

# Extraglottic Devices

- Indication:** Patients who require assisted ventilation due to:
- (1) depressed mental status with loss of protective airway reflexes AND
  - (2) failure to oxygenate with less invasive methods, or
  - (3) failure to ventilate with less invasive methods.

## GENERAL CONSIDERATIONS:

- By definition, an extraglottic device is any device that does not pass the vocal cords (e.g. laryngeal tube, laryngeal mask airway, etc.).
- Extraglottic devices are the **preferred airway device for prehospital cardiac arrest**.
- It is **MANDATORY** to utilize waveform capnography when an extraglottic airway is placed.

## KING LTS-D™ (LARYNGEAL TUBE):

Size	Pediatric				Adult		
	0	1	2	2.5	3	4	5
<b>Patient Criteria</b>	<5 kg	5-12 kg	12-25 kg	25-35 kg	4-5 ft	5-6 ft	>6 ft
<b>Cuff Volume</b>	10mL	20mL	25-35mL	30-40mL	40-55mL	50-70mL	60-80mL
<b>Suction Catheter</b>	10Fr	10Fr	16Fr	16Fr	18Fr	18Fr	18Fr

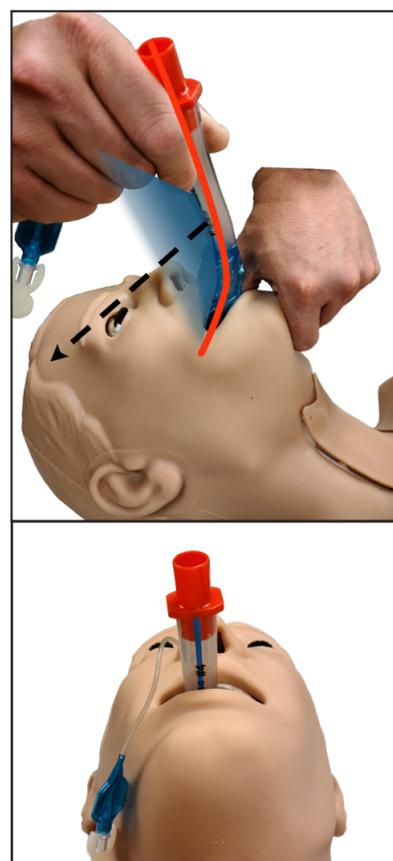
*King LTS-D™ Sizing*

### Contraindications:

- Intact gag reflex
- Known esophageal disease
- Caustic ingestion

### Device Instructions:

- Choose the correct size device (see above).
  - Test the cuff by inflating with the recommended amount of air (see above).
  - Deflate the cuff completely and apply a lubricant to the tip of the tube without blocking any of the holes with lubricant.
  - Use the non-dominant hand to grasp the patient's jaw and open / lift.
  - Insert the device at 45-90 degrees of rotation so that the blue orientation line is touching the corner of the mouth (see picture). Advance the device beyond the base of the tongue.
  - As the tip of the tube passes under the tongue, rotate the tube back to the midline so that the blue orientation line faces the chin (see picture). It is important that the tube faces the midline before advancing completely to ensure that it proceeds into the esophagus.
  - Advance the tube without exerting excessive force until the base of the colored connector reaches the teeth or gums.
  - Let go of the tube and inflate the cuff with the recommended volume. The tube may drift slightly as it seats itself.
  - Attach the BVM and ensure that ventilation is easy. If there is resistance to ventilation, slowly withdraw the airway while ventilating to see if the airway seats in a better position. Assess for the presence of breath sounds.
- The use of waveform capnography is mandatory to confirm placement.**
- When the airway is in its final position, secure the device in place.
  - If the patient regains consciousness or a gag reflex, deflate the balloons completely and gently remove the device. Be prepared to suction the oropharynx and position the patient to avoid aspiration.



## AURAGAIN™ (LARYNGEAL MASK AIRWAY):

Size	Pediatric				Adult			
	1	1.5	2	2.5	3	4	5	6
<b>Patient Weight</b>	<5 kg	5-10kg	10-20kg	20-30kg	<i>Reference Sizing Chart</i>			
<b>Max Volume</b>	4mL	7mL	10mL	14mL	20mL	30mL	40mL	50mL
<b>Suction Catheter</b>	6Fr	8Fr	10Fr	10Fr	16Fr	16Fr	16Fr	16Fr

*AuraGain™ Sizing*

### Contraindications:

- Intact gag reflex
- Caustic ingestion

### Device Instructions:

- Choose the correct size device. Several studies have suggested that LMA may be sized better for adults using ideal body weight. Ideal body weight is based off of patient height. See sizing chart (to the right) for recommended size based on patient height.
- Test the cuff by inflating with the recommended amount of air (see above).
- Lubricate the device.
- Hold the device like a pencil with the mask opening towards the patient's feet. Use the non-dominant hand to grasp the patient's jaw and open / lift (see picture).
- Insert the tip of the cuff into the patient's mouth and press the device against the patient's hard palate. Ensure that the cuff is centered in the patient's mouth (the vertical line on the tube should face the patient's nose). Continue to slowly insert the device along the palate until the LMA enters the hypopharynx and definite resistance is felt. Generally, the patient's upper teeth should rest between the two horizontal lines on the tube. If they are not, consider gently replacing the device (or trying another size) until they are.
- Let go of the tube and inflate the cuff with half of the maximum volume. The device may move slightly as it seats itself. Never inflate the device beyond the maximum recommended volume.
- Attach the BVM or ventilator and ensure that ventilation is easy. Assess for the presence of breath sounds. **The use of waveform capnography is mandatory to confirm placement.**
- When placement is confirmed, secure the device in place.
- If the patient regains consciousness or a gag reflex, gently remove the device. Be prepared to suction the oropharynx and position the patient to avoid aspiration.

	Male	Female
4'8"	3	3
4'9"	3	3
4'10"	3	3
4'11"	3	3
5'0"	3	3
5'1"	4	3
5'2"	4	3
5'3"	4	4
5'4"	4	4
5'5"	4	4
5'6"	4	4
5'7"	4	4
5'8"	4	4
5'9"	5	4
5'10"	5	4
5'11"	5	5
6'0"	5	5
6'1"	5	5
6'2"	5	5
6'3"	5	5
6'4"	5	5
6'5"	5	5
6'6"	5	5

