

# ASW-WP Installation and Operation Guide



## Important Safety Instructions

- Please make sure you have read and completely understand all instructions in this manual before operating this equipment.
- Keep these instructions in a safe, accessible place for future reference.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with a dry cloth.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Use only accessories specified or recommended by Intelix.
- Explanation of graphical symbols:
  - Lightning bolt/flash symbol: the lightning bolt/flash and arrowhead within an equilateral triangle symbol is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product enclosure which may be of sufficient magnitude to constitute a risk of shock to a person or persons.
  - Exclamation point symbol: the exclamation point within an equilateral triangle symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.
- **WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE AND OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHOULD NOT BE PLACED ON THIS APPARATUS.**
- Use the mains plug to disconnect the apparatus from the mains.
- **THE MAINS PLUG OF THE POWER CORD MUST REMAIN READILY ACCESSIBLE.**
- Do not defeat the safety purpose polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of your obsolete outlet. **Caution! To reduce the risk of electrical shock, grounding of the center pin of this plug must be maintained.**
- Protect the power cord from being walked on or pinched particularly at the plugs, convenience receptacles, and the point where they exit from the apparatus.
- Do not block the air ventilation openings. Only mount the equipment per Intelix’s instructions.
- Use only with the cart, stand, table, or rack specified by Intelix or sold with the equipment. When/if a cart is used, use caution when moving the cart/equipment combination to avoid injury from tip-over.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- **Caution! Shock Hazard.** Do not open the unit.
- Refer to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



# Table of Contents

- Important Safety Instructions ..... 2
- Overview ..... 4
  - Package Contents..... 4
  - Front Panel..... 5
  - Rear Panel ..... 6
- Installation Instructions ..... 7
  - Basic Installation ..... 7
  - Twisted Pair Output ..... 8
  - Contact Closure Inputs..... 8
  - Device Power ..... 9
  - RS232 ..... 9
- Basic Operation ..... 10
  - Switching..... 10
  - LED Indicators ..... 11
  - EDID Management..... 11
  - HDCP Management..... 12
  - VGA Input..... 12
  - Low Power Mode ..... 13
- RS232 Connection ..... 14
- RS232 and TCP/IP Commands..... 15
  - System commands ..... 15
  - Display Control Commands..... 16
- Display Control Software ..... 17
- Troubleshooting..... 23
  - Unit does not power on ..... 23
  - Unit does not respond to RS232 commands ..... 23
  - No video ..... 23
  - PC Audio distorted ..... 23
  - No video from HDBaseT output..... 23
- Technical Specifications ..... 24

## Overview

The Intelix ASW-WP is a two-gang, Decora-style wall plate designed to be the primary PC interface for classrooms, boardrooms, and conference centers. It features VGA + Audio to HDMI conversion and an HDMI input. The unit will detect which input has an active video input, and switch to that input – if both inputs are active, the “last in” will be selected. There are additional contact closure inputs provided on the rear of the unit to allow third party control. RS232 control of the ASW-WP can be accomplished by connecting to the RS232 port on a compatible receiver, such as a DIGI-HD60C-R.

The ASW-WP utilizes HDBaseT technology to extend the digital output up to 60 meters away using standard Cat6 cable. This transmitter device is compatible with several Intelix HDBaseT receivers, but is designed to work primarily with the DIGI-HD60C-R. The unit features multiple EDID modes to eliminate user confusion, and incompatible video formats.

The ASW-WP can be powered from the rear panel, or by Power over HDBaseT (PoH). Built-in surge protection and diagnostic LEDs ensure hassle-free and robust installations. The Auto-Switching Wallplate also features a customizable power management system, which will put the unit into a low power state after no video for 30 minutes or being inactive for 3 hours by default.

The ASW-WP can be programmed to control the connected display. The display manufacturer’s RS232 commands can be entered into the ASW-WP with the use of Intelix Display Control software. This allows display power and input to be automatically controlled based on video activity, eliminating the need for a third party control system in many installations.

### *Package Contents*

Please verify the following items are in the shipping box prior to installation of the ASW-WP.

- 1 ea ASW-WP Auto-Switching Wallplate
- 1 ea White Decora Insert - HDMI
- 1 ea White Decora Insert – PC Video / Audio
- 1 ea White Two Gang Decora Cover Plate with mounting screws
- 1 ea Installation and Operation Guide
- 1 ea Intelix Pocket Screwdriver

## Front Panel



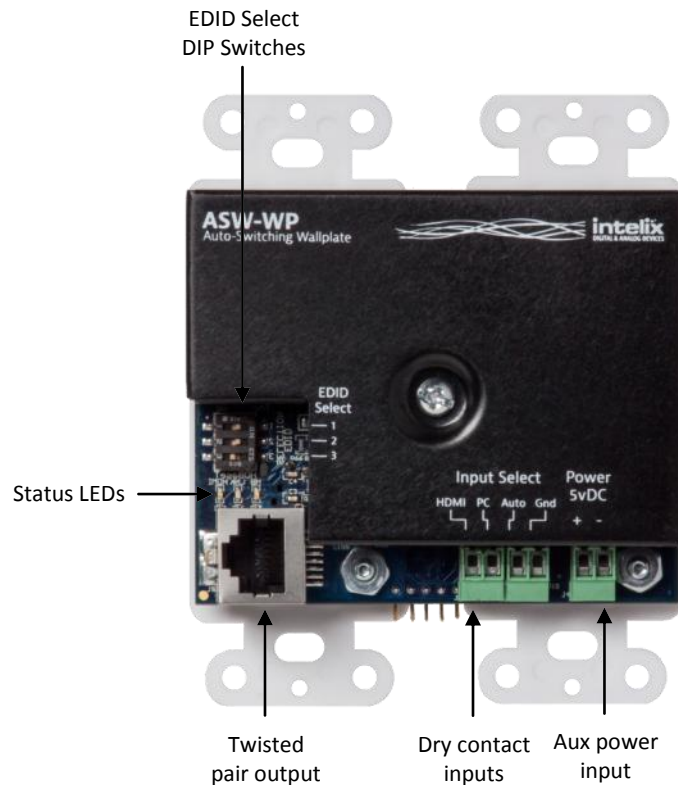
HDMI Input status LED – Indicates power, active signal, and selected input for the HDMI input.  
(p. 11)

PC Input status LED – Indicates power, active signal, and selected input for the PC Video input.  
(p. 11)

HDMI Input – Video sensing HDMI input

PC Video and Audio Input – Video sensing PC Video and Audio input that converts the signal to a digital format

## Rear Panel



EDID Select DIP switches – Alter the EDID that is being presented to the HDMI and PC Video sources.

Status LEDs – Indicates status of the HDBaseT chip and connection

HDMI (Green) – Indicates whether video is being transmitted

Link (Amber) – Indicates the integrity of the connection between the ASW-WP and the HDBaseT receiver

Heartbeat (Blue) – Indicates whether the HDBaseT chip is running

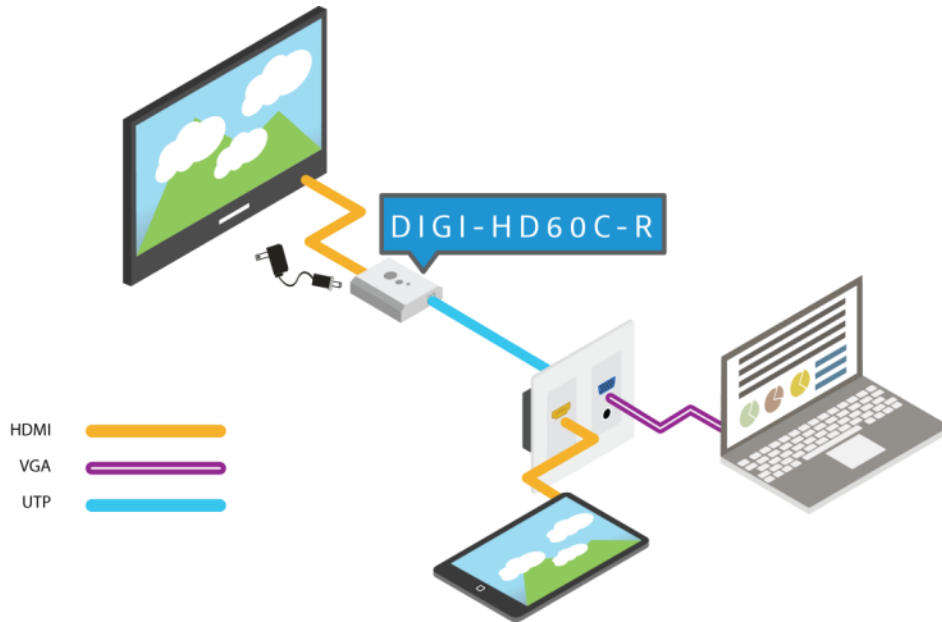
Dry contact inputs – Inputs for mechanical switches or relays to provide manual input selection control

Aux power input – 5vDC 2a input to power the ASW-WP. It is not necessary to connect power when using a compatible receiver with PoE (Power over Ethernet) such as the DIGI-HD60C-R. When required, Intelix part # PS-5D-20TL should be used.

## Installation Instructions

### *Basic Installation*

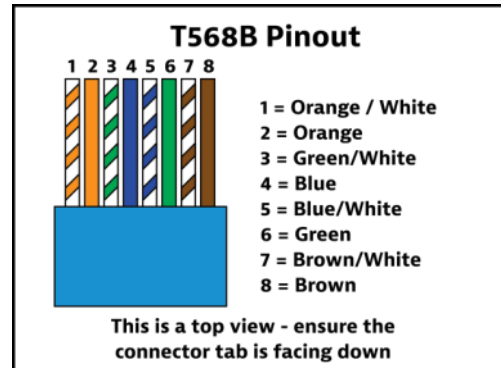
This diagram shows the most basic application for the ASW-WP. Follow the instructions below for installation of this system.



1. Turn off power and disconnect the audio/video equipment by following the manufacturer's instructions.
2. Connect twisted pair cable between the transmitter (ASW-WP) and the receiver (DIGI-HD60C-R). Ensure T568B straight-thru wiring.
3. Install the ASW-WP into the wall box using the included screws.
4. Install the 2-gang cover plate using the included screws.
5. Connect HDMI cables between the display and the receiver (DIGI-HD60C-R).
6. Connect the power supply (PS-24D-25) to the receiver. Connect the power supply to an AC outlet.
7. Power on attached audio/video devices.
8. Connect HDMI or VGA /Audio sources.

### Twisted Pair Output

The ASW-WP includes an HDBaseT Lite extender output. When used in conjunction with compatible HDBaseT receivers (see Tech Specs), the signal may be transmitted up to 60m (200') away. Additionally, the user may connect via RS232 to the HDBaseT receiver, and control the ASW-WP. Connection should be made using Cat6 unshielded or shielded cable. Please terminate both ends using EIA/TIA-568B crimp pattern, as shown in this diagram.



### Contact Closure Inputs

The ASW-WP includes dry contact closure (C.C.) inputs to allow different types of manual switching. These C.C. inputs are intended to be connected directly to relays or switches. To activate, simply short the associated terminal to the “GND” terminal. The ASW-WP ships from the factory with a jumper in place between the “AUTO”, and “GND” terminals; this should remain in place if you wish the unit to switch automatically when a video signal is present. Normally open, momentary switches should be used.

Fig. 1 – Auto-switching with manual override.

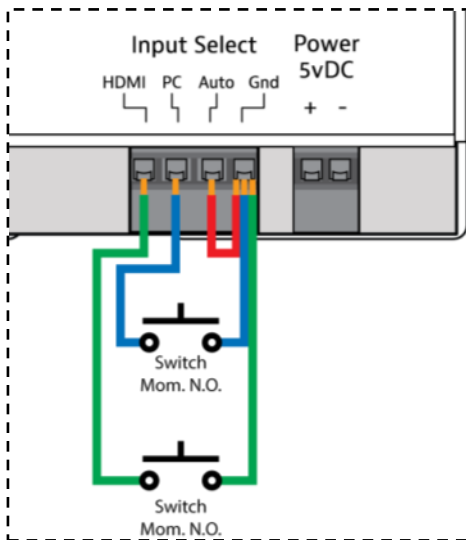
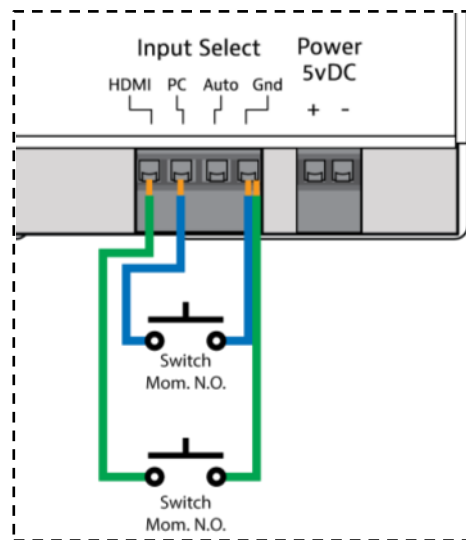


Fig. 2 – Manual switching mode.





## Device Power

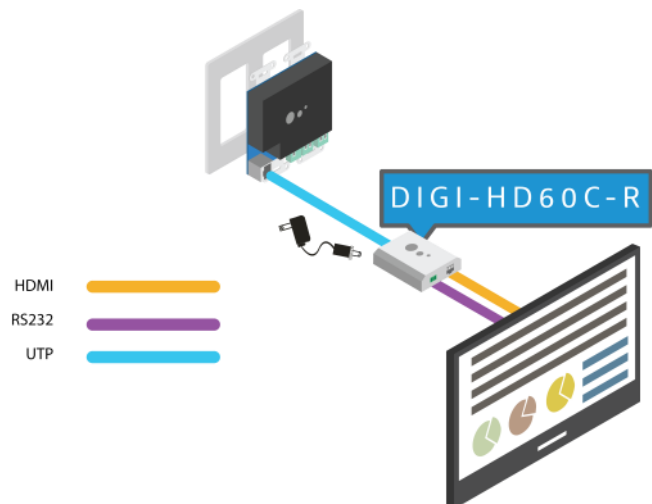
The ASW-WP supports [2] types of power input: PoE and rear panel input. When using PoE, a compatible HDBaseT receiver can power the ASW-WP by inserting power onto the twisted pair cable. When using a compatible receiver (such as the DIGI-HD60C-R), there is no need to use the rear panel power input. If using a different receiver that does not supply power (such as the DIGI-HD70-R) you must connect power to the rear power input. Using this method, a 5vDC 2a power supply should be used (such as the PS-5D-20TL).

## RS232

The ASW-WP can be controlled by RS232 by connecting to a computer's serial port or 3<sup>rd</sup> party control system. The diagram below shows an example of this application:



Alternatively – the ASW-WP can be programmed to control the display via RS232; more about this feature on p. 17. Connections for this method would be as shown in this diagram:

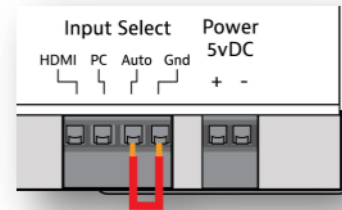


## Basic Operation

### Switching

There are [3] methods by which you can control the ASW-WP switching functions:

1. Auto – By placing a jumper, between the “Auto” and “Gnd” terminals on the back of the ASW-WP, the unit will switch inputs by sensing video signal.
  - a. The ASW-WP will switch automatically to the “last in” connected input. For example: if you have a VGA signal displayed, and then connect an HDMI source, the unit will switch to the HDMI input. If you then remove the HDMI source, the unit will switch back to the VGA input.
  - b. You can force the unit to switch to the other input without removing any cables by disabling the source video that is currently being displayed. For example: if you have active sources connected to both inputs, and the HDMI input is currently selected, by pressing (Fn+F8 twice) on the HDMI laptop, the video output will be disabled, and the ASW-WP will select the VGA input. To return to the HDMI input, press (Fn+F8 twice) to enable the video output. *Depending on the laptop manufacturer, this operation may alter slightly.*
2. Contact Closure Inputs – By connecting momentary switches to the contact closure inputs (see p.9) you can create push-button control of the input selection on the ASW-WP.
  - a. When using “Auto-switching with manual override” (p8, Fig.1) , the unit will function as described in the “Auto” section above, but pressing one of the override buttons will cause the unit to switch to the selected input. If there is no video signal connected to the selected input, you will experience a black video screen.
  - b. When using “Manual switching mode” (p8, Fig. 2), the unit will only switch when the button that corresponds to the input selection is pressed. If no video is present on the selected input, you will experience a black video screen.
3. RS232 – By connecting the RS232 port of the HDBaseT receiver to a 3<sup>rd</sup> party control system, serial commands can perform switching functions, as well as provide greater information about the units status. RS232 control can be used simultaneously with “Auto” and “Contact Closure” operation, but not when using the Display Control functionality.



## LED Indicators

**Front LEDs** - The ASW-WP has [2] bi-color LEDs to provide switching status.

Mode	Status
<b>OFF (both)</b>	Unit is in low-power standby mode
<b>Violet (both)</b>	Unit is on – no signal detected
<b>Blue</b>	Input has active video, input not selected
<b>Amber</b>	Input has active video, input selected

**Rear LEDs** – The ASW-WP has [3] SMD indicators to provide operation status.

Color	Indicates	Status
<b>Green (fast flashing or solid)</b>	<b>HDMI</b>	Video is being transmitted by the ASW-WP
<b>Amber (solid)</b>	<b>HDBaseT Link</b>	Connection to HDBaseT receiver is stable.
<b>Blue (slow flash)</b>	<b>Heartbeat</b>	HDBaseT chip is running
<b>None</b>	<b>Low or no power</b>	Unit may be in standby mode, or unit may not be receiving power

## EDID Management

An essential part of operation is the EDID table, which is transmitted to the source via HDMI cable from the ASW-WP HDMI input. The ASW-WP units feature a pass through EDID mode for the HDMI and VGA inputs. The preferred native timing of the display will be transmitted to the source. For example – if the resolution of the TV connected to the output is 1080p, then the switcher will request the source to output 1080p. The benefit of this method is that the video output by the source will be imaged perfectly for the display. Some displays will have a large number of compatible resolutions, which will show up as a long list on a laptop's graphic options; to simplify this list, the ASW-WP features some resolution presets, which will limit the EDID list to a preferred resolution, with a few other compatible resolutions. To change the EDID mode:

1. Unplug any input cables (HDMI or VGA)
2. Change the DIP switches using a small flat-blade screwdriver.
3. Plug input cables in.

This table shows how the DIP switches correlate with the EDID table:

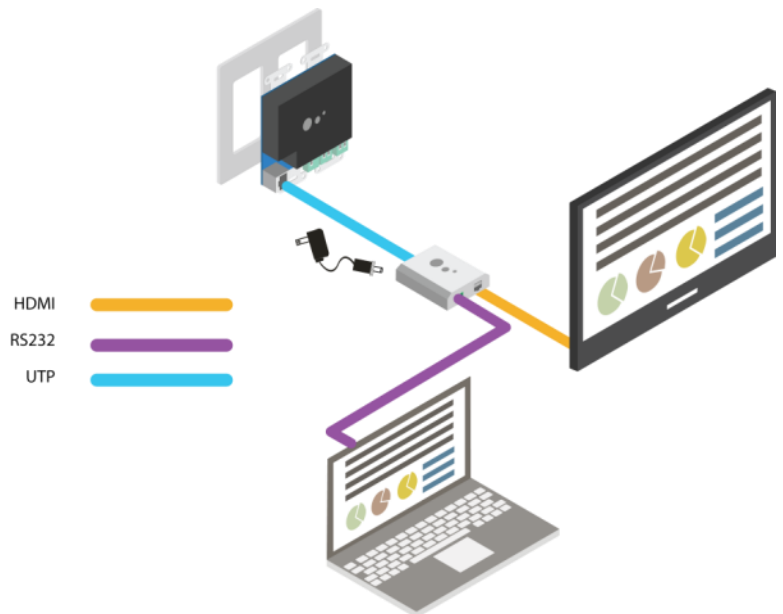
Setting	
0,0,0 (Down, Down, Down)	EDID Pass-through
1,0,0 (Up, Down, Down)	1080p, 2ch audio
1,1,1 (Up, Up, Up)	1920x1200, 2ch audio
1,0,1 (Up, Down, Up)	1280x800, 2ch audio
1,1,0 (Up, Up, Down)	1024x768, 2ch audio

## HDCP Management

The ASW-WP offers advanced HDCP management to allow greater compatibility with other devices. The output will always be encrypted or unencrypted, following the status of the source content (if the content is encrypted, the output of the HDBaseT receiver will be encrypted; if the content is unencrypted, the output of the HDBaseT receiver will be unencrypted).

### HDMI Input

The ASW-WP ships with the HDMI input set to “HDCP compliant”. This will work for most applications; however, the ASW-WP allows you to set the input to “Not HDCP compliant”. This is important for systems using not-compliant sinks (such as a video conferencing or recording system). To set the unit to “Not HDCP compliant”, simply connect via RS232 to the HDBaseT receiver as shown in this diagram, and send the RS232 command as described on p. 15.



### VGA Input

The VGA input will convert analog video to digital and will not add encryption to the content.

*For more information about HDCP, please visit [www.digital-cp.com](http://www.digital-cp.com)*

## Low Power Mode

The ASW-WP has a low-power or standby mode that it will automatically return to, based upon input signal and switching activity. In this mode, the HDBaseT chip is off, so an RS232 command will not “wake” the unit. Dry contact closure or applying an active video signal will wake up the ASW-WP. The wake up process takes between 6-10 seconds.

1. No video – If the ASW-WP detects no video on either the HDMI or the VGA input for a set amount of time, the ASW-WP will go into low-power mode. The default time is 30 minutes, which can be adjusted by using the Display Control Software or sending an RS232 command. The timeout clock is accurate to +/-4%.
2. No activity – If the unit does not switch inputs (auto or contact closure) or communicate via RS232 for a set amount of time, the ASW-WP will go into low-power mode. The default time is 3 hours, which can be adjusted by using the Display Control Software. The timeout clock is accurate to +/-4%.

### Changing Low Power Mode Settings

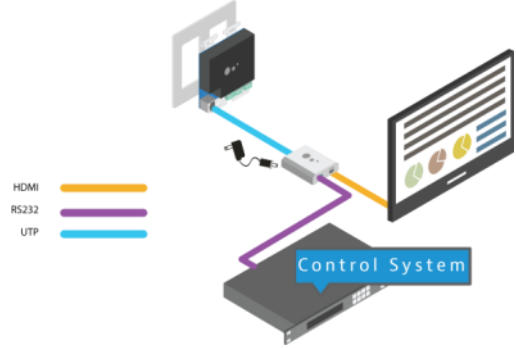
The No Signal and No Activity timeouts can be changed using the Display Control software or by sending the unit different timeout commands via RS232. Use of the software is described in detail starting on page 17.

If sending RS232 commands, the *Turn Display Control OFF* command (DFG0) command needs to be sent first. To disable the timeout, the next two commands to send to the unit would be Disable the “No Signal” Timeout (DNS000) and Disable the “No Activity” Timeout (DNA000). These commands are found on Page 16. There are also other commands to change the timeouts on that page.

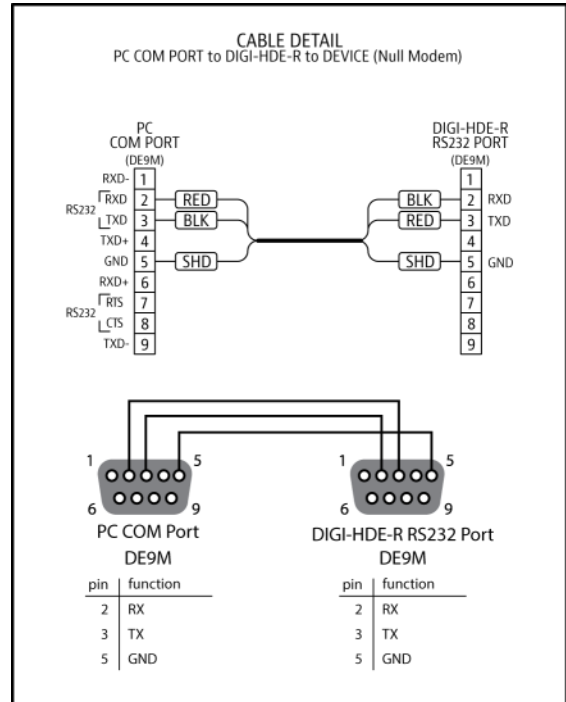
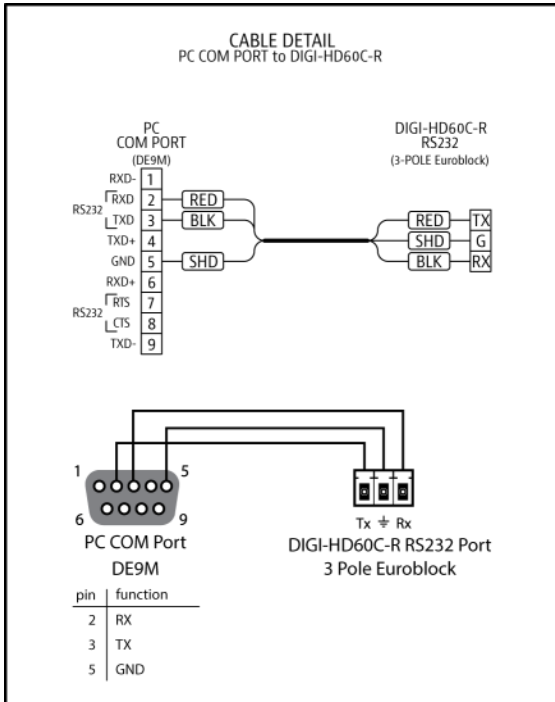
## RS232 Connection

The RS232 control port requires a standard straight-through serial cable for operation. This diagram shows the connections required for controlling the ASW-WP with a 3<sup>rd</sup> party control system:

- 9600 baud
- 8 Data Bits
- 1 Stop Bit
- Parity = none



Below are some diagrams to assist you in the pin out between standard PC COM ports and HDBaseT receivers that are compatible with the ASW-WP:



## RS232 and TCP/IP Commands

RS232 Settings: 9600 baud, 8 Data bits, 1 Stop bit, Parity = None

<CR> = Carriage return (Hex 0D)

<LF> = Line Feed (Hex 0A)

<SP> = Space (Hex 20)

**\*NOTE: You must turn Display Control OFF in order to gain control of the ASW-WP via RS232 – please send the “Display Control OFF” command first! (See page 16)**

### System commands

Description	Command	Response
Select HDMI input	SET HDMI<CR><LF>	SET HDMI!<CR><LF>
Select VGA input	SET VGA<CR><LF>	SET VGA!<CR><LF>
Get selected input	GET IN<CR><LF>	GET IN!<CR><LF>
Get HDMI video status	GET HDMI<CR><LF>	HDMI 1!<CR><LF> This response indicates video present on HDMI input HDMI 0! <CR><LF> This response indicates NO video present on HDMI input
Get VGA video status	GET VGA<CR><LF>	VGA 1!<CR><LF> This response indicates video present on VGA input VGA 0! <CR><LF> This response indicates NO video present on VGA input
Turn auto-switching on	AUTO ON<CR><LF>	AUTO ON!<CR><LF>
Turn auto-switching off	AUTO OFF<CR><LF>	AUTO OFF!<CR><LF>
Enter low-power mode (will disable RS232 communications until physical action wakes up ASW-WP)	STANDBY<CR><LF>	STANDBY!<CR><LF>
Reset microprocessor	RST<CR><LF>	No response – ASW-WP will power cycle
HDCP Compliance ON	HDCP ON<CR><LF>	HDCP ON!<CR><LF>
HDCP Compliance OFF	HDCP OFF<CR><LF>	HDCP OFF!<CR><LF>
Get HDCP Compliance status	GET HDCP<CR><LF>	HDCP ON! <CR><LF> Or HDCP OFF!<CR><LF>

## Display Control Commands

Description	Command	Response
Turn Display Control ON	DFG1<CR><LF>	No response
Turn Display Control OFF	DFG0<CR><LF>	No response
Store the ON command for Display Control ( <i>xx = up to 20 characters</i> )	DON ( <i>xx</i> )<SP><CR><LF> Example: DONpwron<SP><CR><LF>	No response
Store the OFF command for Display Control ( <i>xx = up to 20 characters</i> )	DOF ( <i>xx</i> )<SP><CR><LF> Example: DOFpwroff<SP><CR><LF>	No response
Store the input select command for Display Control ( <i>xx = up to 20 characters</i> )	DIS ( <i>xx</i> )<SP><CR><LF> Example: DIShdmi1<SP><CR><LF>	No response
Store the time between power on and input select commands ( <i>xxx = time in seconds – 3 characters</i> )	DDC ( <i>xxx</i> )<CR><LF> Example for 5 sec.: DDC005<CR><LF>	No response
Store the “No signal” timeout value ( <i>xxx = time in minutes – 3 characters</i> )	DNS ( <i>xxx</i> )<CR><LF> Example for 30 min.: DNS030<CR><LF>	No response
Disable the “No signal” timeout	DNS000<CR><LF>	No response
Store the “No activity” timeout value ( <i>xxx = time in hours – 3 characters</i> )	DNA ( <i>xxx</i> )<CR><LF> Example for 3 hours: DNA005<CR><LF>	No response
Disable the “No activity” timeout	DNA000<CR><LF>	No response
Store the display baud rate	DBR ( <i>x</i> )<CR><LF> Where: 1 = 115200 2 = 57600 3 = 19200 4 = 9600	No response



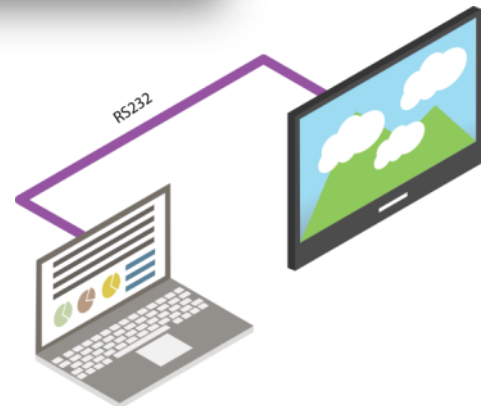
## Display Control Software

By using the free software “Intelix Display Control”, the ASW-WP may be used to control power and input status of the LCD or Projector connected to the HDBaseT receiver (DIGI-HD60C-R). When the ASW-WP is “woken up” from low-power standby mode, it will send the preprogrammed “Power ON” command, followed by the “Input Select” command. When the ASW-WP times out due to lack of video or activity, it will send the preprogrammed “Power Off” command. This will effectively synchronize the power states of the display and the ASW-WP, eliminating the need for a 3<sup>rd</sup> party control system in many systems. Use the following instructions to configure and program the ASW-WP for this method.

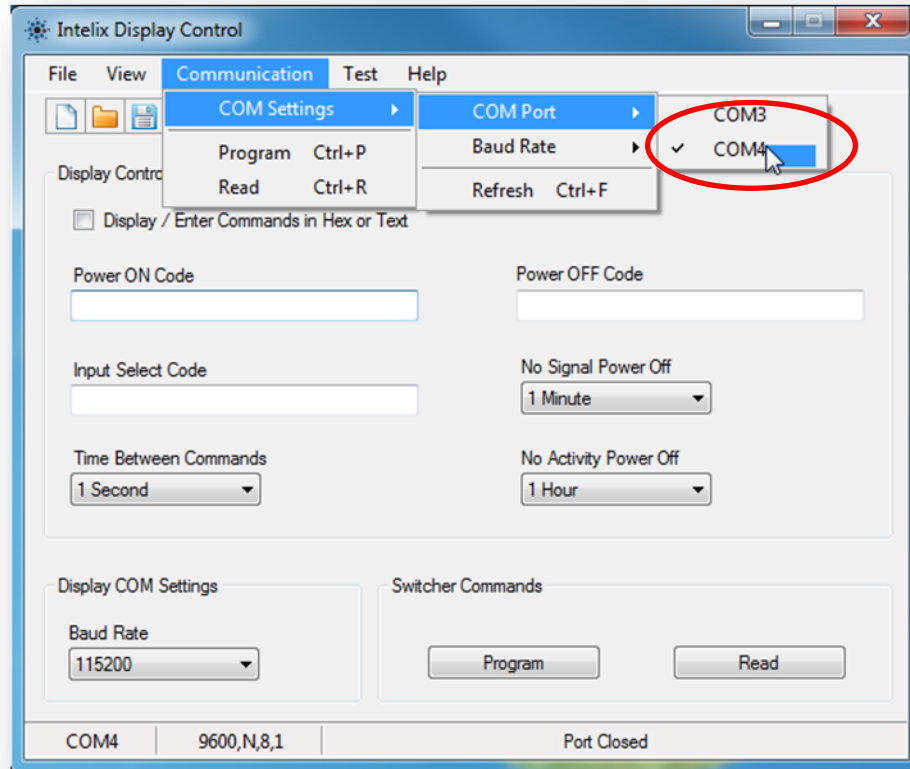
1. Download and install the Intelix Display Control software from the ASW-WP Documentation and Downloads page at [www.intelix.com](http://www.intelix.com). An installation guide is included to assist you with this process.



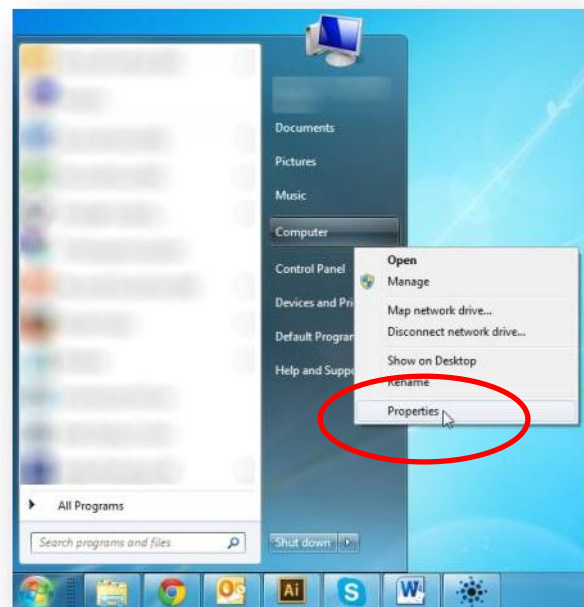
2. Connect your PC to the display you wish to control using a serial cable (you may need to use a USB to serial adaptor if your PC has no COM port).



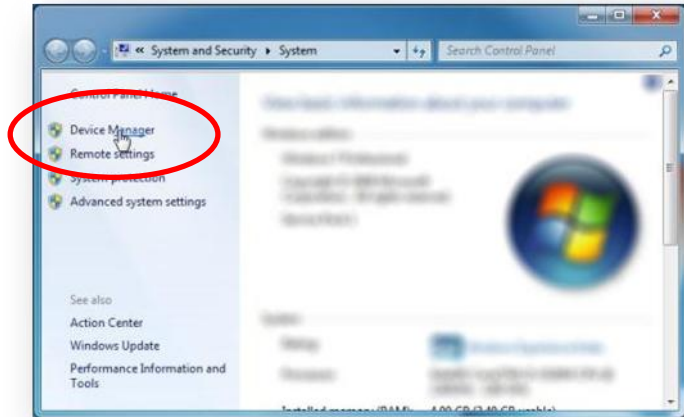
3. Open the Intelix Display Control software.
4. Adjust the COM Port to match the PC COM port – it is usually COM1, unless you are using a USB to Serial adapter.



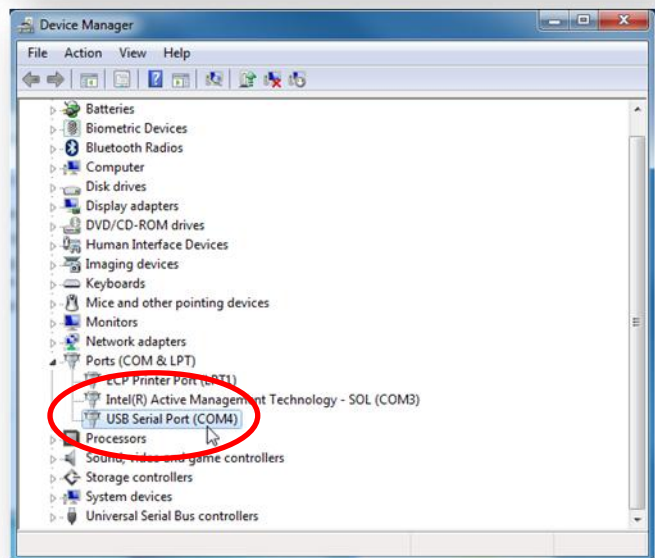
To find the COM port your USB to serial port adapter is using – go to START-> Right click on “Computer” -> select “Properties”



Select Device Manager

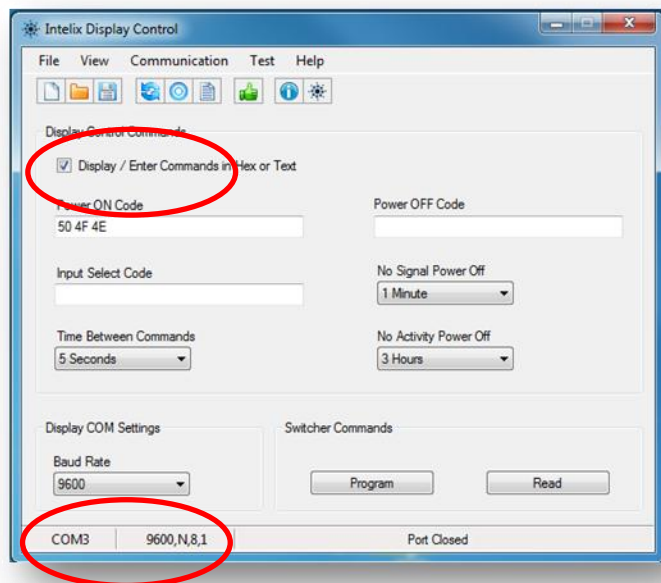


Under “Ports (COM & LPT1)” you should see your adapter listed. The COM port it consumes will be listed next to the name.

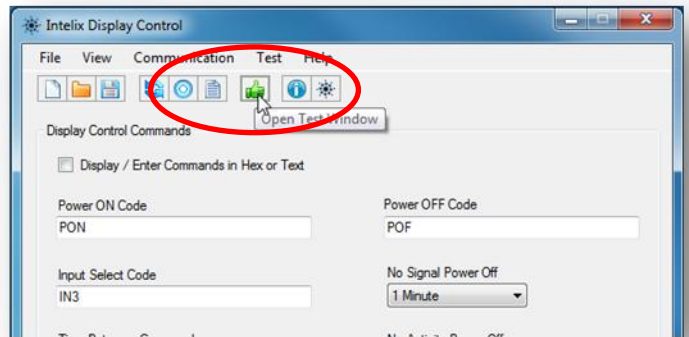


5. Enter the “POWER ON”, “POWER OFF”, and “INPUT SELECT CODE” into the text fields. If you need to enter the commands in HEX – select the check box and enter hex bytes separated by a space. (see display manufacturer’s manual to acquire the codes).

6. Set the baud rate required by the display



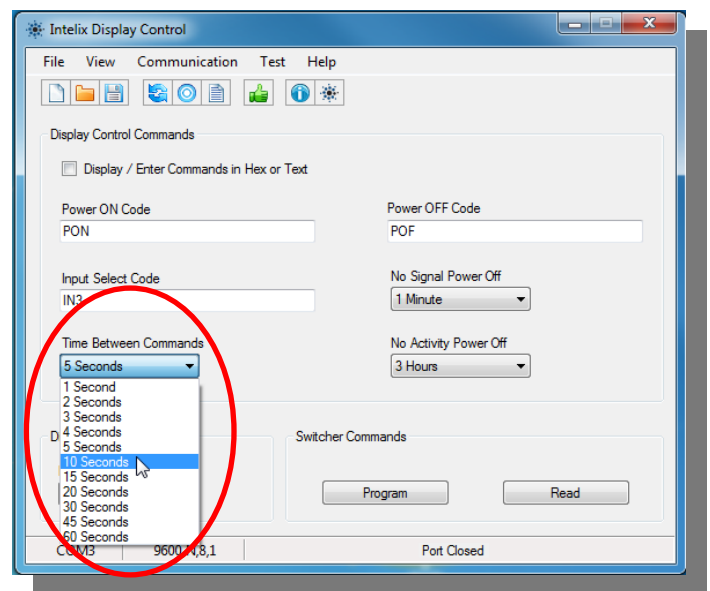
7. Press the green “Thumbs Up!” button or Test -> Perform Test



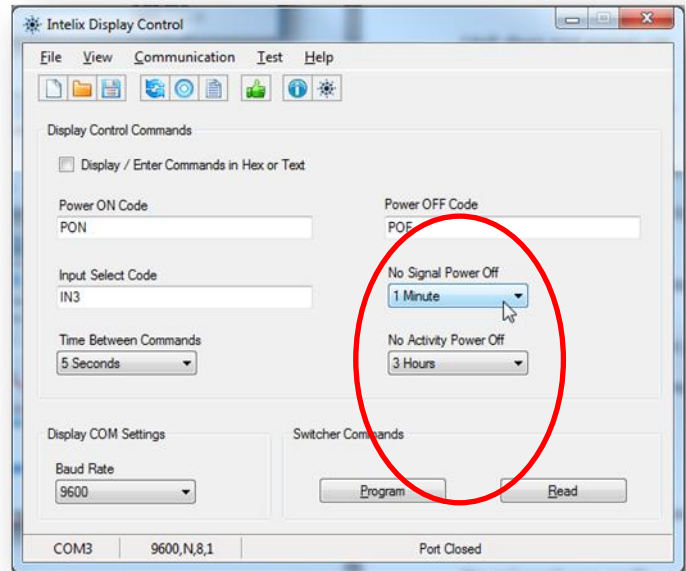
8. Test the commands you entered by monitoring the display status.



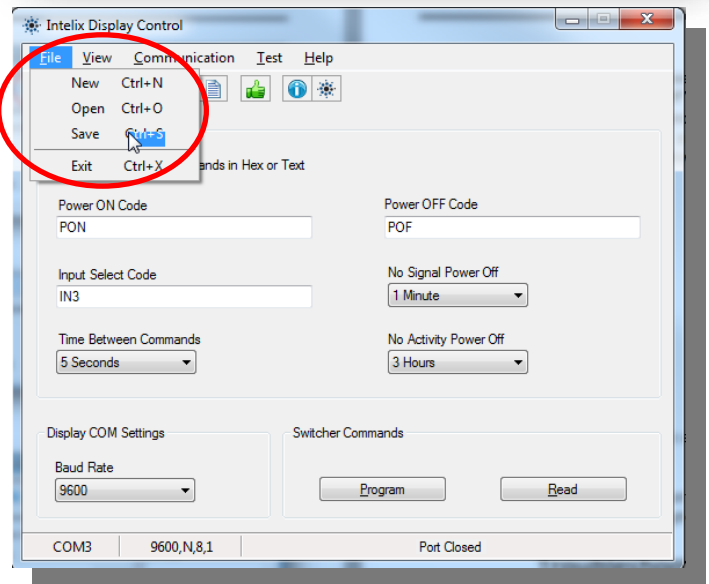
9. Select the “Time Between Commands” from the drop down window. This sets the amount of time the controller will wait after it sends the “Power On” command to send the “Input Select” command. Every display will require a different amount of time



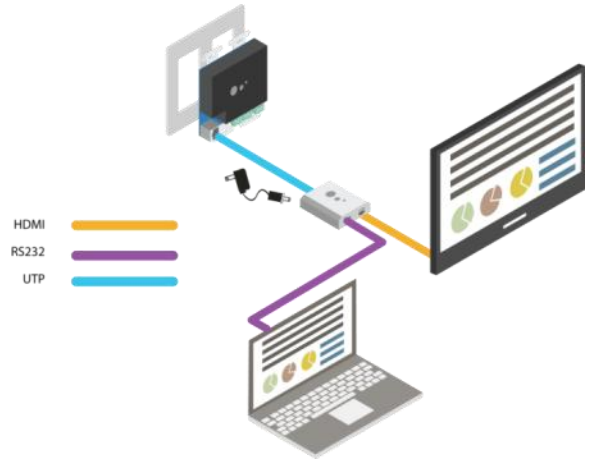
10. Select the “No Signal Power Off” and “No Activity Power Off” timeouts from the drop down windows. For more information on these selections – see “Low Power Mode” on p. 13.



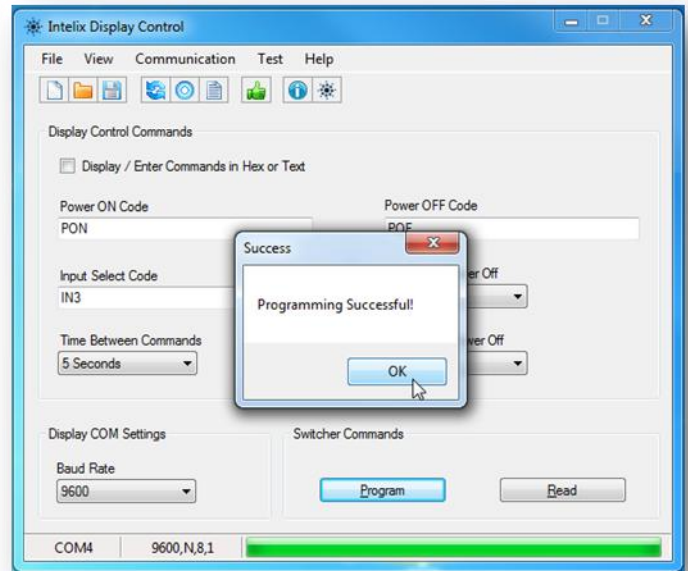
11. Save your configuration and disconnect the serial cable from the display.



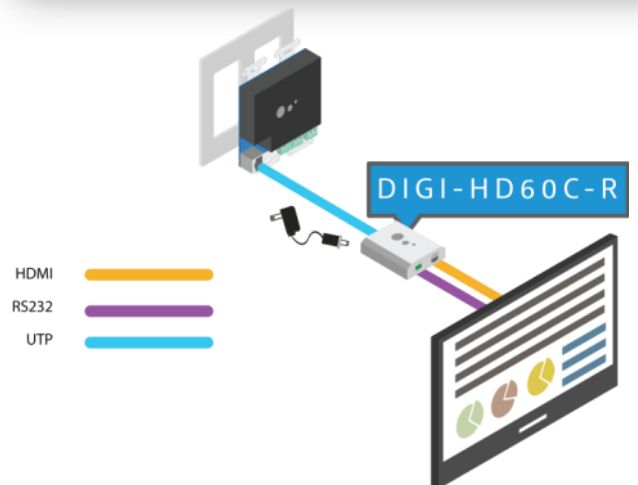
- 12. Connect the ASW-WP to an HDBaseT receiver with an RS232 port (DIGI-HD60C-R) and power the devices.
- 13. Connect your PC COM port to the RS232 port on the HDBaseT receiver. See p. 14 for more information on RS232 connections.



- 14. Press the “Program” button, confirm the action, and wait for the upload to finish. The unit is now programmed, and the Display Control feature is activated. To disable Display Control - you will need to send the “Display Control Off” command via a terminal program.



- 15. Disconnect the serial cable from your PC and connect it to the RS232 port on the display.
- 16. To program multiple ASW-WP devices, repeat steps 12-15 for each unit.



## Troubleshooting

### *Unit does not power on*

Apply an active video signal; the unit may be in standby mode.

If using a receiver with PoE, verify that the receiver is powered.

If using a receiver without PoE, you must use a 5v power supply (PS-5D-20TL) connected to the aux power input on the ASW-WP.

### *Unit does not respond to RS232 commands*

Check your cable connection (page 15).

Turn Display Control OFF by sending the RS232 command “DFG0<CR><LF>”

### *No video*

Check front panel LEDs to be sure that the unit is powered up and receiving video.

Unplug signal cable, and replug.

### *PC Audio distorted*

Turn volume down on your PC.

### *No video from HDBaseT output*

Verify the link LEDs on the receiver and the back of ASW-WP are lit; if not, check the twisted pair cable.

## Technical Specifications

Technical Specifications	
<b>I/O Connections</b>	
HDMI Input	One (1) HDMI Type A Receptacle (Front)
VGA Input	One (1) Female PC Video HD-15-F Connector (Front)
PC Stereo Audio	One (1) 3.5 mm TRS Receptacle (Front)
HDBaseT Port	One (1) 8P8C port (Shielded RJ45)
Power	One (1) 2 Position Euroblock Connector
EDID Dipswitches	Three (3) 2 position switches
Contact Closures	One (1) 4 position Euroblock Connector
<b>Supported Audio and Video</b>	
HDMI Video Resolutions	SMPTE: 480i, 480p, 576i, 576p, 720p, 1080i, 1080p VESA: Resolutions up to 1920x1200 Color Depth: 24, 30, 36, 48bit
VGA Video Resolutions	SMPTE: 480p@60hz, 576p@60hz, 720p@60hz, 1080p@60hz VESA: <ul style="list-style-type: none"> <li>• 640x480, 800x600, 1024x768, 1280x768, 1280x800, 1280x1024, 1600x1200, 1680x1050, 1920x1200(RB) - @60hz</li> <li>• 640x480, 800x600, 1024x768, 1280x1024 - @75hz</li> <li>• 640x480, 800x600, 1024x768, 1280x1024 - @85hz</li> <li>• 1024x768 - @70hz</li> <li>• 640x480, 800x600 - @72hz</li> </ul>
Maximum Video Compatibility at 60 m	Deep Color 36/30/24 Bit at 1080p (HDMI Input)
Maximum Video Compatibility at 40 m	Deep Color 48 Bit at 1080p, 3D (HDMI Input)
Video Compliance	HDMI and HDCP (Selectable)
HDMI Embedded Audio	Up to PCM 8 channel, Dolby Digital TrueHD, and DTS-HD Master Audio
PC Embedded Audio	Analog stereo line-level (Converted to 2ch 24bit PCM 48kHz)
ARC (Audio Return Channel)	No
HEC (HDMI Ethernet Channel)	No
CEC (Consumer Electronics Control)	Yes (HDMI Pass-through Only)
Baud Rate (Wall plate control)	9600
Supported Baud Rates (Display Control)	9600, 19200, 57600, 115200



<b>HDBaseT Signal Characteristics</b>	
Maximum Distance	60 m
Cable Requirements	Category 6, or 6A with TIA/EIA-568B crimp pattern (shielded cable and connectors are recommended)
Bandwidth	10.2 Gbps
Gain	0 dB – 10 dB at 100 MHz
Signal to Noise Ratio (SNR)	> 70 dB at 100 MHz over 100 m
Return Loss	< -30 dB at 5 KHz
Total Harmonic Distortion (THD)	< 0.005% at 1 KHz
Min-Max Signal Level	< 0.3 V – 1.45 Vp-p
Differential Phase Error	±10° at 135 MHz over 100 m
<b>Chassis and Environmental</b>	
Construction	Black painted metal plate (Back Cover)
Faceplate Colors	White, Almond (Sold Separately), Black (Sold Separately) – ABS Plastic
Dimensions	114mm x 116mm x 35mm (4.49 in. x 4.57 in. x 1.38 in.)
Shipping Weight	0.45 kg (1 lbs.)
Operating Temperature	0° to +40° C (+32° to +104° F)
Operating Humidity	20% to 90%, Non-condensing
Storage Temperature	-10° to +60° C (+14° to +140° F)
Storage Humidity	20% to 90%, Non-condensing
<b>Power, ESD, and Regulatory</b>	
Power Supply	5vDC 2A or PoE (Power over Ethernet)
Power Consumption	10 watts
Default Automatic Standby Mode	30 minutes no signal OR 3 hours no activity
ESD Protection	16kV
Regulatory	CE, RoHS
<b>Other</b>	
Warranty	2 years
Diagnostic Indicators	Front Panel: Two (2) Bicolor LED: Blue, (Purple), Amber HDBaseT: Three (3) SMDs: Heartbeat – Blue, Link – Yellow, HDMI – Green
Included Accessories	White Faceplate Set and Installation Manual
HDBaseT Receiver (A/V, PoE, Control) Compatibility	DIGI-HD60C-R
HDBaseT Receiver (A/V, Control) Compatibility	DIGI-HDE-R, FLX-BI4
HDBaseT Receiver (A/V Only) Compatibility	DIGI-HD70-R

Distances and picture quality may be affected by cable grade, cable quality, source and destination equipment, RF and electrical interference, and cable patches. Intelix specifications are based on straight-through cabling with standard-grade Cat 5e unless noted otherwise.

*This page intentionally left blank.*

*This page intentionally left blank.*

Thank you for your purchase.

Please contact us with your questions and comments.

**Intelix**

8001 Terrace Ave, Ste 201  
Middleton, WI 53562

Phone: 608-831-0880  
Toll Free: 866-462-8649  
Fax: 608-831-1833

[www.intelix.com](http://www.intelix.com)  
[intelix@intelix.com](mailto:intelix@intelix.com)