User Guide

Version 1.0.5

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Datapath Limited 13

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Safety Instructions

Safety Instructions (UK)

To prevent damage to your Datapath product or injury to personnel operating the equipment, please read the following safety precautions prior to operation. These instructions should be made available to all those who will use and operate Datapath products.

Power Supply

All Datapath products require a mains power supply. This power supply must be disconnected when equipment is being upgraded or relocated.

Cables

Do not expose cables to any liquids; doing so may cause a short circuit which could damage the equipment. Do not place heavy objects on top of any cables as this can cause damage and possibly lead to exposed live wires.

Ventilation

All computer equipment should be located in a well ventilated area. All ventilation holes on the computer casing must be kept clear of any obstruction at all times. Failure to do so will result in the system over heating and damaging your equipment.

Working Environment

The equipment should be located in an environment free from dust, moisture and extreme changes in temperature and should be placed on a stable and solid work surface. Liquids (hot/cold drinks etc) should not be placed near the equipment as spillage could cause serious damage.

Gas/Flammable Liquids

%ÌÂÃÂÔÌÏ ÎÉÃ ÅÑÕËÐ Í ÂÎÔ ÔÈÌÇÔÌÄ. ÎÂÔÂÔ ÂÃ ÕÔÂÄÃ ÉÎ ÔÈÅ ÐÔÅÔÂÎÃÃ ÏÉ ÇÁÓ ÏÔ ÁÎÙ ŘÁ Í Í ÁÂÌÅ ÌËÑÕËÅñ ÄÏÉÎÇ ÕÏ ÃÏÔÌÄ ÔÄÕÕÌÔ ÉÎ ÁÎ ÅØÐÌÏÇËÏ Î ÏÔ ÔÄÇÉÎÕÓ ÆÉÂ8

Smoke/Unusual Smells

Should you notice smoke or unusual smells being emitted from your computer, turn Ï ã ÁÎ Â ÕÎÐÌÕÇ ÔÈÄ ÒÙÔÔÂ Í ÉÔÏ Í ÔÈÄ Í ÁÉÎÔ ÓÕÐÐÌÙ8 4ÈÄ ÒÙÔÔÂ Í ÔÉÎÔÌÄ ÔÈÄÎ ÃÄ ÐÁÔÔÄÄ ÔÏ Á ÑÔÁÌÉÆÄÄ ÔÂÄÉÎÉÆÁÉÎ ÉÎÔÔ inspection. Continued operation could result in personal injury and damage to property.

Maintenance

Maintenance should only be carried out by competent technicians, any Datapath plug-in cards that are physically damaged should be returned to Datapath for repair using Datapath RMA procedures.

Disposal

At the end of life all Datapath products should be disposed of as per local laws and regulations dictate. In UK contact Datapath to arrange disposal. Our WEE registration number is WEEE/AA0005ZR.

Instrucciones de seguridad (Esp)

Rogamos leer las siguientes instrucciones de seguridad antes de poner en funcionamiÂÎÔÏ ÅÌ ÅÑÕËÐÏñ Á ÆÎ ÄÂ ÃÔÉÔÁÔ ÄÁđÏÔ ÂÎ ÓÕ ÐÒÏÄÔÕÃÔÏÔ ÄÂ $ÁÔÁÐÁÔÈ Ï ÌÅÔÉÏ Î ÅÔ ÁÌ ÐÃÔÏ Î ÁÌ encargado de su manejo. Poner estas instrucciones a disposición de todos aquellos que ÔÁÙÁÎ Á ÔÔÉÏËÚÁÔ ÙŤÏ Í ÁÎ ÅÉÁÔ ÌÏÎÔ ÐÒÏÄÔÕÃÔÏÔ ÄÂ $ÁÔÁÐÁÔÈ8

Alimentación eléctrica

4ÏÄÏÔÌÏ ÐÒÏÄÔÕÃÔÏÔ ÄÂ $ÁÔÁÐÁÔÈ ÔÅÑÕËÅÔÂÎ ÕÎÁ £ÕÂÎÔÂ ÄÂ ÁÌË Í ÂÎÔÁÉÆÈÎ ÅÌ ÏÁÉÆÈÄ8 %ÔÁ £ÕÂÎÔÂ ÄÂ ÁÌË Í ÂÎÔÁÉÆÈÎ ÅÌ ÏÁÔÔÉÄÄ ÄÄÂÄ ÔÁ ÄÂÔÄÏ ÎÂÃÔÁÄÄÄ ÄÔÔÁÎÔÂ ÌÁ Ô ÁÁÔÁÉÆÈÎ ÅÌ ÏÁÔÔÉÄÄ ÄÔÔÁÎÔÂ ÌÁ renovación o traslado.

Cables

No exponer los cables a líquidos, ya que ello puede causar un cortocircuito y, por consiÇÔÉÂÎÔÂñ ÄÁđÏÔ ÂÎ ÅÌ ÅÑÕËÐÏ8 . Ï ÁÏÌÏÄÁÔ ÏÂÉÂÔÏÔ ÐÅÔÁÄÄ ÏÔ ÔÁÔÂ Ì ÏÔ ÄÁÁÌÅÔñ ÙÁ ÑÔÅ ÂÔÔÏ ÐÔÅÄÄ Ï ÂÔ ÄÁđÏÔ Ù Ð Ï ÎÂÔ ÁÌ ÄÄÔÂÔÉÂÔÔÏ Ì ÏÔ ÄÄÂÌÅÔ ÔÉÔÏ8

Ventilación

Todos los equipos informáticos deben estar situados en un área bien ventilada. ManÔÂÎÂÔ ÔÏÄÏÔÌÏÔ ÏÔÉÆÄÉÏÔ ÄÂ ÔÂÎÔÉÌÁÆÉÈÎ ÄÂ ÌÁ ÁÂÔÂÁÔÁ ÄÂÌ ÏÔÄÂÎÂÄÏÔ ÔÉÂ Í ÐÔÂ ÏÉÂÔÂÔ ÄÂ obstrucciones de cualquier tipo. En caso contrario, podría producirse un sobrecalenÔÁ Í ÉÂÎÔÏ ÃÂÌ ÔÉÔÔÂ Í Á Ù ÄÁđÏÔ ÂÎ ÅÌ ÅÑÕËÐÏ8

Entorno de trabajo

%ÌÃÑÕËÐÏ ÄÂÂÂ ÂÔÔÁÔ Á Í ÐÌÁÚÁÄÏ ÂÎ ÔÎ Á Í ÂÉÃÎÔÂ ÔÉÎ ÐÏÌÒÏñ ÈÒ Í ÄÄÁÁ ÎÉÄÄ Í ÂÉÏÔ ÂÔÕÔ-ÃÏÔ ÄÂ ÔÂ Í ÐÂÔÁÔÕÔÁ Ù ÄÂÂÂ ÔÂÔ ÔÉÔÔÁÄÏ ÔÏÎÂÔÂ ÔÎÁ ÔÔÐÂÔÆÃÉÂ ÁÔÔÁÂÌÁ Ù ÔèÌËÄÁ8 . Ï ÃÏÌÏÃÁÔ líquidos (bebidas calientes/frías, etc.) cerca del equipo, ya que un derrame podría causar ÇÔÂÔÂÔ ÄÄđÏ8

'ÁÓŤÌþÑÕËÄÏÔÉÎÎKÁ Í ÁÂÌÅÔ

%Ì ÃÑÕËÐÏ ÄÌÃÃÔÒËÎÉÃÏ ÎÔÎÃÁ ÄÂÂÂ ÔÂÔ ÔÁÁÄÏ ÂÎ ÐÒÂÔÂÎÃÉÁ ÄÂ ÇÁÓ Ï ÌþÑÕËÄÏ ÉÎKÁ Í ÁÂÌÅñ ÙÁ que esto podría causar una explosión o un incendio grave.

Humo/olores inusuales

En caso de percibir humo u olores inusuales provenientes de su ordenador, apagar y ÄÂÔÂÎÃÈÕËÂÔ ÅÌ ÃÑÕËÐÏ ÄÂ ÌÄ ÒÂÄ ÅÌ ÏÄÔÉÂÄ8 %Ì ÔÉÔÔÂ Í Á ÄÂÂÂ ÔÂÔ ÂÏ Î ÆÁÄÏ ÂÎÔÏ ÏÃÂÔÔ Á ÔÎ Ô ÎÂÔÁÔÉÆÁÁÄÏ ÐÁÔÁ ÔÉ

inspección. Si el equipo continuara funcionando, esto podría ocasionar lesiones personÁÌÅÔ Ù ÁÁđÏÔ Í ÁÔÂÉÁÌÅÔ8

Mantenimiento

%Ì Í ÁÎÔÂÎÉ Í ÉÂÎÔÏ ÓÏÌÏ ÄÂÂÂ ÔÅÔÃÕÔÁÄÏ ÐÏÔ ÔÏÏÂÎÉÃÏÔ ÃÁÐÁÃÉÔÁÄÏ8 ¸ÁÚ ÔÁÔÉÂÔÁÔ ÉÎÔÂÔÔÁÔÌÅÔ þÐÌÕÇZÉÎţ ÄÂ $ÁÔÁÐÁÔÈ ÑÕÂ ÁÔÔÏ Î ţÞÔÉÂÁ Í ÂÎÔÂ ÁÁđÁÁÔ ÔÅÔÃÕÔÁÄÏ ÂÂÂÎ Ô ÔÂ ÁÁđÁÁÔ ÔÉÔÔÂ Á ÔÎ Ô a Datapath para su reparación según los procedimientos RMA (Return Merchandise Agreement) de Datapath.

Eliminación

!Ì ÆÎÁÌ ÄÂ ÔÕ ÔÉÂÁ ŤÉÎÎñ ÔÏÄÏÔÌÏ ÐÒÏÄÔÕÃÔÏÔ ÄÂ $ÁÔÁÐÁÔÈ ÄÂÂÂÎ ÔÂÔ ÃÌË Í ÉÎÁÄÏÔ ÄÂ acuerdo con las leyes y normativas locales. En el Reino Unido, contactar a Datapath ÐÁÔÁ ÏÇÂÎËÙÁÔ ÌÁ ÃÎÉ Í ÉŤÁÉÎÉ Í ÁÔÂ %ÌÃÑÕËÄÏ ÁÌÄ Electronic Equipment) es WEEE/AA0005ZR.

Consignes de sécurité (Fr)

!ÆÎ ÄÂ ÎÂ ÐÁÔ ÂÎÄÏ Í ÍÁÇÂÔ ÔÏÔÔÂ ÐÒÏÄÔÉÔ $ÁÔÁÐÁÔÈ ÂÔ ÄâïÏÉÔÂÔ ÔÏÕÔ ÔÉÓÑÕÂ ÄÂ ÂÌÅÓÔÔÂ ÄÔ ÐÅÔÔÎÎÏÔÂ ÌÄ Í ÁÔïÏÉÂÌñ ÔÂÔÉÌÅÙ ÌËÔÂ ÌÅÔ ÄÏ ÔÉÇÎÂÔ ÄÂ ÔÂÔÉÔÔÏ ÔÉÉÓÁÔÂÔÔ ÄÔÉÂÔÉÔÔÂ ÄÔ avant toute utilisation. Ces instructions doivent être mises à disposition de toute personne souhaitant utiliser et exploiter les produits Datapath.

!ÌË Í ÅÎÔÁÉÏÎ Î ÏÌÄÂÔÉÑÔÅ

4ÏÕÔÌÅÔ ÐÒÏÄÔÉÔ $ÁÔÁÐÁÔÈ ÔÅÑÕËÎÔÔÂ ÎÔÔÂ ÔÎ Ä ÁÌË Í ÅÎÔÁÉÔÉÎ Î ÏÌÄÂÔÉÔÔÂ ÐÒÉÎÄÉÐÁÔÈ #ÅÔÔÅ ÁÌË Í ÅÎÔÁÉÔÉ Î ÏÌÄÂÔÉÔÔÂ ÄÏÉÔ ØÔÔÅ ÉÎÔÂÔÔÏ Í ÐÕÄ ÂÎ ÃÁÓ ÄÄ Í ÉÓÄ Ü ÉÏÕÔ ÏÔ ÄÄ ÔÂÌÏÄÂÉÔÉÔÔÂ ÄÔ Î ÃÔ Í ÁÔïÉÂÌ8

Câbles

Ne pas exposer les câbles à un liquide quelconque car cela pourrait provoquer un court-ÄÉÔÃÔÉÔ ÔÔÔÄÄÐÔÉÂÌÅ ÄâÎÎÄÏ Í Í ÁÇÂÔ ÌÄ Í ÁÔïÔÉÅÌ8

. Å ÐÁÔ ÐÌÁÅÅÔ ÄâïÏÉÅÂÔÔ Ï ÏÕÄÔ ÔÔÔÄÔ ÃŸÂÌÁÔ ÃÁÔ ÃÅÌÁ ÐÏÕÔÁÔÂÔÔÏ ÃÁÔÔÁÔ ÄÄ ÄÏ Ï Í ÁÇÂÔ Å Ô ÏÎÔÉÔÔÂ ÏÔÔÂÎÌÅ Í ÂÎÔ Ü ÄÂÔ ÆÌÔ ÏÄÂÔÔÂ Í ÁÔÔÁÔÂÔÔ ÄÔÎÔÔÂ ÄÔ

Ventilation

4ÏÕÔ Í ÁÔïÔÉÅÌ ÉÎţÏÔ Í ÁÔÉÑÕÂ ÄÏÉÔ ØÔÔÅ ÄÉÔÐÏÔÏ ÄÁÎÔ ÕÎ Ï ÂÎÄÔÏÉÔ ÅÉÂÎ ÔÂÎÔÉÌ8 6ÅÉÌÅÔ Ü Ï Í ÎÔÉÔÔÂ ÉÄ Í ÁÉÔ Ï ÂÔÔÔÔÂÔÔ ÌÅÔ ÏÉÆÁÂÔ ÄÂ ÔÂÎÔÉÔÔÂ ÔÂÔÔÂ ÄÂ ÔÂÔÔÂ ÄÂ ÔÂÔÔÂ Ä

FCC Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limit are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction guide, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

#ÈÁÎÇÅÓ ÏÒ Í ÏÄÉÆÃÁÔÉÏ Î Ï Ô ÅØÐÒÅÓÌÙ ÁÐÐÒÏÖÄ ÂÙ ÔÈÅ ÐÁÒÔÙ ÒÅÓÐÏ ÎÓÉÂÌÅ Æ ÏÒ ÃÏ Í ÐÌÉÁÎÃÅ ÃÏÑÌÄ ÖÏÉÄ ÔÈÅ ÕÓÅÒ¿Ó ÁÕÔÈÏÒÉÔÙ Ô Ï ÏÐÅÒÁÔÅ ÔÈÅ ÅÑÕÉÐ Í ÅÎÔ8

Introduction

4ÈÅ 6ÉÓÉÏ Î3#Ę ($ÏƆ ÈÁÓ ÆÏÕÒ Ï Î ÂÏÁÒÄ ÖÉÄÅÏ ÃÁÐÔÕÒÅ ÃÈÁÎ ÎÅÌÓĵ ô× Ï ÃÈÁÎ ÎÅÌÓ ÏÆ ($ -) X8Ï ÏãÅÒÉÎÇ ΩήÏΦØΨXάΦ Ά ΩΦ ÆÒÁ Í ÅÓ ÐÅÒ ÓÅÃÏ ÎÄ ¡ÆÐÓĘ ÁÎÄ ô× Ï ($ -) X8Ω ÃÈÁÎ ÎÅÌÓ ÏãÅÒÉÎÇ X í ΨΦØXΦήΦ Ά άΦ ÆÐÓĥ ÁÌÌ operating independently of each other. This enables four separate video sources to be captured and controlled simultaneously. The VisionSC-HD4+ card also has embedded audio support across all four channels.

Key Features

LiveStream Technology

- , Ï × ÌÁÔÅÎÃÙ ÖÉÄÅÏ ÁÎÄ ÁÕÄÉÏ ÃÁÐÔÕÒÅ Í ÉÎÉ Í ÉÚÅÓ ÔÈÅ ÄÅÌÁÙ ÐÒÉÏ ÔÏ Ð Ï ÓÔ ÐÒÏÃÅÓÓÉÎÇ

MultiStream

- Open and independently control multiple instances of the same capture from a single input source

Powerful hardware scaler

- ! ÄÉÕÓÔ ÔÈÅ ÉÎÃÏ Í ÉÎÇ ÖÉÄÅÏ ÓÉÚÅ ÔÏ ÙÏÕÒ ÒÅÑÕÉÒÅ Í ÅÎÔÓ

Text and bitmap overlay

- / ÖÅÒÌÁÙ ÔÅØÔ ÁÎÄ É Í ÁÇÅÓ Ï Î ÔÏ ÔÈÅ ÃÁÐÔÕÒÅ ÂÕãÅÒ

Automatic video signal detection

- Accurate signal detection for all signal sources.

Hardware Overview

Quad Channel Video Capture

Channel	TDMS Signalling	HDCP	Max Resolution	0ÉØÅÌ #ÌÏÃË - (Ú
1	HDMI 1.4a	HDCP 1.4	ÏΦíáØΨXáΦ	Ψíε
2	HDMI 1.4a	HDCP 1.4	ΨΦíáØΨΦíá	165
3	HDMI 1.4a	HDCP 1.4	ÏΦíáØΨXáΦ	Ψíε
4	HDMI 1.4a	HDCP 1.4	ΨΦíáØΨΦíá	165

Audio Capture

- Embedded audio support across all four channels.

Datapath Vision Performance Driver

- Multiple cards per system, 16 streams per card
- Frame sync and time stamping
- Automatic signal detection
- Direct Show interface
- Datapath 2 ' "%ÁÓÙ ! 0)

Models

VisionSC-HD4+/H - Capture card with 2 x HDMI splitter cables.

VisionSC-HD4+/D - Capture card with 2 x DVI splitter cables.

Fig.1

Fig.2

Software Overview

!ÌÌ $ÁÔÁÐÁÔÈ ÃÁÐÔÕÒÅ ÃÁÒÄÓ ÁÒÅ ÓÕÐÐÌÉÅÄ ×ÉÔÈ Á ÐÏ×ÅÒÆÕÌ ÓÏÆÔ×ÁÒÅ ÁÐÐÌÉÃÁÔÉÏÎ ÆÏÒ ÃÏÎÆÇÕÒÉÎÇ ÔÈÅ ÆÏÒ Í ÁÔ ÏÆ the input sources and displaying the data.

Video Streaming

DirectShow drivers for WDM Streaming driver supports the following applications, to encode, record and ÓÔÒÅÁ Í ÖÉÄÅÏ ÏÖÅÒ ÎÅ× ÏÒËÓ ÏÒ ÔÈÅ)ÎÔÅÎÔ

- Microsoft Media Encoder®
- VLC
- VirtualDub
- Any other DirectShow encoding software

For streaming applications, Vision cards can be used with Windows Media Encoder to compress and stream captured video. To replay the video, use Windows® Media Player.

Any application compatible with Windows® DirectShow technology can use Vision capture cards due to their built-in WDM support.

Vision Software Capabilities

4É Í ÅÓÔÁ Í Ð ÓÕÐÐ ÏÒÔ ÆÏÒ ÓÔÒÅÁ Í É Î Ç ÓÙ Î ÃÈÒ Ï Î ÉÓÁÔÉ Ï Î

- Synchronisation of multiple inputs across multiple cards
- Synchronise systems using network clock synchronisation
- For edge blending and other applications

&ÌØÉÂÌÅ ÁÎÄ ÃÏÎÆÇÕÒÁÂÌÅ %$)$ - ÁÎÁÇÅ Í ÅÎÔ

- Allows programming of custom EDID parameters for capture cards

Low Input to Output Capture Latency

$ - ! ÔÏ ÔÈÉÒÄ ÐÁÒÔÙ ÇÒÁÐÈÉÃÓ ÖÅÎÄÏÒ ÂÁÃË ÁÎÄ ÆÒÏÎÔ ÂÕãÅÒÓ ÖÉÁ $ÉÒÅÃÔ$

- Compatibility with AMD DirectGMA
- Compatibility with Nvidia GPUDirect

5ÓÅÒ - ÏÄÅ ÆÌÔÅÒ ÓÏÕÒÃÅ ÓÅÌÅÃÔÉÏÎ

- Enables cropping support in DirectShow on all inputs
- Supports Start and Stop trigger interface on all Visi0n inputs

$ÁÔÁÐÁÔÈ 5ÎÉÆÅÄ 6ÉÓÉÏÎ $ÒÉÖÅÒ

- Multiple cards per system, 16 streams per card
- Frame sync and time stamping

- DirectShow interface
- 4ÈÅ 2 ' "%ÁÓÙ !0) Æ Ï Ò ÁÄÖÁÎÃÅÄ ÁÕÄÉÏ ÁÎÄ ÖÉÄÅÏ ÃÏ ÎÔÒÏÌ
- Fully integrated for use with Datapath Wall Control software for video wall applications

Multistream

$ÁÔÁÐÁÔÈßÓ - ÕÌÔÉ3ÔÒÅÁ Í ÆÅÁÔÕÒÅ ÉÓ ÁÖÁÉÌÁÂÌÅ Ï Î ÁÌÌ $ÁÔÁÐÁÔÈ ÃÁÐÔÕÒÅ ÃÁÒÄÓ ÁÎÄ ÅÎÁÂÌÅÓ Í ÕÌÔÉÐÌÅ independently formatted video streams to be setup in parallel.

Each stream can be formatted completely independently and individual selection of resolution, colour ÓÐÁÃÅß ÁÎÄ ÃÒÏÐÐÉÇ ÒÅÇÉÏ Î ÃÁÎ ÂÅ ÓÅÔ Æ Ï Ò ÅÁÃÈ ÓÔÒÅÁ Í 8 4ÈÉÓ Í ÁØÉ Í ÉÚÅÓ ÂÁÎÄ×ÉÄÔÈ ÕÔÉÌÉÓÁÔÉÏ Î ÏÆ ÔÈÅ ÃÁÐÔÕÒÅ ÃÁÒÄ 0#)Å É Î ÔÅÒÆÁÃß ÁÎÄ ÁÌÓÏ ÓÉ Í ÐÌÆÅÓ ÄÅÖÅÌÏÐ Í ÅÎÔ ÔÁÓËÓ ÆÏ Ò ÁÐÐÌÉÃÁÔÉÏ Î ÄÅÖÅÌÏÐÅÒÓ ×ÈÏ ÄÏ Î ÏÔ need to implement video stream reformatting separately.

Vision Application Overview

The ÁÐÐÌÉÃÁÔÉÏ Î ÄÉÓÐÌÁÙÓ ÔÈÅ ÃÏ Î ÎÃÔÅÄ ÓÏÕÒÃÅ É Î Á ×É Î Ä Ï ×ή É Ó ÈÁÓ ÔÈÅ Æ Ï ÌÌ Ï ×É Î Ç ÆÅÁÔÕÒÅÓ¿

- 3ÃÁÌÅÓ ÔÈÅ ÄÁÔÁ ÔÏ Æ Ô É Î ÔÈÅ ×É Î Ä Ï ×
- Ability to set up sources accurately (settings automatically saved)
- 3ÁÖÅ Á ÓÉ Î Ç Ì Æ Ò Á Í Å ÔÏ Á Æ Ì Å É Î Ï Î Å Ï Æ ÔÈÅ Æ Ï Ì Ï ×É Î Ç Æ Ï Ò Í ÁÔÓ¿ " - 0ň *0% ' ň ')&ň 4)&&ň 0 . '
- Print a single frame
- Maintain the aspect ratio of the displayed captured data
- Cropping
- Display text over the data (on-screen display)
- Command line interface
- (ÅÌÐ Æ Ì Å Ä Ï Ã Õ Í Å Î ÔÉ Î Ç ÁÌÌ ÆÅÁÔÕÒÅÓ

Note:

The supplied drivers and software require that you are using:

- Windows® XP, Windows® Vista, Windows® Server 2003, Windows® Server 2008, Windows® 7 (x86 and x64 Operating Systems), Windows® 8 or Linux
- CD / DVD ROM Drive

Specification

" ÏÁÒÄ &Ï Ò Í ÁÔ	O#)Ƶ%ØÐÒÅÓÓ Øή ÐÌÕÇƵÉÎ ÃÁÒÄĥ XXΦ Í Í Ø Χéé Í Í ɟÉÎÂÌ ÈÅÁÔ ÓÙÎÃƶ
Connectors (main board)	Ψ Ø $3 - Ÿ í ÃÏ Î Î ÅÃÔ Ï ÒÓ ÐÌÕÓ ÁÄÁÐÔÅÒÓ ɟÓÅÅ Í Ï ÄÅÌ Ï ÐÔÉ Ï Î Óƶ
Maximum Capture Resolution	#ÈÁÎ Î ÅÌÓ X Ǫ Ωƶ ΨØΩήÏ ΦØΨΧάΦÐ Ά άΦ ÆÐÓ #ÈÁÎ Î ÅÌÓ Ψ Ǫ Ïƶ ΨØΧ í ΨΦØΧΦήΦ Ά άΦ ÆÐÓ
&ÒÁ Í Å "Õ ÅÒ	éάή - "
Pixel Transfer Formats	2 ' "ƶŸƵŸƵŸĥ ŸƵάƵŸ Ï Ò ήƵήƵή ɟΨ Ï ÂÉÔ7ΩΨÂÉÔƶ 956ƶ Ïƶ Ψƶ Ψ - / . /ƶ ήÂÉÔ
Audio Capture	HDMI audio can be selected as source for audio streaming.
Signalling Support	TMDS
Operating System Support	Windows XP, Windows Server 2003, Windows Vista, Windows Server 2008, 7 ÉÎ Ä Ï × Ó éĥ 7 ÉÎ Ä Ï × Ó ήƵήȣX Á Î Ä ,É Î Õ Ø
Power Requirements	Max current at 12V – 0.85A Max current at 3.3V – 0.45A - ÁØ Ð Ï × Å Ò Є Xή 7
Operating Temperature	Φ Ô Ï ΩŸ Σ# ɟ ΩΨ Ô Ï í άΣ&ƶ
Storage Temperature	ƵΨΦ Ô Ï éΦ Σ# ɟ ƵÏ Ô Ï XŸήΣ&ƶ
Relative Humidity	Ÿɱ Ô Ï í Φɱ Î Ï ÎƵÃ Ï Î ÄÅ Î ÓÉ Î Ç
Warranty	3 years

We are continuously developing the technology used within our product ranges delivering outstanding É Î Î Ï ÖÁÔÉÖÅ Ó Ï Ì ÕÔÉ Ï Î Óĥ ÔÈÅÒÅÆ Ï ÒÅ ÔÈÅ ÓÐÅÁÉÆÃÁÔÉ Ï Î Í ÁÙ ÃÈÁ Î ÇÅ ÆÒ Ï Í ÔÉ Í Å Ô Ï ÔÉ Í Å8

Unpacking

Your ÐÁÃËÉÎÇ ÂÏØ ÓÈÏÕÌÄ ÃÏ ÎÔÁÉÎ ÔÈÅ ÆÏÌÌ×ÉÎÇ ÉÔÅÍÓ¸

- 6ÉÓÉÏÎ 3#Ɀ ($ ÏƆɀ 1ÕÁÄ ($ -) ÖÉÄÅÏ ÃÁÐÔÕÒÅ ÃÁÒÄ ÁÎÄ ÄÅÐÅÎÄÉÎÇ ÏÎ ×ÈÉÃÈ Í ÏÄÅÌ ÏÒÄÅÒÅÄ¸ ÅÉÔÈÅÒ¸
- 2 x HDMI splitter cables, or
- 2 x DVI splitter cables

Fig.3

Note:

All plug-in cards are static sensitive and are packed in anti-static material. Please keep the card in its packaging until you are ready to install.

)Ô ÉÓ ÒÅÃÏ Í Í ÅÎÄÅÄ ÔÈÁÔ ÙÏÕ ÄÏ ÎÏÔ ÄÉÓÃÁÒÄ ÔÈÅ ÐÁÃËÉÇ ÂÏØ ÕÎÔÉÌ ÙÏÕ ÁÒÅ ÃÏ Í ÐÌÅÔÅÌÙ ÓÁÔÉÓÆÉÄ ×ÉÔÈ ÔÈÅ capture card and it is fully installed and working correctly. We also recommend that you make a note of the serial number of the card in a prominent place before the card is plugged into the computer. This should hasten any query should you need to contact our Technical Support Department. The serial number is displayed on the card itself and the box label.

Installing the Capture Card

9ÏÕ ÁòÅ ÌÉËÅÌÙ ôÏ ÎÅÄ Á ŘÁô ÂÌÁÄÅ ÁÎÄ ŽÏò Á ÃòÏÓÓ ÈÅÁÄ ÓÃòÅ×ÄÒÉÖÅò ÆÏò ÔÈÅ ÉÎÓÔÁÌÌÁÔÉÏÎ ÏÆ ÔÈÅ VisionSC-HD4+ card; it would be useful to have these to hand before you begin.

- 0Ï×ÅÒ ÄÏ×Î ÔÈÅ O# ĵÉÎÃÌÕÄÉÎÇ ÐÅÒÉÐÈÅÒÁÌÓ ó×ÉÔÃÈ ÏāÁÔ ÔÈÅ ÍÁÉÎ ÁÎÄ ÄÉÓÃÏÎÎÅÃÔ ÁÌÌ ÔÈÅ ÃÁÂÌÅÓ connected to the computer, noting the positions for accurate reconnection
- Remove the PC cover
- Locate a vacant PCI Express slot (x4 or higher) on the motherboard and remove the blanking plate (retain all screws)
- Reconnect all cables to the PC then connect input cables (not supplied) distributing the video source signal to a connectors on the VisionSC-HD4+ capture card
- Power up the PC and commence the software installation

How to Connect Input Sources

The VisionSC-HD4+ card has two $3 - Ÿí ÃÏÎÎÅÃÔÏÒÓ, the connectors support DVI or HDMI using the supplied splitter cables.

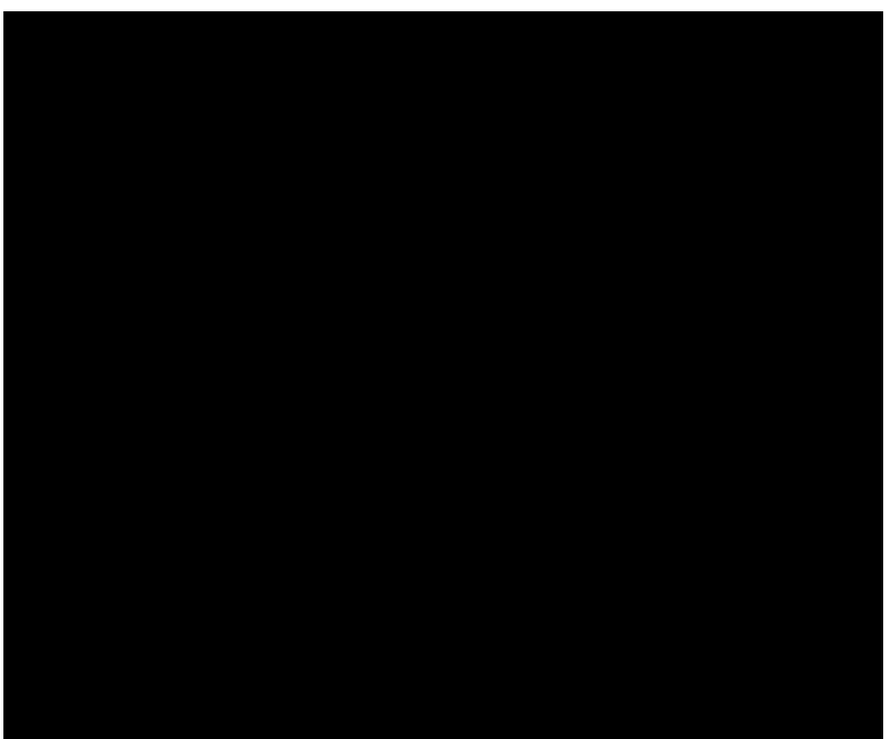


Fig.4

Care should be taken when connecting the splitter cables to the VisionSC-HD4+ card, there is no requirement to force the cable into the connector. Forcing the cable into the connector could result in damage not covered by the warranty.

Installing Multiple Cards

Multiple cards can be installed in a system providing a large number capture channels. Combinations of Vision capture cards in the same machine are supported by the Vision driver.

In order to control the order in which the driver uses the cards, it is recommended when installing multiple cards that the **J5** ÌÉÎËÓ Ï Î ÔÈÅ 6ÉÓÉÏ Î 3#Ƶ ($ Ï Ɔ ÁÒÅ ÃÏ Î ÆÇÕÒÅÄ8 4ÈÅ ÅØÁ Í ÐÌÅ ÂÅÌÏ × ÓÈÏ ×Ó ÔÈÅ ÉÕ Í ÐÅÒ ÌÉÎË settings for up to 32 cards in a single system. When two cards share the same link settings, their order is determined by the PCIe bus.



Fig.5

DirectShow

If you change the link ordering after installation you must run **dplinks.exe**. This program will update the existing input names used by the windows DirectShow interface.

To run the dplinks program open the **Run** dialogue by clicking on **Start/Run** and type dplinks and then press Enter.

4ÈÅ ÐÒÏÇÒÁ Í ×ÉÌÌ ÒÕÎ ÈÏ×ÅÖÅÒ Î Ï Î ÔÉÆÃÁÔÉÏ Î Ó ÁÒÅ ÄÉÓÐÌÁÙÅÄ8

Firmware Upgrades

The VisionSC-HD4+ cards allow Æò Í ×ÁòÅ ÕÐÇòÁÄÅÓ ôÏ ÂÅ ÃÏ Í ÐÌÅôÅÄ ÏÎ ÓéôÅ òÁôÈÅò ôÈÁÎ òÅôÕòÎéÎÇ ôÈÅ ÃÁòÄ ôÏ $ÁôÁÐÁôÈ8 7 ÈÅÎÅÖÅò Á Æò Í ×ÁòÅ ÕÐÇòÁÄÅ éÓ ÐÅò£Ïò Í ÅÄ‘ ôÈÅ 3 7 Ψ ÏÎ ôÈÅ $)0 Ó×éôÃÈ Í ÕÓô ÂÅ ÓÅô / .8 4ÈÅ DIP Switch can be located on the back of the VisionSC-HD4+ (See Fig. 6). To perform the upgrade, follow the step-by-step instructions provided by the upgrade application. The VisionSC-HD4+ is shipped with the SW2 switch set at ON, therefore no action should be necessary.

In the unlikely event that something goes wrong during the upgrade process (e.g. System power outage) it is possible to revert to the factory settings by powering down the system, temporarily setting SW2 to the OFF position then powering up the system. Once the system has rebooted, set the SW2 back to the ON ÐÏÓéôéÏÎ Î ¡×ÈéÌÅ ôÈÅ ÓÙÓôÅ Í éÓ ÓôéÌÌ ÐÏ ×ÅòÅÄ ÕÐq Á Î Ä òÅÓÔÁÔÛ ôÈÅ Æò Í ×ÁòÅ ÕÐÇòÁÄÅ ÐòÏÃÅÓÓ8

)Ô ÓÈÏÕÌÄ ÂÅ Î ÏÔÅÄ ôÈÁô ôÈÅ ÌÁÔÅÓô ÄòéÖÅò é Î ÓôÁÌÌÁôÉÏ Î ÐòÏÇòÁ Í éÎÃÌÕÄÅÓ ÁÎ ÁÕÔÏ Í ÁôéÃ Æò Í ×ÁòÅ ÕÐÄÁôÅ‘ ÉÆ required. Therefore, prior to installing the application and driver, ensure that SW2 is set to ON.



Fig.6

Software Installation

The Vision software (driver and application) is installed by inserting the CD that was shipped with your card into your CD ROM drive. The installation process should start automatically.

Should the CD fail to autorun use Explorer to browse the CD, locate then double click on install.exe ÆÌÅ Å8Ç8 d:/install.exe and click on Install Software... ÁÎÄ ÆÏÌÏ× ÔÈÅ ÉÎÓÔÁÌÌÁÔÉÏÎ ×ÉÚÁÒÄ ÉÎÓÔÒÕÃÔÉÏÎÓ ÁÓ prompted.

2ÅÇÕÌÁÒ ÓÏÆÔ×ÁÒÅ ÕÐÄÁÔÅÓ ÁÒÅ ÁÖÁÉÌÁÂÌÅ ÆÒÏ Í ÏÕ ×ÅÂÓÉÔÅ¸ www.datapath.co.uk

Also available on the Datapath CD:

- The Release Notes - The release notes contain the latest information on the VisionAV-HD4+
- Installation instructions.
- Release history
- Known problems
- Troubleshooting
- The application (ÅÌÐ &ÉÌÅ Ž)ÎÓÒÕÃÔÉÏÎ Ï Î È× ÔÏ ÕÓÅ ÔÈÅ ÁÐÐÌÉÃÁÔÉÏÎ 4ÈÅ ÈÅÌÐ ÆÌÅ ÉÓ É Ä¿ÓÏÆ×ÁÒÅ ÖÉÓÉÏÎ8ÃÈ Í 8 4ÈÅ ÈÅÌÐ ÆÌÅ Í ÕÓÔ ÂÅ ÐÒÅÓÅÎÔ Ï Î ÔÈÅ ÌÏÃÁÌ Í ÁÃÈÉÎÅ ÔÏ ÖÉ×ÉÔ ÃÏÎÔÅÎÔ8

Using the card with other Datapath products

The VisionSC-HD4+ captures data and stores it in an on-board ÖÉÄÅÏ ÂÕãÅÒ8 4ÈÉÓ ÄÁÔÁ ÉÓ ÔÈÅÎ ÃÏÐÉÅÄ ÕÓÉÎÇ DMA to the host system for display, storage or streaming.

When a Datapath graphics card is used, the VisionSC-HD4+ transfers the data directly to the graphics card thereby increasing performance. The VisionSC-HD4+ sends the relevant portions of each captured image to each display channel and instructs each channel to use its graphics engine to render the data. This fully utilises the hardware and dramatically increases performance.

When a Direct3D compatible graphics card is used the data can be transferred direct to the graphics card ÉÎ Á ÓÉ Í ÉÌÁÒ Í Á Î ÎÅÒ ÔÏ ÔÈÅ $ÁÔÁÐÁÔÈ ÇÒÁÐÈÉÃÓ ÃÁÒÄ ×ÉÔÈ ÔÈÅ ÓÁ Í Å ÂÅÎÅÆÉ ÏÆ Î Ï ÎÇÔÅÁÒÉÎÇ ÃÁÐÔÕÒÅ8

When the data is displayed on a non Datapath graphics card, the VisionSC-HD4+ sends the data to system memory or direct to the graphics card, dependant on the software used for display.

Datapath Limited

Datapath has a long and very successful history in the computer graphics industry. Datapath has been ÄÅÓÉÇÎÉÎÇ ÁÎÄ ÓÕÐÐÌÙÉÎÇ ÈÉÇÈ ÐÅÒÆÏÒ Í ÁÎÃÅĥ ÈÉÇÈ ÑÕÁÌÉÔÙ ÇÒÁÐÈÉÃÓ ÄÉÓÐÌÁÙ ÓÙÓÔÅ Í Ó ÔÏ ÔÈÅ × ÏÒÌÄ¾Ó ÌÁÒÇÅÓÔ ÁÎÄ Í ÏÔ ÄÅ Í ÁÎÄÉÎÇ ÃÏ Í ÐÁÎÉÅÓ ÁÎÄ É ÎÓÔÕÔÉÏÎ Ó ÓÉÎÃÅ X íήΨ8 $ÁÔÁÐÁÔÈ ×ÁÓ Ï ÎÅ ÏÈÅ ÆÏÕÎÄÉÎÇ companies of multi-screen Windows acceleration using single and multi board solutions. Now using the ÖÅÙÌÁÔÅÓ ÄÉÓÐÌÁÙ ÔÅÃÈÎÏÌÏÇÙ $ÁÔÁÐÁÔÈ ÏãÅÓ Ó Ï Í Å Ï ÆÔÈÅ × ÏÒÌÄ¾Ó ÌÅÁÄÉÎÇ Í ÕÎÔÉ ÓÃÒÅÅ Î ÇÒÁÐÈÉÃÓ accelerators for the most demanding applications.

As new technology advances, so we at Datapath improve the performance and functionality of both our hardware and software to give our customers more. Following a continuous development program, we pride ourselves on our support and responsive nature towards all our customers and their changing needs. As more sophisticated equipment and techniques become readily available, so we are there to exploit the power and potential that this technology presents.

Technical Support

Registered Users can access our technical support line using, email, and the Support page on the Datapath Web Site, usually with a response within 24 hours (excluding weekends).

Via Email

Send an email to support@datapath.co.uk with as much information about your system as possible. To ÅÎÁÂÌÅ Á Ó×ÉÆÔ ÒÁÓÐ Ï ÎÓÅ ×Å ÎÅÄ ÔÏ ËÎ Ï × ÔÈÅ ÆÏÌÌ Ï ×É Î ÇÅÔÁÉÌÓ¿

- 3ÐÅÃÉÆÙÁÔÉ Î Ï ÆÔÈÅ 0# Ɀ É ÎÃÌÕÄÉÎÇ ÐÒ Ï ÃÅÓÓ Ï Ó ÓÐÅÅÄ
- Operating System
- Application Software
- Datapath Hardware / Software
- 4ÈÅ ÅØÁÃÔ ÎÁÔÕÒÅ Ï ÆÔÈÅ ÐÒ Ï ÀÌÅ Í Ɀ Á Î Ä ÐÌÅÁÓÅ ÂÅ ÁÓ ÓÐÅÃÉÆÃ ÁÓ Ð Ï ÓÓÉÂÌÅ8

Please quote version and revision numbers of hardware and software in use wherever possible.

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