


FILM-TECH

THE INFORMATION CONTAINED IN THIS ADOBE ACROBAT PDF FILE IS PROVIDED AT YOUR OWN RISK AND GOOD JUDGMENT.

THESE MANUALS ARE DESIGNED TO FACILITATE THE EXCHANGE OF INFORMATION RELATED TO CINEMA PROJECTION AND FILM HANDLING, WITH NO WARRANTIES NOR OBLIGATIONS FROM THE AUTHORS, FOR QUALIFIED FIELD SERVICE ENGINEERS.

IF YOU ARE NOT A QUALIFIED TECHNICIAN, PLEASE MAKE NO ADJUSTMENTS TO ANYTHING YOU MAY READ ABOUT IN THESE ADOBE MANUAL DOWNLOADS.

WWW.FILM-TECH.COM

	TITLE		NUMBER	REV	PAGE
	Networking Feature for XD10/XD20 Software V2.2.02 and above		TN-H396	A	1 of 4
DEPARTMENT Engineering	CREATED BY: K. Hultgren/M. Smith/L. Brown	EFFECTIVE DATE February 18, 2010	APPROVED BY:		

Introduction

This document provides an overview of the networking feature of the XD10 and XD20 player.

- This feature is only available with XD10 and XD20 system software V2.2.02 and above.
- Note:** It is always advisable to consult with an IT professional when networking the players.
- Please also refer to the XD20 Installation and Operating Guide (*TM-H264 1.0* and above) for more information on networking the XD20.


The XD10 and XD20 players can be networked together in a closed or open network. By doing so, feature audio and CSS access content will automatically be distributed to all players on the network from any player. It's possible to have both XD10's and XD20's on the same network. Networking to multiple XD20's eliminates the need for each player to have a DR-1 (separate DVD drive unit). In this configuration, a single DR-1 connects to one XD20 that is networked to other players. When XD10's and XD20's are on the same network, no DR-1 is required as the DVD drive on the XD10 may be used to load content.

When new content arrives at the theater and is loaded into one XD10 or XD20 (via the one DR-1), the content will automatically distribute to all players on the network. The XD10 or XD20 will display that it is receiving content from another player by displaying the address of that player and the content that is currently transferring.

Content can be loaded at any time to any player, and content transfer will not interfere with players during shows. Transfer speed will be somewhat slower if the player is running a show. On the XD10 only, network transfer will stop when playing CSS captions. The transfer will resume once the feature ends.

- Note: Video or AVC files will not transfer on the network and must be loaded into each player separately. This can be done via USB on XD20 players not connected directly to a DR-1.
- Note: If content is manually deleted from an XD10 or XD20 player, the same content can only be restored to that player by reloading content directly into that player.
- Note: CSS Content will only be distributed to those players on the network that have a CSS license. However, the CSS Content may be loaded into a non-CSS licensed player for distribution (it will not play back at the non-licensed player).

To connect multiple XD10 or XD20 players in a local network, it is necessary to connect each player using CAT 5e or CAT 6 Ethernet cable to a network switch or router, depending on the requirements of your system. Whether using a network switch, a router, or connecting to an existing LAN, it is necessary to make sure that Network Transfer is set to **"Enable"** for each player on the network.

	TITLE		NUMBER	REV	PAGE
	Networking Feature for XD10/XD20 Software V2.2.02 and above		TN-H396	A	2 of 4
DEPARTMENT Engineering	CREATED BY: K. Hultgren/M. Smith/L. Brown	EFFECTIVE DATE February 18, 2010	APPROVED BY:		

Closed Network (Stand-Alone System)

In a closed network, the XD10's and/or XD20s are connected together using a simple network switch (hub). No other computer devices can be on the network when using this set up. You will need a network switch that has as many outputs as there are XD10s or XD20s. The switch should be rated for at least 1G byte/second. Cat 5e or Cat 6 cables should be used to connect the network switch to each of the players. Up to 25 players can be networked together in one closed system.

Setup each XD10 or XD20 in the network by first selecting the **Network Mode** to **Static IP**, setting a **Static IP address**, then enabling **Network Transfer**. Follow these menu setup steps:

- To enter the menus, press the "Enter" button, then select Setup → System → Network → Network Mode, then select **Static IP**.
- Use the left arrow button to go back to the Network menu, select Set Static IP → **IP Address**.
 - Note: In the Static IP Address menu, no changes are needed to the Subnet Mask, Default Gateway, Primary DNS, or Secondary DNS.

Using the navigation keys, change the IP address to a unique number. The IP address of each XD10 or XD20 must be the same except for the last three digits. We've found the best address scheme to use is:

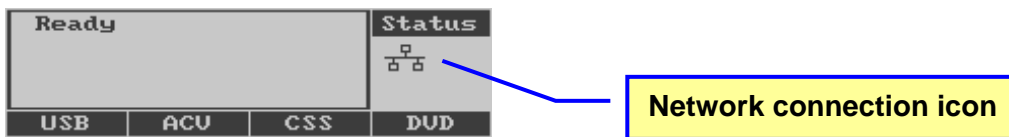
192.168.xxx.xxx

192.168(core number). Zero(s) + total number of screens. screen number followed with zero

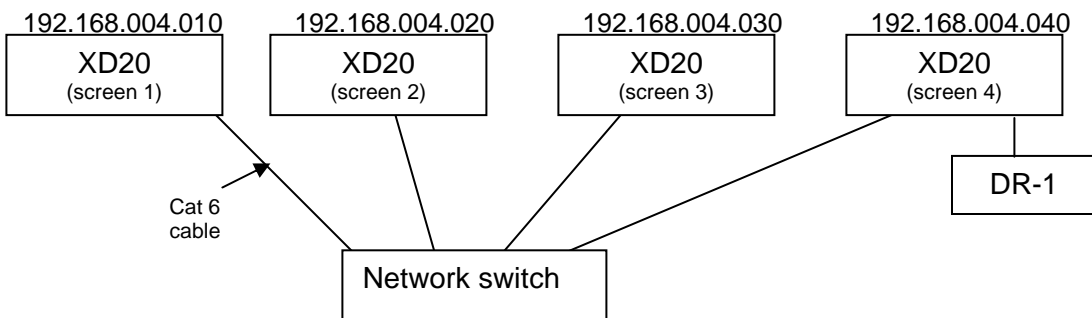
Example for a 10 screen theater complex


- the XD20 in screen #1 would have IP 192.168.010.010
- the XD20 in screen #2 would have IP 192.168.010.020
- the XD20 in screen #10 would have IP address 192.168.010.100

- Use the left arrow button to go back to the Network menu, select Network Transfer → **Enable**.
- Reboot the player after setup is complete. XD20 only: After reboot, if setup was successful, the network icon should appear in the status screen and the boxes in the icon should blink.



Below is an example of a four (4) screen complex:



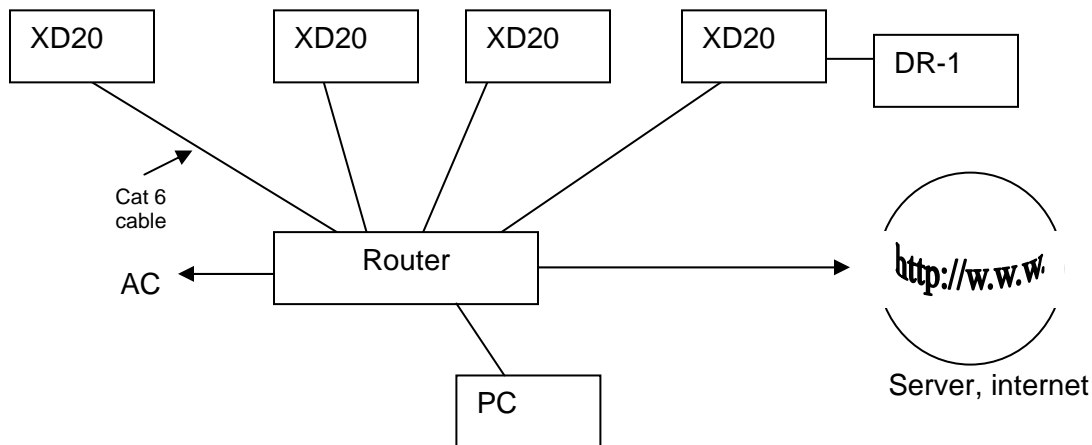
	TITLE		NUMBER	REV	PAGE
	Networking Feature for XD10/XD20 Software V2.2.02 and above		TN-H396	A	3 of 4
DEPARTMENT Engineering	CREATED BY: K. Hultgren/M. Smith/L. Brown	EFFECTIVE DATE February 18, 2010	APPROVED BY:		


Open Network

In an open network, such as an established LAN, the XD10s and/or XD20s are connected to a router. Other computers, servers, and internet connections can also share the router. When setup this way, it's possible to monitor the player's performance remotely. Cat 5e or Cat 6 cable should be used to connect each player to the router.

Setup each XD10 and/or XD20 in the open network using the following steps:

1. To enter the menus, press the "Enter" button, then select Setup → System → Network → Network Mode, and select **DHCP Server**. The IP address of each XD20 will now automatically set by sending a request to the site's network server to automatically assign a dynamic IP address.
2. If the system also requires a subnet mask, DNS, or default gateway please enter those addresses as well. Contact the site's IT system administrator for that information. Use the left arrow button to go back to the Network menu, select Static IP and then the appropriate menu. For more information please see TM-H264 section 7.8.5.
3. Use the left arrow button to go back to the Network menu, select Network Transfer → **Enable**.
4. Reboot the player after setup is complete.



	TITLE		NUMBER	REV	PAGE
	Networking Feature for XD10/XD20 Software V2.2.02 and above		TN-H396	A	4 of 4
DEPARTMENT Engineering	CREATED BY: K. Hultgren/M. Smith/L. Brown	EFFECTIVE DATE February 18, 2010	APPROVED BY:		

Confidentiality Statement

CONFIDENTIAL: Contains confidential proprietary information owned by Datasat Digital Entertainment, including but not limited to trade secrets, know-how, technical and business information. Unauthorized disclosure is a violation of State, Federal, and International laws. Use limited to licensees of Datasat Digital Entertainment.

Copyright Protection

Copyright 2010, Datasat Digital Entertainment. All rights reserved. Protected by U.S. and international patents issued and pending.

The content of this publication is subject to change without notice. Datasat Digital Entertainment assumes no obligation to notify you of any changes or updates. While Datasat Digital Entertainment believes this publication is accurate, due to ongoing improvements and revisions, Datasat Digital Entertainment cannot guarantee the accuracy of printed material, nor can it accept responsibility for errors or omissions. Datasat Digital Entertainment may periodically publish updates and revisions to this publication as it deems necessary.

USE OF THE SOFTWARE IS AT USER'S SOLE RISK. DATASAT DIGITAL ENTERTAINMENT DOES NOT WARRANT THAT THE OPERATION OF THE SOFTWARE WILL BE UNINTERRUPTED OR ERROR FREE. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THE DATASAT DIGITAL ENTERTAINMENT SOFTWARE AND RELATED DOCUMENTATION ARE PROVIDED "AS IS," WITH ALL FAULTS AND WITHOUT WARRANTY OF ANY KIND, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSES, AND NON-INFRINGEMENT OF THIRD PARTY RIGHTS, ALL OF WHICH ARE HEREBY EXPRESSLY DISCLAIMED.

UNDER NO CIRCUMSTANCES, INCLUDING, WITHOUT LIMITATION, NEGLIGENCE, SHALL DATASAT DIGITAL ENTERTAINMENT OR ITS DIRECTORS, OFFICERS, EMPLOYEES OR AGENTS BE LIABLE FOR PERSONAL INJURY, OR ANY INCIDENTAL, SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES WHATSOEVER, INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF PROFITS, LOSS OF DATA, BUSINESS INTERRUPTION OR ANY OTHER COMMERCIAL DAMAGES OR LOSSES, ARISING OUT OF OR RELATED TO YOUR USE OF THE DATASAT DIGITAL ENTERTAINMENT SOFTWARE, HOWEVER CAUSED, REGARDLESS OF THE THEORY OF LIABILITY AND EVEN IF DATASAT DIGITAL ENTERTAINMENT HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT SHALL DATASAT DIGITAL ENTERTAINMENT'S LIABILITY EXCEED THE AMOUNT PAID BY YOU TO DATASAT DIGITAL ENTERTAINMENT. SOME STATES DO NOT ALLOW THE LIMITATION AND/OR EXCLUSION OF LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

Datasat Digital Entertainment Technical Support

Datasat Digital Entertainment Headquarters Email: techsupport@datasatdigital.com Tel outside USA: +1.818.401.4253 Tel in USA: 888.428.2268 Fax: +1.866.448.6802 www.datasatdigital.com	Datasat Digital Entertainment Europe Email: eusupport@datasatdigital.com Tel: +44 (0) 118.934.9199 Fax: +44 (0) 118.934.9198 www.datasatdigital.com
--	--