

HydroGraph Software

Remote Operation

Users Manual

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Introduction

This Users Manual tells you how to use the HydroGraph software to control tests on the IDA-1S and IDA-5 (the Products). Refer to the Users Manuals of the Products for detailed product operating instructions and important safety information.

If multiple channels are installed on the Product, HydroGraph shows graphs of all the installed channels at one time. See Figure 1.



Figure 1. Main Screen

System requirements:

- Windows XP, Windows 7 (32 or 64 bit), Windows 8 (64 bit).
- 1 GB RAM, 500 MB available disk space.
- CD drive (for installation)
- USB port

Note

You must disable power save features (particularly on laptops) as these can disrupt the connection with the Product. If the connection is lost, the Product continues ongoing tests until the Product is turned off. The Product will recover the results at power on. Then you can import the results to HydroGraph.

Connect HydroGraph

- 1. Make sure the Product is NOT active on any channel when the software is started. On the IDA-5, go to the Status All Channels screen.
- 2. On the PC, start the HydroGraph application.
- 3. Connect the Product to a PC with the supplied USB cable. HydroGraph detects a Product connected to the PC.
- 4. The first time the Product connects to the PC, select the device name in the left and right boxes of the connection dialog. Thereafter, HydroGraph keeps the connection data.

Start Tests with HydroGraph

In the window for the applicable channel, click the **Test Setup** button (see Figure 2) to show the Test Setup dialog. The subsequent sections tell how to start each test type.

Ghannel 1 IDA-5-Ga	mma1			
		🔺 😫 🔽		
	"Undefined" Te	est Set Flow Rat	e 0.00 ml	/hr
ml/h				
2.8				Control Numb Unknown Test
2.4				Started : Manuf :
				hwh29.bmp

Figure 2. Test Setup

Flow Test

1. Select the **Flow** tab. See Figure 3.

				Equipment Detail	s	
				Manufacturer	í	
Control Number *				Device Type		
				Device Type		
Operator *				Serial Number		
				Location		
				Comments		
low Test Parameters						
Set Flow Rate (ml/hr)	0			Tolerance [0	
Fotal Volume (ml)	0			Use AutoStart	7	
top Test when						
Volume reached		0	ml			First condition
. Time reached		0	Hours	0	Mins	Both conditions
te:- * Fields are man	datory.					Clear Fields

Figure 3. Flow Setup Dialog

2. Fill in the data for the test and click **OK**. The syringe symbol (see Figure 4) shows that priming is necessary.



Figure 4. Prime Indicator

- 3. Prime the channel. When the channel is primed, the syringe symbol goes away and the **Start Channel** (green flag) button is enabled (see Figure 5).
- 4. Click the Start Channel button to start the test.

CI	hannel 2 IDA-5_20005	
6		
	Flow Test Set Flow Rate 0.00 ml/hr	
ml/h	1	
1.0		huk22 bmg

Figure 5. Start Channel

Occlusion Test

1. Select the Occlusion tab. See Figure 6.

annel 1 Test Setup - IDA-	5-Gamma1	- de	<u> </u>	
North Cocclusion CA	Template			
			Equipment Details	
			Manufacturer	
Control Number *			Device Type	
Operator *			Serial Number	
operator			Location	
			Comments	
Ordering Track Descendary				
Set Flow Rate (ml/hr)	0			
Stop Test when				
Time reached	0	Hours 0	Mins	
Note:- * Fields are manda	tory.			Clear Fields
				ОК
				hwb3

Figure 6. Occlusion Test Dialog

- 2. Fill in the data for the test and click **OK**. When the Product is ready, the **Start Channel** button (green flag) is enabled.
- 3. Click the Start Channel button to start the test.

PCA / Dual Flow Tests (IDA-5 only)

1. Select the PCA / Dual Flow tab. See Figure 7.

V Occlusion PCA	/Dual Flow	Template						
				Equipment Details				
				Manufacturer				
Control Number *				Device Type				
On averation &				Serial Number				
Operator *								
				Location				
				Comments				
PCA / Dual Flow Test I	Parameters				_			_
Basal / Secondary	0			Lockout Time	0	Min	0	Sec
(Continuous)		_		Loading Dose (ml)	0			
otal Volume (ml)	0				r		_	
Bolus / Primary	0	-		Tolerance	0			
/olume (ml)	Ů			Use AutoStart 🔽				
Stop Test when								
Volume reached)	ml			FIE	rst con	dition
Time reached		Hours	0	Mins		Bo	oth con	ditions
ote:- * Fields are ma	andatory.					c	lear Fie	elds

Figure 7. PCA / Dual Flow Dialog

- 2. Fill in the data for the test and click **OK**.
- 3. Prime the Product and start the test as described in the Flow Tests section.

hwh34.bmp

hwh35.bmp

Template-Controlled Tests (IDA-5 only)

1. Select the Template tab. See Figure 8	1.	. Select the Tem	plate tab.	See Figure 8	5.
---	----	------------------	------------	--------------	----

	Equipment Details
Control Number *	Manufacturer Device Type Serial Number Location Comments
Template Selection	
TemplateName	Device Comments
< [m

Figure 8. Template Dialog

- 2. Fill in the infusion device data and select the template from the list.
- 3. Click **OK**. Each step of the template starts like a manual test of the same type.

Stop Tests with HydroGraph

Wait for the test to complete or click **Stop** to end the test. The system prompts you to save and print the results, answer **Yes** or **No** to each question.

Recall, View, and Print Results

Select **File | Test Records** or click in on the top toolbar, to open the Test Records Dialog. The stored records show with the most recent records at the top. Table 1 tells how to use the Test Record dialog.

Test Records						
Test Records						
Search by Control Numbe	er		Search			
ControlNo	Type of Test	Start DateTime 🔻	Set Flow Rate	Filename		
123	0	16-Dec-10:16:55:58	50.00	HGr_O 10kutmt.		
123	0	16-Dec-10:16:53:51	60.00	HGr_O10kut5t.i5		
123	0	16-Dec-10:16:51:18	50.00	HGr_O10kurbp		
123	0	16-Dec-10:16:49:44	40.00	HGr_O10kusl1.i5		
123	0	16-Dec-10:16:47:40	0.00	HGr_O10kus9p		
123	F	16-Dec-10:16:44:49	30.00	HGr_F10kusl1.i5		
123	0	16-Dec-10:16:41:56	20.00	HGr_O10kussl.i5		
123	F	16-Dec-10:16:40:20	20.00	HGr_F10kuqup		
123	F	16-Dec-10:16:35:20	10.00	HGr_F10kuql9.i5		
123	0	16-Dec-10:10:48:10	HGr_TO 10ku7u.			
123	0	13-Dec-10:17:41:19	0.00	HGr_O10kojc3.i5		
123	0	13-Dec-10:17:41:18	HGr_O10koja6.i!			
123	0	13-Dec-10:17:41:16	0.00	HGr O 10koj6d.i!		
123	0	13-Dec-10:17:41:15	0.00	HGr_O10koj4g.i!		
PCA	Р	13-Dec-10:15:11:16	9.00	HGr P20kobb0		
DUAL TEST 1	P	13-Dec-10:14:48:55	5.00	HGr P20koc58.i!		
<	101			>		
ок		Delete		Cancel		
				hwh36.br		
Function			Process			
Change the sort order	C	Click the column heading to sort by. Click again to reverse the order.				
Open a test result	S de	Select the check box for the test result and then click OK or double-click anywhere on the test result line.				
Delete a test result	S	elect the test result and	then click Delete			
Toggle the view betweer table data	n graph and C	Click the View Data Table button. See Figure 9.				
Print the graph or data	S	Select File Print or click the Print button on the toolbar.				

Table 1.	Test	Record	Dialog	Functions
10010 11	1000	1100010	Dialog	i unonono



Figure 9. Flow Test - Graph View

hwh37.bmp

Default Parameters

You can set default parameters for HydroGraph. From the main menu, select **Control | HydroGraph Parameters**. Figure 10 shows the Default Parameters dialog. See Table 2 for a description of the fields.

HydroGraph De	efault Parame	eters			23
Report Heade	er				
Header 1					
Header 2					
Header 3					
File Path	Default Pai	th	Network Path	Custom Pa	th
	Contraction of the second seco		O Network Paul	Customra	
Set File Path	C:\Users\Pub	blic\HydroGraph	ו		Browse
Default Parameters					
Default Flow	v Tolerance	11			
Graph Line \	Nidth	4			
Default Pres	sure Units	mmHg	•		
				Ok	Close

Figure 10. Default Parameters Dialog

hwh138.bmp

Table 2. Default Parameter Fields

Parameter	Description
Header 1, Header 2, Header 3	These three lines are printed on all reports. Set the first line to the name of the establishment.
File Path Set File Path	The type of path and the file path name where HydroGraph stores the test results.
	Select Default Path to set the file path to the default location for the version of Windows where HydroGraph is installed.
	• For Windows 7 it will be: C:\Users\Public\HydroGraph
	 For Windows XP it will be: C:\Documents and Settings\All Users\Application Data\HydroGraph
	Select Network Path to set the file path to a network folder. The folder must have read/write access. If HydroGraph is on more than one PC, you can keep and get results from a common location.
	Select Custom Path to set the file path to a folder on the local computer.
Default Flow Tolerance	The default flow tolerance percentage for the limit lines in the Flow Graphs. You can override this setting on individual tests.

Parameter	Description
Graph Line Width	The width of the graph lines on the screen. Change this for best visibility.
Default Pressure Units	Sets the units of pressure used for Occlusion tests. The units are mmHg, kPA, and psi. You can override this setting on individual tests.

Import from the Product

When a Product is connected, select **Control | Import** or click . The Import Items dialog shows with the **Records** tab selected. Table 3 tells about the controls.

	Control Number	Test Type	Date Time	
		(corrypt	out the	
_				

Table	3.	Import	Items	Settings
-------	----	--------	-------	----------

Control	
Control	Description
Get List	Retrieves the list of test results stored in the Product. To select individual records, click the select boxes.
Select All	Selects all the records.
Unselect All	Unselects all the records.
Import	Imports all the selected records.
Template tab (IDA-5)	Use this tab to import template definitions from the IDA-5 to HydroGraph. The selection method is the same as for records.
Import User Notes tab (IDA-5)	Use this tab to import user notes from the IDA-5. User notes are stored in a text file on the PC.

Export to the Product (IDA-5 only)

When a Product is connected, select **Control | Export** or click . The Export Items dialog shows with the **Templates Selection** tab selected. Table 4 tells about the tabs.

port Iten	ns			X	
Template	Selection Export Instruct	on Manual Export User No	tes		
	TemplateName	Device Comments	User Comments		
	SYRINGE DEMO TEM	Syringe pump check			
	Select All	Unselect Al		Export	
	-			hwh3	
	Tab		Description		
emplate	Selection	Exports the select Export .	ted template. Select the	e template and click	
port In	struction Manual	Exports user inst	ructions that are supplie	ed by your IDA-5 vendo	
(port ሀ	ser Notes	Exports user not Notes feature to products on a sit	Exports user notes. Use in conjunction with the Import User Notes feature to share user notes between multiple IDA-5 products on a site.		

Table 4. Export Item Tabs