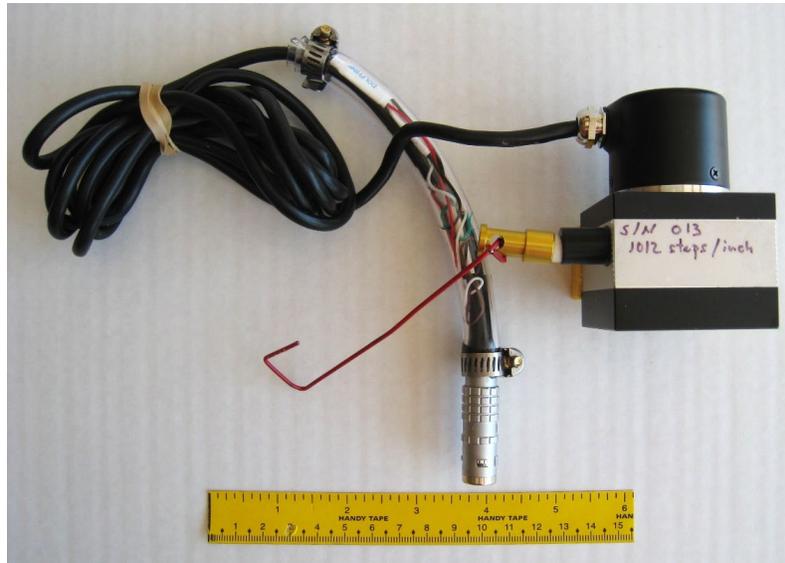


## jimmy ellis string encoders models 1M and 2M



One-meter draw string model 1M shown above. Two-meter version model 2M is similar.

model	1M	2M
Draw string length	1 meter (39.37 in.)	2 meter (78.74 in.)
Data cable length	2 meter	2 meter
Encoder body size (inches)	3.35 x 2.92 x 2.21	3.5 x 3.0 x 2.9
Encoder body size (mm)	85 x 74 x 56	88 x 75 x 74
Total Weight	471g (1.04 lbs.)	597g (1.32 lbs.)
Standard connector	16 pin lemo	16 pin lemo
Compatibility	MX2, SX, X3, Gekko, Mantis	MX2, SX, X3, Gekko, Mantis
Price	Call (+1) 718-757-9464	Call (+1) 718-757-9464

Integral magnetic base is standard. For non-magnetic materials: suction cups upon request.

Other connector/adapters are possible. Free UPS ground or USPS priority shipping in US.

See demo at YouTube:

<https://www.youtube.com/watch?v=Tg51jPGAZIM>



Users:



ASNT - Houston Testing Center



## String Encoder Best Practices

Feb 10, 2024

- Avoid "snapbacks". Never extend the spring tensioned draw string out and then let it go. When it snaps back to the home position it could be damaged. This is the most common way of damaging a string encoder.
- Keep the extended string clean and dry. A muddy or wet draw string can bring moisture into the body of the encoder. A rusty spring won't work right. If you have to work in a wet environment keep a towel at the home end to soak off as much moisture as possible before the string re-enters the encoder body.
- If you need to take a scan circumferentially use a piece a fishing line for the string path touching the pipe. Use a pancake magnet with a hook on it to route the fishing line around the pipe while keeping the string encoder's string on a straight line held off the surface of the pipe. The fishing line is very strong and it keeps dirt and moisture out of the body of the encoder.
- Most examiners will find that they take a more consistent scan in one direction or the other; left-to-right, or right-to-left. Always take your scans in the direction that you make best UT coupling. This could be, for example, zero to 39 or 39 to zero. Just use the "normal/inverse" function and/or the "origin" function to change directions.
- Always take your scans toward the encoder body so the spring is pulling you into the scan and assisting you. Locate the encoder body on the end that you are scanning towards. Again, if the direction is opposite what you need, use the "normal/inverse" and/or "origin" function.
- When inserting the 16 pin lemo connector, push it straight in and to remove it retract the outer knurled housing to release it, then pull it out. Don't twist. Lemo connectors have a torque setting and it would not be good to exceed the torque setting by excessive twisting pressure.
- Many of the instruments Lemo encoder connector ports develop a "memory" and don't "like" a new encoder Lemo. Sometimes you might need to use some rubber bands to apply some side tension to the lemo connector.
- Once you know the "steps per inch" setting of your encoder you don't need to keep re-doing your encoder calibration "wizard". Most Jimmy Ellis string encoders are 1012 steps per inch.
- The inner mechanism of a string encoder is special spring. Treat the whole thing as a delicate instrument. Treat the encoder with care and you will be able to take many, many thousands of scans with it.
- If you do accidentally break your string encoder with a "snapback" or in some other way, they can usually be repaired by jimmy at cost of shipping only.

If you have any problems at all with your string encoder, contact me and we will try to resolve your issue:

Jimmy Ellis 718-757-9464 [utgeek@earthlink.net](mailto:utgeek@earthlink.net)

**please visit my website:** <https://UTofPipelineDigs.com>

**please visit my YouTube channel:**

<https://www.youtube.com/channel/UCcVTiMTHq9QOICYSDBW9niA/videos>

