

AL4000 DMX512 Processor Chips

Our range of Dimmer Chips are pre-programmed microcontroller chips,
optimised for specific product classes.

Since its formation in 1988, Artistic Licence have been supplying
dimmer chips to the lighting industry.

Originally aimed at small companies without the R+D facilities needed
to develop microprocessor equipment, we now supply major lighting
control manufacturers around the world.

Part	Function	Description
AL4002	Three phase Dimmer	The AL4002 provides all the control features required for a medium specification three phase digital dimmer. Both analogue and DMX512 inputs are supported. The AL4016 provides a less sophisticated single chip solution to DMX512 phase or PWM control.
AL4005	Converts received DMX512 to 96 Channels analogue	The AL4005 is designed to receive the DMX512 protocol and provide all the control signals necessary to generate 96 channels of analogue control signals. The AL4005 is suitable for the development of DMX512 to Analogue Decoders and also provides an elegant solution to the DMX512 upgrade of existing analogue dimmers. The AL4007 provides a lower chip count solution with a maximum of 72 analogue outputs.
AL4006	Receives DMX512 to control relays (on-off)	The AL4006 is designed to receive the DMX512 protocol and provide two analogue outputs and sixteen switch outputs. Applications include: <ul style="list-style-type: none"> • Single and dual channel dimmer control • Smoke machine remote control • Colour scroller control • Motor speed control • Robotics • Smoke Machines The AL4009 provides an identical function with the relay drive
AL4007	Demux controller - 72 Channel	The AL4007 is designed to receive the DMX512 protocol and provide all the control signals necessary to generate 72 channels of analogue control signals. The AL4007 is suitable for the development of DMX512 to Analogue Decoders and also provides an elegant solution to the DMX512 upgrade of existing analogue dimmers. The AL4005 provides an alternative solution with a maximum of 96 analogue outputs. The AL4007 is the core technology used in the DMX-Demux.

<p>AL4008</p>	<p>Relay Controller - 24 channels</p>	<p>The AL4008 is designed to receive the DMX512 protocol and provide the control signals necessary to drive 24 relays or other switched devices.</p> <p>The AL4008 is suitable for the development of DMX512 Switch Packs.</p> <p>The AL4006 also provides relay drive functionality.</p> <p>The AL4008 is the core technology used in DMX-Relay.</p>
<p>AL4009</p>	<p>Receives DMX512 to control relays Reverse / Opposite relay to AL4006</p>	<p>The AL4006 is designed to receive the DMX512 protocol and provide two analogue outputs and sixteen switch outputs.</p> <p>Applications include:</p> <ul style="list-style-type: none"> • Single and dual channel dimmer control • Smoke machine remote control • Colour scroller control • Motor speed control • Robotics <p>The AL4006 provides an identical function with the relay drive polarity reversed.</p>
<p>AL4016</p>	<p>Dimmer Thyristor. Receives DMX512 & switches thyristors on-off to dim lamps (Single phase dimmer)</p>	<p>The AL4016 is designed to receive the DMX512 protocol and provide 16 phase position modulated outputs in order to switch thyristor or triac loads.</p> <p>The AL4016 provides all the control processes required by modern digital lighting dimmers.</p> <p>The AL4002 provides a higher specification with Analogue and DMX512 control.</p>

AL4020	Multiplex Controller	<p>The AL4020 is designed to receive both a DMX512 input and up to 72 analogue inputs. The two input types are merged to form a DMX512 output.</p> <p>The start channel of the analogue data on the DMX512 output can be selected with the BCD switch inputs. Setting the BCD inputs to "000" disable the DMX512 input and allows the device to operate as a simple analogue to DMX512 converter without any user controls.</p> <p>Multiple devices can be cascaded using the DMX512 inputs and outputs to produce products with up to 512 channel capability.</p> <p>The insertion delay of the AL4020 is less than 60uS, which ensures that cascaded device designs do not introduce a DMX512 response delay.</p> <p>The AL4020 is the core technology used in the DMX-Mux.</p>
AL4100	Dual Servo Controller to position-control 2 motors.	<p>The AL4100 is designed to receive the DMX512 protocol and control two DC Motor servo circuits.</p> <p>Applications include:</p> <ul style="list-style-type: none"> • Colour Changers • Pan & Tilt Yokes • Automated Luminaries • Moving Faders • Special Effects
AL4200	DMX-Kabuki	<p>The AL4200 provides all the control features required for a four channel, forward - reverse relay driver.</p> <p>Applications include drupe release and general purpose animatronic effects.</p> <p>The AL4400 is the core technology used in the DMX-Kabuki.</p>
AL4400	PWM dimmer	<p>The AL4400 provides all the control features required for a high specification DC - PWM dimmer.</p> <p>Applications include low voltage lamp dimming, LED, LEP, EL and cold cathode colour mixing.</p> <p>The AL4400 is the core technology used in the Power-Pipe and Colour-Fill.</p>

<u>AL4800</u>	Stepper motor driver for moving lamps	<p>The AL4800 provides all the control features required for a medium specification moving lamp or moving yoke. The basic configuration provides micro-stepping (high resolution) outputs for pan and tilt. Pin inputs allow 2 settings for pan motor type and 4 settings for tilt motor type.</p> <p>The colour wheel and gobo wheel motors are wave drive stepper motors and assumed to be continuously rotating with inputs for a home sensor.</p> <p>The iris motor is also a wave drive stepper motor channel with end stop sensor.</p> <p>Applications include moving lamps, moving yokes, colour wheels and general purpose animatronics.</p> <p>Custom variations of this part can be produced subject to order quantity.</p>
<u>AL3001</u>	Programmed Dimmer menus for AL2001	<p>The AL2001/AL3001 combination provides all the core functionality required to produce a sophisticated three phase digital dimming system.</p> <p>The AL3001 is the DMX512 and Use Interface processor that communicates via a parallel data bus to the AL2001.</p> <p>The AL4016 provides a less sophisticated single chip solution to DMX512 phase or PWM control.</p>
<u>AL2001</u>	Main Data control chip for dimmers. Three Phase and lots of features.	<p>The AL2001/AL3001 combination provides all the core functionality required to produce a sophisticated three phase digital dimming system.</p> <p>The AL2001 is the phase control processor that communicates via a parallel data bus to the AL3001.</p> <p>The chip set can be used, with the addition of an external 100Hz pulse generator, to DMX control any PWM devices including constrained motor speed control and LED colour mixing.</p>

Evaluation circuit boards are available for some of the Dimmer Chip range. We are also able to supply customised versions of many of the designs in the enclosed data book.

The AL4000 DMX512 Processor Chip are not usually supplied via distributors as the support for these particular items may become complex, so we only offer quantity discounts to end users.

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