

Just plug it in

There are no modes. The tester looks at what is connected about eight times a second and runs the right test:

You plug in	It tests
A body cord: one end in J1 (top), the other in J2 (front). A 2-prong foil / sabre plug goes in J2's B and C, its alligator clip on the CLIP post.	Body cord: every wire, every short, crossed wires, and breaks while you flex it
A good cord in J1 with a weapon on its far end	Foil / sabre straight away (B to C closed). Epee as soon as you press the tip
The probe (PROBE jack) touching a lame or mask that is clipped to the cord in J1 or to the CLIP post	Lame / mask , and mask wires

Test the cord first. It remembers the last good cord and subtracts it, so weapon and lame readings are the item alone ("cord subtracted" on screen).

The light

	Means
 green	Passes
 yellow, steady	Borderline: leaky insulation (dry and clean it), or a probe reading between 1 and 5 ohm (fine for a lame or mask, too high for a mask wire)
 yellow, blinking	Do the next step: press the foil tip, or let go of the epee tip
 red	Fails. The screen's big word says why
 off	Nothing connected yet (an epee at rest counts as nothing until you press its tip)

The light keeps the last answer for 30 seconds after you unplug, so you can unplug first and look after.

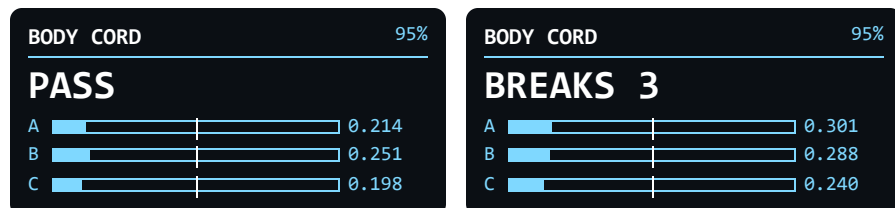
The sounds

Sound	Means
Rising double chirp	Just turned green
Low double buzz	Just turned red (on the probe: a new worst spot over 5 ohm)
Short tick	A tip press registered, like a scoring box would see it
Click	A break while you flex a cord: every click is a fault

The button: tap = start over. Hold for a second = sound off (the header shows "mute") or back on.

Body cord

Plug both ends in. Wait for the chirp and green. Then bend and twist the cord along its whole length, hardest where it enters each plug: **any click is a break** and turns the light red. A wire that ever read high stays counted until you tap the button.



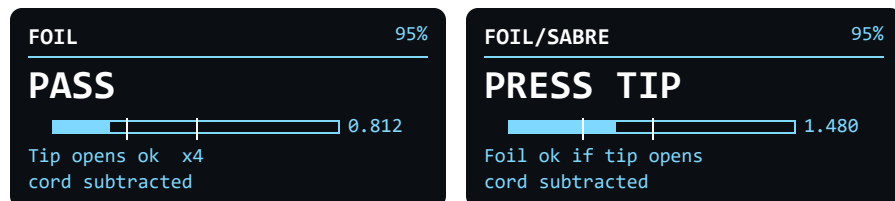
Big word	Meaning	Usual cause
PASS	every wire 1 ohm or less, no shorts, no breaks	
FAIL (a bar past the line)	a wire is over 1 ohm	corroded pins, broken strands, a loose screw in the plug
FAIL (OPEN)	a wire does not conduct	broken wire, usually right at a plug
FAIL (to J2-x)	a wire reaches the wrong pin	plug wired wrong after a repair
SHORT A-B / B-C / A-C	two wires touch, under 1 k	crushed cord, stray strand in a plug
LEAKY ... (yellow)	1 k to 100 k between wires	sweat or damp inside a plug, dirt between pins
BREAKS n	n breaks while flexing	a wire about to fail; replace or re-terminate

Foil and sabre

A tested cord in J1, the weapon on its far end. At rest a foil and a sabre look the same (B to C closed), so the tester judges against both limits until you press the tip:

Light	Means
● green, "Sabre ok. Foil: press tip"	1 ohm or less: passes as a sabre. A foil: press the tip, you hear a tick and it says "Tip opens ok"
● blinking, PRESS TIP	1 to 2 ohm: too high for a sabre, fine for a foil if the tip opens. Press it: green when it does
● FAIL	over 2 ohm, or (sabre) the probe found over 1 ohm on the blade
● DIRTY TIP	the press gives tens of ohms instead of open: grit in the barrel

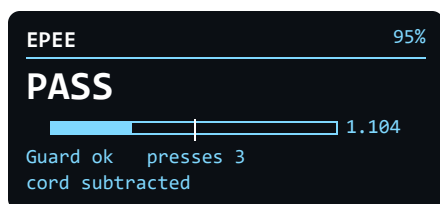
No tick when you press a foil tip = it never opens: the blade wire is shorted to the blade. Sabre: also touch the probe to the tip, the forte and the bell; tape or paint shows up as red.



Epee

A tested cord in J1, the epee on its far end. At rest it reads as nothing (an epee is open at rest). Press the tip: tick, and green if it is 2 ohm or less. Every press ticks. The tip wires are checked against the guard all the time.

Light	Means
● PASS	opens at rest, 2 ohm or less pressed, guard insulated
● blinking, LET GO	it was closed when first seen: let go; if it stays, the tip is stuck or the spring too short
● FAIL	over 2 ohm pressed: dirty contacts, loose tip screws, a wire breaking at the guard
● SHORT	a tip wire touches the blade or guard



Changing weapons? Unplug one, wait a couple of seconds, plug in the next: a pause starts a fresh test.

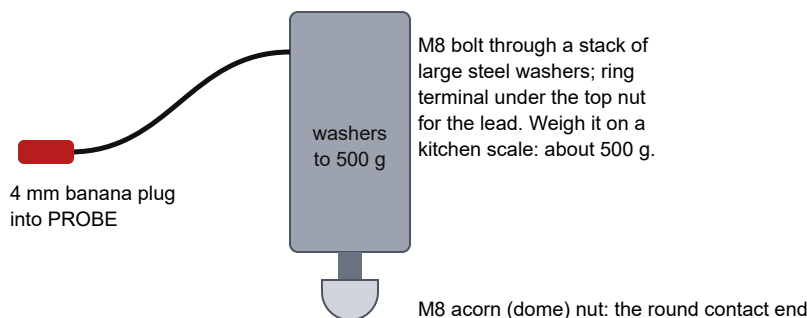
Lame, mask and mask wires

Clip the lame (or mask) to the cord in J1, or straight onto the CLIP post. Slide the probe slowly over the whole target. The light follows the probe: ● under 1 ohm, ● 1 to 5 ohm (fine for a lame or mask), ● over 5 ohm, with a buzz each time it finds a new worst spot. The screen keeps the worst steady reading, marked under the bar; landing bounces are ignored. Lifting the probe between strokes is fine for up to 10 seconds. Tap to start a new sweep.

Mask wire: clip one end to CLIP, touch the probe to the other clip. It must be ● green (1 ohm or less).



FIE checks lames with a **500 g weight with a rounded 4 mm radius end**. Contact pressure changes the reading, so a pen probe pressed by hand gives numbers you cannot compare with the armory's. Build the weighted probe:



What it does not test: tip spring weights (foil 500 g, epee 750 g), epee tip travel (0.5 mm and 1.5 mm shims) and blade flex. Those are mechanical; an armorer still checks them.