

DESIGNED & ENGINEERED IN GERMANY

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**U500® SERIES**  
PROFESSIONAL WIRELESS SYSTEMS

**LDsystems**   
free your sound



Listen to the "The Wireless U Sessions" on YouTube  
<http://bit.ly/wireless-u-sessions>

Artist: Kiddo Kat

# U500® SERIES

Listening to your suggestions, we have designed the U500® Series to make advanced technology and superb sound most affordable for professional users. Available for vocals, instruments and conferencing, the audio quality, reliability and straightforward operation of U500® wireless systems will exceed your expectations.

With automatic channel scanning, convenient one-touch infrared synchronizing and high-contrast OLED displays for easy menu navigation, battery level indication and user name assignment the U500® Series true diversity UHF wireless systems are quick and intuitive to set up. Up to 30 mW selectable transmitter output and pilot tone squelch circuitry provide superior signal quality free of artefacts and more than 100 m line-of-sight operating range.

A choice of replacement microphone heads enables flexible handheld applications. With switchable line and instrument output levels the single and dual receivers facilitate direct connection to guitar and bass amps, and the 30 Hz - 16 kHz frequency response covers all bass guitar applications.

The U500® Conference System is expandable to a maximum of 20 microphone units for effective communication with excellent speech intelligibility.





# U500<sup>®</sup> SERIES

PROFESSIONAL WIRELESS  
MICROPHONE SYSTEMS

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# U500<sup>®</sup> SERIES

PROFESSIONAL WIRELESS  
INSTRUMENT SYSTEMS

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# U500<sup>®</sup> SERIES

4-CHANNEL WIRELESS  
CONFERENCE SOLUTION

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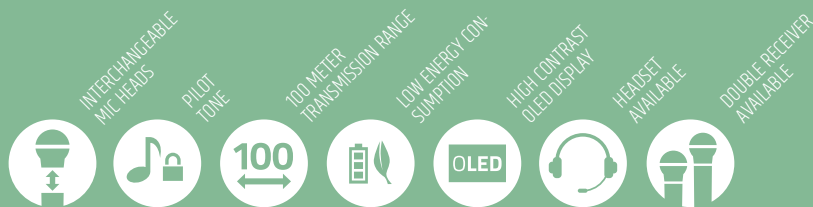
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## U500<sup>®</sup> SERIES

PROFESSIONAL WIRELESS  
MICROPHONE SYSTEMS

Making professional technology and sound most affordable, the U500<sup>®</sup> Series has been designed around you. We listened to your feedback and are now introducing a wireless system for live vocals with amazing performance and reliability that is sure to surpass your expectations. With a focus on pro and semi-pro users, our engineering and development created the U500<sup>®</sup> Series so you can share your emotions and great onstage moments.



### INTERCHANGEABLE MIC HEADS

Tune your handheld transmitter with interchangeable microphone heads! Four screw-on dynamic and condenser capsules are available with cardioid or hypercardioid patterns to cover virtually all voice characteristics and applications.

### WE DO THE HARD WORK

Automatic channel scanning allows quick and easy selection of interference-free radio frequencies. Receiver and transmitter are synced via infrared in a convenient one touch operation.

### GAIN CONTROL

The handheld and bodypack transmitters feature a gain control putting level adjustment right at your fingertips. The screw-on dynamic and condenser microphone capsules are easily interchangeable.



### PILOT TONE FOR NOISE-FREE OPERATION

Inaudible for the human ear a pilot tone is added to the transmitter signal. To prevent noise from interfering signals the receiver is automatically muted if it detects no pilot tone to prevent noise from interfering signals. Transmission power is switchable to 2, 10 or 30 mW.

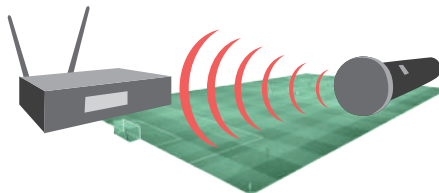


### OLED DISPLAY

U500 Series components feature high-contrast OLED displays for easily readable status indication even under adverse conditions. Designed and engineered in Germany, U500 systems provide maximum performance and reliability.

### ALL THE WAY ACROSS A FOOTBALL PITCH

With a line-of-sight operating range of more than 100 metres, U500 systems cover the length of a football pitch! The transmitter's very low current draw allows up to 10 hours of continuous operation with a pair of AA batteries.



### READY TO GO

All U500 systems come with a rugged ABS transport case to hold and protect your wireless mic. Ready to go, ready to gig!



# U500<sup>®</sup> SERIES

## SINGLE MICROPHONE SYSTEMS

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**U5XX\* HHC**  
WIRELESS MICROPHONE SYSTEM  
WITH CONDENSER HANDHELD MICROPHONE



**U5XX\* BPH**  
WIRELESS MICROPHONE SYSTEM  
WITH BODYPACK AND BLACK HEADSET



**U5XX\* HHD**  
WIRELESS MICROPHONE SYSTEM  
WITH DYNAMIC HANDHELD MICROPHONE



**U5XX\* BPHH**  
WIRELESS MICROPHONE SYSTEM  
WITH BODYPACK AND SKIN-COLOURED



**U5XX\* BPL**  
WIRELESS MICROPHONE SYSTEM  
WITH BODYPACK AND LAVALIER MICROPHONE

\*Replace the XX with the desired version underneath to choose your frequency band:

U505 // 584 - 608 MHz // simultaneous operation of 12 systems  
U506 // 655 - 679 MHz // simultaneous operation of 12 systems  
U508 // 823 - 832 MHz + 863 - 865 MHz // simultaneous operation of 6 systems  
U506 UK // 606 - 614 MHz // n.a.  
U518 // 1785 - 1800 MHz // n.a.

For a current list of frequency bands and country compatibilities,  
visit [www.id-systems.com/u500](http://www.id-systems.com/u500)



# U500<sup>®</sup> SERIES

## DOUBLE MICROPHONE SYSTEMS

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**U5XX\* HHC2**  
WIRELESS MICROPHONE SYSTEM  
WITH 2 x CONDENSER HANDHELD MICROPHONES



**U5XX\* HDD2**  
WIRELESS MICROPHONE SYSTEM  
WITH 2 x DYNAMIC HANDHELD MICROPHONES



**U5XX\* BPH2**  
WIRELESS MICROPHONE SYSTEM  
WITH 2 x BODYPACKS AND 2 x HEADSETS

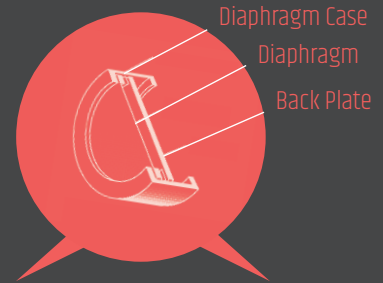
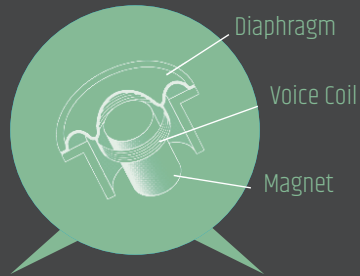


**U5XX\* BPHH2**  
WIRELESS MICROPHONE SYSTEM  
WITH 2 x BODYPACKS AND 2 x HEADSETS SKIN-COLOURED



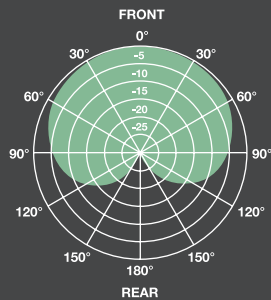
## DYNAMIC MICROPHONE

## CONDENSER MICROPHONE



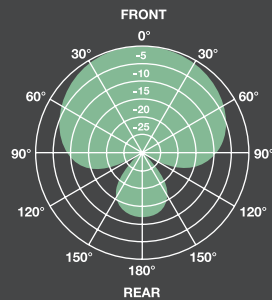
### U500 DC

DYNAMIC CARDIOID MICROPHONE HEAD



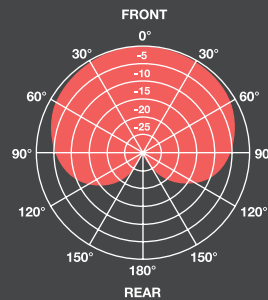
### U500 DH

DYNAMIC HYPERCARDIOID MICROPHONE HEAD



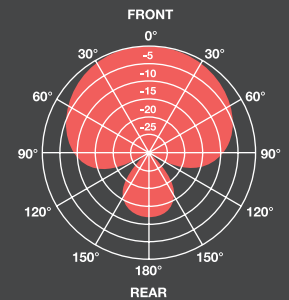
### U500 CC

CONDENSER CARDIOID MICROPHONE HEAD



### U500 CH

CONDENSER HYPERCARDIOID MICROPHONE HEAD



# SPECIFICATIONS

## RECEIVER:

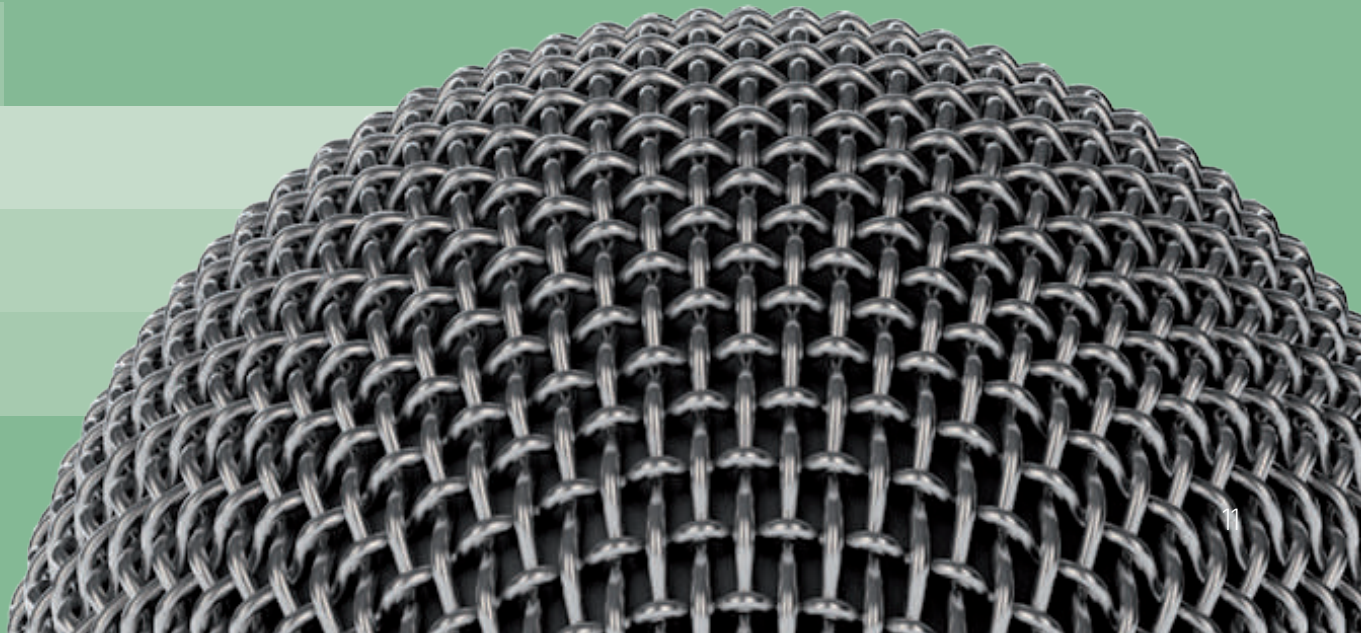
Product type:	receiver
Type:	true diversity
Antenna inputs:	2
Antenna connector:	BNC
Frequency response:	30 - 16,000 Hz
Noise reduction:	adjustable squelch
THD:	< 0,3 %
Signal-to-noise ratio:	> 100 dB pilot tone squelch
Audio output, balanced:	XLR - 12 dBV / 6.3 mm TRS - 18 dBV
Controls:	POWER on/off, MENU push-turn-control, VOL Volume control, switch INSTRUMENT/LINE
Indicators:	OLED Display
Operating voltage:	12 - 18 V DC
Width:	212 mm
Height:	45 mm
Depth:	163 mm
Weight:	0.91 kg

## MICROPHONE:

Product type:	handheld transmitter
Microphone type:	dynamic / condenser
Directivity:	cardioid / hypercardioid
Frequency response:	60 - 16,000 Hz
Rated HF output power:	2 mW, 10 mW, 30 mW (switchable)
Controls:	power on/off, menu, set
Indicators:	OLED display
Operating voltage:	2 x AA battery
Operating time:	up to 10 h, depending on battery type
Length:	257 mm
Diameter:	51 mm
Weight:	0.25 kg
Other features:	pilot tone, switchable gain, switchable RF power, interchangeable mic head

## BODYPACK:

Product type:	bodypack
Groups:	8
Inputs:	Mini-XLR (3-pin)
Frequency response:	30 - 16,000 Hz
Rated HF output power:	2 mW, 10 mW, 30 mW (switchable)
Controls:	menu, set, power on/off
Indicators:	OLED display
Operating voltage:	2 x AA battery
Operating time:	up to 10 h, depending on battery type
Width:	65 mm
Height:	86 mm
Depth:	23 mm
Weight:	0.09 kg
Other features:	pilot tone, switchable gain, switchable RF power, detachable antenna,





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- EXTENDED LOW END
  - DISTORTION FREE SOUND
  - PILOT TONE
  - 100 METER TRANSMISSION RANGE
  - LOW ENERGY CONSUMPTION
  - HIGH CONTRAST OLED DISPLAY
- 30 Hz
- PAD
- 100
- OLED



## U500<sup>®</sup> SERIES

### PROFESSIONAL WIRELESS INSTRUMENT SYSTEMS

Whether you play guitar, bass, wind or bowed string instruments, the U500<sup>®</sup> Series has been designed around you. Making professional technology and sound most affordable, we have listened to your feedback and are now introducing a wireless instrument system with amazing performance and reliability that is sure to surpass your expectations. With a focus on pro and semi-pro users, our engineering and development created the U500<sup>®</sup> Series so you can share your emotions and great onstage moments.



### 30Hz EXTENDED LOW END

With an extended frequency response down to 30 Hz, the U500 Instrument Sets are a perfect choice for 5 or 6 string bass guitars fully covering the low B.

### WE DO THE HARD WORK

The automatic channel scan allows quick and easy selection of an interference free frequency which is synced with the transmitter over infrared in a convenient one touch operation.

### GAIN CONTROL

The bodypack transmitters feature a gain control putting level adjustment right at your fingertips. The digital gain level can be adjusted from 0 to -27 dB in 3 dB steps.

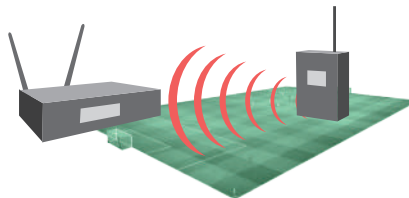


### PILOT TONE FOR NOISE FREE TRANSMISSION

Inaudible for the human ear a pilot tone is added to the transmitter signal. The receiver is automatically muted if it detects no pilot tone to prevent noise from interfering signals. Transmission power is switchable to 2, 10 or 30 mW.

### ALL THE WAY ACROSS A FOOTBALL PITCH

The U500 systems sport an outdoor transmission range of more than a 100 meters - that's the length of a soccer field! The transmitters' very low current draw allows up to 10 hours of continuous operation with a pair of AA batteries.



### OLED DISPLAY

U500 Series components feature high contrast OLED displays for easily readable status indication even under adverse conditions. Designed and engineered in Germany, U500 systems provide maximum performance and reliability.

### READY TO GO

All U500 systems come with a rugged ABS transport case to protect and keep your wireless mic. Ready to go, ready to gig!





# U500<sup>®</sup> SERIES

SINGLE INSTRUMENT SYSTEMS

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**U5XX\* BPG**  
WIRELESS MICROPHONE SYSTEM  
WITH BODYPACK AND GUITAR CABLE



**U5XX\* BPW**  
WIRELESS MICROPHONE SYSTEM  
WITH BODYPACK AND BRASS  
INSTRUMENT MICROPHONE

## SPECIFICATIONS

### RECEIVER:

Product type:	receiver
Type:	true diversity
Antenna inputs:	2
Antenna connector:	BNC
Frequency response:	30 - 16,000 Hz
Noise reduction:	adjustable squelch
THD:	< 0,3 %
Signal-to-noise ratio:	> 100 dB pilot tone squelch
Audio output, balanced:	XLR - 12 dBV / 6.3 mm TRS - 18 dBV
Weight:	0.91 kg
Controls:	POWER on/off, MENU push-turn-control, VOL Volume control, switch INSTRUMENT/LINE
Indicators:	OLED Display
Operating voltage:	12 - 18 V DC
Width:	212 mm
Height:	45 mm
Depth:	163 mm
Accessories (included):	2 X HF antennas, 2x AA batteries

### BODYPACK:

Product type:	bodypack
Groups:	8
Inputs:	Mini-XLR (3-pin)
Frequency response:	30 - 16,000 Hz
Rated HF output power:	2 mW, 10 mW, 30 mW (switchable)
Controls:	menu, set, power on/off
Indicators:	OLED display
Operating voltage:	2 x AA battery
Operating time:	up to 10 h, depending on battery type
Width:	65 mm
Height:	86 mm
Depth:	23 mm
Weight:	0.09 kg
Other features:	pilot tone, switchable gain, switchable RF power, detachable antenna,

\*Replace the XX with the desired version underneath to choose your frequency band:

U505 // 584 - 608 MHz // simultaneous operation of 12 systems  
U506 // 655 - 679 MHz // simultaneous operation of 12 systems  
U508 // 823 - 832 MHz + 863 - 865 MHz // simultaneous operation of 6 systems  
U506 UK // 606 - 614 MHz // n.a.  
U518 // 1785 - 1800 MHz // n.a.

For a current list of frequency bands and country compatibilities, visit [www.ld-systems.com/u500](http://www.ld-systems.com/u500)



# ACCESSORIES

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**WIN 42 AD**  
4-WAY ANTENNA SPLIT BOX



**WS 100 AB**  
ANTENNA BOOSTER



**WS 100 TNC**  
ANTENNA CABLE TNC TO TNC 0.5 m



**WS 100 TNC 10**  
ANTENNA CABLE TNC TO TNC 10 m



**WS 100 DA**  
DIRECTIONAL ANTENNAS



**U500 GC**  
GUITAR CABLE



**WS 100 MH1**  
HEADSET MICROPHONE



**WS 100 MH3**  
HEADSET MICROPHONE  
BEIGE



**HSAE 1**  
PROFESSIONAL AEROBICS HEADSET  
MICROPHONE WATER RESISTANT



**WS 1000 MW**  
WIND MICROPHONE



**WS 100 ML**  
LAVALIERE MICROPHONE

## RACK MOUNTING KITS

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### **U500 RK**

19" RACK KIT FOR U500 SINGLE RECEIVER



### **U500 RK 2**

19" RACK KIT FOR 2 x U500 SINGLE RECEIVER



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# U500<sup>®</sup> SERIES

4-CHANNEL WIRELESS  
CONFERENCE SOLUTION

Designed around you and for you, our engineering and development put their focus on professional users to create a wireless conference system for effective communication and interaction. Providing advanced technology and superb speech intelligibility, the U500<sup>®</sup> is a fully featured, elegant solution. This user-friendly system makes your job easier and conventions, meetings and discussions a success.





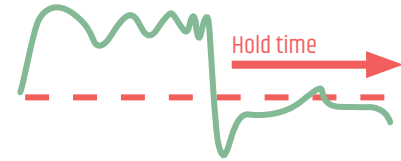
### GAIN CONTROL & LOW CUT

Soft-spoken or powerful, the gain control lets you match the mic level to a speaker's voice. A switchable highpass filter prevents boominess when the speaker is too close to the microphone.



### RECEIVER CASCADING

To extend the number of microphone units the U500 Receiver features audio and data ports for cascading up to five units. Sharing the antennas of the master unit they provide a maximum of 20 channels.



### AUTO & MANUAL GATE

If a microphone unit's signal level falls below the threshold the gate mutes the respective channel to eliminate unwanted noise. Hold time determines how long the noise gate remains open after the input level has dropped below the threshold.

### PILOT TONE FOR NOISE FREE TRANSMISSION

Inaudible for the human ear a pilot tone is added to the transmitter signal. The receiver is automatically muted if it detects no pilot tone to prevent noise from interfering signals.



### INDIVIDUAL AND MIX OUTPUTS

The receiver sports individual XLR outputs for each of the 4 channels plus a mix output. This provides a summed signal of all the channels based on their individual level settings.

### REMOVABLE GOOSENECK MIC

Featuring a luminous indicator ring, the gooseneck condenser microphone is detachable from the desktop base's XLR connector.



### READY FOR REMOTE CONTROL

Providing an RS-232 interface, the receiver enables external control via remote systems.



# SPECIFICATIONS

## CONFERENCE RECEIVER:

Modulation type:	FM
Groups:	6
Channels:	60 (6 x 10)
Antenna inputs:	2
Antenna connectors:	BNC
Frequency response:	60 - 16,000 Hz
Noise reduction:	adjustable squelch (10 steps)
THD:	< 0,2 %
Signal-to-noise ratio:	> 100 dB
Audio outputs balanced:	4 x XLR
Audio outputs mix balanced:	XLR
Max. output level:	+12 dBu
Controls:	power on/off, digital encoder, RX1 - 4 quick access buttons
Indicators:	OLED display
Operating voltage:	12 V DC, 1,000 mA
Width receiver:	484 mm
Height receiver:	44 mm
Depth receiver:	243 mm
Weight receiver:	2,45 kg

## AVAILABLE FREQUENCIES:

U505 CS4 // 554 - 586 MHz  
U506 CS4 // 662 - 694 MHz  
U508 CS4 // 823 - 832 MHz + 863 - 865 MHz

## CONFERENCE MICROPHONE:

Channels:	6 (6 x 10)
Groups:	6
Inputs:	XLR
Frequency response:	60 - 16,000 Hz
Signal-to-noise ratio:	> 100 dB
Rated HF output power:	10 mW
Controls:	low cut, power / mute, gain
Indicators:	LED, OLED display
Operating voltage:	2 x AA battery
Operating time:	>8 h (with alkaline batteries)
Width:	115 mm
Height:	54 mm
Depth:	135 mm
Weight:	0,72 kg



## NOISE GATE WITH AUTOMATIC AND MANUAL THRESHOLD SETTING

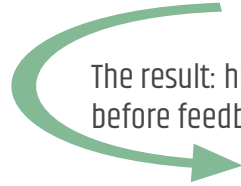
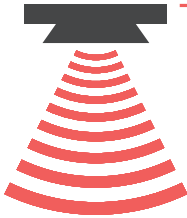


The U500 receiver's noise gate provides a choice of AUTOMATIC or MANUAL modes of threshold and hold time setting.

The gate opens when the input level rises above the threshold to pass speech through. If a microphone unit's signal level falls below the threshold the gate mutes the respective channel to eliminate unwanted noise. Hold time determines how long the noise gate remains open after the input level has dropped below the threshold.

# THE NOISE GATE IN OPERATION

Ceiling speaker



The result: higher gain before feedback!

The signal is picked up by all mics.



Auto Gate

Algorithm

- ✓ higher signal level
- ✓ less ambient noise
- ✓ feedback prevention



Algorithm

Output



Algorithm

Mics 1 & 3 are muted.



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PROFESSIONAL WIRELESS SYSTEMS

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[www.youtube.com/ldsystemsvideos](http://www.youtube.com/ldsystemsvideos)  
[blog.adamhall.com](http://blog.adamhall.com)



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