

Introduction to the Summer Newsletter

Dear Partner,

Welcome to the Summer edition of our newsletter.

Comparable to the high decibels of the Vuvuzelas during the World Cup Football in South Africa, we bring you the summer edition of Fujitsu's newsletter with LOUD enthusiasm.

The reason for our enthusiasm is in the first place the introduction of our new multi-input resistive touch panel. This touch panel is able to detect simultaneous input actions and is now available as customized product. Page 3 of this newsletter features a short introduction of the new Fujitsu touch panel. With success we demonstrated the multi-input panel to the first interested visitors at the Kiosk Europe Expo.

That brings us to another reason for our enthusiastic newsletter. From the 15th to the 17th of June 2010 we exhibited at the Kiosk Europe Expo 2010 with our thermal printer, touch panel and wireless modules product line-up. In cooperation with Fujitsu Technology Solutions we experienced a successful and pleasant exhibition, where we were able to meet with our distribution partners and potential customers in an inspiring environment. Please browse through to page 2 for a report about this exhibition in Essen, Germany.



With an eye on 2010's event calendar, we see that our coming exhibition brings us to Munich, where we will participate, again with much enthusiasm!, in the Electronica exhibition.

This newsletter will inform you of the date(s) that you should keep available for this leading international trade fair.

We hope you will enjoy reading this newsletter.

Kind regards,
The MARCOM Team

Kiosk Europe Expo 2010

Exhibition report

Page 2

Touch panels

NEW! Multi input touch panel

Page 3

Electronica 2010

Reserve the date(s)!

Page 4

FTP-63A printer mechanism

The self-service printing solution

Page 5

Fujitsu knowledge company

Shares knowledge, assist on technical topics

Page 6

Technical topics #1

Relay operation and coil voltage

Page 7

KIOSK EUROPE EXPO 2010

Exhibition Report

The 15th to the 17th of June brought Fujitsu Components to the Kiosk Europe Expo 2010, held in this year's cultural capital Essen. Together with our partner Fujitsu Technology Solutions, we participated in this exhibition, aiming at the POS and Kiosk market.

As the Kiosk market is growing every year, this exhibition is of much value for Fujitsu's thermal printers and touch panels business. Fujitsu's latest addition, wireless modules, can as well be perfectly integrated in a Kiosk application.

New products

The Kiosk Europe exhibition has been a good opportunity for Fujitsu to present the latest technologies on thermal printers, touch panels and wireless modules.

The new FTP-63A printer mechanism was the thermal printer eye catcher on the booth. (more information about this printer mechanism on page 5 of this newsletter)

Visitors of the booth have also shown interest in the wireless modules product line-up and with pride we demonstrated the Fujitsu multi-input resistive touch panel. The new touch panel is able to detect simultaneous input actions (please browse to page 3 for more details on the multi-input touch panel).

The synergy between Fujitsu products in a kiosk application was presented by a demo containing a 4-wire touch panel and a Fujitsu Technology Solutions mainboard that managed the printing of the FTP-639USL002, the FTP-627USL432 and the standalone printer FP-32L.



15, 16, 17 June 2010 | Messe Essen | Essen | Germany

For an impression of the Kiosk Europe exhibition, we placed a small video on our Extranet. The movie clip shows demonstrations of our thermal printers and an interview with our thermal printer product manager. Please visit <https://extranet.fceu.fujitsu.com> to view this video.

Documentation about the new multi-input touch panel and the FTP-63A thermal printer can also be downloaded on our extranet.

Summarized we experienced the Kiosk Europe Expo 2010 as a successful and pleasant event.

Were you not able to meet us at Kiosk Europe Expo? Please browse through to page 4 to find out which dates you need to reserve in your agenda for the Electronica 2010 exhibition.

We will exhibit on the Electronica our complete product line up.

Successful and inspiring exhibition

TOUCH PANELS

NEW! Multi-input touch panel

Fujitsu Components Europe B.V. has expanded its touch panel product range by releasing the multi-input resistive touch panel. The new touch panel is able to detect simultaneous input actions; finger and stylus action can be performed at the same time.

MULTI INPUT

The use of touch panels in present and future applications experiences an exceptional growth. These days the majority of mobile phones are operated by a touch panel. And public facilities such as POS, Kiosk and banking systems are often operated with the help of a touch panel. As the requirements on the touch panel market extends to multiple and simultaneous input actions, Fujitsu developed the multi-input resistive touch panel.

Fujitsu's resistive multi-input panels can process single-tap and multi-touch input from nearly any object using varying pressure – e.g., a heavy-gloved finger, credit card edge, standard pens, a light finger touch, etc. This capability results in accurate, stylus-handwriting input and enables two-finger manipulation, including pinch, push, rotate and scroll functionality (to zoom or rotate pictures). Both finger and stylus action can be performed simultaneously.

Fujitsu's resistive multi-input panels are lightweight and offer excellent performance in a variety of operating environments. They feature low power consumption, high resolution and high accuracy and are splash- and dust proof.



Fujitsu will start offering customized panels in sizes from 5.6- to 12.1-inch. Controller boards, ICs with USB interface and Windows® 7 drivers are readily available to facilitate panel integration.

Fujitsu Components is the first manufacturer to obtain Windows® 7 logo certification for a resistive multi-input touch panel.

MULTI-INPUT touch panel



ELECTRONICA 2010

Reserve the date(s)!

Although we still have a few months to go, we already look forward to the 24th edition of the Electronica exhibition in Munich.

This year's Electronica event will take place from the 9th to the 12th of November in Messe München.

Like previous years Fujitsu Components will be present at the Electronica showing our product line-up.

We have good experiences and memories from past Electronica editions and it is very important to us to meet with our partners.

As can be read in this newsletter (and previous editions) Fujitsu has brought several new products on the market this year, which we gladly would like to show to our partners and customers. The Electronica gives us that perfect opportunity to display our products and present its interesting features.

Please mark your agenda for the Electronica days. We are looking forward to meet you on our booth!

You can find Fujitsu at Hall B5 booth 343. Further details about Fujitsu's participation at the Electronica will be released in the near future.

We hope to see you in November!



New Munich Trade Fair Centre
09–12 November 2010



FTP-63A PRINTER MECHANISM

The self-service printing solution

Fujitsu recently added the FTP-63A printer mechanism to the thermal printer line-up. The FTP-63A stands out through its compact size, high speed printing and thick paper handling.

Transaction efficiency

The FTP-63A is a 24-volt, 3 inch thermal printer mechanism that offers ultra-fast print speeds, long-term operating reliability and a compact footprint. These features reduce operating costs and downtime by increasing transaction efficiency in high-volume receipt printing applications.

With a 250mm (2000 dotlines/sec. max.) print speed, the new FTP-63AMCL011/411 printer series is Fujitsu's fastest-in-class printer mechanism.

The FTP-63A accepts thermal papers up to 86 mm wide, 60-150 micrometers thick for standard head type and 60-250 micrometers for near edge type, making it suitable for a variety of receipt generating applications. A platen release mechanism facilitates drop-in paper loading and print head maintenance to ensure continuous operation.

The printer features a replaceable thermal head with a printing life of 150km. An available, front-mount guillotine cutter offers full or partial cutting and has a mechanical life of over one million cuts.

The cutter jam free construction of the FTP-63A keeps the service costs down.

When integrated with the auto-cutter, the entire unit measures a compact 119.1(W) x 54(D) x 38(H) mm and weighs 315g. The compact design offers mounting flexibility and easy integration.

The printer's die-cast frame enhances durability and acts as a heat-sink during continuous printing. The die-cast frame also reduces shock and vibration, and provides mounting stability and static electricity dissipation, while enabling a wide operating temperature range of -20 to +70 °C.

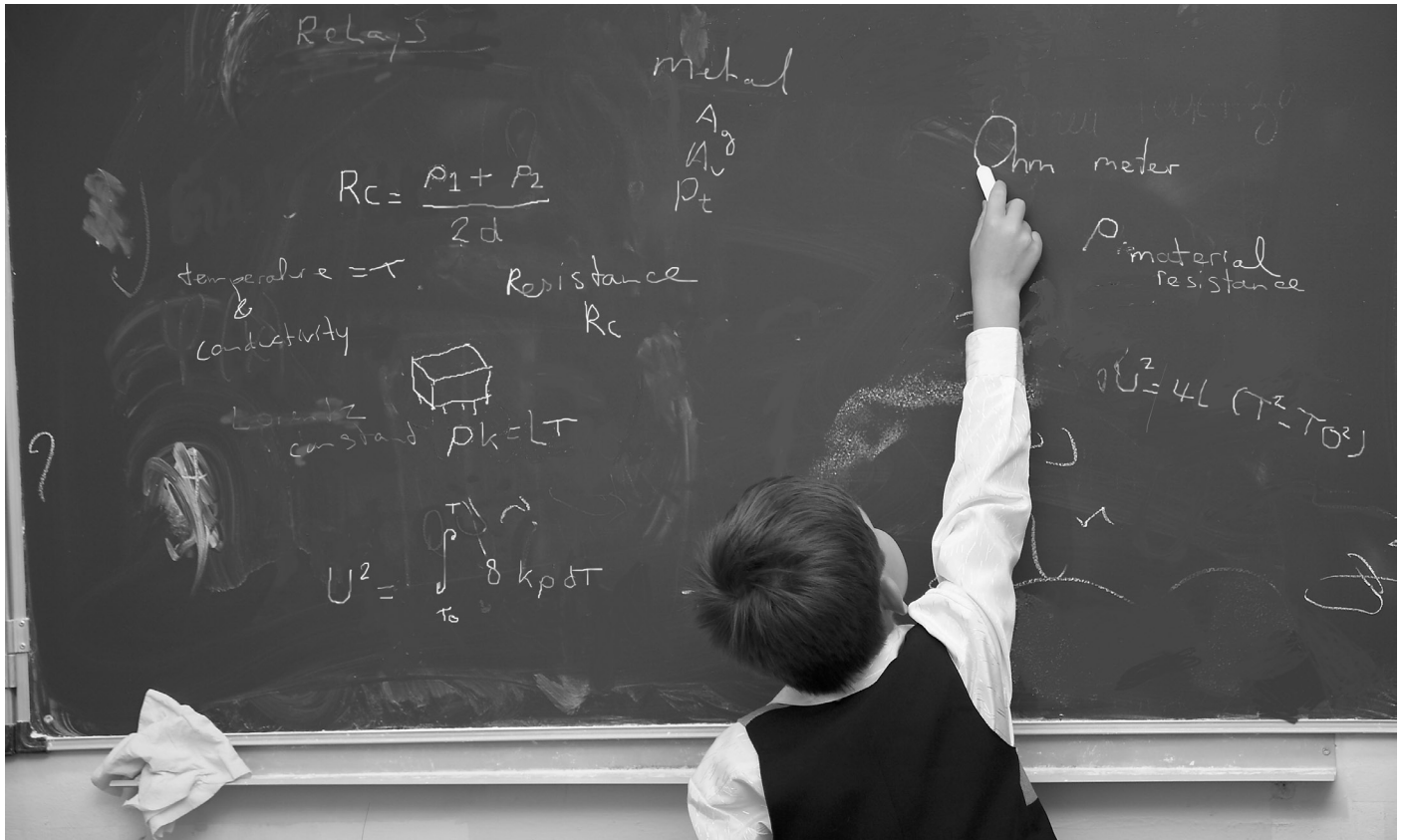


The FTP-63A prints 8 dots/mm resolution (640 dots/line) and is able to print customizable receipts with logos, graphics, coupons, messages, etc. Target applications include POS, ticketing, banking, and kiosk systems.

Compact, fast & thick paper handling

FUJITSU KNOWLEDGE COMPANY

Shares knowledge, assist technical topics



Over the years Fujitsu Components has made its name on the component and device market with a complete product line-up adapted to the requirements of the market.

The acclaimed professionals of Fujitsu Components Europe have built a wealth of knowledge through their many years of experience each on their speciality. Fujitsu would like to share this knowledge with its partners and bring support on technical topics.

Trainings and webinars

Fujitsu will share their knowledge through product trainings and webinars. On a regular base Fujitsu's product engineers will host a training at Fujitsu Components European sales office or at a location upon request or in a webinar; an online live meeting were you can follow the training from behind your own desk.

Fujitsu webinars

A schedule of upcoming trainings and webinars, and registration details will be communicated to you soon!

Newsletter technical topics

Besides trainings and webinars our knowledge will also be shared through technical articles. These articles will appear in the Fujitsu newsletter.

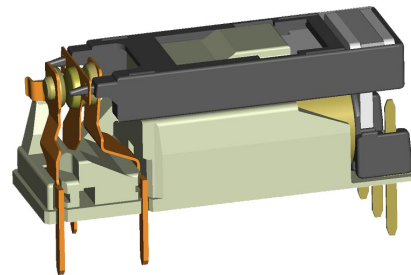
The first technical article can be read on page 7 of this newsletter issue!

To start at the beginning, the subject of this article is the basic working of a relay; "relay operation and coil voltage".

TECHNICAL TOPICS #1

Relay operation and coil voltage

Every relay type, irrespective of whether it is a small signal relay or a high current relay, all need to be operated or controlled by applying a voltage source to the coil. Ever wondered what is happening and how to read the datasheets that specify the operation parameters of a relay?



Nominal coil voltage

Let's start by taking a general purpose power relay, like the JS-series type. When you are selecting a type from the list of available JS versions, the first thing you might look for is the so-called "rated" or "nominal" coil voltage. For a 12 Volt relay e.g., the nominal voltage is obviously 12 Volt. This means that all specified parameters are valid or applicable when the voltage measured on the relay coil terminals is 12V.

Magnetic field

Relays are electro-mechanical devices that need a magnetic field to actuate and move the contacts by means of an actuator. This magnetic field is generated by a coil wound over a bobbin containing a soft iron core. The level of the magnetic flux, Φ or magnetic current through the relay core and armature depends on the electric current flowing through the coil and the number of turns of the coil. Simply said, the magnitude of the magnetic flux can be expressed at $AT = A \times T$ (Ampere-Turns). Irrespective of the coil voltage rating, as is printed on the relay, the AT product is the same for all relay coil versions of the same series.

A relay manufacturer will always strive to use the full winding space available on the bobbin to get the highest efficiency of the coil.

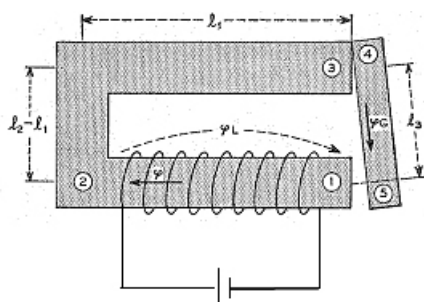
In order to keep the same level of necessary coil power for each different coil voltage rating, a different wire size is used to keep the coil resistance at the highest possible level and provide at the same time the same necessary AT product to generate the necessary magnetic field.

Looking at the relay datasheet we see that for each different coil voltage the corresponding coil resistance is different, but the coil power or coil dissipation is the same for all coil voltages.

This means that for a specific relay series, the operate current is the same for all rated voltages.

The reason why relay datasheets mention the coil voltage rather than the coil current is that it is easier to select a suitable relay by its coil voltage rating than by the necessary coil current and match it to the available driving voltages in the circuit.

The next edition of Fujitsu's relay technical topics will go further on this subject. The second article will concentrate on the different relay types with respect to the operations of the coil and gives information about relay coils at elevated temperatures.



Relay magnetic circuit

In a relay magnetic circuit, there is a continuous iron path, broken only by the air gap at the moving armature yoke interface. The permeability " μ " of the soft iron material of the core and yoke, between points 1 and 3, is a factor of 1000 higher than the μ of the air gap at the armature, between point 1 and 5 and the heel gap between point 3 and 4. The magnetic reluctance R_0 in the air gap generates a high magnetic field, pulling the separate parts to each other, and closing the armature and the attached contacts.

DID YOU KNOW?

Fascinating facts



New website lay-out

The Fujitsu Components Europe website has been renewed with a fresh look. Check the new website lay-out on emea.fujitsu.com/components

Vuvuzela deaf

A vuvuzela can produce a sound pressure that is on the threshold of pain. With a sound pressure of 120dB(A) at 1 metre (3.3 ft) from the horn opening, the high sound levels can lead to permanent hearing loss for unprotected ears.

The vuvuzela has become a symbol of South African soccer, as the stadiums during the FIFA world cup 2010 were filled with this typically 65 cm (2.13 ft) plastic blowing horn that produces a loud, distinctive monotone note.

(Source: wikipedia)

Football World Cup trophy stolen

The Football World Cup trophy has been stolen twice in the history of this tournament. The first time was in 1966, four months before the start of the FIFA World Cup in England. The trophy was stolen during a public exhibition in England, at Westminster Central Hall. The trophy was found seven days later wrapped in newspaper at the bottom of a suburban garden hedge in South London, by a dog named Pickles.

In 1970 Brazil won the world cup football title for the third time, and the trophy was taken to Rio de Janeiro. There the trophy was stolen again in 1973 and never recovered.

FIFA's regulations now state that the trophy cannot be won outright: the winners of the tournament receive a replica which is gold plated rather than solid gold.

(Source: wikipedia)

Did you know?

FUJITSU IN THE NEWS

Advertisements and press releases



Introduction

For every new product ready to be introduced Fujitsu Components sends out product introduction kits. After providing our partners with the necessary information about our new products we will publish the new product in the media.

Markt&Technik

- April 2010 (special edition “Elektromechnik & Passive Bauelemente”)
 - Relay advertisement
- Purpose: General relay promotion
- Article relay get-together Markt&Technik

EPN

- May 2010
 - Thermal printer advertisement
- Purpose: Promotion thermal printer range
- Wireless modules advertisement
- Purpose: General wireless modules promotion

Electronics Talk

- April 2010
- Latching relays item

Kiosk Europe

- June 2010 (Summer edition)
 - Advertisement Fujitsu kiosk solutions
- Purpose: Promotion participation Kiosk Europe Expo
- Article wireless modules
 - Kiosk Europe Expo show preview

POS Manager Technology

- June 2010
 - Thermal printer advertisement
- Purpose: Promotion POS/Kiosk solutions
- Article Standalone printer FP-32L

Stay informed!



ASK FUJITSU COMPONENTS

Contact us on +31 (0) 23 556 0910 or
info@fceu.fujitsu.com or visit emea.fujitsu.com/components/

©2010 Fujitsu Components Europe B.V. All rights reserved. All trademarks or registered trademarks are the property of their respective owners. Fujitsu Components Europe B.V. or its affiliates do not warrant that the content of this product guide is error free. In a continuing effort to improve our products Fujitsu Components Europe B.V. or its affiliates reserve the right to make any changes without prior notice. Printed in the Netherlands. Summer Edition JULY 2010