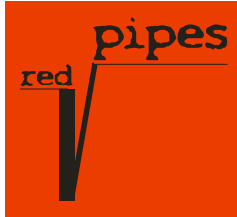


Operating Manual



Redpipe

electronic Bagpipe

***redpipe* – a revolution in electronic piping**

hear the soul of the instrument, thanks to new technology. The sound itself ‘breathes’, just like with classic air bagpipes. The *redpipe* is unique in that it delivers a sound almost indistinguishable from regular bagpipes.

Unique pneumatic technology

Sound is produced by applying pressure to the bag under your arm, just like the original thing. Optimised sensors provide for authentic chanter fingering.

The *redpipe*’s pneumatic sound system control provides for an unprecedented overall effect.

The sound

Modern microprocessor technology provides optimal simulation of the Great Highland Bagpipe and Scottish Smallpipe. The chip has been designed to allow future sound and feature upgrades.

No limitations

A bagpipe without the tuning limitations. The *redpipe* covers a wide range of keys, allowing you to play along with any other instrument.

Choose between G natural or G sharp for playing mixolydian and Ionian music.

Regards Rolf Jost

Precautions

The **redpipe** Chanter will give you years of reliable service if you follow the simple precautions below:

Location

Keep the instrument away from locations where it might be exposed to high temperatures (such as direct sunlight) or humidity. Also avoid locations which are subject to excessive dust accumulation or vibration capable of causing mechanical damage.

The bag is finest leatherwork. Like with clothes you have to be carefully about fluids and dirt. Direct sunlight can be also bad for the colour of the bag.

Handle the **redpipe** with Care

Although the **redpipe** has been constructed to withstand the rigors of normal use for optimum sturdiness and reliability, avoid subjecting it to strong physical shocks (such as dropping or hitting it). Just handle the **redpipe** as you would a precision-made musical instrument.

SWITCH OFF THE CHANTER BEFORE PLUGGING OR UNPLUGGING CABLES

To prevent damage, always switch the Chanter off before plugging or unplugging cables or headphones.

DON'T OPEN THE CASE OR TRY REPAIRING THE INSTRUMENT YOURSELF

The Chanter contains no user-serviceable parts. Never open the case or tamper with the internal circuitry in any way, since doing so may result in damage to the instrument. Refer all servicing to your dealer or the manufacturer.

redpipes will not be held responsible for any damage caused by handling or operation. Opening the case voids warranty.

Getting Started

Insert the Battery

The **redpipe** Chanter works with 2 Mignon Batteries (AA). The battery compartment is accessible by removing the Lid. Low Battery is indicated by a blinking LED.

If the LED-Controllight twinkle, the batteries can be used still for several hours.

Connecting Headphones

Connect the Headphones to the Headphonejack . It is possible to connect all standard headphones as used for example with portable disc players. Always use a stereo plug as mono plugs cause a short circuit which may damage the instrument.

Light-emitting diode (LED)

The LED shows the operating status of the *redpipe*. The following information is available:

Display	Function
off	The <i>redpipe</i> is switched off or in power-save mode
one flash per second	Standby, the <i>redpipe</i> may be started
continuous light (short interruption shows activity)	The Chanter is active
equably	the Battery is low and should be changed
the LED blinks with the beat of the Metronome	Metronome

Power On

Use the slide switch to switch on the the *redpipe*. After approximately two hours, the *redpipe* moves to a power-save mode. Switch the Chanter off and on to restart power.

IMPORTANT: Even in the power-save mode the *redpipe* consumes a little power. To lengthen the lifetime of the batteries, use the slide switch to power off the Chanter after using it.

Start and stop the sound

Sound is produced by applying pressure to the bag under your arm.

You have two switchpoints. First you start the drones. Again pressing the chanter starts to play.

The switchpoints, you start to play the *redpipe*, you can tune by yourself.

Press the bag and if you feel fine, press **KEY** for three seconds.

The **LED** will give a sign for seconds. Now it is tuned. After then you need no more pressure to the bag and the sound will stop. All individuell switchpoints will be tuned like this - volume, high of the key ct. and also it works after changing batteries. If you change the switchpoints, the sound has to be started and stopped again at least before you turn off. So all switchpoints are saved.

Real Bagpipe sound

Applying pressure to the bag the airpressure will go up till the drones start at first. More pressure and the chanter will start. The swichpoints are strong – that means, drones and chanter starts if the switchpoints are reached.

An airpressed pipe is at the beginning more deep till the pressure to the bag is o.k. The *redpipe* breathes that means the sound is variable insignificant. Press about three seconds to the soundbottom till the LED will shine for seconds. Like this you can this funktion switch on or off.

Volume (+ -)

The volume can be adjusted by pressing the + and - keys. Avoid using headphones at very high volume levels.

Switching between the different Instruments (SOUND)

Pressing the SOUND key changes the instrument from Highland Pipe to Smallpipe and vice versa.

Volume of the Drones (DRONES)

To adjust the drone volume, hold down the DRONES key and then adjust with the + and - keys. The drone volume can be adjusted separately for the different instrument sounds.

Baritone-Drones

Toggle the Baritone Drone by holding down the DRONES key and pressing the SOUND key.

Changing the Key (KEY)

The default key of the *redpipe* Chanter is B_b (B-Flat). This is the sounding pitch of most of the modern Highland Bagpipes. The key can be adjusted by semitones with the + and - keys while holding the PITCH key. Holding the PITCH key and pressing the + and - key at the same time resets the pitch to the default of B-Flat. The keys are stored individually for the different instruments. The key is retained if the KEY button is held while changing the instrument (SOUND).

Tuning (TUNE)

The *redpipe* can be tuned easily with the + and - keys while holding both the KEY and DRONES keys. The tuning is global and independent of the selected instrument.

The Metronome (MET)

The built-in metronome is started by pressing the MET key twice. After pressing the key the first time, the metronome waits for two seconds for a second press. If the MET key is pressed during this time, the metronome clicks on, using this time interval. To stop the metronome, simply press the MET key once. If the metronome is stopped, press and hold the MET key for three seconds to restart the metronome with the same speed as used last time.

Reset to Defaults

To reset default, simply press + and - keys at the same time.

Drones:

1. Press and hold DRONES
2. Press + and - to reset the Drone volume and deactivate Baritone Drone.

Key:

1. Press and hold KEY
2. Press + and - to reset the key to B-flat.

Tuning:

1. Press both DRONES and KEY
2. Press + and - to reset the tuning to default of 440 Hz.

Reset to Factory Settings:

1. Switch off the slide switch and wait at least 5 seconds
 2. Press and hold + and - key
 3. Switch on the slide switch
- after this we have a factory setup

Fingering Mode

The fingering of the *redpipe* Chanter is the same as the Scottish Highland Pipes.





The *redpipe* Chanter offers three choices of fingering.

1. **Minimal** (standard notes, not special effects)
2. **Standard** (allowing natural e, natural f and vibration)
3. **Extended** (fully chromatical – All semitones, extended pitch range and overblow)










Fingering mode is selected by pressing and holding any of the keys -, + or DRONES while switching on the slide switch
Factory default is Standard.

Key	Fingering
-	Minimal
+	Standard
DRONES	Extended

The following tables show the fingering of the Chanter. The holes (sensors) which are in no particular for the respective note are shown shaded in gray. Holes which cause a Vibrato are shown hatched.

	closed
	open
	don't care
	vibrato

Minimal Fingering:

Griff									
Ton	low-G	low-A	B	C	D	E	F	high-G	high-A
Notennummer (MIDI)	56	58	60	62	63	65	67	68	70

Standard Fingering:

Griff												
Ton	low-G	low-A	B	natural C (C ₂)	C	D	E	natural F (F ₂)	F	high G	sharp-G (G#)	high-A
Notennummer (MIDI)	56	58	60	61	62	63	65	66	67	68	69	70

Extended Fingering:

Griff															
Ton	low-G	low-A	natural B (B _n)	B	natural C (C _n)	C	D	natural E (Var.1)	natural E (Var.2)	E	natural F (F _n)	F	high-G	sharp-G (G#)	high-A
Notennummer (MIDI)	56	58	59	60	61	62	63	64	64	65	66	67	68	69	70

Extended Fingering (cont.):

Griff								
Ton	high- B_b	high-B	high- C_b	high-C	high-D	high- E_b	high- E_b	high-E
Notennummer (MIDI)	71	72	73	74	75	76	76	77

G Sharp (G[#])

The 'normal' G (low-G as well as high-G), which is a whole note below the A, can be replaced by a sharp G. This replacement can be activated by holding down the SOUND key while switching on the Chanter using the slide switch. Repeating the procedure deactivates the Sharp-G.

The MIDI Out

MIDI stands for Musical Instrument Digital Interface. No sound is transmitted through the MIDI interface, only data. Sound is generated by the connected MIDI tone equipment. You may play the Chanter with any sound the connected equipment is capable of producing.

The DIN plug meets the MIDI standards and may be connected to any MIDI equipment (also personal computers which are equipped with a MIDI interface).

A single MIDI interface is capable of transmitting 16 MIDI channels. The redpipe uses channel 1 for the chanter data, and channels 2 to 4 for the Drones.

MIDI-Channel	Note Number
1	Chanter (see Fingering-Charts)
2	58 (Tenor Drones)
3	46 (Bass Drone)
4	53 (Baritone Drone)

To prevent missing Note-Off signals, always stop the Sound before switching off the slide switch.

Volume (MIDI)

There is no volume control when MIDI output is connected. Volume must be adjusted using the volume control of the connected equipment. The drone volume is the same as used for the PHONES output.

Switching between the Well-Tempered and the Pipe Scale

The scale of the bagpipe chanter does not use the modern “well-tempered” scale mostly used for today’s musical instruments. The chanter uses a Pythagorean scale to fit every note perfectly to the drones. MIDI equipment is generally unable to produce a Pythagorean scale on its own. The Chanter, however, is able to generate the pipe scale by sending pitch bend data to the connected equipment. To work correctly, the pitch bend range of the connected equipment must be set to two semitones. Since this is the default value of most MIDI equipment, it is rarely necessary to make any adjustments.

It is sometimes better to play the well-tempered scale, especially when playing together with other instruments. The Chanter only sends pitch bend data when the sound is switched to Highland Pipe. Switching to Smallpipe stops sending pitch bend data and returns to the standard tempered scale.

Technical Data

Power Supply
Battery Lifetime

Weight

2x AA Mignon alkaline batteries
approx. 100 h. using alkaline batteries (depending on the connected equipment)
01,3kg

Trouble Shooting

Problem	Possible Cause	Solution
• No sound at the PHONES jack or LED dark	No battery or empty battery	Insert new battery
	Adjustment for volume is too low	Increase the volume
	Not enough pressure in the bag	Applying more pressure
	Headphones defective or not connected properly	Check headphones and contacts
	The internal microprocessor is in an undefined state	Switch off the slide switch, wait for at least 10 seconds and power on again
	Others	Contact your dealer or the manufacturer
• No sound from the connected MIDI device	No battery or empty battery	See above, also check if the Chanter works with earphones
	Cables not connected properly	Check cables

	The connected MIDI devices are not adjusted to receive on MIDI channel 1 or volume too low	Check adjustment at the MIDI device, check corresponding owners manual
	The internal microprocessor is in an undefined state	See above
<ul style="list-style-type: none"> Sensors respond delayed or not at all 	Dry skin	Use hand cream to increase the circuit capacity of the hand
<ul style="list-style-type: none"> Sensors seem to 'hang', i.e. after take the finger away nothing happens 	The Chanter is moist or dirty	Dry or clean the sensor area carefully. If necessary use a bit soap and water. (clean the sensor area all around)
<ul style="list-style-type: none"> Adjustments are lost after switching off 	The Sound was not stopped before switching off	Always stop the Sound before switching of the slide switch

This Product complies with the requirements of the EMC Directive 89/336/EEC, and carries the CE marking accordingly.