

DSX-CORE INSTALLATION MANUAL

JUNE 2024

Firmware V 1.5.9 Core Utility V 1.18 ®

This page was intentionally left blank.

Compliance Information

You must consult your local fire codes before installing any locking device on doors, gates, or barriers. A construction and fire approval permit may be required before installing any equipment. Call your local Fire Marshall for building code requirements in your area.

Information contained within this document was known to be true at the time of printing. This information is subject to change at any time without notice.

DSX is a registered trademark of DSX Access Systems, Inc. WinDSX is a trademark of DSX Access Systems, Inc.

This document is a team effort by the Technical Support and Engineering Group at DSX Access Systems, Inc.

All DSX manufactured products are warranted against defects in materials and workmanship for two (2) years from date of shipment. Products not manufactured by DSX are warranted for one (1) year. DSX Access Systems, Inc., will repair or replace products that prove defective and are returned to DSX freight prepaid within the warranty period. The foregoing warranty shall not apply to defects resulting from misuse, accident, alteration, neglect, improper installation, unauthorized repair, or Acts of Nature. DSX shall have the right of final determination as to the existence and causes of the defect.

No other warranty, whether written or oral, is expressed or implied.

Table of Contents

Compliance Information	1
Table of Contents	2
System Overview	3
Pre-Setup and Important Notes	4
Folders Subfolders and Files	5
Getting Started	
Power Down Procedure for the DSX-Core	6
Setup Utility	7
Security Certificate	8
Utility Button Definitions	9
Master Controller Connections	. 10
DSX-CORE Programming	11
DataBase	12
Settings	15
Settings - Operator	17
Workstation	. 18
Reports	.20
Reports 1	21
Reports 2	21
Day Night Color Scheme Toggle	.22
Moving the Security Certificate	.23
Updating the Core Firmware	.24
Error Logs and Archiving History	
Bulk Loading Cards	.26
Backing Up and Restoring the Core Database	
Backing Up and Restoring the Core Database (Cont.)	.28
Defaulting and Factory Resetting the Core	.29
Gmail Setup	31

System Overview

DSX-Core streamlines system installation by eliminating the need for a PC and DSX Software. Core provides a system interface for up to 32 Doors and is loaded with many of the features offered by standard DSX Software.

The DSX-Core has panel ready RS-232/485 ports to be connected to any type of DSX Master Controller. The embedded Core is powered from the Controller it is attached to. This Software Embedded device can be deployed quickly in a permanent or temporary application.

The DSX-Core is a great way for a Location or building of a larger system to be separated and sold. The DSX-LAN module at the location is removed and replaced with the DSX-Core. The Core can be programmed with a laptop and browser. A system of up to 32 doors can be defined, secured and usable within a few minutes.

The DSX-Core has a Real Time Workstation Screen and Email Notifications for Alarm Reporting. Powerful Reports are part of the extensive feature set.

Card Readers and Keypads and the most popular Card Formats are all supported. Readers and Keypads are controlled by Time Zone. Antipassback, Number of Uses, and Linking are just a basic part of the system. Emergency Lockdown, Who-is-In reporting and Email Notifications are all possible.

Once programming is complete the DSX-Core can stand alone until modifications or changes are to be made. These features make the DSX-Core a perfect device for small applications that might include small Apartments, Strip Malls, Shopping Centers, Small Schools, Small Office Buildings, etc.

Pre-Setup and Important Notes

Important Notes - READ First!

- 1. Browsers Cache MUST be cleared often. Set browser cache to clear when closed!
- 2. Power Must not exceed 13.5v!
- 3. We recommend Chrome or Edge as browsers used with the DSX-Core.
- 4. Right Click and Run the DSX-Core Utility as Admin. If not done some features will not work properly.
- 5. The DSX-Core setup and configuration must be done on a PC that will be used for DSX-Core operations. Set up the DSX-Core on the PC that will be programming the DSX-Core. It is best to limit it to 1 user at a time. 2 PC web browsers, maximum, can be logged onto the DSX-Core.
- 6. Do not attempt to use the DSX-Core RS 232 and the RS 485 terminals at the <u>SAME</u> time. Disconnect the panel from the DSX-Core prior to connecting to the DSX-Core to run the Utility.
- 7. Finish programming for the first time prior to connecting the panel to the DSX-Core.
- 8. Never skip a Firmware version or attempt to downgrade a Firmware version to the DSX-Core. Each Firmware update must be in sequence.
- 9. You will not be able to connect DSX-Core with the browser while the DSX-Core Utility is in communicating with the DSX-Core.
- 10. After updating, restoring, performing a Factory Reset, or Defaulting the database you will not be able to open the webpage until the DSX-Core resets fully. May take 10 minutes.
- 11. If desired by the IT Dept a Security Certificate can be obtained by the end user. The Security Certificates must be in the following format and upper and lower-case letters matter: private.key, Server.pem, CAClient.cer.
- 12. A corrupted database may result from not correctly following the "Power-Down" procedure when removing power from the DSX-Core. Pg. 6.
- 13. If the DSX-Core is powered only by the battery, when 20% battery is reached the DSX-Core will go into shut down mode. You must follow the power down procedure on page 6.
- 14. Power the Core from the 12 V Reader Power from the Master Controller.

Note: Failure to follow these instructions will cause damage to the DSX-Core.

Folders Subfolders and Files

Note: These are required folders and subfolders you will need for Database Backups, Update Firmware, Error Logs, and Archiving.

This folder structure will be created for you later in the instructions.

Root Folder - DSX-Core (C:\DSX-Core).	
Sub Folder - Utility (C:\DSX-Core\DSX-Core Utility).	
(Contains Utility Application and associated files).	
Sub Folder - Updates (C:\DSX-Core\Updates.	
(Contains the zipped and extracted firmware update	s).
Sub Folder - History Archives (C:\DSX-Core\History Archives.	
(Contains all the archived files).	
Sub Folder - Database Backups (C:\DSX-Core\Database Backups	
(Contains all sub folders that hold each backup fol	der).
Sub Folder - Error Logs (C:\DSX-Core\Error Logs.	

Note: All backups must be saved in separate subfolders. See page 27.

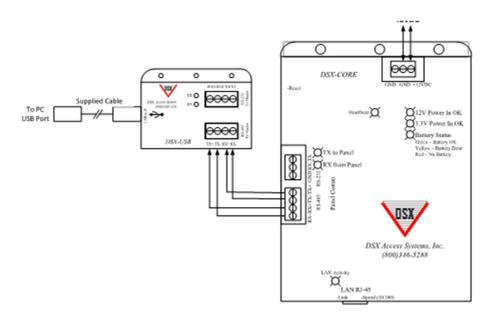
Pre-Setup

You will need the following.

- 1. DSX-USB to Serial Converter.
- 2. IP Address to be assigned to the DSX-Core.
- 3. IP Mask to be assigned to the DSX-Core.
- 4. The Public IP Adress if connecting via internet.

Getting Started

- 1. Remove the cover of DSX-CORE.
- 2. Ensure following jumpers did not come off during shipping:
 - J3 jumper is in the APP.
 - J4 jumper is in the Disabled.
 - J5 jumper is in the Bypass.
- 3. Connect the battery cable.
- 4. Replace the cover of the DSX-Core.
- 5. Connect 12v to the DSX-Core. Power Must not Exceed 13.5v!
- 6. Using the DSX-USB connect to the RS-485 port on the Core using a 4-wire connection as in the drawing below.
 - TX+ RX+ TX- RX-RX+ TX+ RX- TX-



Power Down Procedure for the DSX-Core

- 1. Once this procedure is started you must complete it.
- 2. Press the reset button on the side of the unit for 10 seconds.
- 3. After 10 seconds have passed release the reset button.
- 4. Wait until the Heartbeat light slows to a 2 second pulse.
- 5. Remove 12v.
- 6. Disconnect the battery.

Setup Utility

Connecting to the DSX-Core

- 1. Find the DSX_CoreSupport_installer.exe on the supplied thumb drive right click and **"Run as Administrator"**.
- 2. Navigate to C:\DSX_Core_Support and open this folder.
- 3. Open the folder called CoreUtility_1.18.
- 4. Right click on **CoreUtility.exe** and **"Run as Administrator".** You will then see the Utility screen below.
- 5. Connect the USB to serial cable to the DSX-Core.
- 6. Go to Device Manager\ComPorts on your PC. Note the Com Port assigned to the DSX-USB serial device.
- 7. In the DSX-Core Utility, select the correct ComPort using the "Serial Port" dropdown.
- 8. Click the "Connect" button on the app then quickly press reset on the DSX-Core. You must wait for the "Device ID" to populate.
- 9. Once The "Device ID" is obtained enter the "Device IP Address" and the "Device IP Mask".
- 10. Click the "Send" button. You will receive a massage, "Device IP/Mask Sent to Device!"

Core Utility - version 1.1	8 — 🗆	×	
DSX	DSX Access Systems, Inc. 1 (800) 346-5228 DSX Core Utility	^	
Serial Port:	COM3 × Connect		
Device ID:	No Device Connected		
Device IP Address: Device IP Mask:	Send		
Certificate:	Create Select Send Server Certificate Install Client Certificate		
Time Server:	Install DSX Time Server Test Time Server		
Database:	Create Restore Database		
	Default Database Bulk Load Cards/Cardholders		255.255.0.0 X
Reset:	Configuration Reset		
	User Reset Get ErrorLogs		IP Address/Mask Sent to Device!
	Update Core		
Steps to Connect DSX dev 1. Connect the Device to F 2. Press Connect Button o 3. Reset Device.	PC using DSX-USB RS-485 Port only.		OK)

Security Certificate

Initial set-up.

- 1. Ensure the DSX-Core is not connected to the panel.
- 2. Click "Create". This will give you a "Certificate" panel to fill out.
- 3. Fill out the data as indicated. This is the DSX-Core security certificate and should only be created one time.
- 4. Select the "IP Address" radial at the bottom of the page.
- 5. The "Public IP/Domain Name" will be the IP address of the DSX-Core.
- 6. Save the certificate.
- 7. Click "Send Sever Certificate". This sends the security certificate to the DSX-Core.
- 8. Click "Install Client Certificate". This will install the security certificate in the PC browser.

Note: Steps 9-13 are completed using the DSX-Core Utility.

- 9. If the DSX-Core unit **HAS** internet access, skip to step 11.
- 10. If the DSX-Core unit **DOES NOT** have internet access, click "Install DSX Time Server".
- 11. If you intend to bulk load cards, you should do it at this time. Go to the Bulk loading instructions on pg. 26.
- 12. Click the "Disconnect" Button in the utility.
- 13. Close the Utility.
- 14. Disconnect the USB to serial cable from the DSX-Core.
- 15. Page 10 will guide you in connecting to the panel.

I DSX Certificate		_		×
Country Name (2 Letter Code) [US]	US			
State or Province Name (Full Name)	WY			
Locality Name (eg, city)	Great Lakes			
Oganization Name (Company)	IT National			
Organizational Unit (Section)	Midwest			
Email Address	sam@ITNspam.com			
Public IP/Domain Name	192.168.1.136			
	O IP Address	O DNS N	ame	
	Clear	Sav	e	

Utility Button Definitions

Create Restore Database (Back-up):

When not connected to the DSX-Core this button reads "Create Restore Database". After connected to the DSX-Core it will read "Restore Database".

This will create an "Backup.zip" file in your back-up that already contains a back-up without having to connect to the DSX-Core. You can then restore the Database from the DSX-Core web browser. You can also connect to the DSX-Core with the Utility and complete both tasks using the Utility. Instructions are on Pg. 28.

Defaulting The Database:

"Default Database" will reset the database, passwords, and users back to the Default. Instructions are on page 30.

Bulk Load Cards/Cardholders:

This will allow you to load as many card holders as you need, up to the maximum 500 individual or 2 cards per card holder up to 1000. **Be sure to be accurate, only one card can be deleted at a time.** Instructions are on page 27.

Factory Resetting the Database:

This restores the network settings (IP address, Subnet Mask, Default Gateway, and Security Certificates, etc...) to their original default values. Does not affect the database. Instructions are on page 30.

Configuration Reset:

This will reset the configuration server settings to default.

User Reset:

This will reset all user data to default settings including "Master" logins. Instructions are on page 31.

Get ErrorLogs:

This button allows you to pull the Error Logs from the files and save them to "ErrorLog" folder created during the install. Pg.25

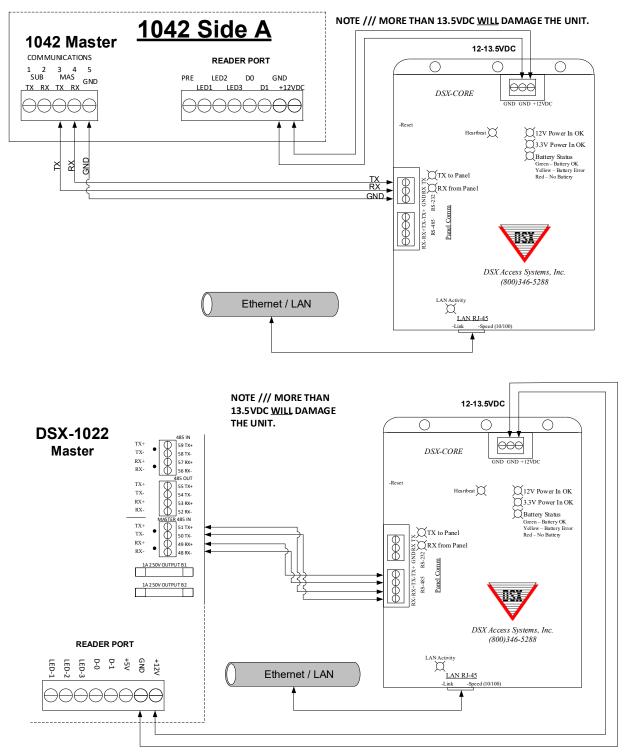
Update Core:

Update Core allows to update the DSX-Core using the utility. Pg.24

Master Controller Connections

Power from Reader Port 12V Power. Power Must not exceed 13.5v!

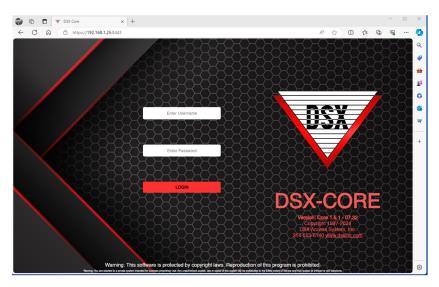
With programming complete connect Communications port from the DSX-Core to the Master Panel and reboot the panel.



DSX-CORE Programming

Open Chrome or Edge and enter the Default IP address or the IP address you changed it to in the address bar using the following format (must include "https://" and ":8443"): https://192.168.1.25:8443/

Login: admin / Password: admin



The default login is admin / admin.

Once logged in you will be asked to change the <u>Master Password</u>. Make sure to write it down and secure it. This will be used to create other logins to be used.

Passwords

Under "Settings/Operator" you will find the default users and password profiles.

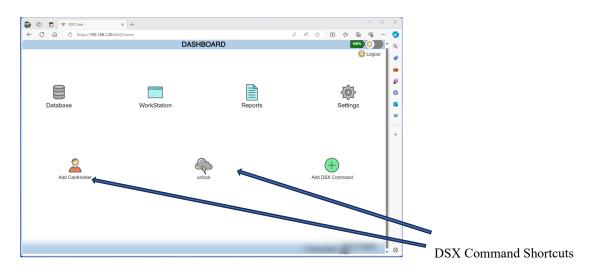
Admin = Master Database = Database only Workstation = Workstation only WSRE = Workstation and Reports DBWS = DataBase and Workstation

	× +				đ		×
 SETTINGS	DSX COMMANDS	OPERATOR	CONFIGURATION	EMAIL SERVER SETTINGS	UTILITIES		٩
			Name	>			*
			admin				4×
			database (0
			workstation				
			wsre				
			dbws (+
						12/31/17 06:10	
					0 Active Ala	PM 12/31/17 06:10	\$

DataBase

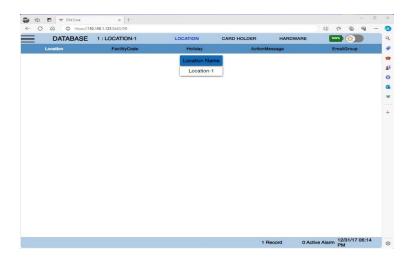
DataBase - Dashboard

Once a new password has been created and you have logged back in, you are at the Dashboard. From here you can go to DataBase or Workstation, Add Cardholder, Reports, Settings, or Add a Shortcut.



DataBase - Location

You can edit the location and change the name and set the details and features used just like all DSX Software.



Location Menu Items (- capacities)

Location - 1 Facility Code - 16 Holiday - 16 Action Message - 32 Email Groups - 32

DataBase (cont.)

DataBase - Card Holders

Card Holders can be sorted by Name, Card Number/Code, and by Company.

 Image: Open state Image: Open state	× +				<i>P</i> A1	☆ Φ ·	¢ @		×
DATABASE		LOC	CATION C	ARD HOLDER	HARDWARE				٩
CardHolders		AccessLevels		Company		UserDefine	dField		•
			New Cardholder						*
	General	User	r Defined Fields	Cards/Phone #/Key	·				<u>2</u> 1
		First Name	Enter First Name						6 6
									-
		Last Name	Enter Last Name						
									+
		Company	Company 🗸						
		Trace							
		Notes							
		Cancel		Save					
	_				_				
					1	Active Alarm	03/05/24 AM	08:48	\$

Card Holder Menu Items (- capacities)

Card Holders - 500 Access Levels - 32 Company - 16 User Defined Fields - 8

DataBase - Email Group

	New Email Group	New Email Group			
General	Edit Email Group	General	Edit Email Group		
Name	New Test	Select Names To List		Names In Email Group	
		Doe ,John		Doe ,John	
			Add		
Notes			Remove		
			Email TimeZone: Emails		
< Previous Next	xt > Cancel Save	< Previous	Next > Cancel	Save	

Must have "User Defined Fields".

Select the card holders and add to the group, then select a time zone-save. Email Groups - 8 Card Holders per Email Group - 8

DataBase (cont.)

DataBase / Hardware

There are 6 default Timezones. These are automatically assigned to Device 0 and 1 and the associated Inputs and Outputs. More Time Zones can be added and these can be altered. This is just a starting place to simplify getting started.

DATABAS	E 1:LC	CATION-1		LOCA	TION	CARD H	OLDER	HAR	DWARE	100%	Þ 🔅 👅	
imeZone	Dev	rice	0	utput		Input		LinkingGrou	ip	Lin	kingLevel	
Name	SUN	MON	TUE	WED	THU	FRI	SAT	HOL1	HOL2	HOL3	Ð	
Readers	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	•	
Inputs	0 - 2400	0 - 2400	0 · 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	•	
Outputs	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	•	
Access Levels	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	•	
Linking	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	•	
Emails	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	0 - 2400	•	

Hardware Menu Items (- capacities)

TimeZone - 32 Devices - 32 Outputs - 8 outputs per device Inputs - 16 inputs per device Linking Groups - 64 Linking Levels - 32

Settings

Configurations

DSX Commands is where the Dashboard Shortcuts are created. Configuration is where the Version is displayed along with IP Settings.

											×
	DSX Core	× +									
< ℃		168.1.25:8443/Settings				P AN 1	φ	t= (6 8		•
=	SETTINGS	DSX COMMANDS	OPERATOR	CONFIGURATION	EMAIL SERVER SETTINGS	UTILITIES	S 🚺	S 🔅		i	Q
			Mac Addr	ess	00-08-66-20-00-30						•
			Firmware Version		Core 1.5.1						्र <u>ह</u> ा
			IP Address		192.168.1.25						0 0
			IP M	ask	255.255.255.0						-
			IP Gate	vay	192.168.1.1						+
			DNS Set	ver	192.168.1.1						
			NTP Addr	ess	192.168.1.20						
			Timezone Of	set	-6						
			DST Ena	ble							
			Save								
						0 Act	tive Alarm	01/01/1 AM	8 06:23		۲

Settings Menu Items DSX Commands

back in.

Hawaii-Aleutian Standard Time GMT-10

Operators Configuration - Ip Settings. Email Server Settings - Use gmail. Utilities - Upgrade, backup, Save Error Logs, and Archiving

ounties - opgrade, backup, save Error Logs, and	Archwing.	
Configurations - IP Settings IP Gateway must be entered.	IP Gateway	192,168.1.1
DNS Server if there is one.		
NTP Address:	DNS Server	192.168.1.1
If not on the internet this will be the IP Address of the PC. If there is no Time Server, but on the	NTP Address	time.google.com
internet use "time.google.com". Timezone Offset is your Time Zone. Enable Daylight Savings Time.	Timezone Offset	-6
TimeZone Offsets	DST Enable	
Easter Standard Time GMT-5 Central Standard Time GMT-6 Mountain Standard Time GMT-7 Pacific Standard Time GMT-8	Save Note: After savi	ing DSX-Core will
restart.		5
Alaska Standard Time Anchorage -9	Refresh y	our browser to log

Settings (cont.)

Settings - Email Server Settings.

۵ 🌍	DSX Core	× +									×
← C		.168.1.25:8443/Settings					☆ Φ	19			•
\equiv	SETTINGS	DSX COMMANDS	OPERATOR	CONFIGURATION	EMAIL SERVER SETTINGS	UTILITIE	ES 🚺	os) 🔅		Î	Q
										- 1	-
			Server Add	ress	smtp.gmail.com					- 1	-
										- 1	<u>2</u>
										- 1	0
			Port Nun	hber	587						•
											-
										- 1	
				,							+
		User	lame/From Add	ress	dsxtech1@gmail.com					- 1	
										- 1	
			Passv	vord [- 1	
			ſ	Save							
			L								
								_ 01/01/1	0.00.44	_	
						0 A	ctive Alarr	n AM	00:44	Ŧ	۲

Server Address - smtp.gmail.com or Email server. Port Number - Gmail is 587. User Name/From Address - must be valid email.

Password - Email password.

Settings - DSX Commands.

DSX	COMMANDS	OPERATOR	CONFIGURATION	EMAIL SE	RVER SETTINGS	
			Name +			
			DSX Command			
	General					
	Locations	Location-1		Name	Туре	
	O	utputs		1:0:1 0	Output	
	<mark>1:0:1 0</mark> 1:1:1 1		Add			
	Outputs	•		Timezone Action	Outputs	
	< Previ	ous	Next >	Cancel	Save	

Adding a DSX Command in Settings places an icon on the Dashboard. It is a shortcut to execute an action from the Dashboard.

Settings (cont.)

Settings - Operator

Name	Ð
admin	
database	•
workstation	•
wsre	•
dbws	•

Under the Operator Tab set up your users.

NOTE: For admin users only. Placing your email in the "Email ID" box will allow you to receive an email anytime the DSX-Core Restarts.

SX COMMANDS	OPERATOR	CONFIGURATION	EMAIL SERVER S	ETTINGS
_				
		Edit Operator		
General				
	Nar	me admin)	
	Passwo	ord]	
	PwProt	file Master v]	
F	wProfile Descripti	ion This profile has Co	omplete Access to the	e application
	Not	tes)	
	Register	red 🗹		
	Email	ID]	
< Pre	vious	Next >	Cancel S	Save

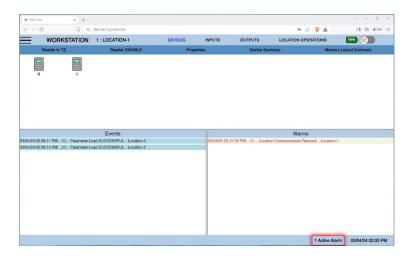
Email address here for admin accounts only.

You will receive DSX-Core Start-up alerts and battery alerts. This email for Admin Operators is very important. After an update or restore you will receive an email stating the DSX-Core has restarted and you are then able to log into the browser.

Workstation

Workstation - Devices

When workstation is selected you are taken to Devices by default. Notice the readers have a Green Icon. If the reader is disabled it will turn red. The Event Window is on the bottom left and the Alarm Window is on the bottom right.

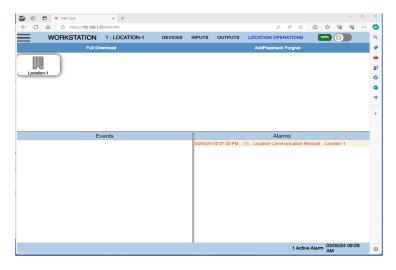


Device Menu Items

Reader to TZ Reader Disable Properties Device Summary - Firmware and hardware revisions. Memory Layout Summary - Controller Memory usage.

Workstation - Location Operations

Select the Location followed by Full Download or Antipassback Forgive.



Location Operations Menu Items Full Download AntiPassback Forgive

Workstation - Outputs Outputs is where the locks are monitored and controlled. Select an Output and then a menu item. The Icon shows the electrical state and how it got there such as by manual command, time zone. or link.

🐨 DSX Core	× +							~ -	o ×
< > 0		192.168.1.25:8443/WS					아 🖒 🛛 🛛 🛆	00	• VPN =
<u> </u>	ORKSTATION	1 : LOCATION-1	DEVICES	INPUTS	OUTPUTS	LOCAT	TION OPERATIONS	100%)	
Secure	Open	To Timezone	Grant Access	All Secure	•	All Open	All Timezone	Prope	rties
o)							
		Events					Alarms		
	PM (1) Opr set outp PM (1) Parameter I	ut: OPEN 1	1	03/04/24 02:27:	33 PM (1) Lo	ocation Communi	Alarms ication Restoral Location-1		
03/04/24 02:28:17	PM (1) Parameter L			03/04/24 02:27:	33 PM (1) Lo	ocation Communi			
03/04/24 02:28:17	PM (1) Parameter L	ut: OPEN 1 pad SUCCESSFUL Location-		03/04/24 02:27:	33 PM (1) Lo	ocation Communi			

Output Menu Items

Secure Open To TimeZone **Grant Access** All Secure All Open All TimeZone **Properties**

Note: In the footer at the bottom of Workstation and DataBase you can see the number of Active Alarms.

Reports

History

History can be searched by time and date.

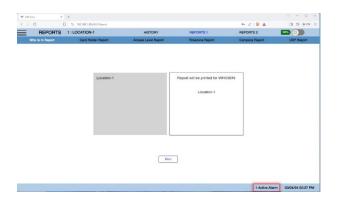
One filter can be applied at a a time. You can run a report by time and date and select one event instead of all events like Access Granted, or one reader instead of all readers, or one cardholder instead of all cardholders. Since there is only one selection if you select an event you will get a report that includes all readers and card holders.

🐨 DSX Core	× +				У – С X
$\langle - \rangle = 0$	🗍 🛸 192.168.1.25/8443/Report			or 🗹 🔯 🛆	
REPO	ORTS 1 : LOCATION-1	HISTORY	REPORTS 1	REPORTS 2	10%) 📀 🗾
		History	/ Report		
		NOTE: History ca	an be viewed from		
			11 18.00:52		
		Start Date 03/04/2024	Stop Date 03/04/2024		
		Start Time 12:00 AM (0)	Stop Time 11:59 PM (G)		
		ZAII Event Types Includ	bed		
		Events from all Device	es are included		
		Events from all CardH	iolders are included		
		Civents nom all cardi	ioners are included		
		Get	listory		
				1 Active Alarm	03/04/24 02:36 PM

History Filters All Events All Devices All Card Holders

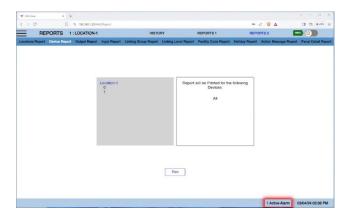
Reports (cont.)

Reports 1



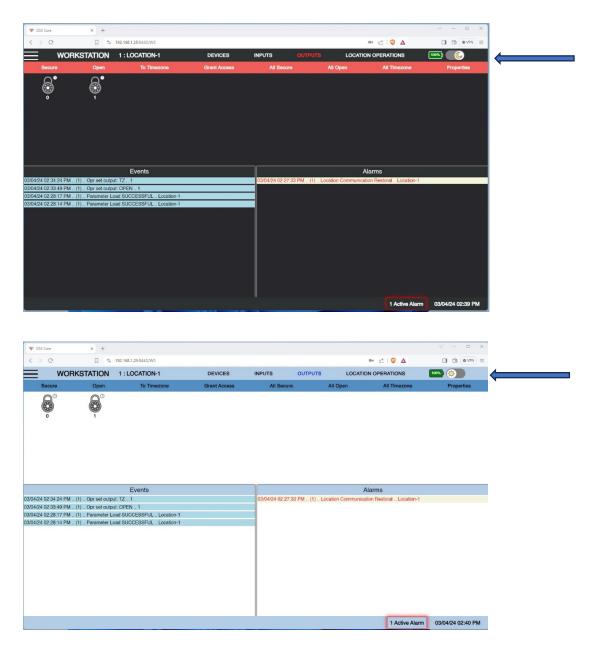
Who Is in Report - based on Antipassback Zone 1 status. Card Holder Report Access Level Report Time Zone Report Company Report UDF Report

Reports 2



Location Report Device Report Output Report Input Report Linking Group Report Linking Level Report Facility Code Report Holiday Report Action Message Report Panel Detail Report

Day Night Color Scheme Toggle In the top right corner there is a slide switch that changes the color scheme from dark to light depending on the preference of the operator and environment used in.



Moving the Security Certificate

Moving the Security Certificate to a new PC.

Warning: Do not create a new certificate!

- 1. Navigate to the folder containing the DSX-Core Utility.
- 2. Right click and run as admin.
- 3. Click "Select".
- 4. When the folder opens highlight "private.key and server.pem".
- 5. Click "Open".
- 6. Close the DSX-Core Utility.
- 7. Navigate to the folder where the DSX-Core Utility is located.
- 8. Copy and paste the Clientinstall.exe to the new PC in a new folder.
- 9. Find the file "ClientInstall.exe", right click and run as administrator.
- 10. This will install the Security Certificate on the PC Browser.
- 11. Close the folder and open the DSX-Core webpage.

Updating the Core Firmware

New versions of firmware to update the DSX-Core will be sent zipped containing an "update.zip" file. Place the extracted file in the "Updates Folder" subfolder under the DSX_Core_Support folder created with the install. You can find your current version in the DSX-Core Settings/Configuration page and the Web Browser on DSX-Core. **Do Not** skip a firmware version when updating the DSX-Core.

Updating the DSX-Core using Web Browser

- 1. Backup the DSX-Core pg. 25.
- 2. Place the zipped update file desktop and extract the file to the "Updates" Subfolder.
- 3. Open the browser to access the DSX-Core.
- 4. Navigate to the Settings/Utilities section.
- 5. Click the top "Choose File" above "Update Firmware".
- 6. Navigate to the "update_159.zip" file in your update folder.
- 7. Select and open the file.
- 8. In the Settings/Utilities page click "Update Firmware".
- 9. Wait for the DSX-Core to finish, it will then log you out.
- 10. This may take up to 30 minutes. During the update time the Heartbeat light will blink at a faster rate. You must wait until the rate slows to about a 1 second rate. Admin Operator will receive email notice.
- 11. Before Opening the Browser and connecting to the DSX-Core clear the "Cache" in your browser. This process varies with browsers, Google your browser for directions if needed.
- 12. When the Heartbeat light slows to normal open the web browser and check the following:
 - a. Browser displays the correct version of DSX-Core firmware, ie. Version: Core 1.5.9-07.32.
 - b. Check the Settings/Configuration page for same.

Updating the DSX-Core using the Core Utility

- 1. Backup The DSX-Core pg.25.
- 2. Disconnect the panels from the DSX-Core.
- 3. Connect the DSX-USB to the DSX-Core using the RS-485.
- 4. Verify the Com Port in Computer Manager.
- 5. Launch the DSX-Core Utility as admin.
- 6. Select the Com Port in the "Serial Port" drop down box.
- 7. Click "Connect" then press the reset button on the DSX-Core.
- 8. Click up "Update Core" on the utility.
- 9. Navigate to select the Zipped Update file in the "Updates" folder.
- 10. Select the file by highlighting it and click "open".
- 11. Wait until the progress bar states, "Process Complete".
- 12. Click Disconnect or the "X" on the Utility.
- 13. You must still wait for the DSX-Core to finish the file updates.

Error Logs and Archiving History

Save Error Logs in Web Browser.

- 1. In the Settings/Utility section of the browser Click on "Save Error Logs".
- 2. Navigate to the folder created during install.
- 3. Click Open.
- 4. View the errors by going to that folder and opening the text file.

Get ErrorLogs using the Utility.

- 1. Disconnect the DSX-Core from the panel and connect USB 485 to the DSX-Core.
- 2. C

Archive History.

Note: When you have files to archive you will receive the following message when opening the web page:

Information!
There are files to Archive
Close

- 1. These archived files can be accessed later for History Reports.
- 2. Go to Settings/Utilities.
- 3. Click on "Archive History".
- 4. You will see an "Archiving...." message.
- 5. When done click "Save to PC" and select the folder created on page 5.

Retrieving Archived History.

(coming soon)

Bulk Loading Cards

<u>Unless this is the first time</u> setting up the DSX-Core be sure to make a back-up prior to Bulk Loading Cards. Go to "Creating A Back-Up" on page 25 of these instructions.

Bulk Loading Cards

- 1. Ensure that all Access Levels, Devices, and Companies are programmed.
- 2. Disconnect the DSX-Core from the panel and connect the DSX-USB RS-485.
- 3. Go to Device Manager\ComPorts on your PC. Note the Com Port assigned to the DSX-USB serial device.
- 4. Navigate to the folder that has the DSX **CoreUtility.exe** and run it as admin.
- 5. In the DSX-Core Utility, select the correct Com Port using the "Serial Port" dropdown.
- 6. Click the "Connect" button on the app then quickly press reset on the DSX-Core. You must wait for the "Device ID" to populate.
- 7. Click on "Bulk Load Cards/Cardholders".
- 8. Wait for the panel to enter the range of cards to be loaded.

	_	
	Bulk Load	×
	Access Level	×
	Company	×
	startCode	0
	cardHolderCount	0
	Generate CardHolders	Cancel
).	Once information has been enter \times	ered click "Generate Cardholders".
	CardHolders inserted to the database!	

10. Click "OK".

11. After the above pop-up you can close the bulk loader.

OK

- 12. Wait for the DSX-Core Utility to finish the Bulk Load completely before continuing.
- 13. A pop up will appear "Completed Uploading Edited Databases!".
- 14. Click disconnect in the DSX-Core Utility.
- 15. Reconnect to the DSX-Core to the panels.
- 16. Launch the DSX-Core Web Page.

Backing Up and Restoring the Core Database

Note: Create a backup folder then create subfolders for each backup and name them using date and time created for easy identification later. (C:/Database Backups/D22124T0800) Be sure if backing up files, build sub folders for each date.

Restoring is a three-step process: create the Database Backup the DSX-Core Browser, zipping the Database Backup files using the DSX-Core Utility, and restoring the DataBase Backup using the DSX-Core Browser or DSX-Core Utility.

Creating a Database Back-up.

- 1. Create a folder for your backup on a preferred drive and name it (ie, Database Backups).
- 2. Create a subfolder and name it the date of your Database Backup.
- 3. Open the DSX-Core Webpage.
- 4. Navigate to the Settings/Utilities page.
- 5. Click on "Backup Database".
- 6. The DSX-Core will create a backup and provide a prompt when complete.
- 7. Click "Save To PC" button.
- 8. Click "Select Folder".
- 9. Click "OK" at the two prompts.
- 10. Wait for completion.

Creating a Database Backup.zip File to Restore Using The DSX-Core Utility.

- 1. Do not connect the DSX-USB to the DSX-Core.
- 2. Navigate to the folder that has the DSX-Core Utility.
- 3. Launch the Utility as admin.
- 4. Click on "Create Restore Database".
- 5. Navigate to the desired Database Backup folder.
- 6. Select all the files by highlighting them.
- 7. Click "Open".
- 8. Click "OK" at the pop-up saying "Database_Backup.zip created for Restoral".
- 9. This zips the files previously backed up into the Database Backup folder.
- 10. Close the DSX-Core Utility.

Backing Up and Restoring the Core Database (Cont.)

Restoring the DSX-Core DataBase Using the DSX-Core Browser.

- 1. Navigate to the "Settings/Utilities section of the DSX-Core browser.
- 2. Click "Choose File" above "Restore Database".
- 3. Navigate to the back-up folder and choose the "Database Backup.zip" file.
- 4. Click "Open".
- 5. Click "Restore Core".
- 6. This process will log you out of web browser, and you must wait at least 2 minutes to log back in.
- 7. Close the browser (you may need to clear the browser Cache) and reopen it to log in to DSX-Core.

Restoring the DSX-Core DataBase using the DSX-Core Utility.

Note: When using this method to restore you do not need to create the create a Database Backup.zip prior to restoring.

- 1. Disconnect the panels from the DSX-Core.
- 2. Connect the DSX-USB to the DSX-Core using the RS-485.
- 3. Verify the Com Port in Computer Manager.
- 4. Launch the DSX-Core Utility as admin.
- 5. Select the Com Port in the "Serial Port" drop down box.
- 6. Click "Connect" then press the reset button on the DSX-Core.
- 7. Click "Restore Database".
- 8. Navigate to the desired Database Back-up folder.
- 9. Highlight all 5 files and click "Open".
- 10. When complete you will see a pop-up "Database Has Been Restored".
- 11. Click "Disconnect".
- 12. Close the DSX-Core Utility.
- 13. Disconnect the USB from the DSX-Core.
- 14. Open your browser and check your database.
- 15. Reconnect your panels to the DSX-Core.

Defaulting and Factory Resetting the Core

Defaulting Database of the DSX-CORE.

- 1. Disconnect the DSX-Core from the panels.
- 2. Connect the DSX-Core using the DSX-USB and RS-485.
- 3. Go to the folder housing "CoreUtility.exe" and launch it as admin.
- 4. In the DSX-Core utility select the correct "Serial Port" using the dropdown menu.
- 5. Click on "Default Database".
- 6. Wait for the following window.

		×
All Databases returne	d to Default	
	ОК	

- 7. Click "Disconnect" and close the DSX-Core utility application.
- 8. Reconnect the panel to the DSX-Core.
- 9. Open the web browser and reprogram the database.

Factory Resetting the DSX-CORE.

- 1. Disconnect the DSX-Core from the panels.
- 2. Connect to the DSX-Core using the DSX-USB and RS-485.
- 3. Navigate to the folder housing "CoreUtility.exe" and launch it.
- 4. In the DSX-Core utility select the correct "Serial Port" using the dropdown menu.
- 5. In the DSX-Core utility click "Factory Reset".
- 6. You will receive a caution message below.

Caution!	5	
This will clear CORE settings to	o their factory default valu	ies. Proceed?
	Yes	No
"Vec" to continue		

- 7. "Yes" to continue.
- 8. After this process is completed go back to pages 7 & 8 and re-enter the data.

Defaulting and Factory Resetting the DSX-Core (Cont.)

User Reset The DSX-Core.

- 1. Disconnect the DSX-Core from the panels.
- 2. Connect the DSX-Core using the DSX-USB and RS-485.
- 3. Navigate to the folder that has the DSX-Core Utility.
- 4. Launch the Utility.
- 5. Connect to the DSX-Core using the DSX-Core Utility using steps 3-6 pg. 4.
- 6. Click "User Reset".
- 7. Wait until DSX-Core Utility finishes.
- 8. Click Disconnect in the DSX-Core Utility.
- 9. Log in to the DSX-Core Web Page.
- 10. You will be asked to enter a new password.

Configuration Reseting the DSX-Core.

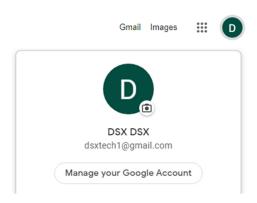
- 1. Disconnect the DSX-Core from the panels.
- 2. Connect the DSX-Core using the DSX-USB and RS-485.
- 3. Navigate to the folder that has the DSX-Core Utility.
- 4. Launch the Utility.
- 5. Connect to the DSX-Core using the DSX-Core Utility using steps 3-6 pg. 4.
- 6. Click "Configuration Reset".
- 7. Wait until DSX-Core Utility finishes.
- 8. Click Disconnect in the DSX-Core Utility.
- 9. Log in to the DSX-Core Web Page.
- 10. You will need to go to Settings/Configuration and put in new server settings.

Gmail Setup

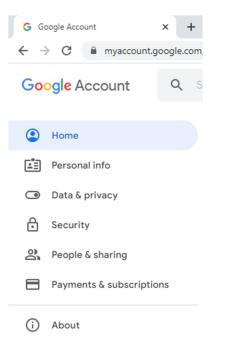
Note: Google has disabled the feature that allows Less Secure Apps to send the User Email name and password. To use Gmail, it may be necessary to reconfigure an App Password.

Create an "App Password".

1. Login to Google and select Manage your Google Account.



2. Select **Security** from the menu.



Gmail Setup (cont.)

3. Go to **Signing in with Google** and enable **2-Step Verification**.

Signing in to Google		
Password	Last changed 8:50 AM	* *
2-Step Verification	On	>

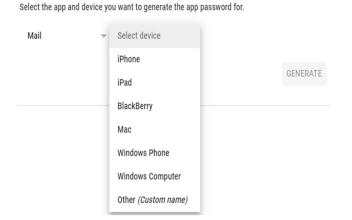
- 4. After 2-Step Verification has been enabled you can now create App Passwords.
 - Under Select App choose Email

Under **Select Device** choose **Other** *(Custom Name)*. Enter the Custom Name and then click **Generate**.

Select the app and device you want to generate the app password for.

Select app	Select device	$\overline{}$	
Mail			
Calendar			GENERATE
Contacts			
YouTube			
Other (Custom name)			

5. Select the App and the Device.



Select the app and device you want to generate the app password for.

DSX Emails X



Gmail Setup (cont.)

6. The App Password will be displayed. This is the information you will enter in the Password field when configuring OlMail.

Generated app password	
	Your app password for your device
	npvp bqrx dqxr jauz
	How to use it
Email	Go to the settings for your Google Account in
securesally@gmail.com	the application or device you are trying to set up. Replace your password with the 16-
Password	character password shown above.
•••••	Just like your normal password, this app password grants complete access to your
	Google Account. You won't need to remember
	it, so don't write it down or share it with anyone.

DONE

This page was intentionally left blank.

R



THE SECURITY PROFESSIONALS' FIRST CHOICE