressure box is closed and locked, the air pressure inside the box is the same as that in the receiver. There is a tracker bar inside the pressure box. Each of 20 holes of the tracker bar is connected with tubing leading to each of 20 pipes. These holes may be closed by the paper roll or opened by the perforations in the paper roll. When the hole is open, pressurized air pushes through the pipe and it sounds. Thus, pressure box is connected to 20 pipes.



- Pipes. There are 4 bass pipes inside the organ and 16 smaller pipes on the front panel. Each pipe has a gap, where air is blowing out to the upper lip, and stopper. The stopper may be moved up and down inside the pipe during the process of pipe tuning (more details in the following chapter).



3. Quick start

1. After unpacking your organ, attach *the crank to the axle* by screwing it onto the axle using hexagonal key or screwdriver.
2. *Prepare the music roll.* Use only a standard paper roll 140 mm in width on a standard plastic reel with 141 mm distance between its flanges. Note that there are two axles protruding at both sides of the reel. One of these - which is a bit longer – has a hexagonal hole inside.
3. *Move the mode switch to the PLAY position.*
4. *Pull the door latch and open the door.*
5. *Insert the reel with music roll into the box.* Start this process by inserting the shorter axle of the reel into the hole in the spring-end at the left side of the pressure box (see picture below).



Then push the reel left until you are able to insert its right portion onto the hexagonal axle on the right side of the pressure box. When the hexagonal axle is in the hexagonal hole of the reel, push the reel right all the way in so that there is no gap between reel and ring collar of the hexagonal axle.

6. *Start the roll.* Put the wire hook onto the pin on the intake reel. Holding the paper with your left hand, make one turn of the intake reel to securely engage the music paper on the reel. Keep holding the paper with your left hand and make four or six turns with the crank handle.



7. *Close the door* all the way—until the latch clicks.

Play music by turning the playing handle clockwise. To rewind the music roll move the switch to the REWIND position. Open slide door at the right side of the box. Turn the rewinding crank clockwise (see picture below) .



4. Tuning the pipes

Although you will receive an in-tune organ, it may not be tuned in perfect pitch (to A=440 GHz). Practically no street organ has ever had a perfectly pitched tone, because it the receiver cannot produce a perfectly even sound, free of bumps caused by uneven air supply pumped by the bellows—hence the characteristic sound. Also, the pitch of the pipes may depend on weather, humidity. It is actually not a big deal (unless the organ is meant to play in a duet with another instrument). However, in time you may wish to re-tune the organ, or just to touch up the tuning of some of its pipes. This is a simple process.

The pipe tones, beginning on the largest pipe, #1, are:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
F	B \flat	C	D	E \flat	E	F	G	A	B \flat	C	D	E \flat	E	F	G	A	B \flat	C	D

The four bass pipes are placed inside the organ, and you have to open upper, back and side panels to reach them. To tune the sixteen front pipes you have to unscrew and open upper panel above the pipes. Then, unscrew and remove the decorative “false board”.

For tuning you need an electronic tuner (chromatic, not just for guitars), and masking tape. Open the door and cover all the holes of the tracker bar with masking tape - except the one you wish to tune. Close the door. Turn on your electronic tuner. Make several turns with handle of the main axle, until the receiver gets enough air. If the pitch is lower than it should be, push the stopper of the pipe inside with the tuning tool. If it is higher, pull the stopper out (the stoppers are shown on the picture below). Repeat the procedure for each pipe that needs to be tuned.



After pipe #1 is tuned, open the door, open the hole #2, and cover the hole #1 with a small piece of masking tape. Close the door. Repeat the procedure. In the same manner, one by one, tune all the pipes.

5. Troubleshooting

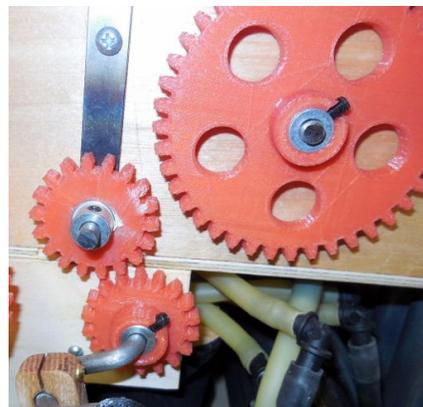
- **One or more pipes are not producing any sound.**

Check to make sure that the gap of the pipe is not blocked by a small particle of wood or other material. Carefully inspect the gap: is it clear? If you can see there is something stuck in the gap, open the door and remove the paper roll. Then take a piece of tubing. Place one end close to the gap and blow into the other end. Strong air flow may clean the gap and push the particle into the pressure box.

You may also clean the gap by pushing a thin piece of paper or plastic through it. Be careful: do not damage the edges of the gap and lip. Then, do not forget to clean the pressure box with vacuum cleaner.

- **While turning the main crank, the bellows pump the air, but the music paper is not moving.**

This means that the crank gear and leading reel gear are not engaged to each other (right picture below). Make sure the mode switcher is in its PLAY position (left picture below). While turning the handle, move the mode lever to the end.



- **The music roll is moving and bellows are pumping, but the volume of air is too small; the receiver does not open enough for pipes to sound.**

Looks like the system is not sealed. Start with checking position of the music reel.

Be sure there is no gap between plastic reel and the metal collar of the hexagonal axle. Check whether the reel can turn freely. Be sure the inside distance between two flanges of the plastic reel does not exceed 141 mm. If it is more than that, carefully press the two cheeks towards each other until the distance is between 140.5 and 141 mm (you may use a light hammer for that purpose).

Check the bellows and receiver fabric – is it securely glued around the entire perimeter? Is there a hole in the fabric? Check to ensure the door is closed. Check the condition of door rubber sealer.

In the case of more serious problems, please send all issues and inquiries to the maker: zayaruzo@cox.net.

6. Warranty

The manufacturer provides a limited, three-year factory warranty for parts and assembly. The term of the warranty starts on the date of purchase. During the term of warranty all damaged or mis-assembled parts will be replaced or repaired with additional warranty. This warranty is not intended to cover damage caused by careless handling of the instrument. Questions should be addressed directly to the manufacturer at zayaruzo@cox.net.

7. Where to get more music rolls?

There are several sources of music rolls on Internet—a list of address and links is available at www.zayaruzostreetorgan.com.