TECHNICAL SPECIFICATION

Transmitter

Voltage rating: 230V
Frequency range: 30 - 70Hz
Switching frequency: Approx. 5Hz
Transmission pulse width: approx. 1.7µS
Transmission pulse amptitude: 20A max.
Temperature range: -10°C to 40°C at max 60% RH
Dimensions: Approx: 65 x 65 x 46mm
Weight: 60g (FD500/T) 65g (FD600/T)
Earth Leakage: Nil
Power supply: From mains
Power consumption: Approx. 1W
Overvoltage category: Cat III/300V
Pollution degree: 2
Protection Class: IP20

Receiver

Tracing depth for fuse assignment: approx. 0 - 10cm, depending on local conditions.
Sensitivity setting: via on/off potentiometer
Temperature range: -10°C to 40°C at max 60% RH
Dimensions: 160 x 55 x 30mm
Weight: approx. 135g (including battery)
Protection class: IP20
Power supply: 9V battery, MN1604/PP3, IEC 6LA61 (alkaline only) - not included.

Units are EMC compliant.

There are no user serviceable parts in the transmitter or receiver.

12 months guarantee

Faults in manufacture and materials are fully guaranteed for 12 months from date of invoice and will be rectified by us free of charge, provided the instrument has not been tampered with, and is returned to us unopened. Damage due to dropping, abuse or misuse is not covered by the guarantee. Our service department will promptly quote to repair any faults that occur outside the guarantee period. Nothing in this leaflet reduces your statutory rights.

Martindale Electric Company Ltd

Metrohm House, Penfold Trading Estate, Imperial Way,
Watford, WD24 4YY, UK.
Tel: 01923 441717 Fax: 01923 446900

Website: www.martindale-electric.co.uk
E-mail: sales@martindale-electric.co.uk

CE

MARTINDALE
ELECTRIC
—TRUSTED BY PROFESSIONALS—

Fuse Finder Instructions FD500 & FD600

The job of locating electrical circuits (AC circuits of 230V ± 10%) is now made quick and easy. No more guessing or trial and error when it comes to locating the correct circuit breaker or fuse supplying electrical power to a socket or lighting fixture (FD600 only).

WARNING

Always check that the Fuse Finder units are operating properly before proceeding.

These instructions contain both information and warnings that are necessary for the safe operation and maintenance of the unit. It is recommended that you read the instructions carefully and ensure that the contents are fully understood. Failure to understand this leaflet and to comply with the warnings and instructions contained herein can result in serious injury or damage.

The units must only be used under the conditions and for the purposes for which it has been constructed. Particular attention should be paid to the safety instructions, the technical specifications and the use of the units in dry surroundings.

The FD500 has a 13A plug-like transmitter unit. The FD600 is provided with two alternative means of connecting the transmitter unit to the mains.

1. A 13A adaptor.
2. A two way fused lead set - TL83.

For tracing circuits with 13A sockets, use the 13A adaptor to connect the transmitter unit to the socket.

For use at bare wires and light fittings, use the TL83 lead set to connect the circuit red to live, black to neutral. Switch off the supply if possible or take appropriate precautions while connecting to live unshielded contacts.

PREPARING TO USE THE FUSE FINDER

Battery Installation

1. Remove battery cover of receiver.
2. Connect 9V battery (not supplied) and insert into compartment.
3. Re-install battery cover.

Unit Test (Always carry out before use)

1. Plug the FD500/T transmitter into an electrical wall outlet or for the FD600 by using the 13A adaptor or the TL83 lead set and turn the power on.
2. Turn receiver on just until a click is heard and the LED lights. This is the maximum sensitivity.
3. Place receiver near transmitter. If receiver is working and the wall outlet's power is on, the receiver will produce a distinctive beep and the LED will flash.

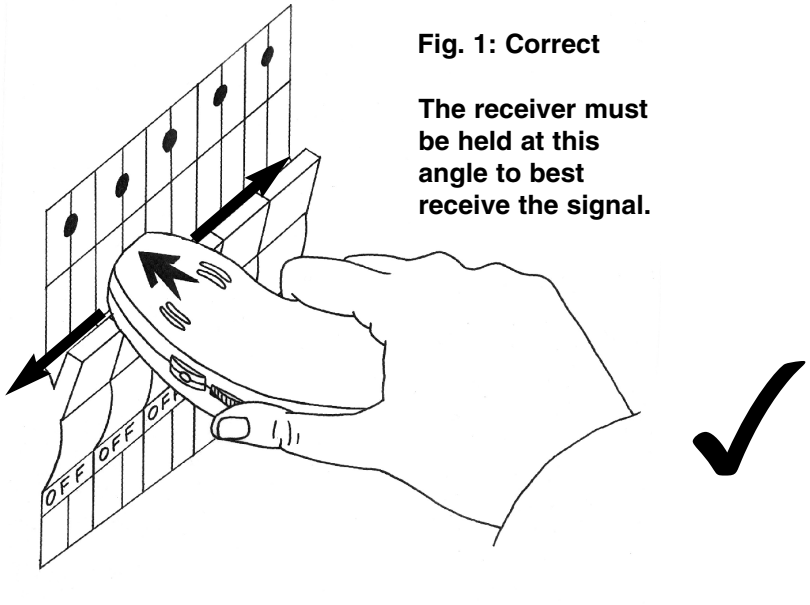

Fig. 1: Correct

The receiver must be held at this angle to best receive the signal.

USING THE FUSE FINDER

Locating the Fuse or Circuit Breaker controlling a wall socket.

1. Plug the FD500/T transmitter into an electrical wall outlet or for the FD600 by using the 13A adaptor or the TL83 lead set and turn the power on.
2. Check unit as in "Unit Test" section.
3. Go to fuse box (consumer unit) and place flat surface of receiver at a right angle to and directly on the fuse or circuit breaker (**Fig. 1**).

4. Slowly move the receiver along the row or rows of fuses while continually lowering the receiver's sensitivity by rotating the wheel away from the arrow until only one fuse causes the receiver to beep.

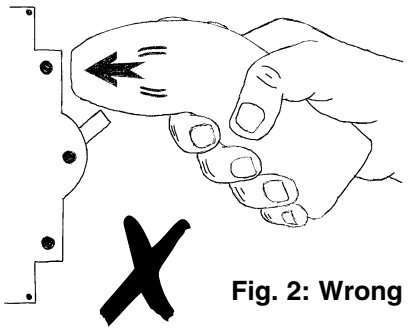

Fig. 2: Wrong

5. Ensure that all fuses/breakers are scanned by the receiver. Do not assume that the first signal is the only signal. ***(Note: In certain instances an adjacent fuse may also beep due to the routing of the wires in the panel. If this occurs or if an area of the panel is sensitive, remove the panel cover (observing normal safety precautions) and hold the Fuse Finder against the wires leading to the fuses. This should eliminate any crossover signals and allow unique identification of the fuse).***
6. After you have located the right breaker or fuse, you can turn off the circuit and the receiver will stop beeping.
7. Check that the red light on the transmitter is off to confirm you have turned off the correct fuse.

Sockets controlled by a wall switch

Your Fuse Finder is the easiest way to determine if a wall socket is controlled by a switch.

1. Carry out the unit test and ensure it works.
2. Turn the wall switch OFF.
3. Plug the transmitter into the outlet being tested.
4. Repeat the Unit Test.
5. If the receiver does not beep, that outlet is controlled by the wall switch.

Locating more than one socket/location on the same circuit

1. Plug the transmitter into a socket with the power on and verify that the receiver is working as explained in the "Unit Test" section.
2. Take the receiver to the other location in question, hold the receiver against the socket or wiring in the same manner as you would with a fuse. Due to variations in the wiring of sockets you may need to vary the angle of presentation of the receiver unit.
3. If this socket is on the same circuit as the outlet where the transmitter is plugged in, the receiver will beep.

CAUTION: Use extreme care when you work around electrical circuits. A severe shock hazard exists. Your Fuse Finder is not intended to replace good electrical practices, but to assist you in knowing established wiring layouts.

WARNING

In order to avoid the danger of electrical shock, it is important that proper safety measures are taken when working with voltages exceeding 30V AC rms, 42V peak or 60V DC.

Cleaning

Disconnect the instrument from all circuits. Moisten a cloth slightly with diluted washing up liquid and wipe the instrument surface by applying light pressure. Allow a recovery time of 6 hours after cleaning before operating the instrument to ensure it is perfectly dry.