

CTS-112R₄

Total Station



Hardware Description

CTS-112R₄

Total Station

The CTS-112R₄ total station is based on proven technologies and designed for users who need the most cost-effective survey solution. It has an angle accuracy of 2" and is equipped with high efficiency EDM that provides long range measurements: 800 m reflectorless and up to 5 000 m using a single prism, with millimeter accuracy.

Better industrial design makes work more efficient. Each replaceable battery provide 8 hours continuous working time, so you do not have to worry about losing power in the field any more. Easy data transfer, supporting an external SD card, with up to 32 GB memory. Furthermore, there are various built-in programs also available to make your work more efficient.



Core Technology



Makes fieldwork easier

Dual face keyboards with buttons illumination to minimize mistakes provide optimum viewing and convenience under any environmental conditions. Star key button [★] immediately brings up necessary functions. Built-in laser plummet is equipped for quick instrument setup in all lighting conditions. Enables cable-free connection like mini-USB, SD as well as serial ports.



Large memory size

Internal memory can store 30 000 points, however external SD card supports maximum 32 GB memory that can record 245 760 000 points.



Intuitive onboard software

Reliable onboard software with an intuitive interface is productive and sufficient for the typical survey and construction needs.

Better EDM performance

The CTS-112R₄ is one of the fastest total stations in his class, with a distance measurement speed of 0.3 seconds. Reflectorless range is up to 800 m and distance measurement to single prism is 5000 m.



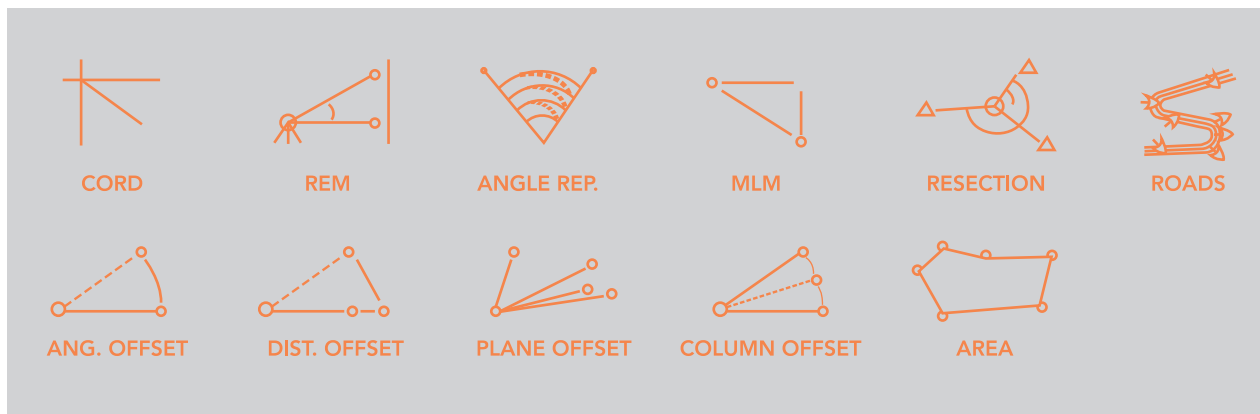
2 years warranty

Improved industrial design, and CHC experience in manufacturing of quality solutions provide extended 2 years warranty. Should a device fail because of defects in material or workmanship, all repairs or replacement will be covered under the warranty policy.



Field software

The CTS-112R₄ is a versatile, easy to use, rugged total station with a variety of advanced field applications SW built-in to make your work more efficient.



Specifications

Distance Measurement

Laser output	Prism	Class 2
	Reflective sheet	Class 2
	Non-prism	Class 3R
Distance measurement	Prism	5000 m
	Reflective sheet	800 m
	Non-prism	800 m
Accuracy	Prism	2 mm+2 ppm
	Reflective sheet	3 mm+2 ppm
	Non-prism	3 mm+2 ppm
Measuring time		Prism fine 0.3 s
		Prism tracking 0.1 s
Laser type		Red visible laser
Carrier		0.650~0.690 μ m
EDM type		Coaxial
The smallest display		0.1 mm

Angle Measurement

Diameter	79 mm
Minimum readout	0.1"/1"/5"/10" optional
Accuracy	2"
Detection method	Horizontal: Dual Vertical: Dual

Telescope

Image	Erect
Tube length	154 mm
Objective lens effective aperture	For telescoping: 45 mm
	For measuring: 50 mm
Magnification	30x
Field of view	1°30'
Minimum focus distance	1.4 m
Resolving power	3"
Reticle illumination	4 brightness levels

Auto Compensator

System	Dual axis photoelectric detection
Working range	$\pm 3'$
Accuracy	1"

Laser Plummet

Accuracy	1.5 mm at 1.5 m instrument height
Laser spot size	2.5 mm

Display

Type	LCD, 6 lines digital screen
Keyboard	Alphanumeric, 28 keys with backlight
Control panel	Double
Screen size	2.8 inch

Interface and Data Recording

Interface	RS232-C, Mini-USB, SD
Internal storage	4 MB (ready for 30,000 points)
External storage	Up to 32 GB (ready for 245,760,000 points)

Battery

Battery type	Rechargeable lithium battery
Battery voltage	DC 7.4 V 3100 mAh
Operating time	Continuous distance/angle measurement 8 hrs
	Continuous angle-only measurement 16 hrs
Charging time	About 3 hrs

Environment

Operating temperature	-20°C to +50°C (-4°F to 122°F)
Dust and water proof	IP55

Size and Weight

Size	160x150x330 mm (6.3x5.9x13.0 in)
Weight	5.2 kg

*Specifications are subject to change without notice.

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– Revision August 2018

Shanghai Huace Navigation Technology Ltd.

599 Gaojing Road, Building D
Shanghai, 201702, China

+86 21 54260273 WWW.CHCNAV.COM

