## Ackerman Music

# YCL-450M Quet



# A duet of tradition and technology

The most notable news on the YCL-450M is the introduction of the Duet+ technology from our oboes.

The upper joint body is drilled out slightly larger around the bore and tone-holes. Thermoplastic ABS resin is injected into the cavity, instantly forming the inner shape.

It is designed to preserve as much as 90% of the wooden portion, while its natural appearance is hardly distinguishable from conventional all-wooden models.

Due to this kind of bore treatment this clarinet has a lighter resistance and an open sound with a mild timbre while also protecting and stabilising the inner surface of the upper joint.

The new adjustable thumb-rest with strap ring makes it much more comfortable to hold the instrument.

- 65mm barrel
- Grenadilla body
- 17/6 nickel silver keys, silver plated
- Inset straight chimneys
- Tapered undercut toneholes
- Bladder pads
- Adjustable thumb-rest with strap ring
- New vent tube
- Tapered pivot screws
- Duet+ upper joint (ABS insert moulding)
- Silver plated bell ring
- Silver plated ligature and mouthpiece cap
- 4C mouthpiece
- Case: CLC-400E II



## l YCL-450M Duet+ Key Features

#### ■ Vent tube

A new vent tube shape improves pronounciation in the second register. It offers great response, even with low air pressure, making it easy to play even for children.

### **■** Adjustable thumb-rest



Adjustable thumb-rest with strap-ring

### ■ What's new

YCL-450	Specification	YCL-450M	Advantage
Traditional cut	Bore treatment	Duet+ upper joint (ABS insert moulding)	Lighter resistance, mild timbre, crack protection, stable bore dimensions
Pivot screws	Mechanism	Tapered pivot screws	More easy and precise key adjustment
	Vent tube	New hole-shape	Improved response of 2 <sup>nd</sup> register
Fixed	Thumb rest	Adjustable, with ring	Comfortable to hold

## ■ Yamaha's Unique Duet+ Technology



#### **Insert Moulding**

Yamaha is premiering this new technique (patent pending) to bring a reasonable solution to the intermediate family. The upper joint body is drilled out slightly larger around the bore and toneholes. Thermoplastic ABS resin is injected into the cavity, instantly forming the inner shape of an clarinet. It is designed to preserve as much as 90% of the wooden portion, while its natural appearance is hardly distinguishable from conventional all-wooden models.

This also ensures that under different environmental conditions the bore of the instrument remains stable.

#### **Toneholes**

Upper-joint toneholes (except metal octave vents) are moulded simultaneously with the resin bore.

#### Joint tenon

The upper joint tenon is also formed as an extension to the resin bore. This ensures smooth connection between the joints even under moist conditions.