



KINNAIRD BAGPIPES & REEDS

Thank you for purchasing **Kinnaird Evolution Drone Reeds**. Over 10 years ago, Kinnaird Carbon Fibre Drone Reeds were launched. The original reed design has been hugely successful, and played by many top level pipe bands and soloists. The Kinnaird Evolution Drone Reed is exactly as the name suggests - an evolution in design from the original reed. All the great features of the original design are still there - the curved carbon fibre tongue, waterproof glass fibre body, poly nose cone with threaded pitch adjuster, world class air efficiency and moisture resistance. What has evolved is the sound! The Kinnaird Evolution Drone Reeds have a much brighter and brilliant tenor sound than the original reeds. To complement the changes to the tenor reeds, the bass reed has been re-designed to be fuller, and more robust. Together you will find that the tenors and bass blend perfectly to give you a truly cane-like experience with a minimal amount of effort. I hope you enjoy your new reeds.

Rob Kinnaird, Reedmaker

Getting the Most Out of Your Reeds

Check the condition of the bagpipe

Before installing the reeds, check that all joints including the stocks are tightly hemped and that no air is leaking from the joints. Check for cracks in the drones or a loose drone bush. Take each section of the drone and plug one end with your finger and blow on the other end. No air should escape. Check the bores of the drones for obstructions. If you use a canister system, check to ensure the hose connections to the stocks are tight and not cracked. When the instrument is in good shape, proceed with installation.

Tips from the Reedmaker

Installation

See Reed Component Drawing for Part Details

Insert each reed into the reed seat on the bagpipe. Ensure that the reeds are seated tightly and securely. If air leaks past the reed through the reed seat, the reeds will squeal and not function correctly. If needed, add or remove some black waxed hemp from the reed until they seat solidly in the bottom of the drone.

Ensure that the reeds are seated straight in the bottom of the drones and that they are not in contact with the sides of the stocks.

Adjusting Air Consumption

Increasing the Strength (Reeds will be harder to shut off and require more air to operate)

Moving the o-ring bridle away from the vibrating end of the reed will increase the strength of the reed. This will also make the drone tune lower, which may need to be compensated for. See **Raising the Pitch**.

Decreasing the Strength (Reeds will be easier to shut off and require less air to operate)

Moving the o-ring bridle towards the vibrating end of the reed will decrease the strength of the reed. This will also make the drone tune higher, which may need to be compensated for. See **Lowering the Pitch**.

Adjusting the Pitch

Raising the Pitch (Drone will tune higher on the tuning pin).

The pitch of the reed can be raised by removing the nose cone from the end of the reed and unscrewing (counter-clockwise) the setscrew in the nose cone with the supplied Allen key. This reduces the length of the air column in the

reed, which will raise its overall pitch. The drone will have to be lengthened to compensate. When removing the nose cone, gently rock or twist as you pull until it comes out of the reed body.

Seating the reed further into the drone reed seat can also increase the pitch. Remove some hemp and re-install the reed further into the reed seat.

Lowering the Pitch (Drone will tune lower on the tuning pin).

The pitch of the reed can be lowered by removing the nose cone from the end of the reed and screwing (clockwise) the setscrew into the nose cone with the supplied Allen key. This will lengthen the air column in the reed, which will lower the overall pitch. The drone will have to be shortened to compensate. When removing the nose cone, gently rock or twist as you pull until it comes out of the reed body.

The pitch can also be lowered by seating the reed further out of the reed seat. Add some hemp and re-install the reed in the reed seat.

Troubleshooting

Reed Double Tones: The reed is too strong for your blowing set up. See **Decreasing the Strength**.

Reed Squeals: Tongue length is too short for drone acoustics. Move the bridle away from the vibrating end of the reed. Also check that the reed is seated properly and no air is leaking between the reed and reed seat. To check for air leaks, remove the bottom section of the drone with the reed. Cover the top of the tuning pin with your finger and blow the reed by mouth. If any air leaks, you will need to re-hemp the reed until the connection is airtight.

Reed Squeals During Strike In: Check your strike-in technique. Try striking the bag in different locations. Try striking the bag more gently. Move the bridle away from the free end of the reed.