



BASIC INFORMATION

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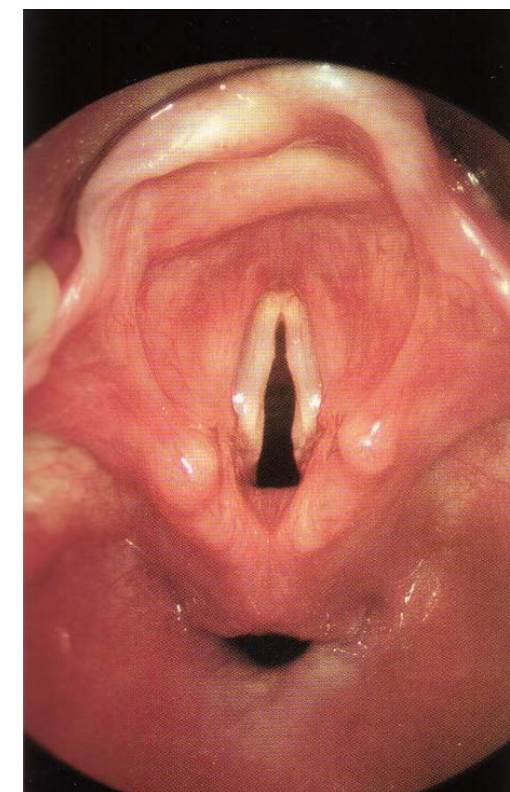
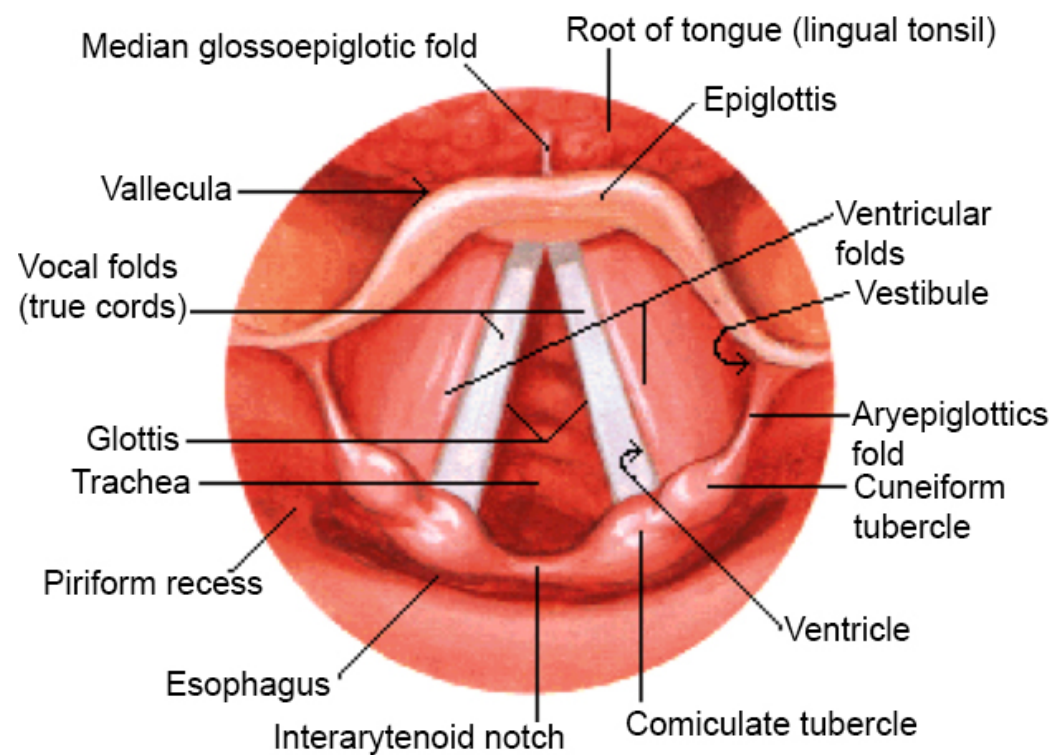
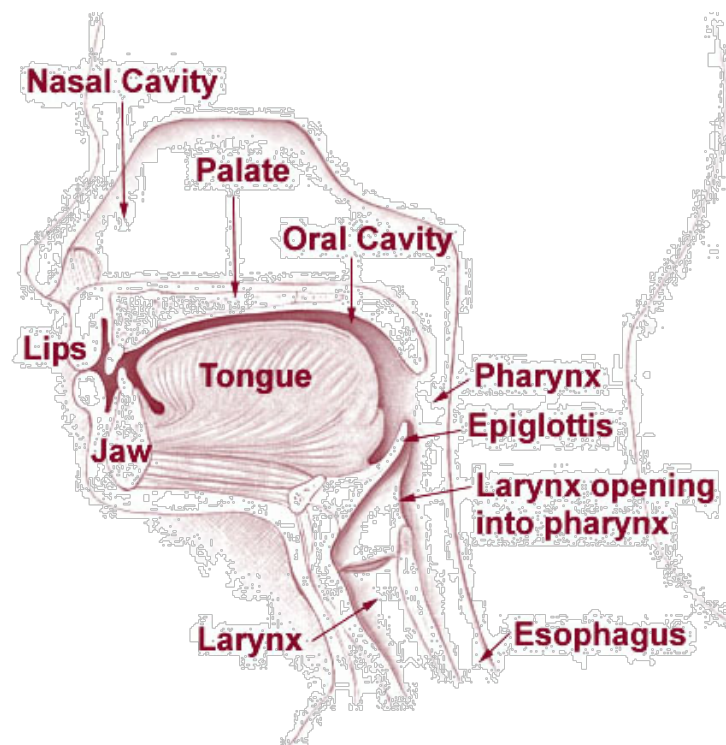
- ✓ AIRWAY MANAGEMENT BASICS
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Objective:

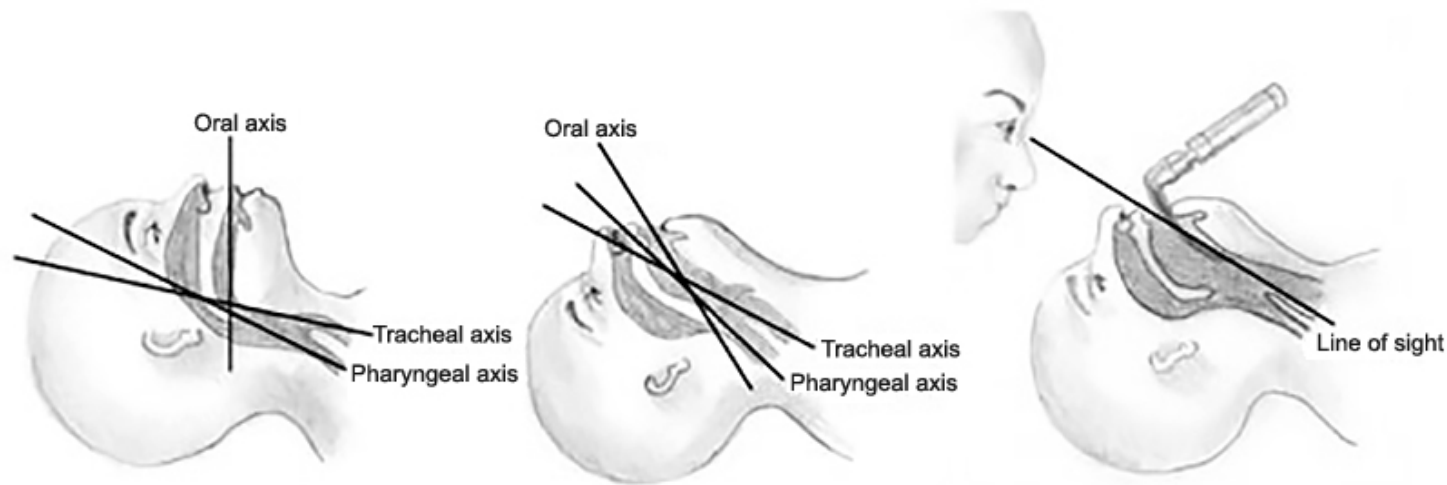
- ✓ To acquire a basic knowledge on how to intubate with Airtraq
- ✓ To identify potential problems during initial usage and point out solutions

Time Required: 30 minutes

AIRWAY MANAGEMENT BASICS | Glottis Anatomy



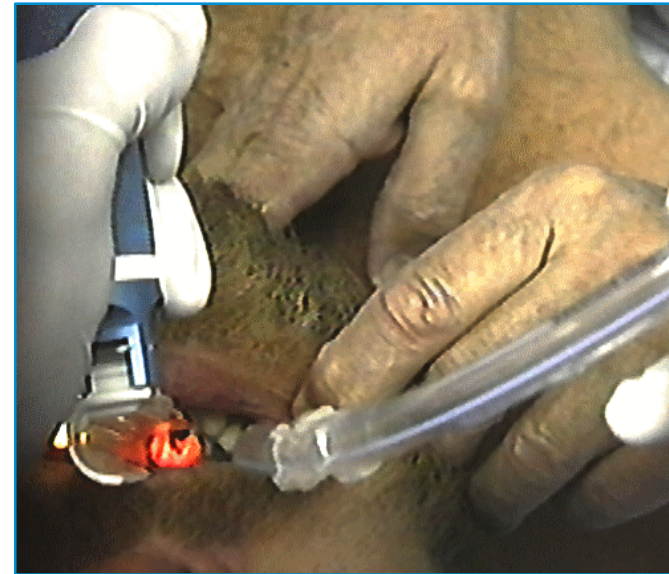
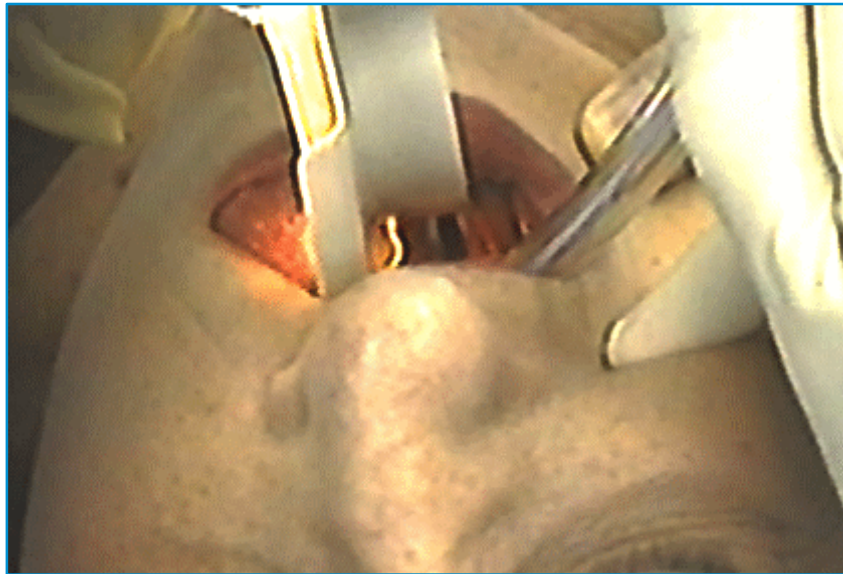
AIRWAY MANAGEMENT BASICS | Airway Axes



The 3 axes are aligned by flexion of the cervical spine and extension of the head on atlanto-occipital joint to improve the alignment for better viewing. A variety of factors may limit the operator from aligning the 3 axes hence the “line of sight” may be restricted or absent.

AIRWAY MANAGEMENT BASICS | Direct Laryngoscopy

Examples of direct laryngoscopy view:



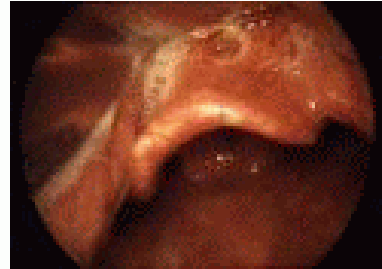
AIRWAY MANAGEMENT BASICS | Airway Classification

AIRWAY CLASSIFICATION

Cormack – Lehane Grade



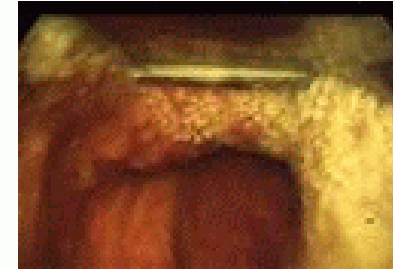
Class I



Class II



Class III



Class IV

12%

AIRWAY CLASSIFICATION

Mallampati Class



Class I



Class II



Class III



Class IV

Markers of Difficult Laryngoscopy

Mallampati class III/IV

Thyromental distance <6 cm

Mouth opening <3 cm

Neck pathology from mass, surgical scar, or radiation

Thick neck

Limited cervical motion

DEVICE INTRODUCTION | General Description

Airtraq VL : The most simple solution for Video Intubation

1. Disposable
2. Guiding channel for the ETT
3. Zero capital investment

Airtraq SP: The choice for crash carts, EMS, etc.

- ✓ Fully disposable
- ✓ All-in-one
- ✓ Ready to use

Airtraq Avant: The choice for the OR's

- ✓ Disposable Blade and Reusable Optics
- ✓ Low cost per use
- ✓ Zero capital investment

Two configurations, clinically identical, that complement each other.



DEVICE INTRODUCTION | General Description



All Airtraqs
connect **to**
All accessories



DEVICE INTRODUCTION | Main Features and Characteristics

- ✔ Anatomic shape 90° resembles actual anatomy to minimize hyperextension.
- ✔ Guiding channel directs ETT through cords.
- ✔ High definition optical system composed of lenses, mirrors and prisms.
- ✔ Several options to visualize the glottis.
- ✔ Integrated led light and built-in anti-fog system that warms the lens to body temperature to effectively avoid fogging.
- ✔ Avant: MRI Conditional.

DEVICE INTRODUCTION | Sizes

Airtraq SP is offered in different sizes allowing to intubate from neonates to large adults using the same technique.

Adults



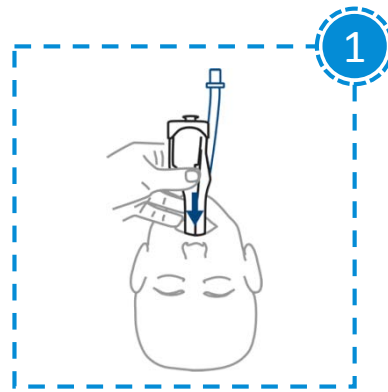
Children



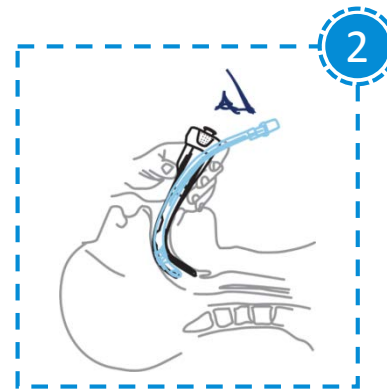
Airtraq Avant is offered only for adults in 2 different sizes.



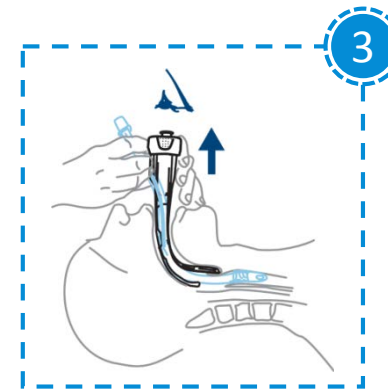
DEVICE INTRODUCTION | Intubation Technique Summary



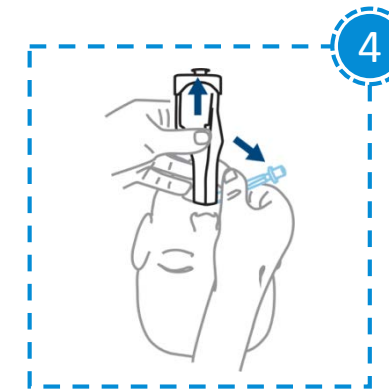
Slide midline



Center vocal cords



Push ETT



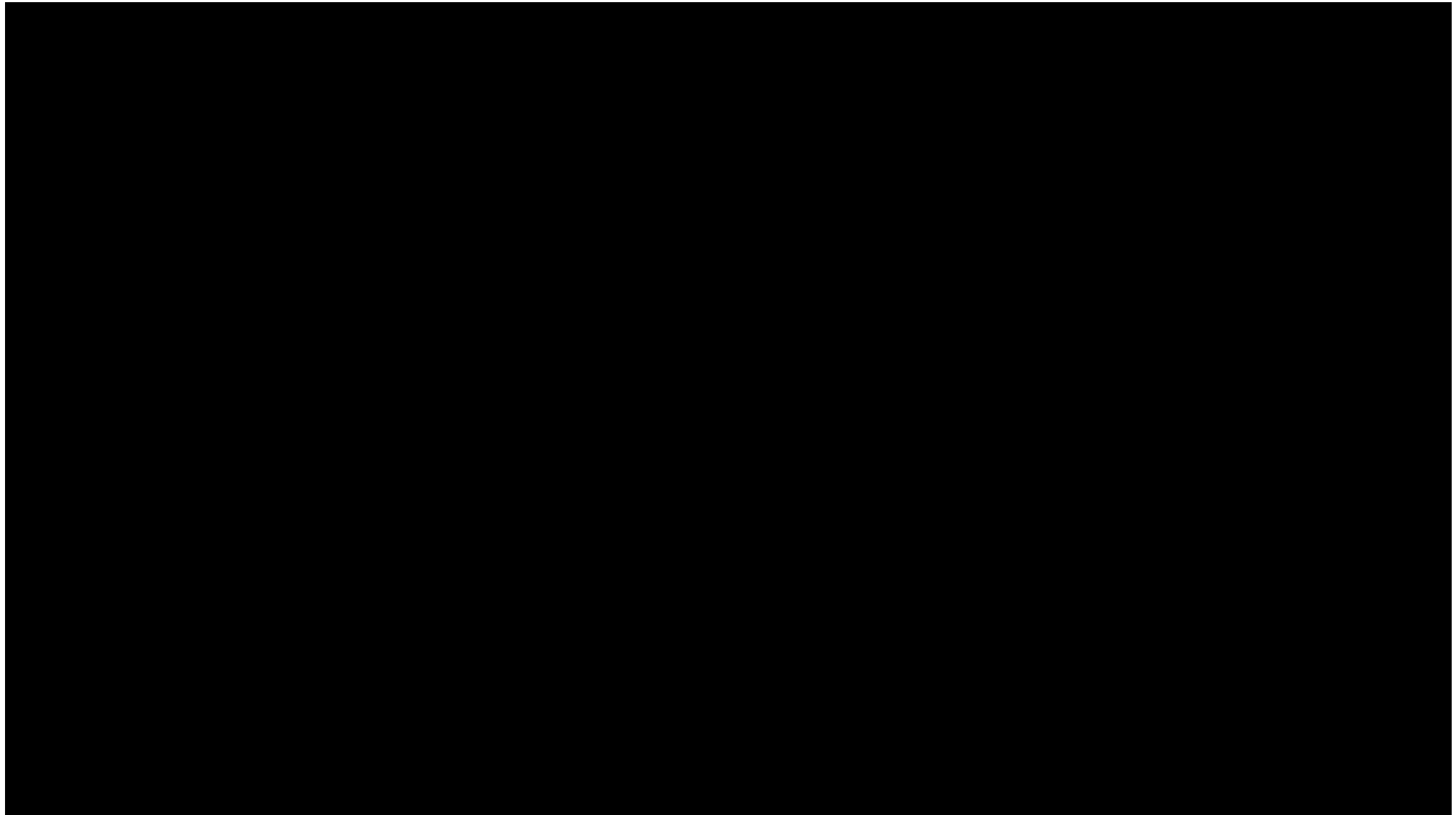
Remove midline

- ✓ Do not insert too deep
- ✓ Lift gently
- ✓ Twist Airtraq to center vocal cords
- ✓ Corkscrew ETT



- ✓ Safe for the patient
- ✓ Easy to learn
- ✓ Simple to use

DEVICE INTRODUCTION | Intubation Direct View



DEVICE INTRODUCTION | Clinical Experience

- ✔ Airtraq successfully used to manage difficult airways since 2005
- ✔ More than 1.5 Million intubations with Airtraq worldwide
- ✔ Plenty of published Clinical Studies and Case Reports from all over the world.
- ✔ Airtraq is the device of choice for many anesthesiologist to manage difficult airways.
- ✔ Airtraq has been used to intubate an airway when other Direct Video Laryngoscopes have failed
- ✔ Anesthesiologists that try Airtraq and learn the technique keep using it.

DEVICE INTRODUCTION | Airtraq Avant Components

- ✔ **Optics (REUSABLE): Service Life 50 uses.** Contains the optical system and it is articulated to facilitate its insertion into the blade. It only works when fully inserted into a blade.
- ✔ **Blade and Eyecup (DISPOSABLE):** 2 sizes for Adults.
- ✔ **DOCKING STATION (REUSABLE):** Recharges Optic battery and displays the remaining service life.



DEVICE INTRODUCTION | Airtraq Avant Basic Operation

✓ Docking Station Set Up:

- ✓ Connect to mains supply
- ✓ Turn on the power switch on the back.



✓ Optics Set Up:

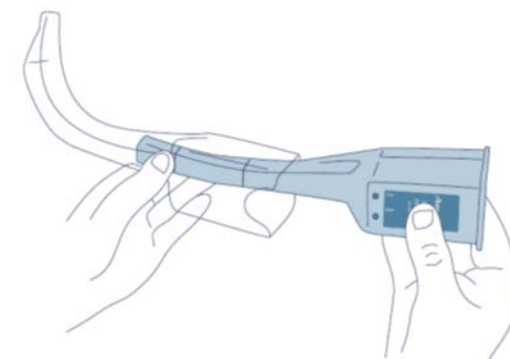
- ✓ Before starting to use a new unit insert battery and charge it in the docking station.
- ✓ Service Life will start at 50 and will decrease each time the Optic is inserted into the blade and the anti-fog element reaches temperature
- ✓ Battery charge and service life are indicated by the color of status leds in the Optic: Green, Orange, Red.
- ✓ A fully charged Optic is powered to perform more than 15 intubations.



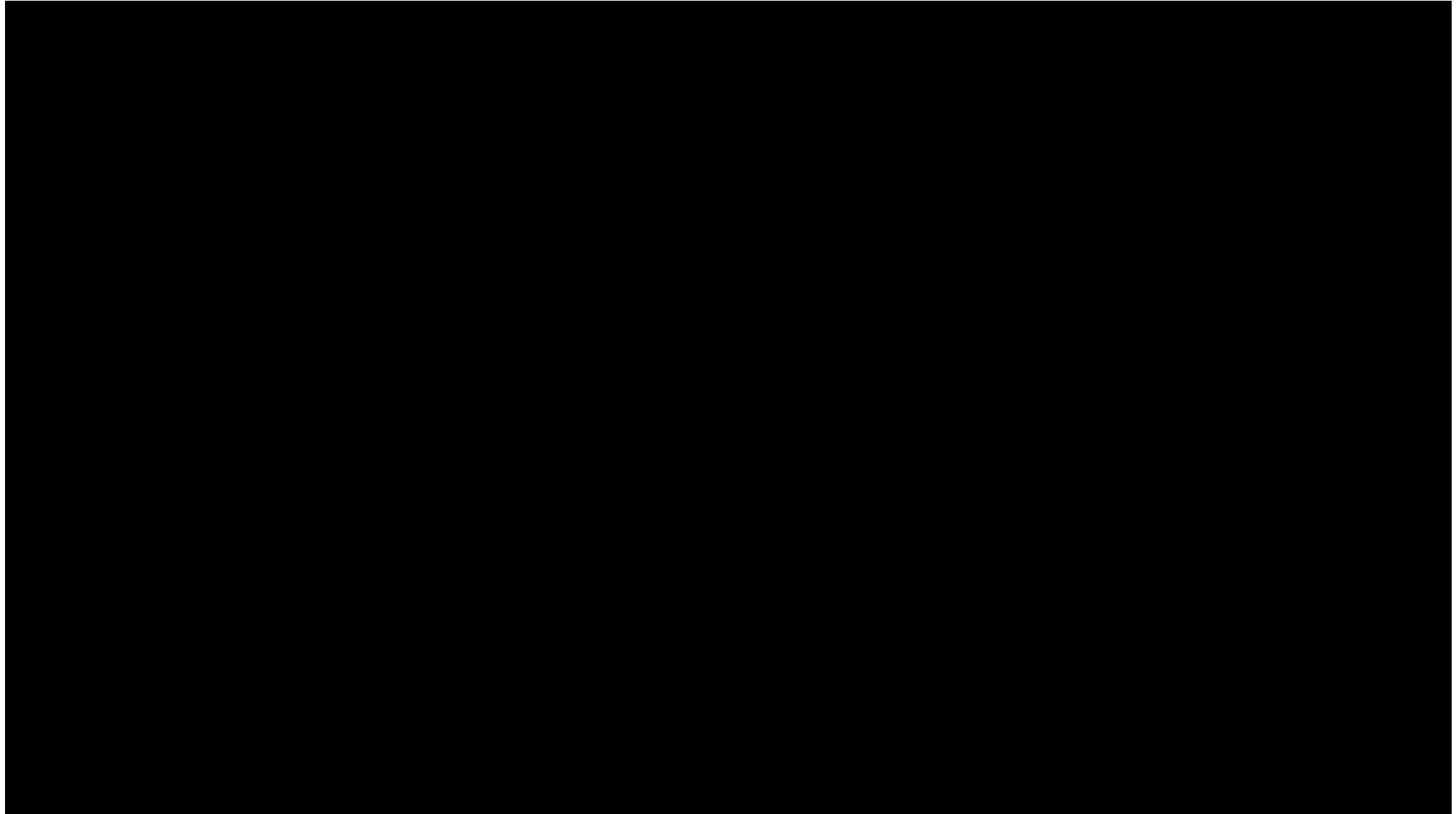
DEVICE INTRODUCTION | Airtraq Avant Basic Operation

OPTIC, BLADE AND EYECUP ASSEMBLY

- ✓ Check Optics battery status and service life available in the Docking Station.
- ✓ Select the appropriate blade size based on the size ETT to be used.
- ✓ Insert the Optics into the blade fully, until it clicks into position.
- ✓ Place eyecup over the proximal end of the Optics. There is only one position in which it fits.
- ✓ Upon inserting the blade, the light will **automatically start** blinking for approximately 35 seconds until the anti-fog warms the lens of the blade. Once the device is ready for intubation the light will become steady.

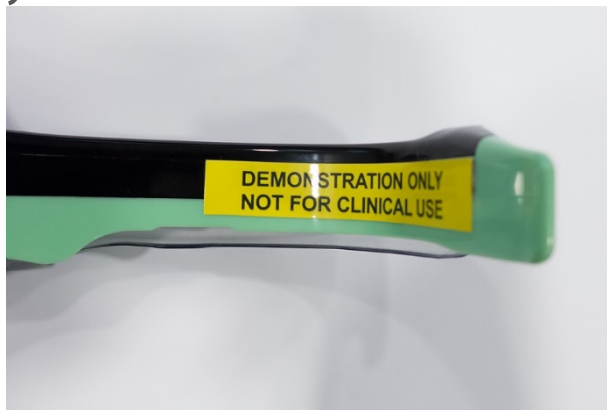


DEVICE INTRODUCTION | Airtraq Avant Assembly



DEVICE INTRODUCTION | Airtraq for Training Purposes (Demo)

- ✔ There are Airtraq SP and Avant specially prepared for training in manikins.
- ✔ They are not suitable for clinical use since the anti-fog system is deactivated.
- ✔ They can be reused without limit.
- ✔ Avant Demo service life automatically refreshes to 40 once it gets to zero.
- ✔ Batteries can be replaced when needed
- ✔ They are labeled as DEMO



DEVICE INTRODUCTION | How it is different from other VL

CLINICAL CONSIDERATIONS

- ✓ It has a **guiding channel** that simplifies ETT insertion.
- ✓ Airtraq SP is fully disposable and Airtraq Avant reusable. Optic is fully protected, thus there is **minimum risk of cross contamination**.
- ✓ Airtraq Avant can be used in **MRI**.

ECONOMICAL CONSIDERATIONS

- ✓ **Zero capital** investment, therefore it can be **deployed in every area** where an intubation may be performed. It guarantees **instant availability**.
- ✓ **Low Cost** disposable Blades (Avant)
- ✓ **Zero maintenance** costs.
- ✓ **Several options to visualize** the Airway:
 - ✓ Direct View (Zero Cost)
 - ✓ Connected to an Endo Camera (Zero Cost)
 - ✓ Adapter for Phone (Low Cost)
 - ✓ Wi-Fi Camera (Moderate Cost)

WHY GUIDED VIDEO INTUBATION | Benefits. Easier ETT insertion

- ✔ No stylet needed.
 - ✔ Injuries and perforations of the soft palate, palatopharyngeal folds and tonsillars pillars have been reported when intubating with unchanneled VL. There is a “blind spot”, before the tip of the ETT can be viewed on the display.
 - ✔ Stylet adds cost.
- ✔ Once Airtraq is inserted the **ETT is already in front of the glottic opening**, **reducing intubation time** (as demonstrated in Meta Analysis of clinical studies).
- ✔ **90° shape resembles anatomy** minimizing hyperextension and reducing force needed.
- ✔ **Easier to learn**. For less experienced users guided intubation is easier to master.
- ✔ **High intubation success rate**. Even for very difficult cases a **bougie** inside the ETT will make the intubation feasible.
- ✔ Airtraq offers **freedom to manipulate ETT inside channel** to adjust delivery.
- ✔ **Insertion** of the Airtraq into the mouth can be done with either hand



WHY GUIDED VIDEO INTUBATION | Benefits

✔ Procedures where Airtraq can be more effective than Unchanneled VL's :

- ✔ C-Spine immobilization
- ✔ Face to face or Lateral intubation
- ✔ Awake intubation
- ✔ Inserting a gastric tube
- ✔ Guiding a fiberscope
- ✔ Intubation during chess compression

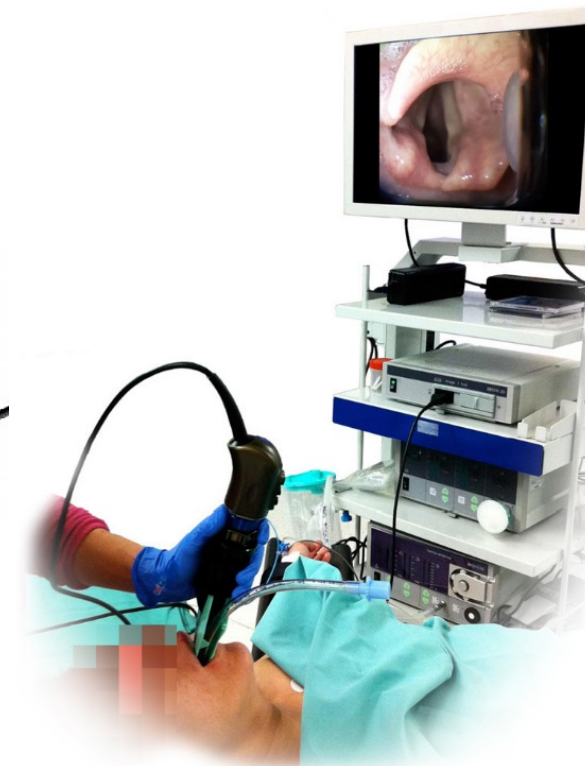
VISUALIZATION OPTIONS | Basic Information

✓ Direct View

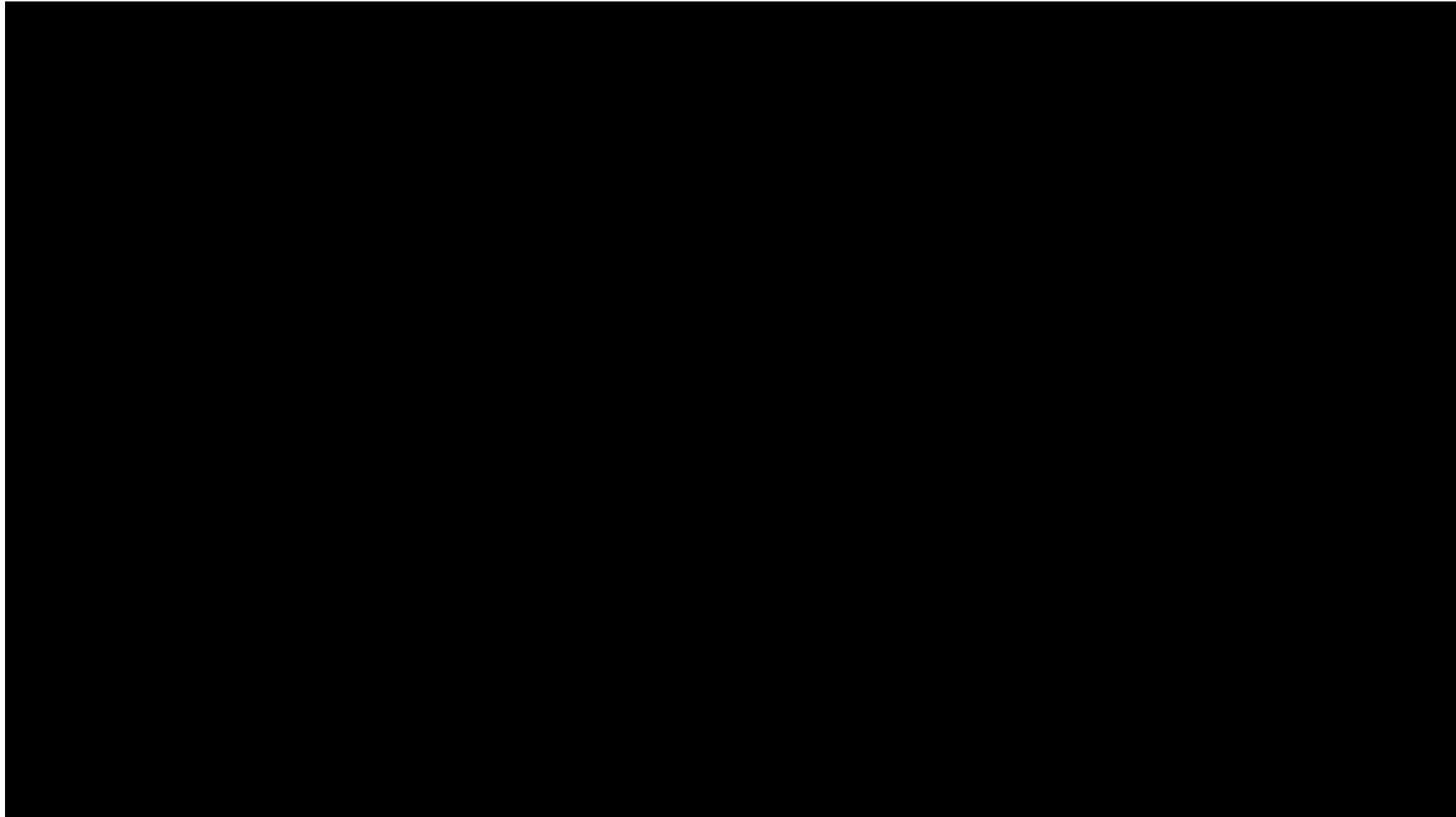
Immediate glottis view without using any additional equipment

✓ Endo Cam

Eyecup, provided with every Airtraq, connects to most HD Endo Cameras already available in the operating room



VISUALIZATION OPTIONS | Intubation Endo Cam

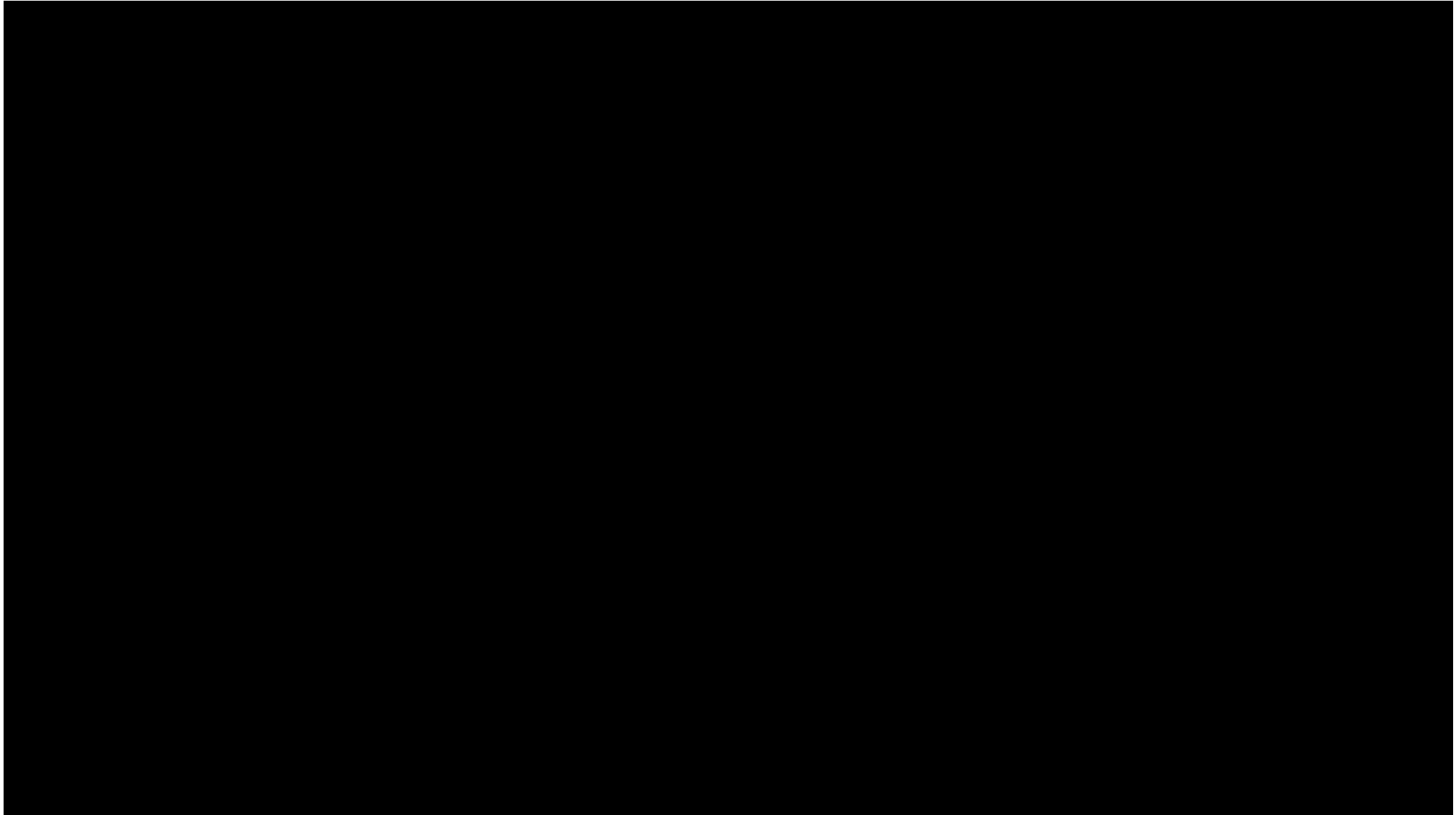


VISUALIZATION OPTIONS | Wi-Fi Camera

- ✓ Video Recording
- ✓ 2 Axis Flip Screen
- ✓ Wi-Fi to PC, Apple® & Android®



VISUALIZATION OPTIONS | Intubation A360 + iPad®



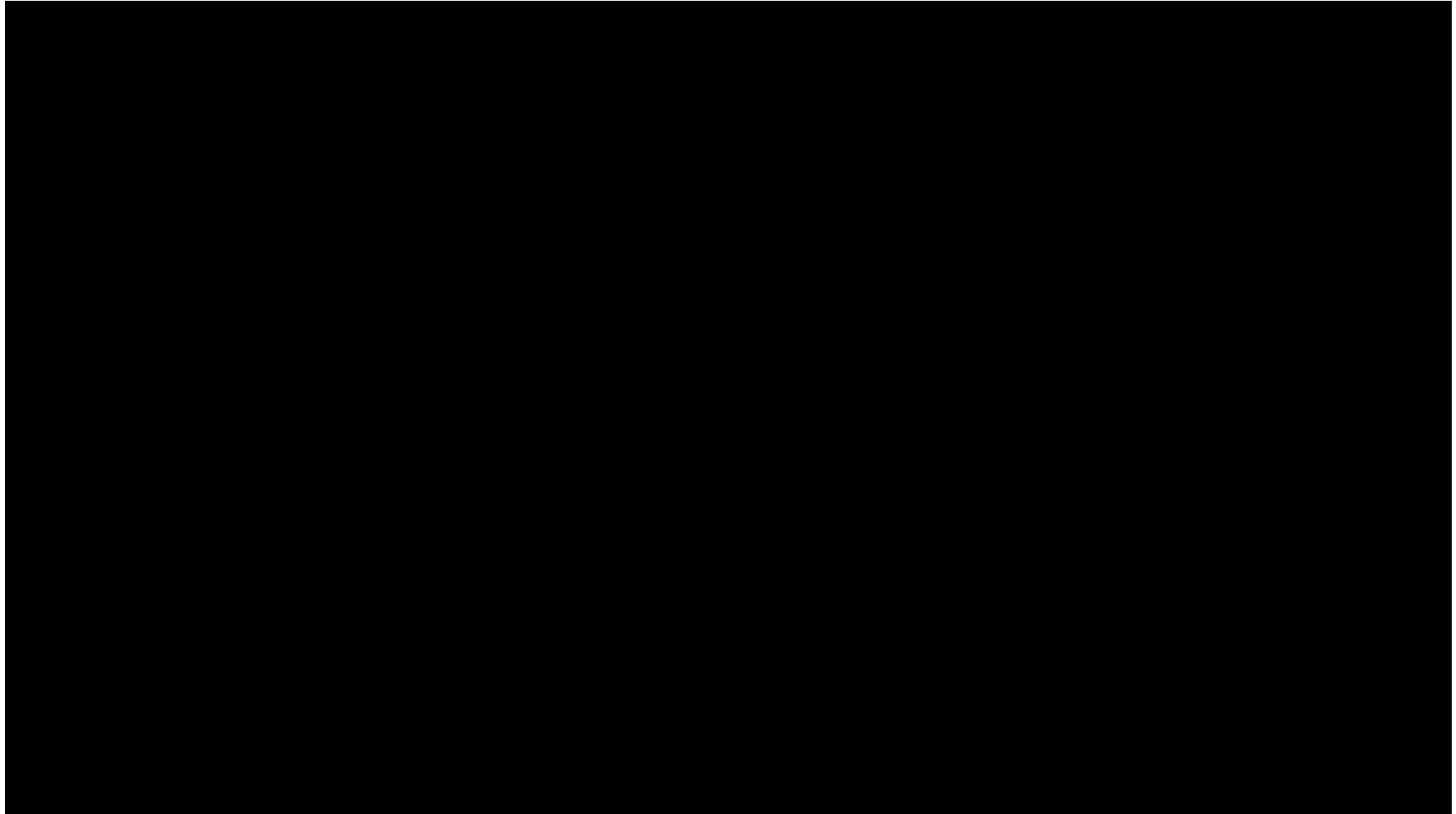
VISUALIZATION OPTIONS | Phone Adapter

- ✓ Universal adapter for **iPhone® & Android®**
- ✓ With or without protection sleeve/case
- ✓ Install “**Airtraq Mobile**” App into Phone
- ✓ Adjust once to specific phone/case.
- ✓ Snap-on >> Open App >> Intubate
- ✓ Recording + Snapshots



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VISUALIZATION OPTIONS | Intubation iPhone®



**END OF
MODULE A: BASIC INFORMATION**

GO TO QUIZ

GO TO NEXT MODULE