

# ••• Amplifiers & Probes



CHESILVALE

## **Tone Probe 500J & 510J**



*Plastic Tip option*

*Metal Tip option*

- 3 year warranty ◦
- Micro controlled ◦
- Filter options ◦
- Key press timing ◦
- Confirmation tones ◦
- Battery-low warning ◦
- Auto Shut off ◦
- Headset connection ◦
- Sealed electronics ◦
- Sealed battery ◦
- Large high output speaker ◦
- Wrist wrap ◦
- One button control ◦
- Crush proof ◦
- Chemical resistant ◦
- Breathes ◦
- Floats ◦
- Seal tests:
  - Submerged for 10 mins at 0.15m ◦
- Free fall tests:
  - 6 x 3m (10 foot) 1 on each axis ◦
  - 60 x 0.33m (1 foot) 10 on each axis ◦
  - 240 x 0.15 (6 inches) 40 on each axis ◦

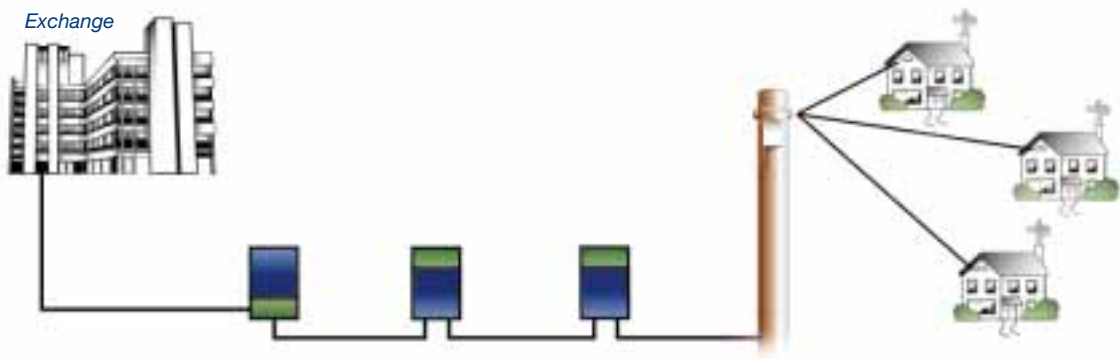
- Tone tracing probes designed specifically to meet the needs of organisations operating large copper networks and in particular those who are committed to improving service delivery and reducing whole life costs.
- Nautilus range products are “operating - environment hardened” to deliver new standards in **reducing Whole Life costs**. Each product includes a “shell” designed to breathe and safeguard the functional elements from water, dust, impact and temperature change.
- Chesilvale specialise in the design and supply of equipment used to deploy and maintain the fixed copper connection between two communicating entities.



Nautilus  
r a n g e

• • • **Cable Design**

If a single wire were used to provide a connection between a telephone and an exchange it would pick up hum from overhead power lines and signals from adjacent wires in the same cable. To overcome this problem each connection to the exchange is made with a pair of wires in close proximity to one another so that both wires pick up any interference and hence there will be no interfering signal between them. The pair is then said to be balanced. To maintain symmetry as far as possible and further reduce crosstalk the pairs are twisted together and adjacent pairs are given different twist lengths within the cable. The twisting of cables also reduces inductive hum and inductive crosstalk.

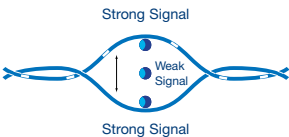
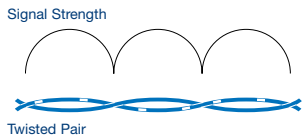


**Crosstalk**

Capacitive coupling between wires in a cable can cause the spill over of information from one circuit to another, which on telephone circuits can lead to overhearing.



- The electronics and battery are housed in separate compartments, which are sealed with silicon rubber gaskets to provide protection from the elements.
- The case design includes strengthening ribs so that it withstands heel weight on solid ground.



- Chesilvale tone generators and probes are designed to maintain the design characteristics of cables in order to minimise the effects of crosstalk. This becomes increasingly important when cables designed for the analogue era are used to carry digital traffic.

The Probe is allowed to 'breathe' via a patented membrane to ensure that it floats if accidentally dropped into deep water. The membrane also prevents changes in internal pressure from sucking in moisture.

• • • **Options & Accessories**

|                 |                                                                                                                                                       |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>M0500-00</b> | Very narrow response - for use with pure 1kHz tone generators BT Jack 609A Headphone connection.                                                      |
| <b>M0501-02</b> | Wider response - for use with warbling oscillators operating at frequencies other than 1kHz. Tag connectors suitable for connecting a Test Telephone. |



RX17A Headset  
**M0131-00**



Mod Adapter  
MA1 RJ11  
**M0008-09**



Mod Adapter  
MA2 RJ45  
**M0110-00**

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