Clinical Indications:

1. Inability to adequately ventilate a patient with a Bag Valve Mask (BVM) and basic airway adjunct.
2. An unconscious patient without a gag reflex who is apneic or is demonstrating inadequate respiratory effort.

Procedure:

1. Prepare, position (sniffing position, unless trauma), and oxygenate the patient with a BLS airway adjunct and BVM. Maintain in-line stabilization in trauma patients.
2. Continue chest compressions throughout the intubation attempt.
3. Clear the patient’s airway with suction.
4. Power on display computer and connect USB extension or adapter cable. Open pouch of Vividtrac device and remove just the USB cable and connect to the USB extension cable. Confirm image is displayed. If damage is noted upon opening package, discard VividTrac and use a new one.
5. Lubricate the first 4 inches of an appropriately sized endotracheal tube (ETT); load the ETT in the Vividtrac channel with a back and forth motion to lubricate the tube channel.
6. Load the straight end of the bougie into the ETT.
7. Gently hold the Vividtrac just below the proximal end of the device with index and middle finger tips on the metal side and thumb placed on the plastic side.
8. While looking at the patient’s face, with your free hand slightly opening the mouth, place the blade tip midline on the surface of the tongue. While keeping the body of the Vividtrac parallel to the patient’s neck, insert the blade to a depth such that the body of the Vividtrac is touching the patient’s chin.
9. With the airway illuminated, look into the mouth and check for fluid in the airway; suction if needed.
10. View the live video image of the airway on the tablet. Gently, with minimal force, insert the Vividtrac deeper into the oral cavity.
11. Using a rotational motion, keeping it midline over the center of the tongue, advance the blade into the patient’s oropharynx while visualizing landmarks.
12. Once the epiglottis is in view, place the blade tip in the center of the vallecula to view the vocal cords.
13. Make gentle alignment adjustments of the device to allow the airway to open up with vocal cords centered on the video image.
14. While allowing adequate distance from the vocal cords, gently advance the bougie past the vocal cords into the trachea.
15. If required, twist the ETT counter clockwise to direct the bougie to the left. If necessary, switch to load the coude tip of the bougie. If required, advance the ETT to move the bougie anteriorly, or retract the ETT to move the bougie posteriorly.
16. Once the bougie is properly positioned, advance the ETT until the cuff is visualized passing through the vocal cords.
17. While visualizing the cords and ETT, inflate the cuff.

18. Confirm proper ETT placement using EtCO$_2$ and waveform capnography. Auscultate for bilaterally equal breath sounds and absence of sounds over the epigastrium. If you are unsure of placement, remove tube and ventilate patient with a BVM. After 3 ventilations, EtCO$_2$ should be >10 or comparable to pre-intubation values. If <10, check for adequate circulation, equipment, and ventilatory rate. If EtCO$_2$ remains < 10 without physiologic explanation, remove the ETT and ventilate using an airway adjunct and BVM.

19. Separate the ETT from the tube channel at the proximal end of the Vividtrac device by pushing the ETT forward and to the right. Firmly hold the ETT in place at the corner of the mouth with one hand while gently reversing the path of insertion and removing the device from the oral cavity.

20. Secure the ETT with a commercial tube securing device.

21. Document the procedure and reassess frequently and with each patient move.

22. Consider using a King Airway if intubation efforts are unsuccessful.

23. Monitor EtCO$_2$ and record readings on scene, en route to the hospital, and at the hospital.

24. Document ETT size, time, result (success) and placement location by the centimeter marks either at the patient's teeth or lips in the ePCR. Document all devices used to confirm initial tube placement. Also document positive or negative breath sounds before and after each movement of the patient.

25. It is required that the airway be monitored continuously through waveform capnography (ALS providers) and pulse oximetry.