

About J-chip

J-chip system consists of following equipment.

Tag



This tag sends its ID No. to J-chip receiver on passing through a mat antenna. Because of its unique shaped slit, it's easy to put the tag on a bib/torso, shoelace, handle bar or front fork of bike etc...
Using 3 kinds of ID transmitting frequency - among 300sMHz, this active tag featured in non-rechargeable long-life battery - the life span is around 7 years. Needless to say, able to use over and over during that period. With a special "Tag checker", it's easy to see tag battery condition.

Receiver



This is to receive and record tag ID. There are 2 types of receiver; 5ch and 8ch. 4m width mat is applied to 5ch, on the other hand, more than 4m are applied to 8ch. Both type of receiver run on DC12V power or a car battery. The max power consumption is 4A.
LAN, serial and USB can be used for its communication. In addition, all operation and parameter setting can be done via external PC.
J-chip receiver gets competitor's time with using its own internal clock which always moves. When competitor passes on the mat antenna, the receiver combines that time and ID data sent out from the competitor's tag. With synchronizing to a GPS, one of receiver's accessories, it becomes easier to get accurate data on what time which competitor passes which timing point/ mat. Scoring can be done if using scoring software.
In order to keep away from dust, it enables to close the lid of the receiver during timing measuring. After closing the lid, it is able to see how receiver works from the small window of the lid.

Tag checker

For adequate preparation for timing measuring, it is necessary to check the tag's battery condition in advance. This checker works for combining competitors' name and Tag ID and ease registration work.

Mat antenna



Its thickness is only 2 mm and light in weight, so it is easy to carry, easy to set up. Several width of mat, 4m, 6m, 8m, 10m and 12m are available from J-chip product line.
Trigger cable and receiver antenna (Di-pole antenna) are embedded in mat antenna to catch tag ID. When competitors carrying J-chip tag across the mat at each timing points (ex. start/ finish line and intermediate of the course), the receiver antenna receives tag ID and then sends the ID data to J-chip receiver. If the ID and the data of the competitor combined in advance, you can know which competitor crossed on which timing point right away.

Specification

J-chip Tag : MTJP-T01

Outer Dimension (approx.)	L28mm x W 44.2 mm x H7.3mm
Weight (approx.)	9.5g
Temperature for Operation	-20-degree C to 40-degree C



J-chip Receiver : 8ch MTJP-RG01-8CH / 5ch MTJP-RG01-5CH

Dimension (approx.)	L	32 cm
	W	38 cm
	H	53 cm
Weight (approx.)	15.5 Kg	
Power source	DC12V (outer) / built-in DC12V battery	
Built-in battery	GS YUASA NP2.3-12 12V 2.3Ah	
Number of Receiving Inputs	8 Channels / 5 Channels	



J-chip Tag Checker : MTJP-TC01

Outer Dimension (approx.)	L 17.5mm x W 15mm x H 5mm
Weight (approx.)	520g
Temperature for Operation	10-degree C to 40-degree C
Power Source	DC 9 V



Mat Antenna : MTMX-ANT4/ANT6/ANT8/ANT10/ANT12

Outer Dimension (approx.)	L 1.05m x W 4m, 6m, 8m, 10m, 12m x H 2mm
Weight (approx.)	13kg / 4m, 19.7kg / 6m, 26.3kg / 8m, 33kg / 10m, 39kg / 12m

