#### CJ-10 Nonmetal ultrasonic detector

### • Purpose

- $\stackrel{\scriptstyle <}{\phantom{}\sim}$  Testing of building foundation piles by cross-hole sonic logging;
- ☆ Inspection of concrete defects by ultrasonic method, such as uncompacted ,cellular, hole area.
- $\stackrel{\star}{\sim}$  Detecting defects of one hole by one trigger two receive.
- ☆ Testing dynam performance of geotechnical investigation、rock、concrete etc.

## Specification



☆ Technical Specification of Dynamic Pile Tests for Highway Engineering JTG/TF81-01-2004

 $\approx$  Technology specification for inspection of concrete defects by ultrasonic method CECS 21: 2000

 $\Rightarrow$  Technical specification for geotechnical investigation method GB50021-2001

## Performance

 $\Rightarrow$  High efficient testing. Lifting speed is more than 60m/s.( 20 cm distance ).

 $\stackrel{\scriptstyle <}{\curvearrowright}$  Display the test data graphically. User can watch analyze result directly;

 $\Rightarrow$  Fast and precise Automatic judge the sound parameters. Real-time wave display to assure test efficiency;

 $\stackrel{\scriptstyle <}{\succ}$  Humanized software design. Software design apply to User and construction plant. its help information ensure user handle easily;

 $\stackrel{\wedge}{\sim}$  Linking the rebound apparatus directly. Detecting strength of concrete by ultrasonic-rebound combine method with linking rebound apparatus directly, and get strength of concrete in time. The functions apply for national patent.

 $\stackrel{\wedge}{\succ}$  Being sensitive to receiving signal. Can receive signal more than 10m in concrete without defects

 $\Rightarrow$  Can supply smooth power for radial energy transducer needless external power.

- $\bigstar\,$  Standard USB storage with big capacity.
- $\stackrel{\scriptstyle <}{\curvearrowright}$  Interior lithium battery supply power for apparatus work more than 6 hours.
- $\stackrel{\wedge}{\bowtie}$  Portable, small, light apparatus (1.75Kg).
- $\Rightarrow$  Extending function for testing thickness of concrete by impacting echo method.

 $\gtrsim$  Professional and powerful analysis software on windows system. It can export the data to Excel or word for advanced analysis

#### Technical Data

Item		specifications		Item	specifications
Main	Control	high-performance	Embed	Display	$640 \times 480$ High brightness
Unit		Computer			TFT Panel



Input	Keyboard	storage	1G(Internal) + 2G(U-Disk	
interface	USB			
Receive Channel	Two	Max Sample	64k	
		Data length		
Trigger Mode	Continuous Trigger	Trigger	65、125、250、500、1000	
	External Trigger	Voltage (V)	selectable	
Receive	≪30µ v	Amplifier gain	82dB	
sensitivity				
Amplifier	$5 \mathrm{KHz} \sim 500 \mathrm{~kHz}$	Sample	$0.05 \mu s \sim 6.4 \mu s$ , 8 grades	
bandwidth		Periods	electable	
Sound time	0.05µ s	Amplifier	0.30%	
accuracy		resolution	0.00/0	
	Interior lithium battery, work	Size	260  mm  imes 185  mm  imes 60  mm	
	more than 6 hours			
	External lithium battery,	Weight	1.75 kg (include lithium	
Power	work more than 6 hours		battery)	
	(select			
	DC 12V	Temperature	-10°C──+40°C	
	AC 100V~240V 50/60Hz			

# • Configure

Instrument	Signal Cable	Plane energy transducer	U-Disk
Box staff	box	lithium battery(selectable)	
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