

# INTEGRA SWITCH Pipettes

## 1. Calibration consistency

The INTEGRA **SWITCH** hybrid pipettes are engineered to deliver consistent performance with both manual pipetting (neat transfer) and repeat dispense mode. To ensure optimal performance, each pipette undergoes a factory calibration after production, following a two-step process:

### Step 1:

- The internal mechanical movements of the drive system are calibrated using an external optical measurement system. This ensures that the plunger displacement corresponds consistently to the same dispense volume in both manual pipetting and repeat dispense mode. This alignment of mechanical calibration is unique to the INTEGRA **SWITCH** pipette.

### Step 2:

- Each pipette is then calibrated gravimetrically to verify the accuracy of the pipetting volume. An offset is automatically applied to the calibrated drive system if an adjustment is required to ensure the correct dispensing volume. This gravimetric calibration is performed using manual pipetting (neat transfer) and is conducted in accordance with ISO 8655 standards.

Thanks to this two-step process, gravimetric calibration in neat transfer mode is sufficient to ensure that both manual pipetting and repeat dispense mode meet the specified performance requirements.

## 2. Maintenance and recalibration

INTEGRA recommends annual servicing of the **SWITCH** hybrid pipettes.

This service includes:

- Inspection and replacement of components subject to wear and tear
- Post-service gravimetric calibration

