



**TAS12/IntraQ Direct Connect
Advanced Configuration Guide
PUD4246R5-0 Version 4.0**

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Preface

Document Overview

This document is meant to provide users with detailed information about the various configuration options available for Alvarado TAS12 and IntraQ Direct Connect devices. The document is current up to TAS12 DirectConnect version 1.3.1.

NOTE

Any instances where the TAS12 and IntraQ **devices** differ will be noted. Otherwise, you can assume that configuration is the same for both devices. "TAS12" is the generic name for the software application.

Support

For questions or comments about the information presented in this guide, contact Alvarado's Entertainment Support department. Support hours are Monday–Friday from 8:00 AM to 4:00 PM Pacific time.

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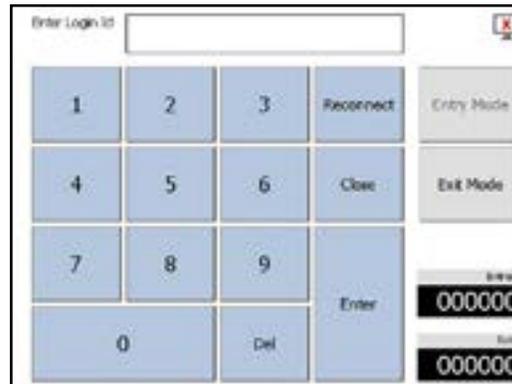


Changing Configuration from the Device

Most Direct Connect configuration options are in the configuration text files detailed in the following sections. However, you can adjust some configuration options from the device itself.

Navigate to the Device Configuration Screen

1. While on the idle screen, **tap the screen three times** within two seconds to go to the Login screen.
2. On the Login screen, enter a valid Login ID into the field and press **Enter** to go to the *Administrator Menu*, shown below. The default Login ID is **123**. Your ticketing provider may also create different Login IDs for you to use, so check with them if the default Login ID doesn't work.
3. Press the **Device Configuration** button.





Device Configuration Options

1. All the configuration options on this screen can also be configured into the `tas.txt` file. See the [TAS.txt File](#) section below on page 6.

Server Url
http://192.168.0.100

Site Name

Min Ticket Length 6

Max Ticket Length 20

Online Mode

Exit Mode

Ticket Validation

Ticket Information in Manual Ticket Entry

- **Server Url:** URL or URI of the validation server.
- **Site Name:** Identifier that is sent to the validation server with each validation request that identifies the device's location.
- **Min Ticket Length:** Minimum length a ticket's barcode number must be for the device to attempt to validate it. If a ticket's barcode number is shorter than this value, the device will mark it invalid without sending it.
- **Max Ticket Length:** Maximum length a ticket's barcode number can be for the device to attempt to validate it. If a ticket's barcode number is longer than this value, the device will mark it invalid without sending it.
- **Online Mode:** When this box is checked, the device attempts to communicate with the server when it validates a ticket. If the box is unchecked, the device will not attempt to communicate with the server and will follow offline validation rules.
- **Exit Mode:** When this box is checked, the device scans tickets out of the facility. If using an Exit Mode device with a turnstile, the turnstile GPIO settings must be set up for exit scanning as well. If the box is unchecked, the device scans tickets into a facility.
- **Ticket Validation:** The *Ticket Validation* screen validates tickets when an operator scans or manually enters a ticket number.
- **Ticket Information in Manual Ticket Entry:** Scanning tickets with the *Ticket Validation* screen displays information about the tickets but does not validate them.



TAS.txt File

Network

Setting Name	Default	Description
SITE NAME=		Text string identifier that is sent to the validation server with each validation request that identifies the device's location.
SERVER URI=	http://192.168.0.100/	URI of the validation server.
ONLINE=	True	True: The device attempts to communicate with the server. False: The device does not attempt to communicate with the server.
OFFLINE VALIDATION=	True	True: If the device loses connectivity to the server, it will use simplified validation rules to validate tickets. The device can upload offline scans to the validation server after it reestablishes a connection if that functionality is configured. False: The device marks all tickets as invalid while it does not have a connection to the validation server.
NETWORK TIMEOUT=	8	The network timeout time, in seconds. If the device does not receive a response from the server before this time, the device switches to offline mode. Minimum value is 1.
SHRED ON MODE=	False	True: Once a ticket is validated at the device, it cannot be used again. Use this setting with devices without turnstile arms. False: Once a ticket is validated and there is a corresponding turnstile arm rotation, it cannot be used again. Use this setting with devices with turnstile arms.
LOCAL LOGIN=	True	True: The device does not download operator login information from the server. Operator login information in the <i>operators.txt</i> file must be manually configured and updated. False: The device downloads operator login information from the server.
EDIT VALIDATION MASKS=	True	True: Device operators can manually edit validation masks when the device goes offline. False: Device operators cannot manually edit validation masks when the device goes offline.

**JSON Interface Fields**

Setting Name	Default	Description
INTERFACE=	2	1: Uses SOAP XML interface 2: Uses JSON interface
AUTHENTICATION=	Basic YWRtaW4vYWx2YXJhZG8=	Basic authentication header used when sending requests.
VALIDATE ENDPOINT=	/validate	Defines the endpoint for ValidateTicket requests.
INFO ENDPOINT=	/info	Defines the endpoint for GetTicketInfo requests.
FORCE ENDPOINT=	/force	Defines the endpoint for ForceValidation requests.
VOID ENDPOINT=	/void	Defines the endpoint for VoidValidation requests.
LOGIN ADMIN ENDPOINT=	/login	Defines the endpoint for LoginAdministration requests.
DEVICE SYNC ENDPOINT=	/sync	Defines the endpoint for SynchronizeDevice requests.
PING ENDPOINT=	/ping	Defines the endpoint for Ping requests.

General

Setting Name	Default	Description
LANDSCAPE MODE=	False	True: The application displays in landscape mode. Use this with IntraQ units. False: The application displays in portrait mode. Use this with TAS12 units.
MIN LENGTH=	12	Minimum length a ticket's barcode number must be for the device to attempt to validate it. If a ticket's barcode number is shorter than this value, the device will mark it invalid without sending it.
MAX LENGTH=	12	Maximum length a ticket's barcode number must be for the device to attempt to validate it. If a ticket's barcode number is longer than this value, the device will mark it invalid without sending it.
GREEN=	20	Time in seconds that the green attendant LED remains illuminated after a valid ticket scan. This is also the time a patron has to move through the turnstile if ACTIVATION TIME=0. If SHRED ON MODE=False, the value defined in the GLOBAL GREEN= field in the <i>TASData.txt</i> file overrides the value entered here.
RED=	3	Time in seconds that the red attendant LED remains illuminated after a valid ticket scan. If SHRED ON MODE=False, the value defined in the GLOBAL RED= field in the <i>TASData.txt</i> file overrides the value entered here.



Setting Name	Default	Description
SCREEN TIMEOUT=	10	Time in seconds that the device will remain idle on the <i>Operator Menu</i> or <i>Operator Login</i> screens before it returns to the previous screen. The timeout applies individually to each screen.
SCREEN REFRESH DELAY=	5	Time in seconds that the device displays the result of the most recent scan on the <i>Ticket Validation</i> or <i>Delivery ID Validation</i> screens.
EXIT=	False	True: The device scans tickets out of the facility. If using an Exit Mode device with a turnstile, the turnstile GPIO settings must be set up for exit scanning as well. False: The device scans tickets into the facility.
DEBUG MODE=	False	True: Adds a Close button to the <i>Home</i> screen which closes the TAS12 application and returns to the desktop. The device also records information about TCP service, start, stop, and error states. This log file is located in the <i>Program Files\TAS\DeviceLog.txt</i> file. False: There is no Close button and the device does not write to the <i>DeviceLog.txt</i> file.
SAME TICKET DELAY=	2000	Time in milliseconds the device will wait before processing a duplicate ticket. For example, a value of 2000 means that the device ignores a ticket's barcode for two seconds after it is scanned.
ACTIVATION TIME=	0	Sets the time in milliseconds that the activation signal (output wires – ACC1) remain in a closed-contact state. Set this value to 0 to use the value defined in the GREEN= field. If there is a non-zero value in this field, the contact signal from the TAS12 unit will remain in the closed state. If used with a turnstile, the turnstile does not re-lock if a patron passes through the turnstile before the conclusion of this time. This setting is meant for use with non-Alvarado turnstiles and is typically set for 500 (0.5 seconds).
DISPLAY TYPE=	4	Vacuum Fluorescent Display (VFD) display port. Possible port values: <ul style="list-style-type: none"> • 0 – Noritake Itron VFD – Model CU20026SCPBT28A • 2 – ASCII • 4 – MatrixOrbital
PRINT RECEIPT=	True	True: When ENHANCED MODE is also set to true, the device prints receipts when it scans a barcode with one of the symbologies defined in the RECEIPT SYMBOLOGY field. False: Scanned tickets validate, but do not print.
TRACK=	2	The device reads from this track number when a magnetic scan media is presented.



Setting Name	Default	Description
LED TIME SLOW ON=	300	Time in milliseconds the LED remains on in Slow Flash Mode.
LED TIME SLOW OFF=	600	Time in milliseconds the LED remains off in Slow Flash Mode.
LED TIME FAST ON=	200	Time in milliseconds the LED remains on in Fast Flash Mode.
LED TIME FAST OFF=	200	Time in milliseconds the LED remains off in Fast Flash Mode.
LED OFFLINE=	002	Defines LED status for when the device is in Offline Mode. See explanation in LED CODE0-9 fields for details. <ul style="list-style-type: none"> • First Digit – Green LED • Second Digit – Yellow LED • Third LED – Red LED
LED CODE0=	10	Defines LED status for when the device displays a valid response. LED CODE0 corresponds with response code “Good 0” (default valid ticket). LED CODE1-9 corresponds with response codes “Good 1” to “Good 9”. The first digit is green LED status and the second digit is yellow LED status. Use one of the following values to define LED status. <ul style="list-style-type: none"> • 0 – LED off • 1 – LED on (solid) • 2 – LED slow flash (as defined in the LED TIME SLOW ON and LED TIME SLOW OFF fields) • 3 – LED fast flash (as defined in the LED TIME FAST ON and LED TIME FAST OFF fields)
LED CODE1=	11	
LED CODE2=	12	
LED CODE3=	22	
LED CODE4=	22	
LED CODE5=	22	
LED CODE6=	22	
LED CODE7=	22	
LED CODE8=	22	
LED CODE9=	22	

Other

Setting Name	Default	Description
TICKET SCREEN ACCESS BARCODE=		If the device scans a barcode with the number defined in this field, the device goes directly to the manual <i>Ticket Validation</i> screen. This is meant to allow device operators to manually enter tickets (that have poorly printed barcodes, for example) without being able to access other sensitive configuration settings.
PARSE BARCODE=		Defines a Regular Expression to pull certain data from a ticket scan (1D or 2D). Contact Alvarado for additional information/documentation.

**Amanda.txt File****Amanda GPIO**

Setting Name	Default	Description
ACTIVATION RELAY OUTPUT=	219	The output port for the activation relay.
GREEN LED OUTPUT=	83	The output port for the green attendant LED.
YELLOW LED OUTPUT=	84	The output port for the yellow attendant LED.
FRONT RED LED OUTPUT=	82	The output port for the red attendant LED.
BACK RED LED OUTPUT=	9999	This is not currently used. Leave this set to 9999 (disabled).
ROTATION FORWARD INPUT=	94	The input port for the forward passage feedback contact.
ROTATION BACK INPUT=	90	The input port for the backward passage feedback contact.
FAN=	203	The port for the TAS12's onboard fan.
FAN CONTROL TEMP=	20	Sets the temperature at which the fan engages when TOGGLE FAN STATE is set to "True". Uses Celsius or Fahrenheit depending on what is configured in the CELSIUS field.
TOGGLE FAN STATE=	False	True: The fan will turn on when the temperature reaches the setting defined in the FAN CONTROL TEMP field. False: The fan remains on as long as the TAS application is running.
CELSIUS	False	True: The temperature is reported in Celsius on the <i>About</i> screen. False: The temperature is reported in Fahrenheit on the <i>About</i> screen.

RS232

Setting Name	Default	Description
SCANNER PORT=	2	RS232 port the scanner uses to connect to the device. The port number can range from 1 to 4, depending on the scanner used.
SCANNER BAUDRATE=	115200	Scanner RS232 port baud rate. Supported values are 9600, 19200, and 38400.
DISPLAY PORT=	0	RS232 port the VFD uses to connect to the device. Use 0 to disable this setting.
DISPLAY BAUDRATE=	19200	VFD RS232 port baud rate. Supported values are 9600, 19200, and 38400.



Setting Name	Default	Description
KEYBOARD PORT=	0	RS232 port used by keyboard in the range 1 – 4. To disable keyboard set to 0. To enable keyboard, set value to port not used by scanner. When keyboard port is shared with front or background display, it would use Display Port settings for baud rate, data size and parity.
KEYBOARD BAUDRATE=	19200	Keyboard RS232 port baud rate. Supported values: 9600, 19200 and 38400.
PRINTER PORT=	0	RS232 port the printer uses to connect to the device when CARD ID MODE is set to True. Use 0 to disable this setting.
PRINTER BAUDRATE=	38400	Printer RS232 port baud rate. Set this 115200 for Zebra KR403 printers.

EDM

Setting Name	Default	Description
EDM PORT=	0	UART port the device uses to communicate with the motor controller board and a paired slave unit, if applicable. 0: EDM functionality is disabled. 1: Enables communication through COM1, which enables EDM mode.
EDM MAIN=	True	True: This TAS12 will operate as the main EDM. The Main EDM communicates with the EDM controller. False: This TAS12 will operate as the secondary EDM.
EDM BAUDRATE=	57600	Baud rate of the EDM port.
EDM INTERVAL=	100	Sets the time in milliseconds between status queries between the main TAS12 and the EDM controller.
EDM DIRECTION=	1	This setting determines the rotation direction of the EDM with respect to the TAS12 device. 0: Counterclockwise (right-hand exit unit or left-hand entry unit) 1: Clockwise (left-hand exit unit or right-hand entry unit)
EDM MODE=	0	This setting determines the turnstile's behavior for the direction of the TAS12 being configured. 0: Controlled 1: Free pass 2: No passage (closed) 3: Barrier disabled (drop-arm lowered) 4: Emergency



RFID-NFC.txt

Setting Name	Default	Description
RFID=	False	True: Enables support for the RFID reader. The device uses RFID scans as Delivery ID or ticket, depending on the RFID IS TICKET field. False: Disables support for the RFID reader.
RFID READER=	2	Defines which RFID reader the device will attempt to use. The following device selections are available. 1: ACR (If using an ACR reader, you must also define which one you're using in the RFID NUMBER field.) 2: Kiosk IV 3: EVO
RFID NUMBER=	1	Selects the RFID reader's controller that it uses to scan RFID media. This field is only used if RFID READER is set to 1. 0: Use with ACR1252 RFID readers. 1: Use with ACR122 readers.
RFID BLOCK=	0	Defines the block on the RFID card the device uses to read data. This value can vary depending on the manufacturer.
RFID IS TICKET=	False	True: The device uses RFID scans as ticket numbers. False: The device uses RFID scans as Delivery ID numbers
RFID READ UID=	True	True: The device reads the serial number (UID) of the RFID chip. This is for devices that have not had custom data written to them. False: The device reads custom data from the RFID chip.
RFID BUZZER=	False	True: The RFID reader beeps twice when it successfully reads an RFID card. False: The RFID reader does not beep when it reads RFID cards.
RFID TYPE NAME=		TAS12 attempts to read MiFare Ultralight RFID cards that are encoded with a specific NFC NDEF format. For example, entering <i>pfasoft.com:card</i> into this field would enable cards with that encoding to be read and validated.
RFID CARD LENGTH=		This is the length of the number on the RFID card that will be validated when it is encoded in NDEF format.



Setting Name	Default	Description
RFID CODE DELIMITER=		Defines a delimiter character used when reading multiple blocks of data. The TAS12 device will read up to the RFID CARD LENGTH or RFID CODE DELIMITER, whichever comes first.
PASSTHROUGH MODE=	False	True: The Kiosk IV RFID/NFC reader will only read MIFARE media. False: The Kiosk IV RFID/NFC reader will read MIFARE and mobile NFC passes (Apple Wallet, Google Pay).
#MERCHANT-KEY 1=		Merchant ID-Private Key pairs for decrypting mobile NFC passes. Contact ticketing provider or Alvarado for details. If you are going to use a Merchant Key, remove the hash symbol.
#MERCHANT-KEY 2=		
#MERCHANT-KEY 3=		
#MERCHANT-KEY 4=		
#MERCHANT-KEY 5=		
#MERCHANT-KEY 6=		
#URL=		<i>Reserved</i>



Messages.txt File

The messages.txt file can be updated automatically by the server when the device first comes online. The file contains a list of messages that are displayed on the Ticket Validation screen depending on the response code returned by the scan.

Messages are stored in the format “##Message”, where “##” is the response code that determines which message is displayed, and “Message” is the text of the message. Alvarado includes a default messages.txt file in new installations of TAS12 Direct Connect. The messages are displayed below to give an example of how you can set up your own response messages.

00Good Ticket	30Error 30
01Good 1	31Cancelled 1
02Good 2	32Cancelled 2
03Good 3	33Cancelled 3
04Good 4	34Cancelled 4
05Good 5	35Cancelled 5
06Good 6	36Cancelled 6
07Good 7	37Cancelled 7
08Good 8	38Cancelled 8
09Valid Bio	39Cancelled9
10Reentry	40Error 40
11Invalid Event	41Already In
12Invalid Date	42Already Out
13Invalid Time	43Exit without Enter
14Invalid Day	44Invalid Bio Score
15Invalid Access	45Invalid Family Pass
16Invalid Location	46Invalid Ticket Price
17Err 17	47Invalid User Code1
18Err 18	48Invalid User Code2
19Err 19	49Invalid User Code3
20Err 20	50Invalid Replacement Media
21Used In Event	51Not Found
22Used In Day	52Rescan
23Used In Hour	53EV Failure
24Used All Days	54Invalid Ticket Checksum
25Used All Hours	55Error 55
26Used at 2nd Location	56Err 56
27No Entries Remaining	57Err 57
28Error 28	58Err 58
29Error 29	59Other

Based on the table above, if a valid ticket returns a response code “0”, the message “Good Ticket” displays on the *Ticket Validation* screen.



Screen Images

The images shown in the tables below are for TAS12 devices. IntraQ devices have the same images and file names, but different dimensions.



TAS12 Go.bmp



IntraQ Go.bmp

Default Images

The bitmap files identified and described below are included by default when TAS12 units ship from Alvarado. Default IntraQ screens look the same, but are oriented in landscape mode.

Bitmap Image	File Name	Description	Response Code
	go.bmp	Any valid entry scan that does not have a specific bitmap.	0-10
	stop.bmp	Any invalid scan that does not have a specific bitmap.	11-99



Bitmap Image	File Name	Description	Response Code
	scan.bmp	The default "idle" image when the device is waiting for the patron to scan a barcode.	N/A
	wait.bmp	Displays when the device is launching the TAS application or when it is processing information. If there are no bitmaps for printing available, the device will use this image.	N/A
	Print.bmp	Image displays when the device is printing tickets.	N/A



Images and Response Codes

Each response code can have its own unique bitmap associated with it. When a ticket scan returns a response code, the TAS12 displays the associated bitmap image on the screen.

For example, Alvarado uses response code 51 when a scanned ticket is not found in the database. When this response code is returned, the device displays this bitmap:



stop51.bmp

Alvarado uses response code 16 for tickets that are scanned at the wrong location. When this response code is returned, the device displays this bitmap:



stop16.bmp

Image File Naming Conventions

When naming bitmap image files, use the following naming conventions:

- For **valid** response codes (0-10), bitmaps should be named **go#.bmp**. Replace the “#” with the response code number.
- For **invalid** response codes (11-99), bitmaps should be named **stop##.bmp**. Replace the “#” with the response code number.
- When replacing any of the default bitmaps, the new bitmap should have the **same filename** as the file it is replacing.



Image File Guidelines

Observe the following guidelines when creating custom bitmaps:

- Bitmap files for **TAS12 devices** must have pixel dimensions 480 (W) x 640 (H). Bitmap files for **IntraQ devices** must have pixel dimensions 640 (W) x 480 (H).
- Bitmap files must have the following attributes:
 - Bit Depth: 8
 - File Size: Approx. 300 KB
 - Resolution: 72 x 72 ppi
 - Color Space: Indexed Color (256 Colors)
- All bitmap files are placed in the device's *FlashDisk\TAS* folder.



Sound Files

Default Sound Files

The sound files described below are included by default when TAS12 units ship from Alvarado, unless alternative sounds are provided by the customer. If a sound file has a name that includes a number, that sound plays for that response code number.

Response codes indicate the reason GateLink10 determined a ticket was either valid or invalid.

File Name	Description	Response Code
Go.wav	Default sound for a valid ticket. If no other specific sounds are available, the device defaults to this sound.	All Valid
Printer.wav	Sound indicates a communication error with the printer.	N/A
Stop.wav	Default sound for an invalid ticket. If no other specific sounds are available, the device defaults to this sound.	All Invalid

Sound File Guidelines

The TAS12 device uses .wav files to play sounds. As with bitmaps, the device can play specific sounds for specific response codes. The sound files can be customized if the guidelines presented below are followed.

- For **valid** response codes (0-10), sound files should be named **go#.bmp**. Replace the “#” with the response code number.
- For **invalid** response codes (11-99), sound files should be named **stop##.bmp**. Replace the “#” with the response code number.
- When replacing any of the default bitmaps, the new bitmap should have the **same filename** as the file it is replacing.
- Has the same or similar size and bit rate as the existing .wav files.

Sound files are stored in the device's *FlashDisk\TAS* directory.



Appendix 1 – Symbologies

The table below shows the syntax for the RECEIPT SYMBOLOGY field. For your convenience, the most commonly used code characters have been provided.

TAS12 devices use the Honeywell 3320g barcode imager. A comprehensive chart of code characters for the Honeywell 3310g imager can be found in Appendix A of the *Vuquest 3320g User's Guide* (available on Honeywell's website).

Symbology	AIM Code Character (3320g)
GS1 DataBar Family	y
PDF417	r
MicroPDF417	R
Aztec, Aztec RUNE	z
Data Matrix	w
QR Code, MicroQR	s
Maxicode	x



Revision History

Revision	Date	Author	Revision History/Description
1.0	5/22/2018	D Bohannon	Original Document
2.0	11/21/2019	D Bohannon	Updated for current version of software.
3.0	8/6/2020	D Bohannon	Added SOAP XML information.
4.0	5/24/2021	D Bohannon	Updated to current configuration file content.



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