

Thank you for purchasing the Long Test Clips (Model 701906). To ensure correct use, please read this manual thoroughly before beginning operation. After reading the manual, keep it in a convenient location for quick reference whenever a question arises during operation.



**YOKOGAWA** ◆

IM 701906-01E  
3rd Edition

### Safety Precautions

This product is designed to be used by a person with specialized knowledge. Make sure to comply with the safety precautions mentioned hereafter when handling the long test clip. Yokogawa Test & Measurement Corporation assumes no responsibility for any consequences resulting from failure to comply with these safety precautions. Also, read the User's Manual of the probe and the measuring instrument thoroughly so that you are fully aware of its specifications and handling, before starting to use the long test clip.

This manual is part of the product and contains important information. Store this manual in a safe place close to the instrument so that you can refer to it immediately. Keep this manual until you dispose of the instrument.

**Make sure to comply with the following safety precautions in order to prevent accidents such as an electric shock which impose serious health risks to the user and damage to the instrument.**

#### WARNING

##### Grounding of the measuring instrument

The protective grounding terminal of the measuring instrument must be connected to ground.

##### Handling of the long test clip

Do not touch the long test clip's input terminal or the long test clip itself with wet hands.

##### Do not operate with suspected failures

If you suspect that there is damage to this long test clip, have it inspect by a service personnel.

##### Observe maximum working voltage

When the oscilloscope's input coupling is AC, DC voltage of the same electric potential as the plug-on clip's input is applied to the oscilloscope's input. Make sure not to exceed the oscilloscope's maximum input voltage.

##### Do not operate in wet/damp conditions

To avoid electric shock, do not operate this long test clip in wet or damp conditions.

##### Do not operate in explosive atmosphere

To avoid injury or fire hazard, do not operate this long test clip in an explosive atmosphere.

##### Avoid exposed circuitry

To avoid injury, remove jewelry such as rings, watches, and other metallic objects. Do not touch exposed connections and components when power is present.

#### CAUTION

##### Maximum input voltage

Do not apply any voltages exceeding the maximum input voltage to the plug-on clip.

#### French

#### AVERTISSEMENT

##### Mise à la terre de l'appareil de mesure

La borne de protection de mise à la terre de l'appareil de mesure doit être reliée à la terre.

##### Manipulation de la longue pince de test

Évitez de toucher la borne d'entrée de la longue pince de test ou la longue pince de test elle-même avec les mains mouillées.

##### Évitez de faire fonctionner en cas de soupçon de panne

Si vous suspectez que cette longue pince de test est endommagée, faites-la examiner par un technicien.

##### Conformez-vous à la tension maximale de fonctionnement

Lorsque le couplage d'entrée de l'oscilloscope est en courant alternatif (CA), un courant continu (CC) du même potentiel électrique que l'entrée de la pince enfichable est appliquée à l'entrée de l'oscilloscope. Assurez-vous de ne pas dépasser la tension d'entrée maximale de l'oscilloscope.

##### Ne pas utiliser dans des environnements humides ou mouillés

Afin d'éviter tout choc électrique, ne manipulez pas cette longue pince de test dans des conditions humides ou mouillées.

##### Ne pas utiliser dans un environnement explosif

Ne pas utiliser l'instrument en présence de gaz ou de vapeurs inflammables. Cela pourrait être extrêmement dangereux.

##### Évitez que les circuits soient exposés

Pour éviter toute blessure, ôtez les bijoux tels que les bagues, les montres et autres objets métalliques. En présence de courant, ne pas toucher les connexions et les composants exposés.

#### ATTENTION

##### Tension d'entrée maximale

Ne pas appliquer de tensions supérieures à la tension d'entrée maximale sur la pince enfichable.

### Waste Electrical and Electronic Equipment (WEEE)



(EU WEEE Directive valid only in the EEA\* and UK WEEE Regulation in the UK)  
This product complies with the WEEE marking requirement. This marking indicates that you must not discard this electrical/electronic product in domestic household waste. When disposing of products in the EEA or UK, contact your local Yokogawa office in the EEA or UK respectively.

\* EEA: European Economic Area

### Disposal

When disposing of this instrument, follow the laws and ordinances of the country or region where the product will be disposed of.

### The Following Symbols are Used in this Manual.

**WARNING** Calls attention to actions or conditions that could cause serious or fatal injury to the user, and precautions that can be taken to prevent such occurrences.

**CAUTION** Calls attentions to actions or conditions that could cause light injury to the user or damage to the instrument or the user's data, and precautions that can be taken to prevent such occurrences.

**Note** Calls attention to information that is important for proper operation of the instrument.

#### French

**AVERTISSEMENT** Attire l'attention sur des gestes ou des conditions susceptibles de provoquer des blessures graves (voire mortelles), et sur les précautions de sécurité pouvant prévenir de tels accidents.

#### ATTENTION

Attire l'attention sur des gestes ou des conditions susceptibles de provoquer des blessures légères ou d'endommager l'instrument ou les données de l'utilisateur, et sur les précautions de sécurité susceptibles de prévenir de tels accidents.

### 1 Description

The 701906 (long test clips) are accessories for differential probes (such as the 701921) and safety adapter leads (such as the 701901). Please use them in combination with differential probes and safety adapter leads. Using the 701906 makes it possible to take measurements in tight locations that probes cannot reach. Make sure you also fully understand the correct use of the instrument and probe when using the plug-on clips.

### 2 Appearance

Red and black long test clips (one each).



### 3 Operation

Replace the pincher tip that comes with the 701921 or other differential probe with the 701906.

#### WARNING

- Make sure to avoid an electric shock when connecting the long test clip or probe to the object of measurement. Do not remove the probe from the measuring instrument or do not remove the long test clip from the probe after the object of measurement is connected.
- When disconnecting the probe BNC output connector, first turn OFF the power to the circuit under measurement. Then, disconnect the long test clip or probe from the high voltage parts of the circuit under measurement.
- Do not use with probes by manufacturers other than Yokogawa.
- EN61010-031 is the safety rating for the probe alone.
- During actual use, you should adhere to the safety ratings and usage precautions of your measuring instrument. Failure to comply with the correct safety precautions may result in electric shock or damage to the instrument.

#### CAUTION

- The actual maximum input voltage is limited to the lesser of either the long test clip's maximum input voltage or the probe's maximum input voltage or the measuring instrument's input voltage.
- See the specifications of the probe or measuring instrument you are using to determine the maximum input voltage.
- Convert the probe's attenuation ratio, and be sure not to input an excessive voltage to the measuring instrument.
- If a voltage exceeding the maximum input voltage or probe's frequency deleting is applied, damage to the instrument may result.
- Use a soft cloth to clean the dirt. Prevent damage to the long test clip. Avoid immersing the long test clip, using abrasive cleaners, and using chemicals contains benzene or similar solvents.

#### French

#### AVERTISSEMENT

- Assurez-vous d'éviter tout choc électrique lorsque vous branchez la longue pince de test ou la sonde sur l'objet que vous souhaitez mesurer. Ne pas enlever la sonde de l'appareil de mesure ou ne pas enlever la longue pince de test de la sonde après la connexion avec l'objet à mesurer.
- En déconnectant le connecteur de sortie BNC de la sonde, ÉTEINDRE d'abord l'alimentation du circuit qui est mesuré. Ensuite, déconnectez la longue pince ou sonde de test des zones de haute tension du circuit à mesurer.
- Ne pas utiliser avec des sondes provenant d'autres fabricants que Yokogawa.
- EN61010-031 est le classement de sécurité de la sonde uniquement. Lors de l'utilisation réelle, vous devez respecter les consignes de sécurité et les précautions d'utilisation de votre appareil de mesure. Le non-respect des consignes de sécurité correctes peut entraîner un choc électrique ou endommager l'appareil."

#### ATTENTION

- La tension d'entrée maximale réelle est limitée à la tension d'entrée maximale de la longue pince de test ou à la tension d'entrée maximale de la sonde ou à la tension d'entrée de l'appareil de mesure si celle-ci est inférieure.
- Voir les spécifications de la sonde ou de l'appareil de mesure que vous utilisez pour déterminer la tension d'entrée maximale.
- Convertir le rapport d'atténuation de la sonde et veiller à ne pas introduire une tension excessive dans l'appareil de mesure.
- Si une tension supérieure à la tension d'entrée maximale ou la suppression de la fréquence de la sonde est appliquée, l'appareil peut subir des dommages.
- Utilisez un chiffon doux pour nettoyer la saleté. Évitez d'endommager la longue pince de test. Évitez d'immerger la longue pince de test, en utilisant des nettoyants abrasifs et en utilisant des produits chimiques qui contiennent du benzène ou des solvants similaires.

### 4 Specifications

Item	Specifications
Rated voltage	1000 V measurement category II (voltage to ground)
Crimping width	Approx. 5 mm max.
Shaft length	200 mm
Operating environment	5 to 40°C, 20 to 80% (no condensation)
Storage environment	-20 to 60°C, 20 to 80% (no condensation)
Operating altitude	2,000 m or less
Safety standards	Complying standards IEC/EN61010-031 Measurement category II*1 Pollution degree 2 <sup>2</sup>

\*1 This equipment is for measurement category II. Do not use it with measurement category III or measurement category IV.

Measurement category Other (O) applies to measurement of circuits that are not directly connected to a main power supply. This category applies to measurement of secondary electric circuits in equipment across a transformer.

Measurement category II applies to measurement of circuits, such as household electric appliances and portable electric tools, that are connected to low-voltage installations.

Measurement category III applies to measurement of facility circuits, such as distribution boards and circuit breakers.

Measurement category IV applies to measurement of power source circuits, such as entrance cables to buildings and cable systems, for low-voltage installations.

\*2 Pollution degree applies to the degree of adhesion of a solid, liquid, or gas which deteriorates withstand voltage or surface resistivity. Pollution degree 2 applies to normal indoor atmospheres (with only non-conductive pollution).