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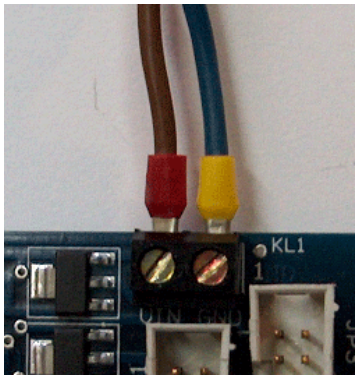
THIS MANUAL DESCRIBES CABLES AND POWER SUPPLY FOR DCA2X16 LED DISPLAY CONTROLLER

Ver. 1.3

1. Power supply

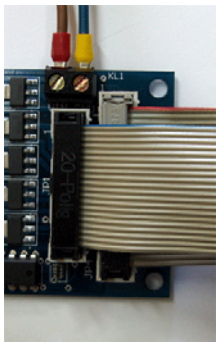
Power supply – LED controller DCA2X16 uses DC 8V - 15V supply source. Power supply can be switched mode or linear. Keep your mind that DCA2X16 and MCA2X16 with connected all external shift registers consumes less than 40 mA on 12V. When SMPS power supply is used, load resistor must be added to power source. SMPS are not so suitable to drive LED displays, because load current is changing extremely depending of appropriate PWM and mode. Also can be used low cost linear power supply including transformer, rectifier and filter capacitors. To avoid frustration of LED Display Luminary, please provide power source with enough current for specific application. LED Controllers has internal step down circuitry that provides precisely filtered (VCC) source for supplying all electronics (internal and external shift registers). You can measure input voltage and supply voltage in any time you wish, using appropriate commands. Refer to page PRODUCTS in our Web: http://www.itsdisplays.com/products.htm

Caution: Check carefully polarity of power supply when connecting controller. If polarity is wrong, it will damage controller permanently!!!



Input Power cable – 2 wire least 2 sq. mm multywire. Before connecting to KL1, please check carefully polarity of the power source! Picture shows KL1 and connected power cable.

2. Cables



Anode connector – 26-pin ribbon cable crimped with 26 pin socket connectors. Good practice is anode cables to be shorter as possible. Also maximal cable current connection for each anode pin is 3 A / 12V.

LINE connectors -10 pin ribbon cables crimped with 10 pin socket connectors. Must be no longer than 1 meter. Cables are equals for both LINES.

Serial channel connector – this cable is only tree wire. Cable connector to the LED controller DCA2X16 side is a C131 - CviLux 0,1 inch pitch crimp type connector. The other side is a standard Canon 9-pin D-subminiature male connector. To DB9 connector is attached standard RS232 cable.

Figure 1 shows schematics for full cable between DCA2X16 and HOST RS232C cables Part No RS232DC and RS232DD. Cables can be up to 30 meter long.

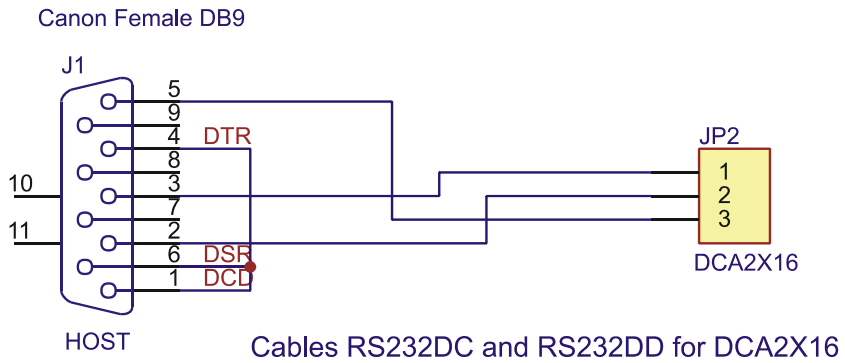


Figure 1

Photo detector cable - this cable is only two wires. Connector to the LED controllers DCA2X16 side is a C121 - CviLux 0,1 inch pitch crimp type connector. The other side is connected photo resistor.

Can be up to 50 cm long. Resistance of photo resistor must be from about 60 ohms under maximal Intensity up 2 Mohms to full dark.

If you have any questions or find some mistakes in this document, do not hesitate to contact us on the next E-mails: its@itsdisplays.com or support@itsdisplays.com , and we try to answer you as soon as possible.