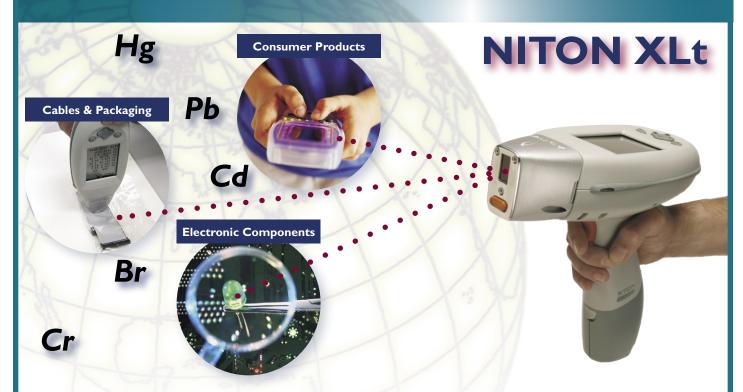
Fast, Nondestructive RoHS and WEEE Screening



EU 2002/95/EC - The RoHS Directive

Early in 2003 the European parliament drafted legislation restricting the quantities of certain hazardous elements in electrical and electronic materials. This legislation, dubbed the RoHS or Restriction of Hazardous Substances directive will become effective on the 1st of July, 2006. At that time, products entering EU countries will likely require strict documentation of compliance, the responsibility of enforcement being upon individual Member States. Restricted substances and their maximum permissable levels will be as follows:

Cadmium (Cd)	<100 ppm or 0.01%
Mercury (Hg)	<1000 ppm or 0.1%
Lead (Pb)	<1000 ppm or 0.1%
Hexavalent chromium (Cr(VI))	<1000 ppm or 0.1%
Polybrominated Biphenyls (PBB)	<1000 ppm or 0.1%
Polybrominated Diphenyls (PBDE)	<1000 ppm or 0.1%

In order to ensure product compliance in manufacturing, suppliers, fabricators, assemblers, and even recyclers must perform verification testing on components. As such, much work is underway to structure new RoHS QA/QC protocols and develop analysis programs - where speed, accuracy, and cost-effectiveness are critical.

NITON XLt - the Ideal RoHS Screening Tool

The handheld XLt 797 analyzer from NITON LLC provides a fast, reliable and nondestructive means of screening plastics and electronic components for RoHS-prohibited substances.

The XLt 797 provides a rapid quantitative analysis of cadmium, lead, mercury, total chromium and total bromine - as well as additional elemental constituents in as little as 30 seconds. The XLt's fast, nondestructive analysis provides the data necessary for a fast go/no-go decision. PCB's, board components, plastic housings, cables, plated fasteners, etc. can all be tested with one instrument. The XLt 797 is the ideal tool for compliance screening in manufacturing, border control and in recycling of scrap for WEEE compliance.

RoHS screening using the NITON XLt 797 eliminates production delays associated with lab analysis, while the fast results and nondestructive nature of the test allows a much larger sampling of material to be tested. The XLt 797 provides a number of distinct advantages:

- Very easy to use even by nontechnical personnel
- Little to no sample preparation is necessary
- Nondestructive test with instantaneous results
- Powerful NDT© data managment software suite





XLt 797 in benchtop test stand - remote operation via wireless PC link

EU Directive 2002/96/EC - WEEE

The Waste Electrical and Electronic Equipment Directive (WEEE) which becomes effective August 13, 2005, aims to minimize the impact of electrical and electronic equipment on the environment both during normal lifespan and after becoming waste. The directive applies to a large spectrum of products, setting criteria for the collection, treatment, recycling and recovery of waste electrical and electronic equipment. Requirements of the directive include, but are not limited to, the removal of all plastic containing brominated fire retardants and components containing mercury (such as switches and backlights).

Electronics Recycling with the XLt 797

The XLt 797 is ideal for use in the recycling of waste electronics, providing fast nondestructive verification of the presence of bromine and cadmium in plastics, mercury in switches and lead-based solders and electronic components. The XLt also quickly differentiates between PVC and non-PVC plastics in the recycling stream.

NITON LLC is the world's leading manufacturer of portable x-ray fluorescence (XRF) instrumentation, with more than 6000 NITON instruments in use every day worldwide.

XLt 797 Specifications

Weight	
VVeigne	1.4 kg (3.0 lbs.)
Dimensions	248 × 273 × 95 mm (9.5 × 10.5 × 3.75 in.)
Excitation Source	Miniature x-ray tube 40kV/50µA maximum
Detector	High performance Si-PiN
System Electronics	Hitachi SH-4 CPU ASICS high-speed DSP 4096 channel MCA
Batteries	2 Rechargeable Li-ion batteries 6-8 hrs each, 2hr. recharge
Display	¼ Backlit VGA touchscreen LCD
Testing Modes	Plastics (cables & packaging) Alloy (solders & components)
Analysis Range	Plastics: Ti,V, Cr, Fe, Cu, Zn, As, Se, Br, Cd, Sn, Hg, Pb, Bi
	Alloy: Ti,V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Se, Zr, Nb, Mo, Hf, Ta, W, Re, Pb, Bi, Pd, Ag, Sn, Sb
Data Storage	Internal - 3000 readings + spectra
Standard Accessories	Testing stand (for benchtop use) 100 sample cups Shielded belt holster Shielded waterproof carrying case 110/120 VAC charger/adapter RS-232 PC data transfer cable Integrated barcode reader NDT PC software utilities
Data Entry	Three methods for user data entry: Virtual touchscreen keyboard; User programmable pull down lists; Integrated barcode reader
Data Transfer	RS-232 serial cable or optional Bluetooth™ wireless connection NITON NDT PC software utility easily exports data for use in common PC applications
Security	Password protected user security
Warranty	12-month limited warranty on instrument and all components
Licensing/Registration	Varies by region. Contact NITON or your local NITON distributor

NITON LLC reserves the right to change the above specifications without prior notice

NITON LLC Headquarters 900 Middlesex Turnpike, Bldg. 8 Billerica, MA 01821

Tel: 978-670-7460
Toll Free: 800-875-1578
Fax: 978-670-7430
E-mail: sales@niton.com

Niton Europe GmbH Joseph-Dollinger-Bogen 9 80807 Munich, Germany

Tel: +49 89 3681 380 Fax: +49 89 3681 3830 E-mail: europe@niton.com NITON Asia Limited 30/F, 30 Queen's Rd. Central, Hong Kong

Tel: +852 2168 0699 Fax: +852 2168 0716 E-mail: asia@niton.com

