

# **ZEKTOR™**

# MAS3

Multi-channel Audio Switch

## Owner's Manual



[www.zektor.com](http://www.zektor.com)

# Important Safety Instructions!

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Read all instructions for prior to installation of your product.

Retain this User's Manual for future reference.

Adhere to all safety and operation instructions.

Before cleaning this product, unplug from the wall outlet. Do not use liquid cleaning products. Use a damp cloth for cleaning.

Do not use this product on an unstable cart, stand, or table. The product may fall, causing serious injury to a child, and serious damage to the product. Ensure that any attached cables cannot be tripped over.

This product is supplied with a UL Class 2 power supply as indicated on the product packaging. Use this product only with the supplied power supply. If you are unsure about the type of AC power in your home, consult your product dealer or a local power company.

Power cords should be routed so they will not be stepped on or rolled over.

If your product is not operating properly, do not attempt to service this product yourself. Refer to a qualified service personnel.

# A MAS3 Overview

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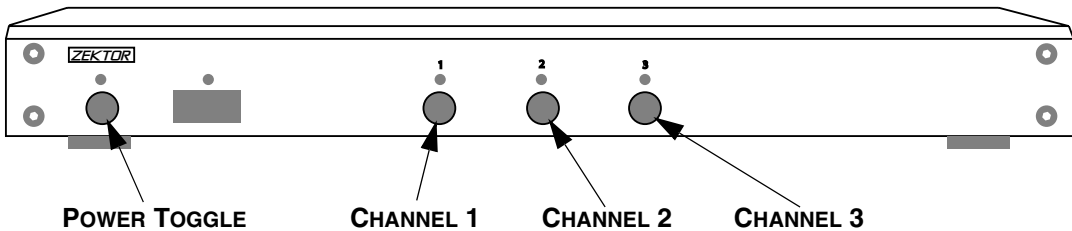
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Operating the MAS3 is straight forward and simply a matter of plugging the MAS3's power supply into an available A.C. outlet, and then plugging the MAS3's power supply into the back of the MAS3.

To operate the MAS3 manually, press the power switch, located on the very left of the MAS3 to cycle power.

Press any one of the three channel switches to switch the MAS3 to the selected channel.

If the MAS3's power is turned off, selecting any one of the three inputs will cause the MAS3 to power on and switch to the selected channel.

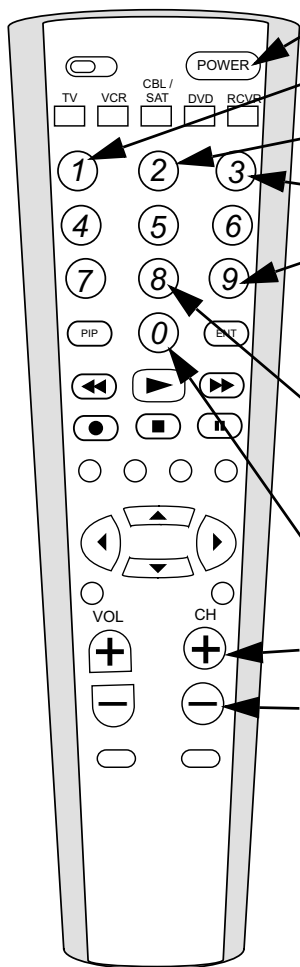


- **POWER TOGGLE.** Pressing this button will cycle power from on to off, and off to on.
- **CHANNEL 1.** Pressing this button will select channel 1 of the MAS3's inputs, if power is off when this button is pressed, then the MAS3 will power on, and select channel 1.
- **CHANNEL 2.** Pressing this button will select channel 2 of the MAS3's inputs, if power is off when this button is pressed, then the MAS3 will power on, and select channel 2.
- **CHANNEL 3.** Pressing this button will select channel 3 of the MAS3's inputs, if power is off when this button is pressed, then the MAS3 will power on, and select channel 3.

# Using the MAS3 with a Remote Control

Remote operations of the MAS3 are accomplished through the use of just about any remote control. *A remote control is not supplied with the MAS3*, yet the versatile programming modes of the MAS3 allows the MAS3 to work with virtually any remote control. The next section "*Programming your Remote Control*" on page 5, describes how to setup your remote controller. After your remote control is programmed the following describes the pre-programmed functions of the MAS3.

There are 9 separate remote controlled commands understood by the MAS3. They are:



- **POWERTOGGLE.** The MAS3 can be toggled from standby to power on, and back to standby using a single button of the remote.
- **SELECTIN1.** Select input 1. If the MAS3 is in standby mode, it will power on and then select input 1.
- **SELECTIN2.** Select input 2. If the MAS3 is in standby mode, it will power on and then select input 2.
- **SELECTIN3.** Select input 3. If the MAS3 is in standby mode, it will power on and then select input 3.
- **POWEROFF.** The MAS3 can be set to standby mode by pressing a single button of the remote. Once the MAS3 is in standby mode, further presses of the **POWEROFF** button will be ignored. This command is useful when using the "macro" feature of some programmable remote controls, and is used when it is unknown whether the MAS3 is already in standby mode or not.
- **POWERON.** The MAS3 can be powered on from standby by pressing a single button of the remote. Once the MAS3 is power on, further presses of the **POWERON** button will be ignored. This command is useful when using remote controls that allow "macro" programming, where it is unknown whether the MAS3 is already power on or not.
- **SETDIMMODE.** Toggles through three different bright/dim display modes. They are: Bright all the time. Dim all the time. Bright for 4 seconds after any keypress, and then automatically dim.
- **SELECT+.** Select the next higher input. If input 3 is currently selected, then this command will cause input 1 to be selected.
- **SELECT-.** Select the next lower input. If input 1 is currently selected, then this command will cause input 3 to be selected.

# Programming your Remote Control

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## Setting up your Universal Remote Control

For remote control operations, the MAS3 requires either a Universal Remote control to be programmed as one of eight pre-programmed devices, or alternatively, the MAS3 can be taught to use most existing remote controls.

The simplest way begin using the MAS3, is to program your Universal Remote control to act like a Symphonic TV. Once this is done you will be able to immediately start using your MAS3.

Check your remote's user manual for instructions on programming your remote control.

The following table shows the Symphonic TV codes for a few different brands of Universal Remote Controllers:

<b>Make</b>	<b>Device</b>	<b>Code</b>
Sony	TV	023
One For All	TV	0476
Sanyo	TV	303
GE / RCA	TV	046
X10	TV	062
Zenith / Phillips / Magnavox	TV	552

# Using Different Remote Codes

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## Using Alternate Component Keys on your Remote

The MAS3 will also respond to alternate component key codes. Allowing you to use an unused TV, VCR, RCVR or one of the added AUX positions many remotes include.

Setting up the MAS3 to respond to alternate component codes is a two step process. You must first program your universal remote control to behave as one of the components in the following table. You must then teach the MAS3 to respond to the same set of alternate component codes.

## Programming your remote to different components

The MAS3 will respond to eight different pre-programmed component codes, they are: Symphonic TV, Hatachi Satellite, Sony TV, Yamaha VCR, Go Video VCR, Awia DVD, Nakamichi Receiver and a Jerrold Cable Box. The following table shows the different component buttons and codes used to program a few different universal remotes.

Make	Device	Sony	One For All	Sanyo	RCA	Zenith	X10
Symphonic	TV	023	0171	104	189	520	202
Sony	TV	001	0000	110	002	708	015
Hatachi	SAT	N/A	0819	N/A	084	N/A	N/A
Yamaha	VCR	040	0038	238	009	025	022
Go Video	VCR	N/A	0432	248	138	139	013
Awia	DVD	015	0641	N/A	350	N/A	N/A
Nakamichi	RCVR	086	N/A	N/A	N/A	N/A	N/A
Jerrold	CBL	001	0476	303	046	552	062

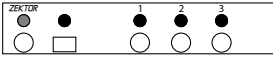
If your remote control's model matches one of the above, read your remote's user manual for instructions on programming your remote control, then use the above device and manufacturer codes to setup your remote.

If your remote is not included above list, or the manufacturer code given does not work, then you will have to follow your remote controls instructions for programming one of the above components and search for a proper match. See the next section. Or teach the MAS3 a new set of codes, See: *"Learning New Remote Codes"* on page 8.

## Teaching the MAS3 a new component code

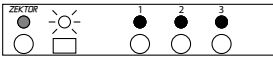
After your remote control has been programmed to act like one of the 8 built in code-sets, teaching the MAS3 to use the new code set is simple.

### STEP 1



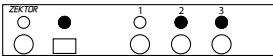
- 1 Place the MAS3 in standby mode. This is the factory default mode on power up, and if it has not been changed, you can unplug the MAS3 and plug it back in and it will power up in standby mode (at this point only the power indicator light is lit and glowing RED). If the MAS3 does not power up in standby mode, follow the steps given in "Restoring the MAS3 to Factory Defaults" on page 13.

### STEP 2



- 2 On your remote control press the buttons in the following sequence, after each button press verify that the remote IR indicator flashes. (If you make a mistake, you can start over by pressing **POWER** twice.):
  - **POWER**
  - **CHANNEL +**
  - **POWER**
  - **CHANNEL -**

### STEP 3



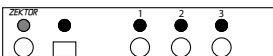
- 3 The MAS3 will power up indicating the new component codes have been accepted.

## Searching for a component code in your remote

Assuming you do not have a remote listed in this user manual you will have to follow your remote controls programming sequences to find a compatible component that the MAS3 understands, or you can go to the section "Learning New Remote Codes" on page 8, to teach the MAS3 new keys for individual commands.

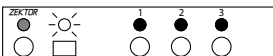
To search for compatible component codes you must place the MAS3 in standby mode and try manufacturer codes in your remote control until one of them causes the MAS3's IR indicator LED to flash.

### STEP 1



- 1 Place the MAS3 in standby mode. This is the factory default mode on power up, and if it has not been changed, you can unplug the MAS3 and plug it back in and it will power up in standby mode (at this point only the power indicator light is lit and glowing RED). If the MAS3 does not power up in standby mode, follow the steps given in "Restoring the MAS3 to Factory Defaults" on page 13.

### STEP 2



- 2 Try different manufacturer codes until one of them causes the IR indicator light on the MAS3 to blink when pressing the **POWERTOGGLE** key. When found, go to back to "Teaching the MAS3 a new component code" on page 6, to teach the MAS3 to use the new component code.

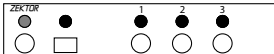
# Learning New Remote Codes

## Teaching the MAS3 to use new remote control keys

If your remote does not have one of the pre-programmed component codes, or you simply want to re-map the MAS3 functions to other keys on your remote, the MAS3 can be taught to use new keys.

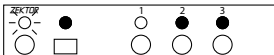
To teach the MAS3 to respond to new keys, you need to have the remote control(s) you want to use ready, and setup in the manner you want it to be used.

### STEP 1



- 1 Place the MAS3 in standby mode. This is the factory default mode on power up, and if it has not been changed, you can unplug the MAS3 and plug it back in and it will power up in standby mode (at this point only the power indicator light is lit and glowing RED). If the MAS3 does not power up in standby mode, follow the steps given in *"Restoring the MAS3 to Factory Defaults"* on page 13.

### STEP 2

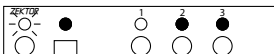


- 2 Using a pen or pencil, press and HOLD the SETUP button on the back panel of the MAS3 (located near the power jack) for around 4 seconds, until the MAS3 powers up, and the Power indicator on the front panel of the MAS3 will turn GREEN and begin to blink RED.

The MAS3 is now ready to accept new remote control key codes. For each of the following steps:

- You may press a key on your Remote Control, if accepted, the IR indicator light will blink, and the key will be learned as the new key for the given function. The MAS3 will advance to the next step.
- Or you may press and release the SETUP key on the back panel of the MAS3, this indicates to the MAS3 to skip this key, and the whatever key was previously programmed for that function will be retained. The MAS3 will advance to the next key.
- Or you may press and hold the SETUP key on the back panel until the MAS3 returns to standby mode. This will end learn mode, all keys already programmed will be remembered, and all the keys skipped will retain their previously programmed values. The MAS3 will advance to Step 13.

### STEP 3

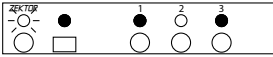


1 BLINK

- 3 The Power indicator blinks slowly, and input 1 is selected.

Press the key on your remote that you want to use as the new key for **SELECTIN1**.

#### STEP 4

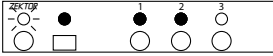


1 BLINK

- 4 The Power indicator blinks slowly, and input 2 is selected.

Press the key on your remote that you want to use as the new key for **SELECTIN2**.

#### STEP 5

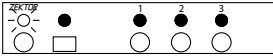


1 BLINK

- 5 The Power indicator blinks slowly, and input 3 is selected.

Press the key on your remote that you want to use as the new key for **SELECTIN3**.

#### STEP 6

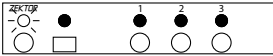


2 BLINKS

- 6 After a pause, the Power indicator blinks 2 times, and repeats.

Press the key on your remote that you want to use as the new key for **POWERTOGGLE**.

#### STEP 7

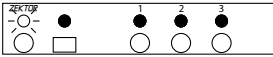


3 BLINKS

- 7 After a pause, the Power indicator blinks 3 times, and repeats.

Press the key on your remote that you want to use as the new key for **SELECTIN-**.

#### STEP 8

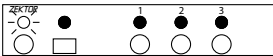


4 BLINKS

- 8 After a pause, the Power indicator blinks 4 times, and repeats.

Press the key on your remote that you want to use as the new key for **SELECTIN+**.

#### STEP 9

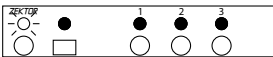


5 BLINKS

- 9 After a pause, the Power indicator blinks 5 times, and repeats.

Press the key on your remote that you want to use as the new key for **SETDIMMODE**.

#### STEP 10

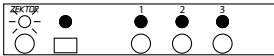


6 BLINKS

- 10 After a pause, the Power indicator blinks 6 times, and repeats.

Press the key on your remote that you want to use as the new key for **POWERON**.

### STEP 11

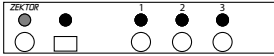


7 BLINKS

**11** After a pause, the Power indicator blinks 7 times, and repeats.

Press the key on your remote that you want to use as the new key for **POWEROFF**.

### STEP 12



**12** The MAS3 will return to the standby mode indicating a return to normal operations. The newly programmed codes will now operate your MAS3.

## Remote Control Learning Caveats

Some component's control codes will work better than others. We've designed the MAS3 to work with a great majority of codes, however a few brands use non-standard ways of transmitting their component's codes that may not be compatible with the MAS3. In these somewhat rare circumstances you will have to program your remote control to a different manufacturer's code, and/or use different buttons on your remote.

When programming the MAS3, if the IR indicator light blinks, and the MAS3 moves on to the next step, then the remote controller's key code has been accepted. If the IR indicator does not blink, it indicates the MAS3 does not understand that particular manufacturer's code and you will have to choose another.

In some cases the remote key code will be accepted, however the range will be limited. If the range of a programmed key is unacceptable, you will have to choose a different manufacturer and try again.

# Bright / Dim / Auto-dimming Modes

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## Setting the Display intensity modes of the MAS3

The front panel display of the MAS3 can be set to Bright, Dim or an Auto-dimming mode where the display brightens for 4 seconds after any function is selected and then auto-dims.

Setting the mode is simply a matter of toggling between the three modes:

- Bright Mode. When pressing the **SETDIMMODE** key to toggle to this state, the display will turn bright and remain that way.
- Dim Mode. When pressing the **SETDIMMODE** key to toggle to the Dim mode, the display will go dim and remain that way.
- Auto-dimming Mode. When pressing the **SETDIMMODE** key to toggle to the Auto-dimming mode, the display will turn bright, then flash to dim, then flash back to bright, indicating the Auto-dimming mode has been selected. After 4 seconds of no activity, the display will smoothly dim to the dim setting.

# Setting Power On Defaults

## The MAS3 power on default mode

When toggling between Standby mode and PowerOn the MAS3 will remember all it's current settings. After completely powering down the MAS3 (by unplugging the AC wall adapter), upon restoring power (by plugging the AC wall adapter back in), it will power up in a user settable default mode. This is useful in situations where the MAS3 is externally switched by a power strip.

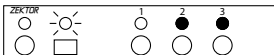
The factory default settings for initial power on are:

- Initial power up in Standby mode.
- Input 1 selected when powered on.
- Auto-dimming mode selected.

## Changing the MAS3 power on defaults

Teaching the MAS3 new power on default settings consists of placing the MAS3 in the preferred initial power on mode, and pressing and releasing the **SETUP** button on the back panel of the MAS3.

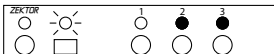
### STEP 1



- 1 Select an initial power on input.

Using the **SELECTIN1** - **SELECTIN3** keys, or the **SELECT+** or **SELECT-** keys, choose the desired power on default input.

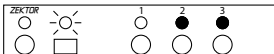
### STEP 2



- 2 Select the initial Bright / Dim / Auto-dimming mode.

Using the **SETDIMMODE** key, choose the desired power on default Bright / Dim / Auto-dimming mode.

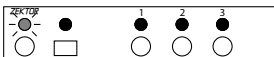
### STEP 3



- 3 Select the initial power mode, Standby or Powered on.

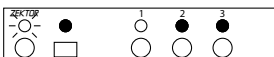
Using the **POWERTOGGLE**, **POWERON** or **POWEROFF** keys, choose the initial power on mode.

### STEP 4



- 4 Press and release the **SETUP** button located on the back panel of the MAS3. The power indicator light on the MAS3 will blink once to indicate the new power on setting have been saved.

or



The previous picture shows the default power up mode, as being set to the standby mode. It may also be set to the power on mode, by pressing and releasing the setup key while power is on, as shown here.

# Restoring the MAS3 to Factory Defaults

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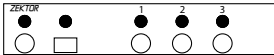
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## Restoring the MAS3 to the factory defaults

There are many ways to program the MAS3's remote capabilities. Most learning modes require the MAS3 to be in standby mode before learning can begin. If the remote used to control the MAS3 were to be lost, and the MAS3 were programmed to power on during initial power up (as described in "Setting Power On Defaults" on page 12), there would be no way to reprogram the MAS3 to accept new remote control codes. Therefore a means of resetting the MAS3 to its factory on defaults has been included.

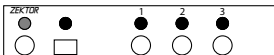
Resetting the MAS3 to the factory defaults is done by removing power to the MAS3. The AC wall adapter must be unplugged, so that the MAS3 is completely without power. The **SETUP** key is then pressed and *held* while power is restored to the MAS3, after about three seconds the power indicator will flash three times indicating the MAS3 has been reset to factory defaults.

### STEP 1



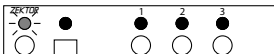
- 1 Remove all power from the MAS3, this can be done by unplugging the AC wall adapter from the back of the MAS3, or unplugging the AC adapter from the wall, or by using a switched power strip. Nothing should be lit on the MAS3.

### STEP 2



- 2 Using a pen or pencil, press AND HOLD the **SETUP** button on the back panel of the MAS3. While continuing to HOLD the **SETUP** key, reapply power to the MAS3. When power is applied, the power indicator light will light up indicating standby mode.

### STEP 3



- 3 Continue to HOLD the **SETUP** key and after about three seconds the power indicator will blink GREEN three times indicating the MAS3 has been reset to its factory defaults.

The MAS3 factory defaults, are:

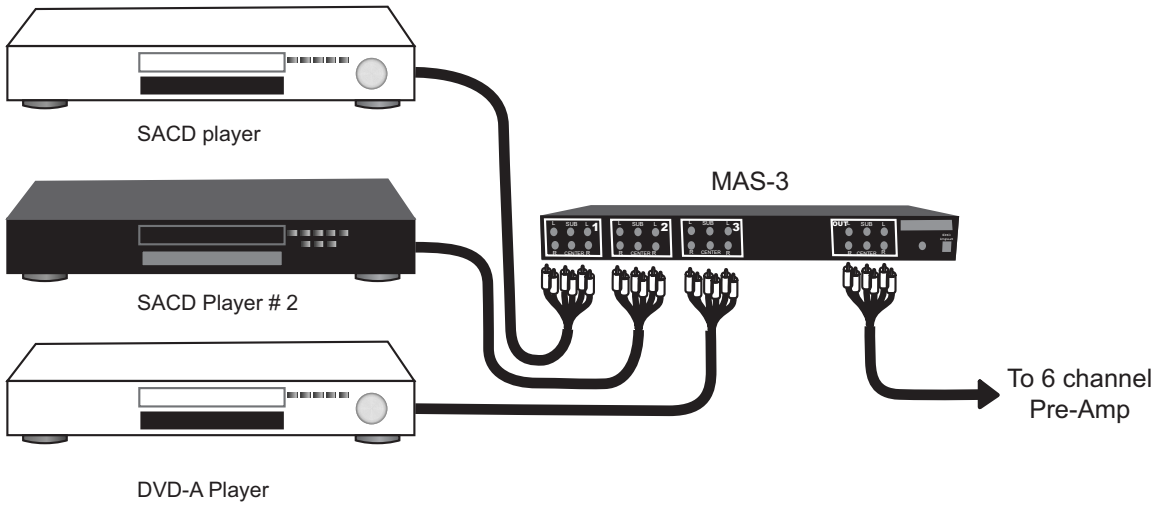
- Control codes used are the Symphonic TV codes.
- Default power up mode is standby.
- Default selected input when powered on is input 1.
- Default brightness mode is Auto-dimming.

# Typical Application

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Typical application of Multi-channel Audio Switching



# Warranty Information

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## Warranty Policy

ZEKTOR, LLC warrants this product against defects in material and workmanship under normal use and service for one year from the original date of purchase. ZEKTOR, at its option, shall repair or replace the defective unit covered by this warranty.

In order to keep this warranty in effect, the product must have been handled and used as prescribed in the instructions accompanying this warranty. This warranty does not cover any damage due to accident, misuse, abuse, or negligence. This warranty is valid only if the product is used as specified in the product documentation.

Repair or replacement, as provided under this warranty, is your exclusive remedy. ZEKTOR shall not be liable for any incidental or consequential damages. Implied warranties of merchantability and fitness for a particular purpose on this product are limited in duration to the duration of this warranty.

Some states/countries do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Some states/countries do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state and country to country.

## Return & Exchange

Shipment of product is as advertised by product. Upon receipt of merchandise inspect product carefully, should you find that the product does not meet your expectations, or satisfaction, contact us at once and tell us your concerns, so we may make every effort to satisfy your purchase.

## Instructions for returning items

Please retain the dated sales receipt as evidence of the date of purchase. You will need it for any warranty service. If you bought the product through a dealer, installer, or reseller, you will need to return the product to the point of sale.

E-Mail us, or call us, using the information listed under “*Customer Service Contact Information*” on the following page, for a Return to Manufacturer Authorization (RMA) number. Describe briefly the reasons for your requested return. You must receive an RMA # before you return any goods to us, the RMA # must appear on your return packing label or on the outside of the box, Merchandise without a RMA # will be refused, and no credit will be issued. RMA's are valid for ten (10) days from date of issuance. All returned merchandise must be shipped in the original packaging. If it is not in the original packaging, ZEKTOR will not be held liable for damage during shipment. Shipments of returns must be prepaid, and we will not accept COD returns.

## Customer Service Contact Information:

### ***ZEKTOR, LLC***

12675 Danielson Court

Suite 401

Poway, CA 92064

Email: **customerservice@zektor.com**