

PROGRAMMABLE
ELECTRONIC
BAGPIPES



ROSS TECHNOLOGIES



Electronic Bagpipes

The Brand new *Ross Technologies* Programmable Electronic Bagpipes are an affordable, high quality digital instrument, equally suitable for use as a convenient practice chanter or, with an amplifier for live performance.

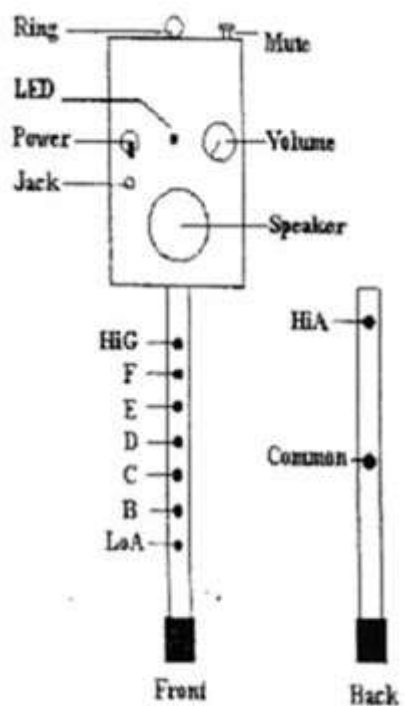
The Electronic Bagpipes are based on crystal-controlled, cutting-edge technology, and are completely digital - which totally eliminates frequency drift and drone tuning problems.

The notes are played in a very realistic manner, by covering electronic touch sensors, positioned to exactly match the finger spacing of a regular pipe chanter.

The unit may be programmed to play in the regular bagpipe key of "b-flat", or one of seven different keys, to match the pitch of other instruments - all by simply playing the desired key on the finger holes - ie: all holes covered for the key of "g".

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CONTROL LAYOUT



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INSTRUCTIONS

- When the unit is first turned on by moving the power switch to the top position, the red status LED will blink for three seconds.
- During this three second delay, any note which is "played" on the chanter will become the "key" that the instrument will play in. Fingering a Hi A or simply having no fingers on the chanter will place the unit in the default key of "b-flat".
- Hold the desired note until the end of the 3 second programming period, when a single beep will indicate that the unit has been successfully programmed.
- The red status LED will now be on steadily, indicating that the key has been programmed, and the unit is now in standby mode.
- Pressing the mute switch will start the chanter and drones to sound through the internal speaker, and the instrument may now be played normally.
- Pressing the mute switch again will toggle the unit back into standby mode, where it will wait for another mute switch input to start the drones and chanter sounding again.

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TROUBLESHOOTING

The most common problem which may be encountered when first using the Programmable Electronic Bagpipes is the "skipping" of notes (i.e. when playing down the scale, jumping from C, for example to Low A without sounding the B), or simply not being able to sound certain notes. This is caused by having particularly dry skin, which raises your natural skin resistance, and causes difficulty in sensing if your fingers are actually covering the holes. The remedy is to simply wash your hands to moisten them, and thus lower your skin resistance.

The second problem which may occur at first is the intermittent sounding of Hi A, which is caused by your right thumb not making proper contact with the touch sensor on the back of the chanter tube. This may be due to improper finger position, or dry hands (see above).

You will very quickly become accustomed to your new Programmable Electronic Bagpipes, and enjoy many years of use.

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NOTE / KEY CHART

KEY	NOTE									
	G	A	B	C	D	E	F	G	Hi	A
E	D	E	F#	G#	A	B	C#	D	E	
F	D#	F	G	A	A#	C	D	D#	F	
G	F	G	A	B	C	D	E	F	G	
A	G	A	B	C#	D	E	F#	G	A	
B	A	B	C#	D#	E	F#	G#	A	B	
C	A#	C	D	E	F	G	A	A#	C	
D	C	D	E	F#	G	A	B	C	D	

EQUAL TEMPERED CHROMATIC SCALE (A₄ = 440HZ)

Electronic Bagpipes

SPECIFICATIONS

- Battery 9 Volt
- Current 18mA Standby
35mA Max. Volume
- Output 3.5mm 3-Conductor Jack
For headphones or amp.
- Size 142 x 84 x 38 mm
Chanter tube 255 mm

FREQUENCY

<i>KEY</i>	<i>LO A™</i>
E	330Hz
F	349Hz
G	392Hz
A	440Hz
B flat *	470Hz
B	494Hz
C	523Hz
D	587Hz

* B flat = Regular Bagpipe Key of A₄ = 470Hz

Certificate of Warranty

Thank you for purchasing a quality Ross Technologies product.

Your new Programmable Electronic Bagpipes are guaranteed to be free of defects for a period of 90 days after the date of purchase.

In the unlikely event of a warranty claim, carefully package your instrument and return it with proof of purchase, prepaid to the point of sale.

This Warranty excludes accidental damage, batteries, battery leakage and misuse.

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