

UNITY 2^{TM}

CIA 8 Installation Manual

Version 1.1 (Changes: Section 2.4)

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1. Introduction

The CIA 8 is an extension of the Air Server for work that requires up to 8 channels with internal standard addition.

2. Installing the CIA 8 onto UNITY 2

See the Air Server installation manual. Below are the deviations from the Air Server instructions.

2.1. Sample line connection

Sample lines are connected to the fittings on the top plate of the CIA 8 labeled 1 - 8. Internal standard gas is connected to the **'IS In**' fitting.



2.2. Connecting UNITY 2 to CIA 8 when no dryer is fitted

Connect the two 1/16" nuts on the heated transfer line as shown above with the brass connector in the **'From UNITY**' position and the stainless steel connector in the **'To UNITY'** position.

Next connect the heater connector as highlighted.



2.3. Connecting the MFC in CIA 8 to UNITY 2

Using 1/16'' PEEK and 1/8'' T pieces connect the outlet lines from the split and desorb needle valves together and connect to the 'flow in' union on the back panel of CIA 8.



2.4. Downloading the operating software to UNITY 2 – CIA 8

Once the firmware has been downloaded click on the '**View**' menu of the software, click on '**Options**' and then select the '**Configurations**' tab.

Ensure the 'Number Of Channels' is set to 8 and the 'Air Server Internal Std.' check box is ticked as shown. Do not tick 'Series 2 Airserver'.

Options		
Methods	Gas Sequence Ports	Configuration Reporting Flow Control Miscellaneous
Aut	omation Sampling C AirServer and UltrA C AirServer C UltrATD Auto	Re-collection Auto So:50 (Same UltrATD) Manual
	UltrA Load/Unload Tempera LoadTemp	UnLoadTemp
	Sampling UltrA	Re-collection UltrA
	AirServer Channels	External Valve Present
	Number Of Channels: 8	AirServer Internal Std.
	 Use Unity with QMB Senso Operate Direct Mode with I Use UltrA with AirServer Use Unity with Flow Control 	or HP7694 C UltrA has ISDP Accy C Unity has Dry Purge Accy No ISDP or Unity DP Accy
	ОК]

A "Change of System Configuration" warning message will be displayed – click 'OK' a "Configurations Options" dialogue box then appears - click 'OK'.

Click **'OK**' on the Options page - a **"Software is shutting down**" message will be displayed telling you that the software is closing in order to effect the changes just made.

Recycle the power on the CIA 8 and then restart the UNITY 2 software by double clicking on the UNITY icon on the desktop. Wait as the software is downloaded to the CIA 8.

2.5. Detecting and setting the external MFC

CIA 8 contains a MFC which is external to UNITY 2.	Once the CIA 8 is correctly configured (see
above) go to 'View – Options – Flow Control'	

Options						
Methods Gas Sequence Ports	Configurati	ion Reporting Flow Control				
Flow Control						
Location	Full range ml/min	Designation				
Unity MFC Position 1	100	Unused				
Unity MFC Position 2		Unused				
Ultra MFC Position 1		Unused				
Ultra MFC Position 2		Unused				
External MFC Module		Unused				
		Scan for Flow				
		Lontrollers				
[
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Click 'Scan for Flow Controllers' (password is Davinci) to automatically detect all MFCs present.

Designate the external MFC to control the **'UNITY Split & Trap**' flow by using the drop down dialogue box.

Enter the maximum flow of the MFC into the **`Full range ml/min**' box.

Flow Control		
Location	Full range ml/min	Designation
Unity MFC Position 1		Unused
Unity MFC Position 2		Unused
🔲 Ultra MFC Position 1		Unused
Ultra MFC Position 2		Unused
External MFC Module	100	UNITY Split & Trap

Ensure the Split and desorb needle valves on the UNITY 2 are open enough to allow the desired flow.