## workiw Lighting Solutions

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## 

## WORKK:

## LM 2 MK II

BIDIRECTIONAL DMX/USB INTERFACE

This compact tool is a bidirectional DMX/USB interface (DMX input/output interface). You can use it:
As a 'USB to DMX interface' to control a full 512 channel lighting system from a unique computer.
As a 'DMX to USB interface' so DMX signal can control the computer and interact with the software.
LM 2 MK II is a very interesting tool for lighting designers. It is especially appropriate for mobile applications due to its intuitive use, small size and strong metal box. Many configurations are possible in order to adapt LM 2 MK II to user's needs.

## FEATURES

- Bidirectional DMX/USB interface.
- Controls up to 512 DMX channels.
- 1500 V full isolation (data \& power lines to protect your computer from surges).
- USB port compatible with USB 1.1 or 2.0 .
- Main supply: 300 mA (via USB).
- Dimensions (WxHxD): $86.3 \times 42 \times 67 \mathrm{~mm}$.
- Weight: 300 g .


LM 2 MK II AS A DMX OUTPUT
LM2 MK II is connected to a PC via USB. It is used as a DMX output in order to connect moving heads and dimmers that are controlled from a software of the PC.



## LM 3E

ARTNET DEVICE

LM 3E is a DMX to Ethernet converter that sends DMX signals in an existing Ethernet network using ArtNet protocol. It has been preset to be automatically integrated into protocol ArtNet, so no configuration is required. Nevertheless, it is fully configurable also using the integrated webserver (LM 3E and LM3R)

Thanks to its group selector, several LM 3E units can be used in a same network, transporting thus various DMX universes together. This is a great solution for consoles that use more than one DMX universe or for many independent DMX controllers.

Dimensions ( W x H x D): $86.3 \times 42 \times 67 \mathrm{~mm}$.

## Lா ヨモ




CONNECTION EXAMPLE
3E unit sends DMX information (one DMX universe per unit) into an Ethernet network. It automatically finds the Artnet node (in this example LM 3R) that receives the DMX information and sends DMX signal to moving heads.


LM 3E FRONT PANEL
t features LAN connection, universe Subnet selector and LED light indicators for DMX signal and Ethernet.


LM 3E REAR PANEL
DMX input (5 pin).

## LM 3R <br> LM 3R2

ARTNET DEVICE

LM 3R and LM 3R2 are the easiest way to transport DMX signals through an Ethernet network，no matter if it is and already existent or a one－time network．
For this purpose the system requires emitters（LM 3E or ArtNet console）which introduce a DMX signal into the Ethernet network，and receivers（LM 3R and LM 3R2）that pull out the DMX signal from the Ethernet network．The system is quick and easy to install，because it doesn＇t requires any kind of configuration．It is set just by connecting and emitter and a receiver that will recognize themselves into the network．If needed，all the devices of the series add webserver for the configuration of parametres such as IP address（except LM $3 R 2$ ）．In addition， they have an AC $100-240 \mathrm{~V} / 5 \mathrm{~V} 500 \mathrm{~mA}$ external power supply．Besides，they add a MicroUSB input in order to supply it with a standard cable．

Both models are receivers／converters ArtNet－DMX and ArtNet nodes，thus，are able to interpret information from a DMX frame sent by the network and turn it into DMX information to control devices such as spotlights，moving heads，etc．

Their configuration is simple，just selecting with the rotary wheel the same number that is selected in the transmitter（LM 3E）to establish both communication and send out／receive the same DMX universe．The connection possibilities are huge，whether in a facility that needs to send a single universe from one location to another，send multiple universes，or even send a single universe to two different areas，using one transmitter and two receivers．

LM 3R2 is an ArtNet node with two DMX universes（1024 channels），fully compatible with other devices．Users can receive the two universes either by two emitters LM 3E or from a mul－ tiverse console via ArtNet．Configuration will set which universe is the first，automatically，setting the following universe as the second to control．

Dimensions（WxHxD）： $86.3 \times 42 \times 67 \mathrm{~mm}$ ．

## LTI ヨR



## LTI ヨR 2



## front panel

It features LAN connexion，universe Subnet selector and LED light indicators for DMX signal and Ethernet


LM 3 series using a multiuniverse DMX con roller
control system composed of two differen MMX devices sets（Moving heads）through an Ethernet network．LM 3E and LM 3R allow to send DMX information through the net to each universe separately．Both units use the ArtNet protocol．

## LM 5

CONTROL INTERFACE FOR AUDIO, LIGHTING AND AV

AV and lighting control within everyone's reach!
In spite of the many improvements of the industry, lighting control has always been complicated for non specialized users. Conventional lighting consoles have been replaced by lighting software but both options offer an intuitive interface that can be easily managed by end-users. This is precisely why WORK Pro engineers have designed LM 5 , to put lighting control but also audio control within everyone's reach...



Installation that uses moving heads controlled by OSC protocol. It is possible to use this software from an IOS or Android devices.

The Swiss knife for audio, AV and lighting control.
LM 5 goes much further and includes an internal memory to store 99 cues (with independent speed and fade time) and 24 cue lists, with up to 512 DMX channels. It is also a fully compatible ArtNet node (Ethernet to DMX interface) and it can be controlled by OSC protocol to create DMX data. LM 5 is without a doubt the most intuitive tool to manage audio and lighting control in commercial installations, bars, small clubs and events.


## AR 5N

AR 5 N is the device from where it is possible to control LM 5 locally. It is a wall mount controller that allows to select scenes previously stored in LM 5 and trigger them, as well as to control the master channel level. It is an IP device that requires the free software WORKCAD Designer developed by WORK Pro to link AR 5N to LM 5.


Control any installations from your smartphone, tablet or computer
The overall installation can be controlled with a smartphone, a tablet or a computer. It is very intuitive so everyone can use it without any technical knowledge. Thanks to the OSC open protocol (www.opensoundcontrol.org), it is suitable for mobile devices (iOS and Android) and PC\&MAC computers: LM 5 turns your smartphone/tablet/computer into an intuitive console for audio and lighting purposes. With OSCillation, the free software developed by WORK Pro, it is possible to edit layouts and create your own interface, totally adapted to the features of your installations. That is precisely the strength of LM 5: you can design your own interface to suit your needs!

Let's imagine you are the owner of a restaurant and you want the waiters to control lighting (typical RGB installation). In this case, you can easily add 3 faders ( $\mathrm{R}, \mathrm{G}, \mathrm{B}$ ) to the interface, as well as a master and a blackout. You can also control audio volume in a DMX compatible amplifier (like SLA amps by WORK Pro). It is easy to understand that another kind of installation (e.g. a small club, with moving lights and LED fixtures) would need another visual interface.

## OSCillation <br> 



## SOFTWARE

OSCillation app together with LM 5 will allow you to design your AV installation as well as your control console. This means that there is no more physical limits because with this combination you can extend and adapt the control of your installation just editing the layout. This scalability and adaptability, which does not imply an increment of the cost of the installation, is one of the highlights of the LM 5 working along with OSCillation app.


## OSCillation <br> SOFTWARE

OSCillation is a professional control application for any software or hardware compatible with OSC. Its modular interface allows the creation of costumized interfaces for any kind of device or installation, from a simple volume control to an advanced multizone control, OSCillation fits any project.

OSCillation is avalaible for Android, Mac and Windows, helping us to make easy its integration in all applications.

## FEATURES

Control of multiple OSC servers simultaneously (Multitarget).

- Different control formats: Push buttons / Faders / Toggle buttons / Labels / Rotary / Encoders.. - Safety configuration with password.
- Built-in layouts for WORKPro devices and customized layouts load.

Layouts compatible with TouchOSC software by Hexler.net.

- Auto discover function for devices compatible with Zero con.
- Layouts load directly from SD card or hard drive.

Full screen display for a best control with touch screens (desktop versions).

- Control DJ software, studio production software, Vj software, lighting control...


Lighting control installation using OSCillation app. Mapfre aniversary event.

Visit the official OSCillation website and download for free the app with multiple layouts available.

## OSCillation

SOFTWARE

 MAC and is also compatible with third-party layouts like those designed by TouchOSC (app developed by Hexler.net)

USE OSCILLATION FROM YOUR COMPUTER, SMARTPHONE OR TABLET


## YOOM <br> SOFTWARE

 Windows OS.
 LightMouse devices (really easy to configurate and use) make easier the lighting system integration in all applications.
Features:

- Simple and easy interface.

YOOM's learning curve is fast and short. Everyone who did use a simple DMX console is capable of using YOOM in 5 minutes.

- Creation and edition of cues and cue lists with stand and fade time.

When using YOOM along with LM 5, cues and cue lists can be created and saved ( 100 cues, 24 cue lists) with their stand and fade time.

- Trigger in stand-alone mode.

When starting YOOM, the system can trigger a cue list independently, without the user's intervention.

- Support for 512 channels.

YOOM manages a DMX universe, which means that it is capable to manage up to 512 DMX channels via 512 faders in a very simple interface.

- Compatible with all the LightMouse devices.

 LightMouse devices interfaces (except LM 2 MK II).
- Control of any device compatible with DMX, including: LEDs, robotic equipment and traditional dimmer channels.

Thanks to its 512 faders of DMX channel, it is possible to control any light. When used in RGB mode it is very simple to find the desired color thanks to the RGB Picker.


LightMouse connection data( IP, name, subnet) and firmware update function.


## 10 CONTROL SOFTWARE

## YOOM <br> SOFTWARE

- 3 different interfaces to use depending on the requirements.
 mode:
- Full mode: with 512 DMX faders. Simple, direct and powerful at the same time
- RGB Architectural mode: designed for 1 RGB zone where exist different presets, cues and/or cue lists to trigger at the right time with emulated buttons.
- 6 channels Architectural mode: Basically it is the same interface as in the RGB mode but with 6 channels. This product emulates with a software our old hardware AR- 6 controller with 6 channels.


- Play audio and video files with geometry and position adjustments, really useful to use with LED screens.

This player together with the events creator is the secret tool of YOOM, that mutiplies the utility of this software tool. This consist of a media player that can trigger any video or audio on the PC or to trigger cue lists previously stored in the LM 5 . When playing video, it is possible to configure the size and the position on the playback window. This feature is really useful in instalations when it is necessary to store the size and the position of the video played with LED screens.

- Trigger synchronization of lighting events, audio and video.

The other secret tool of YOOM is the events editor which makes possible to configurate the media files (video,audio), cues and DMX cue lists launching time, using the system timer that allows to trigger one or several events on specific dates, days of the week, hours of the day, etc. For example, it is possible to trigger a video for a LED screen, a DMX cue list and one audio file at the same time.



## SRD 6

## DMX / RDM SPLITTER

SRD 6 is a DMX splitter with 6 outputs isolated from the inputs and between them. It also allows to fit it within a RDM network with compatible devices. Thanks to that, SRD 6 makes posible that these devices (such as compatible moving heads) submit feedback of some incorporated functions (temperature,etc).

The possibility to work with DMX or RDM is done by an internal rear switcher. Besides, it has another switcher to extend the DMX signal to different devices or activate DMX loop finisher. Available in $19^{\prime \prime}$ rack format ( 1 HU ).


## FEATURES

- DMX and RDM splitter.
- 6 outputs available.
- Electrically isolated inputs and outputs.
- DMX/RDM protocol selector on the rear panel.
- Selector to connect with other units or sequence finish.
- Main supply: 96-260 V AC.
- 1 HU rack 19".


Rear buttons to select the operation mode (RDM or DMX) and Rear buttons to select the operation mode (RDM or DMX) and
the link functionality (Link to other devices or to terminate the daisy chain)
dhe link function

## 12 DMX TOOLS

## DMXnet Series

## DMX DEVICES

DMXnet 4 and 8 are a fully configurable ArtNet node of 4 universes (DMXnet 4) and 8 universes (DMXnet 8). Thanks to these units, users have the opportunity to send data through an Ethernet network, with up to 512 DMX channels per universe. Data transfered using ArtNet nodes is faster than when using DMX networks. This solution is recommended for the control of LED fixtures that use many channels, but also to send DMX information in a big event through an unique Ethernet cable.

Both units have easy settings, just by selecting the universe and the SubNet through the dip switches and the unit will select that universe like the first one and will create the output for it and the following universes.

LEDs on the front panel provide constant activity status information about the network, input data and triggered universes.
Both units have rack format $19^{\prime \prime}(1 \mathrm{HU})$. DMXnet 4 width is completed with rackable wings (included).

## FEATURES

- ArtNet Nodes of 4 (DMXnet 4) and 8 (DMXnet 8) DMX universes.
- Electrically isolated inputs and outputs.
- Select SubNet and universe by dip switches.
- Connection by XLR5 pin connectors.
- Operating LED for each universe.
- Supply 96-264 V AC.
- Format 19 " ( 1 HU ).
- DMXnet 4 width is completed with rackable wings (included).


DMXnet 8


## HomeLED

## LIGHTING CONTROLLERS

HomeLED is a 6A (2 each channel) driver and 3 DMX channels controller appropriate to control RGB LED fixtures. Its wall-mount design coupled with an intuitive handling allow using it for any lighting installations in exhibition halls, pubs and nightclubs, shops and even for domestic use.

It has an encoder with push button that allows controlling the overall lighting with two operating modes: Colour (selection of static colour and its intensity) and Program (adjustment of brightness and speed for the 10 internal programs).

A LEDs frame at the sides of the wheel shows parameters and functions (colour, brightness, speed and program). LED light intensity changes to indicate their current value.

## FEATURES

- DMX channels controller.

3 channels driver.

- Designed for RGB 6A max. LED installations.
- Color output display through a built-in LED halo.
- Controlable operations, color, program, brightness,speed.
- 10 preset programs.
- Wall-mount format.

| TECHNICAL DATA | HomeLED |
| :--- | :---: |
| Main supply | $12-24 \mathrm{~V}$ DC 6A MAX. |
| DMX channels | 3 channels. |
| Factory preset programs | 10 programs. |
| Operating mode | AUTO-MANUAL (colour, brightness, speed). |
| Housing | ABS Plastic. |
| Dimensions (WxHxD) | $86 \times 86 \times 45 \mathrm{~mm}$. |
| Weight | 100 gr. |



CONNECTION EXAMPLE
Example using HomeLED to control 2 differents lines of LED strips.



CONNECTION EXAMPLE
Example using HomeLED as a driver.

## Control ONE DIM ONE / DIM ONE MK II

## LIGHTING CONTROLLERS

CONTROL ONE is a single channel DMX wall-mount controller. Its dimensions for standard electrical box, design and functionality allow to integrate it into spaces or applications where a dimming control based on a single DMX channel is required. The control is done through the integrated encoder, adding the functionality, when clicked, to dim between the selected value and its opposite.
It has a lighting frame around the encoder than increases its intensity with the minimum dimming value in order to locate the CONTROL ONE in the dark, reducing the intensity when the dimming value increases.

DIM ONE / DIM ONE MK II units are Single-channel DMX dimmer which perfectly complement CONTROL ONE. They support a 10 A load and seamlessly integrate it into an application (it can be hidden in the ceiling) thanks to the incorporated wings.
DIM ONE MK II incorporates the functionality of a fader to also work in local mode, avoiding the use of an external DMX controller
There are different possible applications: from the control of a single point of light in a room to the control of several individual points in an integrated DMX system . The minimalist design of the controller and the ability to hide the dimmer allow to create installations with elegant design and an unperceived system.

FEATURES

- Wall-mounted controller.
- DMX signal emission (0-255) sent by a DMX channel.
- Configuration of the DMX channel and the fading time from the DIP-Switch. External supply through DIM ONE.

| TECHNICAL DATA | Control ONE |
| :--- | :---: |
| Main supply | $9-12 \mathrm{~V}$ DC. |
| Connectors | Euroblock. |
| Enclosure | Polycarbonate. |
| Control | 1 DMX channel. |
| Dimensions (WxHxD) | $86 \times 86 \times 45 \mathrm{~mm}$. |
| Weight | 200 g. |

## DMX AIR MK II

## WIRELESS DMX TRANSMITTER / RECEIVER

This evolution in DMX AIR devices allows to use them as transmitter or receiver according to the installation needs simply by pressing the incorporated button.
Thus, it is not necessary to have stock of emitters and receivers. A set of several DMX AIR MK II solves any desired arrangement in an installation to operate either as a sender or receiver. From point to point applications to those where one sender to multiple receivers located in different areas system is required. It is suitable even for applications with several sender/ receiver groups working on individual universes.

As a device that can be used in both modes, the possibilities of use increase while the cost get reduced with an element capable to perform dual function.
The most obvious application of this device is as sender of the DMX frame from a console to a number of devices located at certain distance or where it is not possible because of logistic, type of installation or comfort, to wire them directly to the console. Using a device configured as emitter users can send this frame to another device configured as receiver via wireless, saving the obstacle and controlling devices. Once a unit is configured as a transmitter and the other as receiver by synchronizing both devices on the same channel using the button placed for that purpose, will be possible to send the corresponding DMX frame.

Its compact size allows installation anywhere: trusses, wall fixings, mobile platforms, etc


## FEATURES

- Wireless DMX system where each unit is a transmitter or a receiver, depending on its configuration.
- Operating on the 2.4 GHz band.
- One transmitter can send a signal to several receivers.
- One network can include several DMX AIR MK II systems to control universes (as many as needed).
- Range of emission: 70 m with obstacles, 350 m open field.
- Main supply: cable with Neutrik® PowerCon connector (included).
- Lateral insertion for truss fixation.

| TECHNICAL DATA | DMX AIR MK II |
| :--- | :---: |
| Band | $2400-2483 \mathrm{MHz}$. |
| Broadcast channels | 13 channels. |
| Ratio RF data (sender) | 250 kbps. |
| RF power (transmitter) | 18 dBm. |
| RF sensitivity (receiver) | -90 dBm. |
| Antenna | SMA 50 to $5 \%$. |
| Power supply | $100-240 \mathrm{~V} \mathrm{AC}, 50 \mathrm{~Hz}$. |
| Consumption | 2 W. |
| Dimensions (WxHxD) | $110 \times 111 \times 40 \mathrm{~mm}$. |
| Weight | 360 g. |

## VMX 4 <br> VIDEO DEVICE

It is a composite video multiplexer. Its connection also incorporates $4 \mathrm{~L}+\mathrm{R}$ audio inputs. The purpose of the device is to select one of 4 input sources and send it to the output.
This selection can be done in 2 ways:

- Using the appropriate front button.
- Through DMX signal.

In the latter case, VMX 4 provides a DMX control channel, whose value determines which input signal is sent to the output.
The $16 \times 2$ character LCD display shows information about the current selected input, the DMX frame received and, in that case, the DMX address used.
The applications of this device are varied:

- From security camera control, allowing to pass from one to another even programmatically altering DMX random values.
- Presentations with live cam recordings and previous video, etc.
- Audio source switcher.


## FEATURES

- 4 inputs video/audio multiplexer.
- Input/output interface for composite video (luminance, chrominance, synchronism) and audio ( $L+R$ ).
- Input source selector via front button or DMX.
- 1 DMX control channel. $16 \times 2$ characters LCD display.
- Main supply: AC $230 \mathrm{~V} 50 / 60 \mathrm{~Hz}$.

- Consumption: 23 W.
- Dimensions (W x H x D): $483 \times 44 \times 100 \mathrm{~mm}$.
-Weight: $1,66 \mathrm{~kg}$.



## MINIDIM 1 MINIDIM RGB 2 <br> SINGLE CHANNEL DIMMER / RGB DIMMER

MINIDIM 1 is a single channel dimmer perfectly adequate to one colour LED fixtures. It supports DMX inputs and outputs to link other units as 0-10 V analog signals.
There are two operating modes available: starting address channel (DMX) and increasing percentage of output intensity (manual).
This compact dimmer offers a simple solution for configuration and control and is capable of handling up to 6A load. Its DMX interface allowst to link several dimmers in order to control a complexe LED unit network. It is suitable for 12-24V power supply.


CONNECTION EXAMPLE
1 channel LED strips control through MINIDIM 1 using a 1 DMX channel controller (CONTROL ONE).
MINIDIM RGB 2 supports loads up to 6 A and its DMX interface allows linking units for an extended network. Three operating modes are available: DMX start channel (DMX), increasing percentage of output intensity (Manual) and 8 preset programs (Program). MINIDIM RGB 2 has 8 programs with speed and brightness control.

| TECHNICAL DATA | MINIDIM RGB 2 |
| :--- | :---: |
| Number of channels | $3+1$ (full dimmer). |
| Maximum load | 6 A (2A per colour). |
| Control signal | DMX 512. |
| Connection | Terminals. |
| Main supply | DC $12-24 \mathrm{~V} 6.5 \mathrm{~A}$ max. |
| Dimensions (WxHxD) | $66 \times 84 \times 30 \mathrm{~mm}$. |
| Weight | 270 g. |




CONNECTION EXAMPLE
Example using HomeLED to control RGB LED strips through MINIDIM RGB 2.

## MINIDIM RGB PRO <br> MINIDIM 8

## RGB DIMMERS


 DC 24V.

It has three function modes that can be configured with the dipswitches:

- DMX MODE: choosing the start channel we can control the level of each colour individually with the signal received from a console.
- MANUAL MODE: with this mode, users can set a fixed value for each colour. It has 8 percentage values for each colour.

STAND ALONE MODE: This mode has 7 colour change patterns plus another cyclic pattern with 8 default settings for fade time and speed.


CONNECTION EXAMPLE
CONNECTION EXAMPLE
Example using HomeLED to control 2 differents lines of LED strips.
MINIDIM 8 is a RGB dimmer featuring 8 outputs of 3 channels each. Several operating modes are available. Depending on it, outputs can be put into groups of $25,13,7,4,2$ or 1 DMX channels. This is particularly helpful because it increases possibilities to customize lighting installations: using MINIDIM 8, lighting designers can set the colour for each LED strip, taking advantage of 8 RGB outputs controlled through DMX signal.

| TECHNICAL DATA | MINIDIM 8 |
| :--- | :---: |
| Number of channels | $1,2,4,7,13,25$ (depending on operating mode). |
| Maximum load | 3 per output / 24A max. |
| Control signal | DMX 512. |
| Connection | Terminals. |
| Main supply | DC $12-24 \mathrm{~V}$. |
| Dimensions (WxHxD) | $135 \times 84 \times 30 \mathrm{~mm}$. |
| Weight | 650 g. |



## UNIDIM 1 <br> DUODIM <br> 1 AND 2 CHANNELS DIMMERS

UNIDIM 1 and DUODIM are ultra compact DMX dimmers featuring one or two channels (max. load: 10A. each channel). They can be used as a chaser to remotely switch lighting effects like scanner or moving head.

Thanks to its compact size, it can be easily placed on DIN rails or trusses. The software provides an intuitive menu for parameters edition like maximum dimmer levels or DMX address channel. User can change from dimmer operating mode to chaser one (called Switch mode). The latter allows manual intensity adjustments for each channel. For maximum convenience all the functions are shown on the display.

These dimmers are also compatible with switch devices like foot-switches, but also with connection panels when they are used as a driver.
The schuko connectors ( 1 or 2 depending on the model) has protection lid.

UNIDIM 1




20 DIMMERS

## D 40 K3

12 CHANNELS DIMMER
D 40 K3 is a high performance dimmer of WORK Pro. It supports DMX and Analog signals, with 12 channels of 16 A each.
This is the evolution of the D 40 K2 model. It includes relevant improvements, like a new internal electronic and bi-pole magneto-thermal circuit breakers. In addition, listening to our customer needs, it now includes double schucko connectors per channel on rear panel.

Three programs are available ( 64 chases per program) to realize sequences and edit speed and channel intensity. Thanks to the advanced software for configuration, it is possible to patch each channel in an independent DMX address and edit parameters like pre-heat time, response curve, language, etc.

Because it supports analog signal, this dimmer is compatible with controllers featuring a 0-10V output; It can be controlled even without any lighting controller, using thet menu and trigger buttons available on each channel.

As far as electronics is concerned, it provides optimum results: its power circuit has been reinforced and includes powerful TRIACS, ensuring the best performance in any situation. Its rear panel has been designed to provide maximum versatility, featuring 24 schukos ( 2 per output). It also includes connectors of 3 or 5 pins for DMX inputs and outputs, as well as a sub 15 connector for analog input.

## FEATURES

- 12 output channels.
- Bi-pole magneto-thermal circuit-breakers (16A each channel).
- DMX 512 and analog (DC 0-10 V) signal input, possibility to operate with both signal types simultaneously.
- LED indicators for output levels of each channel.

| TECHNICAL DATA | D 40 K3 |
| :--- | :---: |
| Output channels | 12. |
| Output current | $16 \mathrm{~A} /$ channel. |
| DMX input | XLR 3 and $\times$ LR5. |
| Dimensions (WXHXD) | $483 \times 183.2 \times 412 \mathrm{~mm}$. |
| Weight | 18 kg. |



- Temperature control by microprocessor.
- DMX buffer for connection losses.
- Programmable protection: configuration of each output with a maximum level to avoid sudden level variations that can affect the load.
- 16x2 character LCD display.
- Supported response curves: linear, quadratic, quadratic inverse, on/off.
- Preheat level on each channel.
- Slow start of lamps (4 seconds) to switch on dimmer at full load.
- Mono-phase or Tri-phase mode (emergency operating mode in a unique phase).
- Power frequency auto-adjustment between 47 and 63 Hz .
- 0-100\% duty cycle.
- 25 A TRIACS.
- Software avaliable in 4 languages: Spanish, English, German and French.



## D 66 K3

## 12 CHANNELS MODULAR DIMMER

D 66 K3 is the most powerful digital dimmer from WORK Pro. It features in 3 HU rack units 12 channels with 25 A each. This is the perfect tool for fixed installations and touring, as it provides reliability, power and flexibility.

It features components for user is safety and a correct control of the dimmer. Double circuit breakers ( $1 \mathrm{P}+\mathrm{N}$ ) ensure electrical safety in case of short-circuits and electrical overload, cutting both phase and neutral conductors. Double fan forced cooling system provides uniform cooling, adequate with dimmer's power. Dimensions of power components and inner design ensure streghtness of the dimmer. Thus, internal electrical wiring has been reinforced to eliminate any drop in voltage, noise or unnecessary warming.

Thanks to its microprocessor-controlled electronic components, D 66 K3 maintains a precise regulation, even in case of frequency variations, drop in voltage and noise in the network.
D 66 K 3 is also an easy-to-use dimmer that provides a quick access to control menus, with its $16 \times 2$ character LCD display and keyboard.

## FRONT PANEL INTERFACE

The user interface features 3 main buttons for the menu that allows the configuration of the following parameters: - Preheat level.

- Response time.
- Starting DMX channel.
- Response curve.
- Languages: Spanish, English, German and French.
- Creation and edition of 3 programs (up to 64 chases each) with time configuration between chases and pauses.
- Visualization of channel level (percentage) to check analog and DMX input.


| TECHNICAL DATA | D 66 K3 |
| :---: | :---: |
| Main supply | Mono-phase AC $230-240 \mathrm{~V} /$ Tri-phase (3P/N/E) AC 380 V. |
| Main supply frequency | $47-63 \mathrm{~Hz}$. |
| Output power | Mono-phase 18 kW / Tri-phase 55 kW . |
| Output current | 25 A per channel. |
| Load type | Resistive and inductive (no more than 15\% of nominal load if it is inductive). |
| Signal connector: | DMX in: XLR3 pin and XLR5 pin male. DMX thru: XLR3 pin and XLR5 pin female. Analog in: Sub-D (15 pin). |
| Main supply connector | Terminals ( $L+N+E)$. |
| Output channel connector | Terminals (L+N+E) $\times 12$. |
| Dimensions ( $\mathrm{W} \times \mathrm{H} \times \mathrm{D}$ ) | $483 \times 132 \times 412 \mathrm{~mm}$. (3 HU $19^{\prime \prime}$ rack). |
| Weight | 25 g . |

Lateral fixation accessories and handles included.

## D 66 K3

## FEATURES

- 12 channel digital dimmer.
- DMX 512 and analog (DC 0-10 V ) signal input, possibility to operate with both signal types simultaneously.
- Load capacity: 25 A per channel.
- Total 18 kW (mono-phase) and 55 kW (tri-phase).
- Individual DMX address and patchable response curve for each input channel (linear, quadratic, quadratic inverse, on/off).
- Preheat level on each channel.
- DMX buffer against connections fails.
- 2 pole circuit-breaker ( $1 \mathrm{P}+\mathrm{N}$ ) for each channel.
- Auto-adjustment of power frequency between 47 and 63 Hz .
- Synchronization with microprocessor to detect and filter spurious frequencies produced in the power supply. - Slow start with 4 second starting flange, avoiding current peaks.
- Program memory: 3 programs (64 programmable chases each).
- Lateral fixation accessories and handles.included
- LED indicators for output levels of each channel, DMX signal detection and error detection.



## PROTECTIONS

- Double magneto-thermal circuit breaker ( $1 \mathrm{P}+\mathrm{N}$ ) ensures electrical safety in case of short-circuits and electrical overload, cutting both phase and neutral conductors.
- Double fan forced cooling system (2 fans of 120 mm . diameter): automatic operating mode that reduces temperature to the prefixed value.
- Slow start with starting flange of 4 seconds avoids current peaks. Power frequency auto-adjustment between 47 and 63 Hz (according to power input requirements) do not affect the response curve. Associated with the Zero Crossing Detector (ZCD), it ensures stable output levels.
Synchronization with microprocessor marks zero crossing points, detects and filters spurious frequencies produced in the power supply.
- Programmable protection: configuration of each output with a maximum level to avoid sudden level variations that can affect load (a $95 \%$ output level is efficient and almost undetectable). 0-100\% duty cycle: internal filter and detection circuitry eliminate parasite noise and therefore allow to use using the full cycle during zero crossing process.


Analog input (DC 0-10V).

## TOURDIM 48

RACK OF DIMMERS
This rack of dimmers based on the D 66 K3 model has been designed for almost any touring applications and rental companies, being perfect for live shows. TOURDIM 48 has four D 66 K3 dimmers that provides 48 dimming channels up to 16A each one it. Incorporates an independent circuit breaker for each channel. All its channels and the response curve are patchable. The system comes internally wired and each channel output placed on the rear panel are made with a double connection by 16 pins Harting connectors. Likewise DMX control signal placed at the rear panel allows to connect the unit to any network through its input connection and LINK. The power supply connection ( $3 \mathrm{P}+\mathrm{N}+\mathrm{E}$ ) is made through 400 A Powerlock


## TOURDIM 48

## FEATURES

-48 channels of 16 A with independent circuit breakers ( $1 \mathrm{P}+\mathrm{N}$ ).
Each block of 12 channels has its own circuit breaker for residual current.

- Powerlock connector of 400 A for supply.
- 16 pin multi-connector for output channels.
- XLR5 Pin connector (bypass) on rear panel for inputs and outputs.
- Cooling system on the side of the rack.
- LED indicators for the output level of each channel.
- 16x2 character LCD display.
- Patchable response curves: linear, quadratic, quadratic inverse, On/Off.
- Preheat level on each channel.
- Slow start (4 seconds) to avoid circuitbreak.
- Auto-adjustment of the Power frequency between 47 and 63 Hz .
- 41A TRIACS.
- Software available in Spanish, English, German and French.


16 PIN HARTING CONNECTORS
16 pin Harting connector available for each 6 dimmer channels


RESIDUAL CURRENT DEVICE (RCD) / 4 POLE CIRCUIT BREAKERS FOR EACH DIMMER

Closed rack


400 A POWERLOCK INPUT CONNECTORS

## ESD / EST Series

## VOLTAGE REGULATORS

The voltage regulator has become an essential tool for the mobile installations with voltage variations problems. Taking into account the almost systematic presence of equipment such as computers, lighting controllers, etc, voltage regulators are the safest tool to keep the equipment save from sudden voltage changes. This effect is even more accentuated when the voltage is supplied from a mobile supply unit (generators, etc), because its current is not stable.

WORK Pro presents, to fit users' needs, a comprehensive series, from EST 1 K to the powerful ESD 10K. These stabilizers cover different power requirements of different kind of installations and ensure the good condition of the devices. The implemented system works as follows

When the main power reaches the variable transformer, the control system measures the voltage and the present current at the output.To exceed a certain threshold, the output relay is activated, thus protecting system.Thanks to the sample voltage, it acts on the variation of the transformation ratio, still maintaining the output voltage within the defined value. The control system presents all the data about the input and output voltage via an LCD display. The main power reaches the variable transformer (as long as the system is capable of changing the transformation ratio between primary and secondary). The control system based on microprocessor is responsible for sampling the output current and voltage.

If the output current exceeds a certain threshold, the operating system is protected through the output relay. The other sample, the voltage, is used to act at any moment upon the variation system transformation ratio by allowing the output voltage to remain fixed at the set value.


## ESD 10K

## VOLTAGE REGULATOR

ESD 10 K is a voltage regulator that maintains a constant output supply when voltage varies between 140 and 250 V (with 220 V devices) or between 60 and 130 V (with 110 V devices). It is possible to connect a 10 kVA fix load. As many fixture performance depends on voltage, it is essential to ensure the regulation and control on these values. Regarding inputs, it features a male CEE connector with 32 A and 3 poles, with 2 schuko connectors (one for 110 V -10 A output and another for 230V-16 A output) or terminals. Two large displays show the information regarding devices status, like input, output and current voltage.

To avoid noises coming from the switch, ESD 10 K features a time delay circuit (3 or 6 sec .). After this time, the normal operating mode starts automatically.
It features different protections to ensure output signal integrity: protections against overvoltage ( 255 V ), overheat ( $95^{\circ}$ ) or overload. If one of these values is exceed, units automatically go off and emit an acoustic signal, indicating it on the display. It also has double circuit breaker ( 63 A ) on front panel and a switch for output voltage selection ( $1 \%$ or $3 \%$ ). It also includes a fan that cools the units down.

## FEATURES

- Main supply: 60/130 V - 140/250 V AC.
- Maximum joint load: 10 kVA.

Time delay: 3 or 6 sec.
Output voltage precision: $1 \%$ or $3 \%$.
Protections:
Overheat ( $95^{\circ}$ ).
Overvoltage.
Overload.
Dimensions (WxHxD): $305 \times 260 \times 460 \mathrm{~mm}$.


THREE OUTPUTS AVAILABLE - $110 \mathrm{~V}, 10 \mathrm{~A}$.
$-220 \mathrm{~V}, 16 \mathrm{~A}$.

220 V, 32 A (L+N+E).


MAINS SUPPLY WITH PROTECTION LID AND OUTPUT VOLTAGE SELECTOR

## Front panel

1


## ESD 5K/2 <br> EST 519/2

## VOLTAGE REGULATORS

These 2 regulators maintain a constant output supply when voltage oscillates between 140 and 250 V . It is possible to connect a 22 A fix load.
If their features and operational modes are equal, the enclosures make the diference between them. ESD $5 \mathrm{~K} / 2$ includes handles for an easy transport and has been designed in a 19 " rack format for its integration in fixed installations and an input voltage selector ( $60 \mathrm{~V}-130 \mathrm{~V} / 140 \mathrm{~V}-260 \mathrm{~V}$ ). As many fixtures performance depends on voltage, it is essential to ensure the regulation and control on these values.

To avoid noises coming from ON/OFF switches, it also features a time delay circuit (3 or 6 sec .). It features different protections to ensure output signal integrity: protections against overvoltage ( 255 V ), overheat $\left(95^{\circ}\right.$ ) or overload ( 23 A ). If one of these values is exceed, the unit automatically turns off and emits an acoustic signal, indicating it on the display. In addition, a switch allows the selection of output voltage ( $1 \%$ or $3 \%$ ).

A large display shows the information regarding devices status, like input, output and current voltage.

## FEATURES

- Main supply: AC 140-250 V.
- Maximum joint load: 22A.
- Maximum output current: 23A.
- Time delay: 3 or 6 sec.
- Output voltage precision: 1\% or 3\%.

Protections:
Overvoltage ( 255 V ).
Overheat (95 ${ }^{\circ}$.
Overload (23A).
Dimensions (WxHxD):
ESD 5 K/2: $230 \times 220 \times 370 \mathrm{~mm}$.
ESD 519/2: $483 \times 185 \times 340 \mathrm{~mm}$.

- Weight:

ESD 5 K/2: 16.3 kg .
EST 519/2: 17 kg .




## 28 VOLTAGE REGULATORS

## EST 1K / 2K

## VOLTAGE REGULATOR

These two units maintain a constant output supply when voltage oscillates between 140 and 250 V AC. They allow 1000 VA (EST 1 K ) or 2000 VA (EST 2K) load connection.
Both devices feature different protections to ensure output signal integrity: protections against overvoltage, overload, or short circuits. They also have a circuit breaker on their rear panel. To avoid noises coming from ON/OFF switch, They also feature a time delay circuit (3 or 6 sec.), after this time, normal operating mode starts automatically. A large display shows the information regarding devices status, like input, output and current voltage.

## FEATURES

- Control and regulation by microprocessor (MPU).
- Large LCD screen.
- High accuracy regulation.

Protections against overvoltage, overload or output short circuit. 3 seconds time delay.

| TECHNICAL DATA | EST 1K | EST 2K |
| :--- | :---: | :---: |
| Load capacity | 1000 VA. | 2000 VA. |
| Input | $\mathrm{AC} 140 \mathrm{~V}-250 \mathrm{~V}$. | $\mathrm{AC} 140 \mathrm{~V}-250 \mathrm{~V}$. |
| Output | $220 \mathrm{~V} \mathrm{AC} \pm 3 \%$. | $220 \mathrm{~V} \mathrm{AC} \pm 3 \%$. |
| Frequency | $50 \mathrm{~Hz} / 60 \mathrm{~Hz}$. | $50 \mathrm{~Hz} / 60 \mathrm{~Hz}$. |
| Delay time | $3 / 6 \mathrm{sec}$. | $3 / 6 \mathrm{sec}$. |
| Dimensions (WxHxD) | $150 \times 242 \times 180 \mathrm{~mm}$. | $150 \times 242 \times 180 \mathrm{~mm}$. |
| Weight | 6.6 Kg. | 8.1 Kg. |




## Rear panel

The EST/ESD voltage regulator series offer a different type of output connectors in order to adapt it to the connected devices requierements.
$\square$


## FLYBOX 630 <br> POWER DISTRIBUTOR

FLYBOX 630 is a tri-phase power distributor with 63 A housed into a 10 HU 19" rack, giving a professional supply distribution system perfectly protected and with a total control over its many outputs. Its high quality components and oversized wiring, ensure a really reliable devices supply.

All system is housed into a $10 \mathrm{HU} 19^{\prime \prime}$ rack with corners and metallic protection profiles and handles for transport.

## FRONT PANEL SHOWS:

- Connection input (through 3P+N+E-63A connector).
- Protections (residual current device and circuit-breakers for each phase and neutral).
- Digital ammeter and voltmeter for each phase.
- Neon indicator for each phase and neutral.
- Additional tri-phase output with $3 \mathrm{P}+\mathrm{N}+\mathrm{E}-32 \mathrm{~A}$ connectors and circuit-breaker for each phase and neutral.
- Additional front output with 1P+N+E - 16A connector and circuit breaker.


## REAR PANEL SHOWS:

-3 output blocks with 3 mono-phase connectors each ( $1 \mathrm{P}+\mathrm{N}+\mathrm{E}-16 \mathrm{~A}$ ).

- Each block has circuit-breakers for each phase and neon indicator.


Residual current device (RCD) and general circuit breaker (4 pole). Digital voltmeter and ammeter at each phase. A light indicator shows if a phase is active.


Three-phase connector $(3 \mathrm{P}+\mathrm{N}+\mathrm{E})$ of 63 A . Two additional outputs ( 32 A three-phase $3 \mathrm{P}+\mathrm{N}+\mathrm{E}$ and 16 A schuko mono-phase) with their own circuit breaker.



## FLYBOX 320

## POWER DISTRIBUTOR

FLYBOX 320 is a tri-phase power distributor with 32 A housed into a 8 HU $19^{\prime \prime}$ rack, giving a professional supply distribution system perfectly protected and with a total control over its many outputs. Its high quality components and oversized wiring, ensure a really reliable devices supply. All system is housed into a 8 HU 19 " rack with corners and metallic protection profiles and handles for transport.

## FRONT PANEL SHOWS:

- Connection input (through 3P+N+E - 32A connector).
- Protections (residual current deviceand circuit breakers for each phase and neutral). - Digital ammeter and voltmeter for each phase.
- Neon indicator for each phase and neutral.
- Additional front output with 1P+N+E - 16A connector and circuit breaker.


## REAR PANEL SHOWS:

2 output blocks with 2 mono-phase connectors each (1P+N+E-16A) and 2 schuko connectors for the third phase.

- 1 block with 3 schuko- 16A connectors, each of them connected to a output phase. - Each block has circuit breakers for each phase and neon indicator.


Output block with 3 schukos connectors ( 16 A each) and individual circuit breakers. A light indicator shows if a phase is active.


Two output blocks with two mo-no-phase connectors ( $1 \mathrm{P}+\mathrm{N}+\mathrm{E}$ ) and two schukos ( 16 A each) and
indicator shows if a phase is active.
Residual current device (RCD) and general circuit breaker (4 pole). Digital voltmeter and ammeter at each phase. A light indica-
tor shows if a phase is active


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