Digital & 3D

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Selecting the "Right" 3D

3D in General – The process of sending image signals to each eye in phase to create a 3-dimensional effect. In today's market we can do this with a single digital projector. However, there are dual digital system packages as well as single 35mm packages available (Technicolor 3D).

Active vs. Passive – As depicted above, the 3D effect is created by sending separate signals to each of eye. This is typically achieved by using filters (glasses). There are two types of filtering, active and passive. Passive filtering systems can use a silver or white screen and non-active glasses to create the 3-D effect. These systems include Dolby 3D (High Gain White Screens) and Real-D and Master Image (Silver screens). Active systems use battery operated glasses to create the 3-D effect and typically use high gain white screens.

Silver vs. White – Real D and Master Image use silver screens to create 3-D effect. The benefit is a gain of 2.4 times the light and thus smaller lamps and longer warranty periods for the lamps purchased. This results in lower capital costs up front (smaller projectors) and lower operational costs over the long haul (smaller lamps, lower price and longer warranties). White screens are used for both Dolby and Xpand XD. Remember, 3-D requires extra light and as such, you will typically be required to change the existing "Matte White" screens to high gain screens (1.8-2.2 gains). The down side is typically larger projectors and larger lamps which results in higher capital and operating costs.

Leased vs. Buyout – To add more confusion to the equation, Some 3-D systems can be purchased outright, others leased. Dolby, Master Image and Expand XD are all systems that can be purchased outright. A customer has to decide if they are getting into 3D to stay competitive or to make profit. Buying a 3D system outright adds costs to the capital purchase +/- $25,000 - $35,000. However, the long term profitability is much higher than a leased system. Typical payback periods are usually under 4 years. You must also factor in maintenance with the systems, which are always included in the leased program. Real D is a leased program. There is usually no money up front (CGB members) and maintenance is included. The term of the contract is usually 10 years at 50 cents per ticket. To determine the cost of this system, you need to forecast sales over that period and multiply by the per ticket price.

Reusable vs. Disposable – Xpand XD active glasses and Dolby 3D passive glasses are reusable. This is great for the environment but it may be a headache for you. All glasses have to be handed out but re-useable glasses also have to be collected and sanitized before reissue. This involves operational costs for collection and sanitizing, which typically involves a high speed low temperature dishwasher as well collection carts etc. While this adds costs, keep in mind that both of these systems are purchased outright and over the long run, produce higher profits as you do not have to pay a per ticket fee. Keep in mind that Master Image uses a disposable glass but is purchased outright. This is a little of the "best of both worlds", yielding low operational costs and long term profits. They also offer a lease program, $5,000 down and $600/month for five years and then you own it. Or you can buy it outright at $32,500. (CBG members) Master Image will require an additional service program at $1,800 per year in year three, Dolby offers a one year warranty.

Studio Support – Currently, the studios have supplied the disposable glasses at no charge to the exhibitor as long as they charge a minimum $2/per ticket upcharge at the box office. This was recently changed on Avatar where only Master Image customers were charged 30 cents each for their 3-D glasses. It is expected that all studios will eventually charge for disposable glasses, somewhere between 30 cents and 75 cents per glass. It is not known at this time if the whole formula for admissions upcharge and studio aggregates will change along with it. To note, there are 3rd party companies appearing on the scene selling designer 3D glasses that may be sold at the theatre level to put the re-useable glasses option in the hands of the consumer. Only time will tell.

Dual Projectors – As mentioned above, two projectors can be used for 3-D. One projector for left eye, the other for right. The benefit is brighter images (something we fight in the 3-D world everyday) and projector redundancy, having a second system there if one were to fail. Dual projector systems are more expensive but do not require per ticket deals as the equipment is available by 3rd party suppliers with no per ticket requirements. The down side is trying to maintain the convergence (two images converged into one) aligned in accordance with studio requirements. This often adds to maintenance and service costs.

Recap – Investment has been the driving force. With typical 2D digital projection systems running from $65,000 - $75,000, many of the exhibitors are going with the leased option through Real D. Right now, Real D has a majority share of the world's 3-D systems. A minority share are going with purchased programs, but this number increases everyday. Of these purchased systems, each yields it's own profitability and benefits. (Your best bet is to go through the interview process to further discuss the benefits of each system as it relates to your specific needs.)

Screen Selection

Silver vs. White – As described under "Selecting the "Right" 3D" – by this time you now know what type of screen you'll need, silver or white. To recap, Dolby and Xpand XD use a high gain white screen. Real D and Master Image use a silver screen. To recap, the higher the gain, the more light sent back to the patron. This results in smaller projectors and smaller lamps, which saves you money. This concept applies to all 3D systems.

Lead Times – Average lead time for screens today is between 8-12 weeks. I highly encourage all of my customers to start addressing screens now. Getting the screen ready now will only simplify the 3D conversion process later.

Procurement – You can purchase your

screen through Integrity Entertainment direct or go through a 3rd party front-end screen installation company. Many of these companies exist. Some of our customers install their screens themselves. We do recommend using a 3rd party installer as silver and high gain screens are coated and are more difficult to install than the old "matte whites". To note, it is best if you look behind the existing screen for a screen size tag, usually found on the bottom right or left hand of the screen. You will want to record the screen size as well as the manufacturer. If no tag is present, you can measure the frame or call in your front-end installer to measure. Screen manufacturers do not issue credits for screen sizes ordered in error.

Installation – Screen installations typically take 2-4 hours and can be performed at night, after your last show has let out or in the morning before your first show starts. Please keep in mind that most of the screen installers are equally as busy as the equipment suppliers and may have very long lead times to installation. Again, your best bet is to get the screen done well in advance of the 3D digital conversion.

2D on Silver – the 2D image from a digital projector on a silver or high gain white screen is good. The digital projector is more efficient at spreading light evenly than the 35mm equipment you currently have. That being said, there still exists the potential for "hot spotting". Hot spotting occurs when high gain material is used to reflect light back into a space when light is not evenly distributed on the original reflected surface. It tends to put more light in certain areas of the screen that change based on where you sit in the auditorium. Again, digital handles this better than 35mm. However, this is something to keep in mind if you intend to keep your existing 35mm equipment and have to change the screen to silver or a high gain white. To note, this has not been even a minor issue for any of our customers in over 160 systems deployed.

When to install – Again – install ASAP. Digital can come later.

Selecting Your Projector

DLP vs. LCOS – There are three companies using the DLP technology, or digital light processing. As you know, DLP is not only in our cinema market but is also a very strong contender in the home consumer market. The technology uses a DMD or digital mirror device to reflect light. Currently, DLP is rated up to 2K resolution, or a grid of 1080 x 2048 pixels. Of course, this is the resolution approved by DCI, our founding digital cinema task force that created the standards by which we run today. Over 10,000 DLP 2K systems are deployed today, doing a great job. Enter SONY, and the introduction of a LCOS LCD technology, which also finds it way into high end home consumer markets. Only now SONY introduces 4K, or twice the resolution of our adopted 2K resolution systems. On top of it, Regal and AMC announce exclusive contracts with SONY for their DCIP rollout. What to do?

2K vs. 4K – So what does double the resolution do for you and if it's not important, than why did Texas Instruments, the inventor of DLP technology, quickly announce after the Regal/AMC commitment to producing a 4K chip. For starters, the 2K resolution is the current standard today and will be supported today and into the future. No need to worry, there are 10,000 others besides yours. Will the industry shift to 4K technology … most likely. Technological advances are not going to stop just in the cinema industry. All of the DLP manufacturers have announced 2K machines with the upgradeability to 4K in the very near future (Spring of 2011). These units have already started to hit the market in spring of 2010 and will most likely be readily available in the fall of 2010. Texas Instruments only responded to market demand and to keeping up with competition. This should be expected today and into the future. 2K and 4K will also exist side-by-side for many years to come just as front-surround systems and digital audio systems have for the last twenty years. Only competition and market demand will play factors in this relationship and in determining what theatres will have 4K and what theatres will have 2K. The truth is that both look great and both are a tremendous improvement over 35mm film, which was the intention of this whole endeavor.

Resolution vs. Market Demand – As I mentioned, it is my belief that not only will 2K and 4K live within the same cities and towns but also within the same complex. 4K makes a difference on a screen over 40 feet. Below that, it is barely noticeable. However, what will you have to do if a fully equipped Regal 4K complex resides 4 miles away. That is the question.

.98 vs. 1.2 – More importantly to projector selection today is deciding on units with 1.2K versus .98K chips. All three manufacturers of DLP technology offer models with and without the two chips. The difference is light output! The 1.2K chip produces 22% more light from the same light source. Again, this dictates into smaller projectors, smaller lamps and lower energy costs. To note, the .98K chip is not currently being upgraded to 4K by Texas Instruments, another major reason for selecting a 1.2K chip model. The 1.2K upgrade to 4K resolution is expected by the Fall of 2010 and deployment by Spring of 2011. As I mentioned, 2K upgradeable units are being deployed today. The upgrade required in the future will involve a light-engine swap as well as an integrator rod upgrade and a TI card upgrade, all of which is easy to change in the field. Costs for the conversion have not been identified to date. On top of this, you will need to use a 4K media block today instead of the standard digital servers we typically use. This is explained under "Server Selection", later on in this report.

DLP vs. LCOS Revisited – So what are the benefits of DLP and LCOS as we know them today? For LCOS, one would argue only resolution. Today's LCOS technology is limited by size of screen (maximum 45' 3D sheet), color and energy consumption. LCOS uses larger lamps to reproduce the same light as DLP and thus has higher operating costs.

35 or "not to" 35

Added Cost to do Dual – It is more expensive to keep your old 35mm along with the new digital projector. We recommend placing the new digital in the old "centered" position that the 35mm occupies. This involves relocation costs for the old 35mm as well as installation costs for the new digital projector.

Ports/Exhaust/35 Relocation – Keeping both the 35mm and the new digital will result in costs for added port windows, extra exhaust systems and additional electrical costs.

Rails vs. Registering - Should you insist on keeping your 35mm system, advanced rail systems and registering systems have been developed and are readily available on the market today. Rail systems place tracks on the floor under the 35 and digital systems. The units slide on these rails in and out of position. Added space in the booth is required. Registering systems allow us to make the new digital projector portable (on casters). The digital projector and video/audio harnesses are made to allow the digital projector to be rolled into a docking station and removed during 35mm presentations.

1 Unit vs. 2 Units – It is more important to keep the existing 35mm system in the event that the exhibitor is only installing one new digital projector. In this way, the exhibitor has a move-over house for 35mm film as a hold-over until the next digital release.

Move-over Houses – Digital releases are still prone to flop and as such should have move-over houses for relocation to smaller sized auditoriums.

Auditorium Selection – It is recommended that a mid-sized auditorium is selected if only one digital system is being installed in a complex. Most exhibitors have opted not to tie up their largest screens in their facilities.

Selecting Your Server

2K vs. 4K – There are two types of servers on the market today, 2K and 4K. A 2K server is a standalone system that houses both the storage facility as well as the encryption unit, referred to as the media block. In 4K servers, the "media block" or encrypting/de-encrypting device has been moved to the 4K digital projector console. Please note that the storage facility for the 4K server will still reside in the audio rack. It is still used to store the digital movies, trailers, advertising and cues that normally reside on both 2K and 4K servers. I would highly recommend that anyone interested in switching their 2K upgradeable to 4K projectors in the near future also install 4K server/storage devices today so that additional conversion costs are avoided in the future. Keep in mind, these upgrades will already involve a light engine, integrator rod and TI card swap as it stands, at costs not yet determined. A 2K server at approximately $12,000 today will not work with the 4K projector except in 2K resolution. If you want 4K resolution in the future, you will need a 4K server package today.

Requires one per Auditorium – All digital projectors on the market today require a "dedicated" one to one server. There are no servers that can deliver content to more than one projector at a time. Most people get this confused with "library" or "TMS – Theatre Management" systems, which deliver movies, trailers, advertising, ques and playlists over a "backbone" network that acts as both a delivery as well as a comprehensive "status" system. The library and TMS systems can not produce "playback", only distribution. Playback is produced from single servers, either 2K or 4K on a one to one bases.

Server Options – We currently have Dolby, GDC, Doremi and Qube as digital server companies. More may come.

No Mixing within Single Complex – It is currently recommended that you do not mix servers within the same complex. This is to allow your library or TMS (if used) to communicate easily with like systems. You can mix servers from theatre to theatre within a circuit.

Library Servers – Distribution and status monitoring systems. Also used to network individual auditorium systems into a theatre system for internal and external (remote access) equipment monitoring. Not required for standard playback but offer distribution and status monitoring efficiencies worth exploring. May be required by your VPF provider and may be proprietary.

Auditorium Data Forms

What They Are – Auditorium data forms are used by dealers and manufacturers for collecting relevant auditorium and booth data to help determine the size of the projectors, as well as determine the correct lens and lamps needed. They also help us determine tie-ins to existing audio and automation equipment.

Screen - The first item addressed is always the screen. As I mentioned before, this is an item that can addressed well ahead of the digital projector package as long as you've decided on a 3D provider first, as they are directly related. The best information you can provide to a dealer or front-end installer is the tag information (size and manufacturer). If not present, try to measure the frame. Always indicate this information correctly to your supplier.

Image Dimensions/Throw – A key element in determining lens size. As you know, we typically use two formats in cinema presentation (flat-1.85 and scope 2.39). In most cases, your screen is set up with both formats using either side to side or up and down masking to go between the two formats. If done correctly, you end up with images that are very close to the aspect ratios that the studios intended. More often than not, we find masking systems that have been cheated, where flat and scope images have been enlarged and thus requiring excessive cropping percentages, where intended content has been cut-off in exchange for larger pictures. This has become a major issue with 3D conversions as many 3D providers do not allow cropping, but instead would rather have "letter-boxing", where either height and/or width of the true intended aspect format is achieved and then blank screen is left visable. Much like letter boxing on high-definition TV when watching low resolution, non-HD channels. It is important in 3D to see the peripheral images in order to create the "depth of field" for the 3D process to be effective. Therefore, many customers may wish to consider a revamping of their masking systems at the time or prior to the installation of their new 3D systems. To note, the cropping percentages can be determined from the auditorium data form submittal.

Audio Equipment – What audio equipment do we need to interface or should we recommend newer "digital ready" equipment if the units in place are not adequate? In most cases, we can reuse the analog processor you currently have in place. Keep in mind that 35 mm digital audio equipment has "nothing" to do with digital cinema. They only work with 35mm equipment and are only relevant if we are keeping your 35mm equipment, discussed earlier. In most cases, as most people abandon their 35mm equipment, these 35mm digital audio pieces can be moved to other 35mm audio houses. So, what do you need for digital cinema audio. For starters, the audio files come attached in the digital cinema package (DCP) and use a digital format called AES. There is only one 35mm audio processor that

can read this output, the Dolby CP650, but it requires a special card. There is a new digital processor released by Dolby called the CP750 that reads this format, but it doesn't handle 35mm audio and therefore cannot be used if you're keeping your 35mm system. In most cases, we are able to provide a convertor that goes between the DCP (which resides on the server) and your analog processor. To note, everyone has one, it's the old fashioned analog sound processor that we've used for decades. Some common ones include the Dolby CP50, CP55, CP65, CP45, CP500 (requires a card), and CP650, Smart Mod Series, DTS and USL models etc. We simply interface to the analog input. To note, 35mm digital was only on the soundtrack or on DTS disks. It was read by digital readers and converted to analog, and then pumped into your analog processors, just like we are proposing for digital cinema. FYI, all sound has to be converted to analog, speakers are not digital, they are only analog. Now comes the fun stuff: we have several options for digital to analog conversion. Keep in mind that you may need to plug in other audio equipment such as Blu-Ray players, Xbox 360, Playstation, Laptops and cable-TV, just to mention a few. So the options include a straight digital to analog convertor (D to A or DA convertor). This only allows the conversion of AES to analog, no alternate devices or in other terms referred to as "alternate content". The approximate cost is around $600-$750. Please watch my competitors bids as this is a common place to short your bid. Your second choice is a DA convertor with alternate content hookup, approximate cost is $1,500. The third, a DA convertor with alternate content hookup and a video scaler (+/-$2,000). A video scaler allows you to take input from computers and playback devices (low resolution) and increase their resolution or change their formats to fit the screen. These are similar to devices built into residential cable boxes and high definition TV's that allow you to stretch the picture to eliminate letter boxing, discussed earlier. The final option is to simply replace the analog processor that you have as it may be outdated or antiquated and use the new digital cinema processor mentioned above by Dolby, the CP750. There are other models for both 35mm as well as digital cinema, approximate cost of the two systems run from $3,100 to around $4,000.

Automation – To note, your existing 35mm automation most likely will not work with the new digital projection systems. That being said, the new digital automations systems have been running between $750 - $1,750, more around the range of $1,000. On top of this, many of the server companies are offering automation functions directly in the server, eliminating the need for an automation interface. This all depends on what you are controlling. Also, whether you can accept a software based toggle versus a mechanical button to override an automation that missed, for whatever reason.

Dimmers – Console mounted dimmers will need to be replaced with wall mounted dimmers unless you are keeping your 35mm system, in which case we can interface to the existing console. This is a short term fix as eventually all 35mm will be gone and most people have opted to address these dimmers now instead of later.

Slide Projectors/Preshow – We can interface to your existing advertising program, whether slide or digital projection. The major decision as to whether to use your new digital projector for advertising versus a low cost AV digital projector remains at large. It becomes a moot point if you're only doing a few 3D systems now and not an entire complex conversion. Most people just tie in their existing program as is. However, most new construction and most new complete complex conversions are tying their advertising programs directly into the new digital projector hardware. This can be done either by Blu-Ray players or by direct ingest into the servers, in which case a $3,500 software package is required to convert the advertising program into a readable DCP package.

Port Windows – The digital projectors reproduce the images at approximately the same size as the 35mm equipment. It has not been typical to change the existing port windows. However, adding 3D usually means moving the projector further back from the port window to allow for new 3D equipment and thus enlarges the image through the port window. In most cases we can keep the existing port windows but some do require a change. This will be determined based on information gathered from the completed data form.

Exhaust – Most of the new digital projection equipment requires at least 450 CFM for exhaust flow. Most existing 35mm systems only required 300 CFM. The new digital projectors (non-specific to manufacturer type) also need an 8" line. We can provide you with a low-cost booster fan +/- $300, or you can have your rooftop unit replaced locally. To note, the number one reason for digital downtime is a direct result of exhaust flow inadequacy. This is one area that I recommend that you hire your local HVAC company to evaluate your condition. Also, each new digital system should have a dedicated exhaust unit. Tie-ins to multiple units only increases the catastrophic failure potential for multiple units to fail based on a single unit shutdown.

Electrical – Most of the new digital equipment requires single phase 208/220v, unlike the 3-phase power required for 35mm. It does however also require a 20 amp circuit for ancillary equipment such as new DVD players and 3D equipment that get's loaded into the new digital projector rack base. As such, a power distribution unit is often recommended. It converts 3-phase power into both the 208/220 single phase as well as the 20 amp breaker required. The cost of the unit is roughly around $550 and can eliminate the need for an electrician. All electrical is determined either from the data form or by field survey. It can also be done by phone with your local electrician. It is also dependant upon which manufacturer you use for digital projection.

Equipment Relocation – When filling out the form, please look for access for moving the new equipment to booth. As this is case specific to the manufacturer, it will be helpful to have product selection made prior to this evaluation. In most cases, the movement of all new equipment to the booth is by the owner. Cut-sheets will be provided.

Leasing Options vs. Buyout

Leasing Terms – We have a least four 3rd party leasing companies available to our customers. In addition, customers can use their local banks or pay by cash, which typically involves a contract with IES (Integrity Entertainment Systems).

Leasing terms are typically five years, with ownership after that term.

Leasing Rates – typically around 8% -12% based on credit.

100% or Buy-In Rates – You can buy down the lease amount in any amounts, reducing your monthly payments. Early buyout is available.

Leasing Contacts vs. Local Banks – Our leasing companies are already familiar with the product and process and typically provide less resistance than local banks.

Conditional Sales Agreement – used for cash buyouts. Typical terms are 50% down, 40% upon delivery and 10% net 30 from ship date.

VPFs

Concept/Definition –VPF's, or Virtual Print Fee Reimbursement is a term used in our industry to identify the studio contribution for the equipment you are investing in for digital conversion. As it stands, the only way to qualify for VPF's is to use a 3rd party facilitator, the only one at this time is Cinedgm. To note, Paramount announced a direct VPF to the exhibitors in conjunction with their existing film buying process but limited it's payouts to conditions that required other studios to offer the same. This never happened. There is talk of other VPF's providers coming to the market in 2010, none have been officially announced at this time.

Cinedgm – basic terms include 50% conversion before 12/31/10 and then the balance within one year. You must be self funded and have 10-year parts warranties and service in place for consideration. They use there own library server, which you must purchase.

DCIP – Regal/AMC/Cinemark – May open conversion process to independents to access VPF program. Expected to start rollout in 2010. Currently using SONY, which may limit participation to DLP customers.

Christie – Tentatively announce VPF program for Christie customers, hoping to announce by Showeast.

Library Server – You may want to hold off on a library server until you have selected your VPF provider as some (like Cinedgm) may require proprietary equipment and software.

Buy-In's – 3rd party companies require an exhibitor buy-in of $10,000 or more. You may be able to use existing digital systems already purchased towards this buy-in.

Terms – typically 10 years.

10 Year Warranty – Prices vary by manufacturer/provider.

10 Year Service – Prices vary by provider. Must include remote monitoring.

Monitoring – Required by studios for VPF deals. Includes remote troubleshooting.

Monitoring Box-Office – A lot of customers are concerned that remote monitoring will allow 3rd party providers and the studios access to box office reporting. This is not the case at this time.

January 1st 2010 vs. Series I – As of January 1st, 2010, all manufacturers were supposed to provide new Series II projectors to their customers. Only Christie had these units available by this date. Others have units becoming available by the 2nd – 3rd quarters of 2010. Anyone who installs a Series I projector after this date currently lose any VPF opportunities with existing 3rd party providers. While there is talk that this date may be extended (as so few made the date), there are no guarantees. I highly recommend that you do not buy a Series I projector in 2010 until you do your homework.

Responsibilities/Site Requirements

Electrical vs. PDU – You may be better off with a PDU (Power Distribution Unit) that converts 3-phase power into the digital power required. Approximate cost of a converter is around $550 versus local labor.

Exhaust vs. Inline Blower – Approximate cost of an inline blower is $300 versus local labor.

Audio Upgrades – The new digital projection package requires 5.1 sound. VPF providers may make this a requirement. You may need to upgrade from a mono or front-surround system or add a subwoofer. In most cases, it is better to do this at the time of the digital install or just prior through local labor or existing service providers.

35mm Projector Removal – The customer may elect to remove the existing 35mm package prior to the digital install or have the digital installers unhook at the install date. Typical upcharge is around $150. Projector relocation to alternate floors is not included.

Equipment Receiving - The owner is responsible for all receiving of new digital equipment. Detailed delivery schedules are provided by IES along with phone notifications accordingly.

Equipment Transport to Booth – All equipment transport to the booth is by owner unless hired in advance by IES.

3D Contract – Dolby, Xpand XD and Master Image can all be purchased directly through IES. Real D is a separate contract directly with Real D. We will be happy to put you in touch with them.

3D Data Forms - 3rd party 3D leasing companies such as Real D do require forms to be filled out related to auditorium specifications. IES will help you with these forms.

Studio Forms – You will be bombarded with "studio" forms from Disney to Warner Bros, etc. Our office will help you fill out these forms. Please remember, in most cases, they are also looking for serial numbers for the projector and the server to prepare the digital keys you will need for playback content. Please note that these serial numbers are not available until your units ship. Do not panic, we have never missed an opening and we'll get you there.

Lead Times/Reservations

Order Screen – To recap, order your screens now, either through IES or your own installer.

Order Projector – Current lead times are around 3-6 months, depending on the manufacturer. Anyone looking to install for Harry Potter should be on board before June, 2010.

Ancillary Equipment Lead Times – All equipment manufacturers have been hit with long lead times, including server companies and audio companies.

Ordering Recap

Stay ahead of the game.

Reservations vs. Cancellations (30 days) – You can order today and cancel within 30 days of the delivery date. Lead times require forecasting, please don't wait.

Order Screen "No Matter What"

Lease approval – Get your leasing work done early. You can get pre-approved just like in other industries.

Conditional Sales Agreement – Get this done if you plan to pay by cash.

No orders can ship without an ap

proved lease or signed conditional sales agreement.

Deployment

Install Duration – The typical installation period is two days, including training on the 2nd day.

Down Time – You will be required to take down the theatre for the install as the screen is used for digital projector alignment.

Mon/Tue vs. Wed/Thu – Choosing a Wed/Thu install minimizes down time for the 35mm conversion, you are able to play your existing 35mm system from Friday to Tuesday. However, selecting a Mon/Tue install provides you with a few additional days for practicing on the new equipment and it also provides a buffer for any equipment failures that "knock on wood" have not happened yet but potentially could.

Site Requirements – All electrical and exhaust systems should be in place prior to the digital installation. In addition, all equipment should be in the booth.

Test Materials w/Installer – The installer will have test material in the event that digital content for the theatre has not yet arrived.

Content Availability – Typically content for a Friday opening arrives the Tuesday before. The keys to unlock it either come with the hard drives holding the feature or are sent by email directly to the theatre by Wednesday. The movie can be loaded immediately as well as the keys. The movie is typically not unlocked for playback until Thursday morning at 12:01 am.

Training – Training is held on the second day of the install. It typically runs around 2 hours. You should keep class size down below six as it is a hands on class and too many people in the class can distract from the learning process.

Screen File(s) Backup – We recommend that whomever you select to do your digital installation, please ask them for a copy of your screen and color files as well as all of your channel settings on a thumb drive. This information can be stored in the event of failure and minimize down time as the information can be restored more rapidly than redoing from scratch.

Warranty/Service

Standard Parts Warranty – Typically 2 years on Projectors, 1-3 years on servers.

Expediting Warranty Parts – Please note that the typical parts warranties do not include expedited freight. Should you elect to overnight a part under warranty, you are responsible for the difference in freight costs from ground to whatever expedite method is selected.

Service Plans – Onsite service is not included in standard warranties from the manufacturers. Mon-Fri service call centers are available by phone.

Extended Warranty/Service – Extended onsite service warranties are available including 24/7 phone support, onsite emergency and PM service as well as availability to spare parts.

Spare Parts & Lamps – As with 35mm, all theatres should maintain at least one spare lamp backup and spare filters accordingly.

Monitoring – Remote monitoring is available. This allows a phone technician to access your system remotely for equipment diagnostics. Often, this allows the customer support person to instruct the onsite technician to bring parts for the service call.