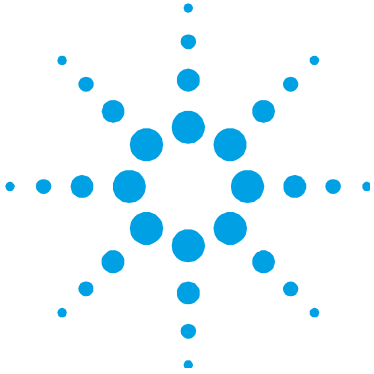

Ion Pumps Controller 24 V

Model
929-0198

Manuale di Istruzioni
Bedienungshandbuch
Notice de Mode D'Emploi
User Manual

87-900-127-01 (C)
05/2011

Agilent Technologies

Notices

Manual Part Number

Publication Number: 87-900-127-01 (C)

Edition

Edition 05/2011

Printed in ITALY

Agilent Technologies Italia S.p.A.

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ITALY

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CAUTION

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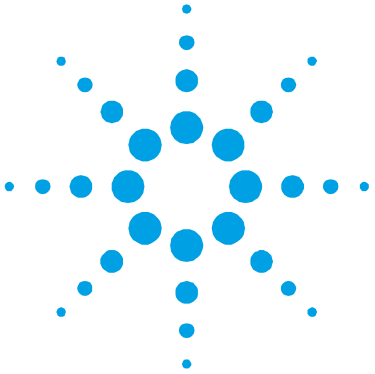
WARNING

A WARNING notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in personal injury or death. Do not proceed beyond a WARNING notice until the indicated conditions are fully understood and met.

Ion Pumps Controller 24 V

Contents



1
Procedura per l'installazione

Traduzione delle istruzioni originali

Descrizione del Controller Ion Pump 24 V

AVVERTENZA!

L'alta tensione sviluppata nel controller può causare gravi danni fisici o il decesso. Prima di mettere in funzione l'unità, scollegare il cavo di alimentazione.
Per il collegamento del controller, utilizzare esclusivamente l'apposito cavo fornito.

ATTENZIONE! Non installare o utilizzare il controller in ambienti esposti ad agenti atmosferici (pioggia, neve, ghiaccio), polvere, gas aggressivi, oppure in ambienti sottoposti al rischio di esplosione o incendio.

NOTA Quando il controller viene acceso è udibile un rumore acuto di intensità e di frequenza variabile. Questo rumore è del tutto normale e non è indice di malfunzionamento.

Informazioni Generali

Questo controller è stato progettato per essere utilizzato da professionisti. Prima di utilizzare il controller, l'operatore deve leggere il presente Manuale d'Istruzioni e qualsiasi altro documento informativo fornito dalla Agilent. La Agilent non sarà tenuta responsabile di qualsiasi evento che possa verificarsi a causa del mancato rispetto, anche parziale, di dette istruzioni, nonché a causa dell'uso scorretto del controller da parte di personale non formato o non autorizzato o di qualsiasi operazione non conforme agli standard nazionali specifici.

Installazione

Durante il funzionamento, devono essere rispettate le seguenti condizioni ambientali:

- temperatura: da 0 °C a +45 °C
- umidità relativa: 0 – 95 % (in assenza di condensa)

Per collegare il controller alla pompa, utilizzare gli appositi cavi forniti. Per maggiori informazioni circa i collegamenti sopraccitati o di altro genere, fare riferimento all'appendice "Technical Information".

Attivazione/disattivazione HV mediante il pannello anteriore:

Agire sull'interruttore presente sul pannello anterior

Tab. 1

Tensione di input	
24 Vcc ± 10 %	OK
< 19 Vcc per più di 1 minuto	HV ON e Avvertimento batteria con accensione simultanea a luce lampeggiante di entrambi i LED con 1 lampeggio ogni 2 sec
< 15 Vdc per più di 2 minuti	HV OFF e assenza di lampeggiamento del LED

LED

Tab. 2 :

Led Pos: 1 lampeggio ogni 2 sec	HV POS ON: funzionamento normale
Led Neg: 1 lampeggio ogni 2 sec	HV NEG ON: funzionamento normale
Led Pos: 2 lampeggi ogni 2 sec	HV POS Corto Circuito: tensione di output < 100 V e corrente in uscita > 4 mA per più di 1 minuto
Led Neg: 2 lampeggi ogni 2 sec	HV NEG Corto Circuito: tensione di output < 100 V e corrente in uscita > 4 mA per più di 1 minuto
Led Pos: 3 lampeggi ogni 2 sec	HV POS fuori servizio: il valore della tensione di output è superiore del 120 % o inferiore dell'80 % rispetto al valore target, per più di 1 minuto
Led Neg: 3 lampeggi ogni 2 sec	HV NEG fuori servizio: il valore della tensione di output è superiore del 120 % o inferiore dell'80 % rispetto al valore target, per più di 1 minuto
Led Pos: 4 lampeggi ogni 2 sec	Cavo di Interlock non connesso
Led Neg: 4 lampeggi ogni 2 sec	Cavo di Interlock non connesso
1 lampeggio di entrambi i LED ogni 2 sec	La tensione di alimentazione è inferiore a 19 Vcc per più di 1 minuto.
Assenza di lampeggiamento di entrambi i LED	HV OFF: la tensione di alimentazione è inferiore a 15 Vcc per più di 2 minuti

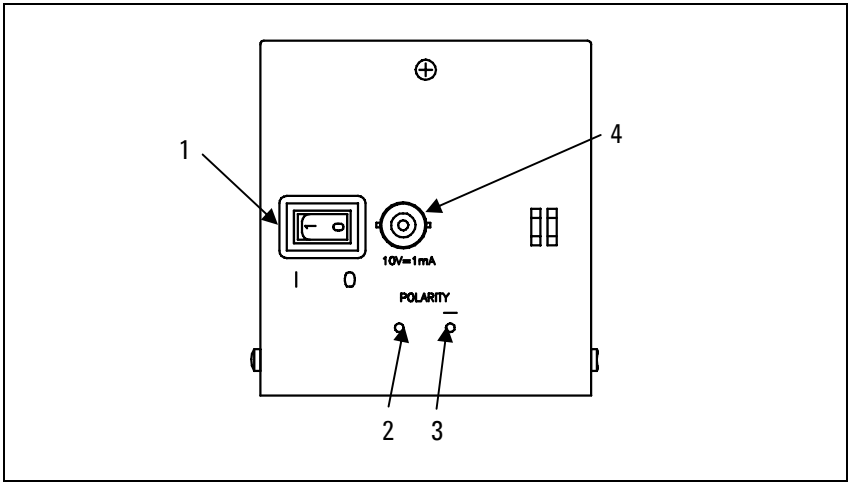


Figura 1 Pannello anteriore

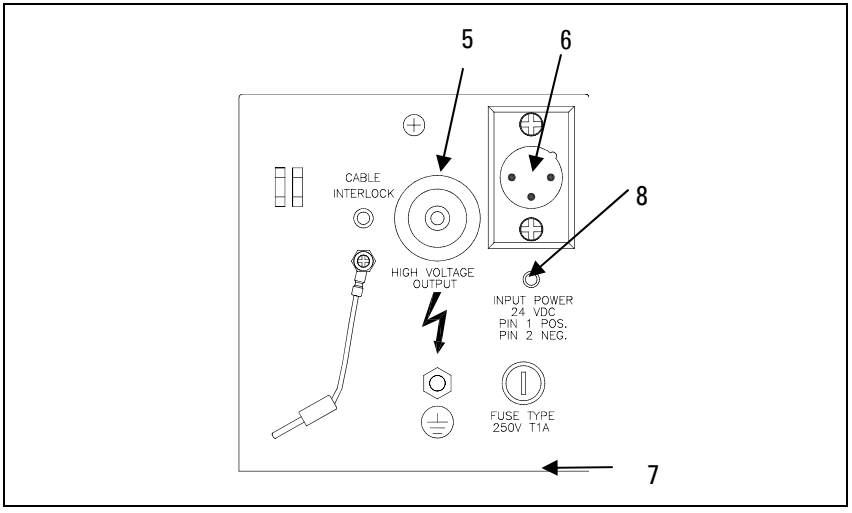


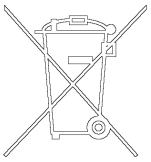
Figura 2 Pannello posteriore

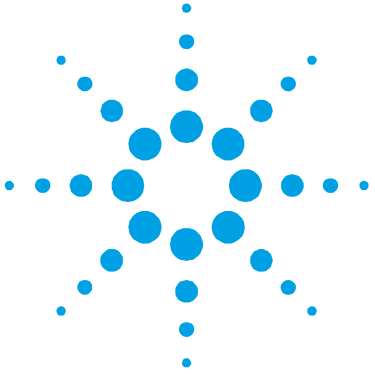
Tab. 3

RIF.	SEGNALE	DESCRIZIONE
1	ON/OFF	Accende l'unità e l'Alta Tensione
2	Positive LED	1 lampeggio ogni 2 secondi quando l'unità e HV pos. sono ON
3	Negative LED	1 lampeggio ogni 2 secondi quando l'unità e HV neg. sono ON
4	Recorder Output Connector	Da 0 a 10 V lineari 1 µA = 10 mV e 1 mA = 10 V
5	HV Connector	Connettore Alta Tensione
6	DC INPUT	24 V ± 10 %
7	FUSE	Supporto fusibile T1A SLOW

Smaltimento

Significato del logo "WEEE" presente sulle etichette.
Il simbolo qui sotto riportato è applicato in ottemperanza alla direttiva CE denominata "WEEE".
Questo simbolo **(valido solo per i paesi della Comunità Europea)** indica che il prodotto sul quale è applicato, NON deve essere smaltito insieme ai comuni rifiuti domestici o industriali, ma deve essere avviato ad un sistema di raccolta differenziata. Si invita pertanto l'utente finale a contattare il fornitore del dispositivo, sia esso la casa madre o un rivenditore, per avviare il processo di raccolta e smaltimento, dopo opportuna verifica dei termini e condizioni contrattuali di vendita.





2
Anleitung zur Installation

Übersetzung der Originalanleitungen

24 Volt Ionengetterpumpen-Kontroller

WARNUNG!

Die im Kontroller erzeugte Hochspannung kann ernshafte Verletzungen oder Tod verursachen. Vor Wartungsarbeiten am Gerät unbedingt das Stromkabel ziehen.

Um den Kontroller in Betrieb zu nehmen, das mitgelieferte Stromkabel verwenden.

VORSICHT! Den Kontroller nicht in Umgebungen installieren oder benutzen, die atmosphärischen Bedingungen (Regen, Schnee, Eis, etc.), Staub, agressiven Gasen, Explosionsgefahr oder solchen mit hoher Feuergefahr ausgesetzt sind.

HINWEIS Die Geräusche in verschiedener Lautstärke und Frequenz, die bei angeschaltetem Gerät hörbar sind, sind völlig normal und bedeuten keine Fehlfunktion.

Allgemeines

Der Kontroller ist ist für Fachbetriebe bestimmt. Vor Gebrauch sollte der Benutzer dieses Handbuch sowie alle weiteren von der Agilent mitgelieferten Zusatzdokumente sorgfältig lesen. Bei - auch nur teilweiser - Nichtbeachtung der enthaltenen Hinweise, unsachgemässem Gebrauch durch ungeschultes Personal, nicht autorisierten Eingriffen und Missachtung der einheimischen, hier zur Geltung kommenden Bestimmungen übernimmt die Agilent keinerlei Haftung.

Installation

Beim Gebrauch müssen die folgenden Umgebungs-bedinungen eingehalten werden:

- Temperatur: 0 °C bis + 45 °C
- rel. Luftfeuchtigkeit: 0 - 95 % (nicht kondensierend)

Zum Anschluss des Kontrollers an die Pumpe die mitgelieferten Kabel benutzen. Für Einzelheiten zu den erwähnten und anderen Anschlüsse den Anhang "Technical Information" zu Rate ziehen.

Hochspannung An/Aus auf dem vorderen Bedienfeld:

Benutzen Sie den Schalter auf dem vorderen Bedienfeld

Tab. 1

Eingangsspannung	
24 V Gleichspannung ± 10 %	OK
< 19 V Gleichspannung für mehr als eine Minute	Hochspannung liegt an und eine Batterie-Warnung mit beiden LEDs wird angezeigt (blinken 1 mal alle 2 Sekunden)
< 15 V Gleichspannung für mehr als 2 Minuten	Hochspannung ausgeschaltet und keine blinkenden LEDs

LED-Anzeigen:

Tab. 2

Positiv LED: Blinkt 1x alle 2 Sekunden	POSITIVE HOCHSPANNUNG AN: Normalbetrieb
Negativ LED: Blinkt 1x alle 2 Sekunden	NEGATIVE HOCHSPANNUNG AN: Normalbetrieb
Positiv LED: Blinkt 2x alle 2 Sekunden	Kurzschluß positive Hochspannung: Ausgangsspannung <100 V und Ausgangsstrom > 4mA für länger als 1 Minute
Negativ LED: Blinkt 2x alle 2 Sekunden	Kurzschluß negative Hochspannung: Ausgangsspannung <100 V und Ausgangsstrom > 4mA für länger als 1 Minute
Positiv LED: Blinkt 3x alle 2 Sekunden	POS.HV- Fehler: Der Wert der Ausgangsspannung ist länger als 1 Minute größer als 120 % oder kleiner als 80 % des Zielwertes
Negativ LED: Blinkt 3x alle 2 Sekunden	NEG.HV- Fehler: Der Wert der Ausgangsspannung ist länger als 1 Minute größer als 120 % oder kleiner als 80 % des Zielwertes
Positiv LED: Blinkt 4x alle 2 Sekunden	Interlock-Kabel nicht angeschlossen
Positiv LED: Blinkt 4x alle 2 Sekunden	Interlock-Kabel nicht angeschlossen
Beide LED´s blinken 1x alle 2 Sekunden	Die Versorgungsspannung liegt für länger als 1 Minute unter 19 Volt Gleichspannung
Keine der beiden LED´s blinkt	Hochspannung AUS: Die Versorgungsspannung liegt für länger als 2 Minuten unter 15 V Gleichspannung

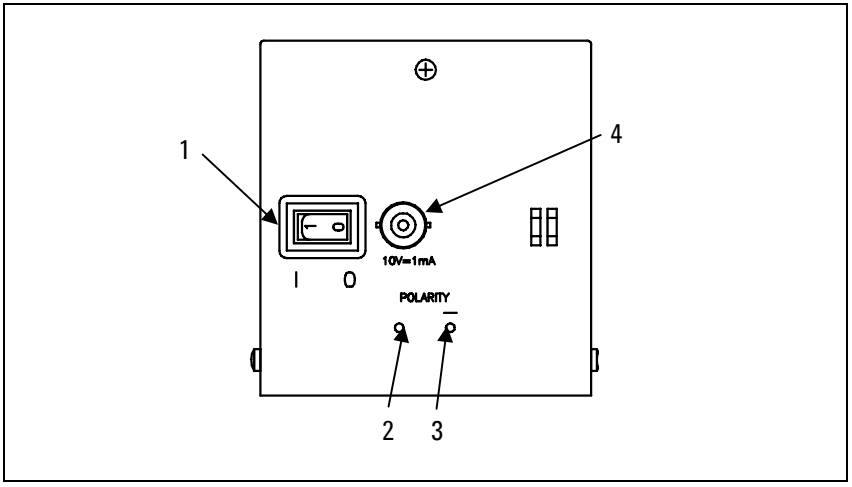


Abbildung 1 Vorderseite

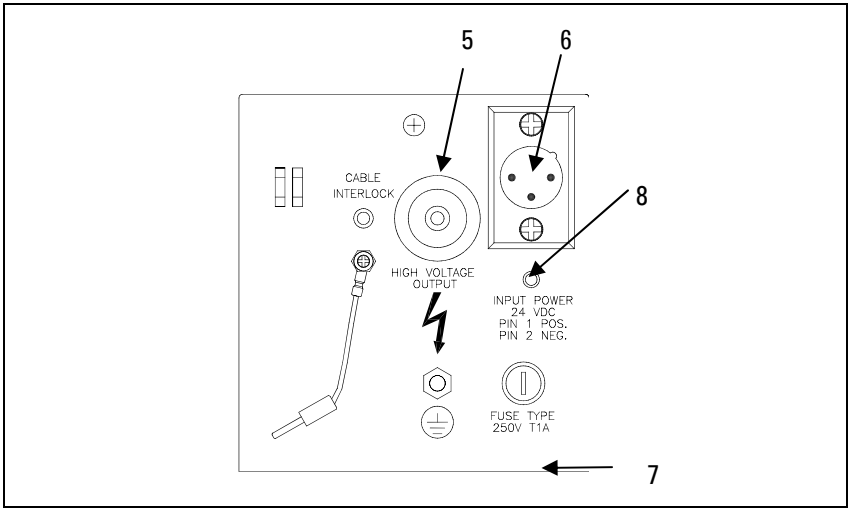


Abbildung 2 Rückseite

Tab. 3

REF.	SIGNAL	BESCHREIBUNG
1	EIN- / AUS-Schalter	Gerät und Hochspannung werden gleichzeitig ein bzw. ausgeschaltet
2	Positiv-LED	Blinkt 1x alle 2 Sekunden, wenn das Gerät und die positive Hochspannung eingeschaltet sind
3	Negativ-LED	Blinkt 1x alle 2 Sekunden, wenn das Gerät und die negative Hochspannung eingeschaltet sind
4	Recorder Ausgangs-Verbindung	0 bis 10 V linear 1µA = 10mV und 1mA = 10 V
5	Hochspannungsausgang	Zum Anschluß der Ionengetterpumpe mittels eines geeigneten Hochspannungskabels
6	GLEICHSPANNUNG-EINGANG	24 V ± 10 %
7	FUSE(Sicherung)	Sicherungshalter für T1A TRÄGE

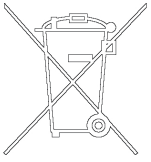
Entsorgung

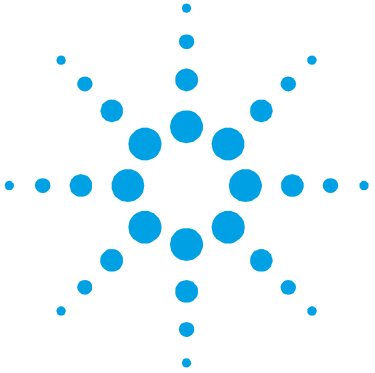
Bedeutung des "WEEE" Logos auf den Etiketten.

Das folgende Symbol ist in Übereinstimmung mit der EU-Richtlinie WEEE (Waste Electrical and Electronic Equipment) angebracht.

Dieses Symbol **(nur in den EU-Ländern gültig)** zeigt an, dass das betreffende Produkt nicht zusammen mit Haushaltsmüll entsorgt werden darf sondern einem speziellen Sammelsystem zugeführt werden muss.

Der Endabnehmer sollte daher den Lieferanten des Geräts - d.h. die Muttergesellschaft oder den Wiederverkäufer - kontaktieren, um den Entsorgungsprozess zu starten, nachdem er die Verkaufsbedingungen geprüft hat.





3 Procédure pour l’installation

Traduction de la mode d’emploi originale

Description du controleur ion pump 24 V

AVERTISSEMENT!

La Haute Tension développée dans le contrôleur peut provoquer de graves lésions physiques voire la mort. Avant de mettre en fonction l'unité, débrancher le câble de l'alimentation.

Pour le branchement du contrôleur, utiliser exclusivement le câble spécial en fourniture.

ATTENTION! Ne pas installer ou utiliser le contrôleur dans des lieux exposés aux agents atmosphériques (pluie, neige, gelée), poussières, gaz agressifs ou bien dans des lieux à risque d'explosion ou d'incendie.

NOTE Lorsque le contrôleur est allumé, on entend un son aigu avec une intensité et une fréquence variable. Ce bruit est tout à fait normal et n'est pas signe de dysfonctionnement.

Informations Generales

Ce contrôleur a été projeté pour être utilisé par des professionnels. Avant de l'utiliser, l'opérateur doit lire le Manuel d'Instructions et tout autre document fourni par Agilent. Agilent décline toute responsabilité pour les incidents ayant lieu à cause du non respect, même partiel, de ces instructions ainsi que de l'utilisation incorrecte du contrôleur de la part du personnel non formé ou non autorisé ou de toute autre opération non conforme aux standards nationaux spécifiques.

Installation

Durant le fonctionnement, les conditions environnementales suivantes doivent être suivies:

- température: de 0 °C à +45 °C
- humidité relative: 0 – 95 %
  (en absence de vapeur d'eau condensée)

Pour brancher le contrôleur à la pompe, utiliser les câbles appropriés en fourniture. Pour de plus amples renseignements concernant les branchements indiqués ci-dessus, se référer au supplément "Technical Information".

Activation/désactivation HV au moyen du panneau antérieur:

Agir sur l'interrupteur présent sur le panneau antérieur

Tab. 1

Tension de d'entrée	
24 Vcc ± 10 %	OK
< 19 Vcc pendant plus d' 1 minute	HT ON et Avertissement batterie avec allumage simultané avec lumière clignotante des deux LED (voyants) avec 1 clignotement toutes les 2 secondes
< 15 Vdc pendant plus de 2 minutes	HT OFF et absence de clignotement du LED

LED:

Tab. 2

Led Pos: 1 clignotement toutes les 2 secondes	HT POS ON: fonctionnement normal
Led Nég: 1 clignotement toutes les 2 secondes	HT NEG ON: fonctionnement normal
Led Pos: 2 clignotements toutes les 2 secondes	HT POS Court-Circuit: tension de sortie < 100 V et courant en sortie > 4 mA pendant plus d'1 minute
Led Nég: 2 clignotements toutes les 2 secondes	HT NEG Court-Circuit: tension de sortie < 100 V et courant en sortie > 4 mA pendant plus d'1 minute
Led Pos: 3 lampeggi ogni 2 sec	HT POS hors service: la valeur de la tension de sortie est supérieure de 120 % ou inférieure de 80 % par rapport à la valeur ciblée pendant plus d' 1 minute
Led Neg: 3 clignotements toutes les 2 secondes	HT NEG hors service: la valeur de la tension de sortie est supérieure de 120 % ou inférieure de 80 % par rapport à la valeur ciblée pendant plus d' 1 minute
Led Pos: 4 3 clignotements toutes les 2 sec	Câble d'interlock non connecté
Led Neg: 4 3 clignotements toutes les 2 sec	Câble d'interlock non connecté
1 clignotement des deux LED toutes les 2 secondes	La tension d'alimentation est inférieure à 19 Vcc pendant plus de 1 minute.
Absence de clignotement des deux LED	HT OFF: la tension d'alimentation est inférieure à 15 Vcc pendant plus de 2 minutes

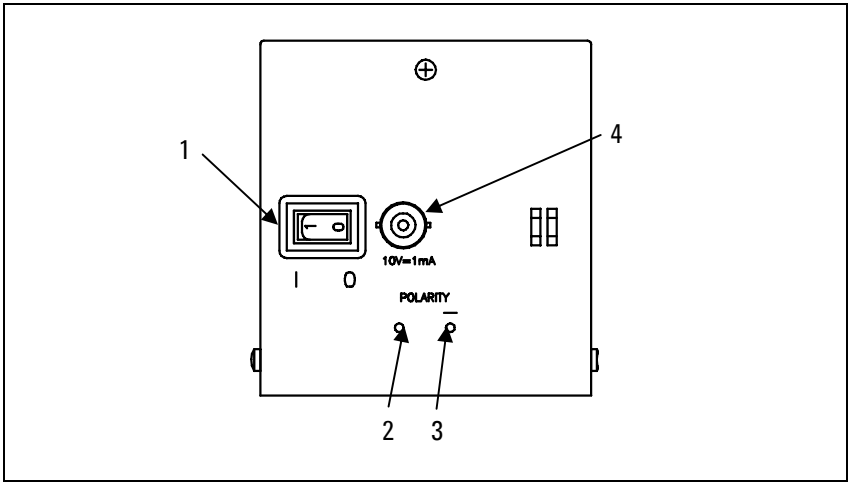


Figure 1 Panneau antérieur

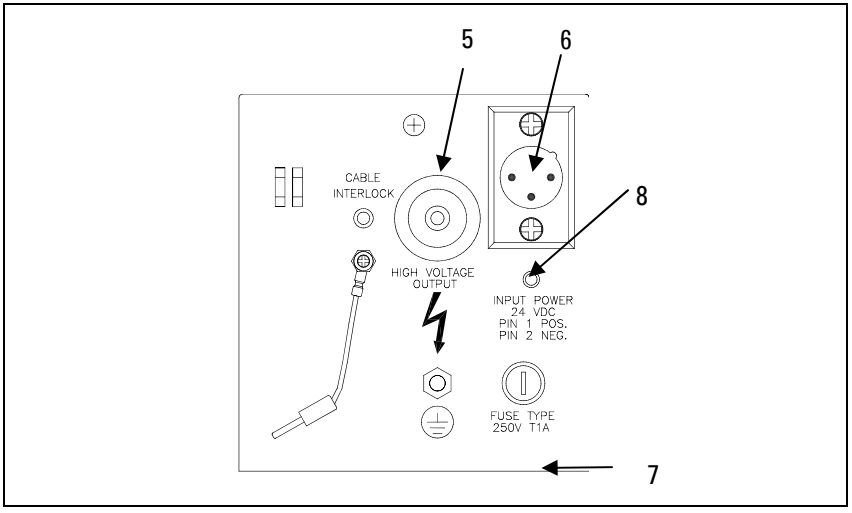


Figure 2 Panneau postérieur

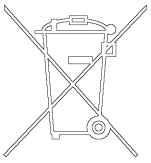
Tab. 3

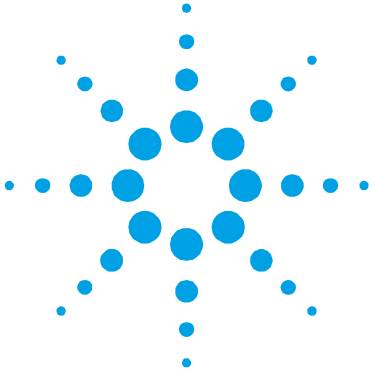
RIF.	SIGNAL	DESCRIPTION
1	ON/OFF	Il allume l'unité et l'HT
2	LED positif	1 clignotement toutes les 2 secondes lorsque l'unité et l'HT post. sont sur ON
3	LED négatif	1 clignotement toutes les 2 secondes lorsque l'unité et l'HT nég. sont sur ON
4	Recorder Output Connector	De 0 à 10 V linéaires 1µA = 10 mV et 1mA = 10 V
5	Connecteur HV	Connecteur HT
6	DC INPUT	24 V ± 10 %
7	FUSE (FUSIBLE)	SUPPORT FUSIBLE T1A SLOW

Mise au rebut

Signification du logo "WEEE" figurant sur les étiquettes.
Le symbole ci-dessous est appliqué conformément à la directive CE nommée "WEEE".

Ce symbole **(uniquement valide pour les pays de la Communauté européenne)** indique que le produit sur lequel il est appliqué NE doit PAS être mis au rebut avec les ordures ménagères ou les déchets industriels ordinaires, mais passer par un système de collecte sélective. Après avoir vérifié les termes et conditions du contrat de vente, l'utilisateur final est donc prié de contacter le fournisseur du dispositif, maison mère ou revendeur, pour mettre en œuvre le processus de collecte et mise au rebut.





4
Installation Procedure

Original Instructions

Ion Pumps Controller 24V

WARNING!

High voltage developed in the controller can cause severe injury or death. Before servicing the unit, disconnect the power cable.

To connect the controller use the specified cable supplied.

CAUTION! Do not install or use the controller in an environment exposed to atmospheric agents (rain, snow, ice), dust, aggressive gases, or in explosive environments or those with a high fire risk.

NOTE The acute noise of variable intensity and frequency heard when the controller is switched on is absolutely normal and does not indicate malfunctioning.

General Information

This controller is destined for use by professionals. The user should read this instruction manual and any other additional information supplied by Agilent before operating the controller. Agilent will not be held responsible for any events occurring due to non-compliance, even partial, with these instructions, improper use by untrained persons, non-authorised interference with the controller or any action contrary to that provided for by specific national standards.

Installation

During operation, the following environmental conditions must be respected:

- temperature: from 0 °C to +45 °C
- relative humidity: 0 – 95 % (non-condensing)

To connect the controller to the pump use the specific cables supplied. See the appendix “Technical Information” for detailed information about the above mentioned and the other connections.

HV On/Off by front panel:

Move the switch on Front Panel

Tab. 1

Input Voltage	
24 Vdc ± 10 %	OK
< 19 Vdc for more of 1 minute	HV On and battery Warning with both LED Blink simultaneously 1 blink every 2 sec
< 15 Vdc for more of 2 minutes	HV OFF and no blink of LED

Led Indicator:

Tab. 2

Pos Led: 1 Blink every 2 sec	HV POS ON: Normal Operation
Neg Led: 1 Blink every 2 sec	HV NEG ON: Normal Operation
Pos Led: 2 Blink every 2 sec	HV POS Short Circuit: Output Voltage < 100 V and Output Current > 4 mA for more of 1 minute
Neg Led: 2 Blink every 2 sec	HV NEG Short Circuit: Output Voltage < 100 V and Output Current > 4 mA for more of 1 minute
Pos Led: 3 Blink every 2 sec	HV POS Out of Order: The value of Output Voltage is major of 120 % or minor of 80 % of the Target Value, for more of 1 minute
Neg Led: 3 Blink every 2 sec	HV NEG Out of Order: The value of Output Voltage is major of 120 % or minor of 80 % of the Target Value, for more of 1 minute
Led Pos: 4 Blink every 2 sec	Interlock cable not connected
Led Neg: 4 Blink every 2 sec	Interlock cable not connected
1 Blink of both LED every 2 sec	The supply voltage is under 19 Vdc for more of 1 minute.
No Blink of both LED	HV OFF: The supply voltage is under 15 Vdc for more of 2 minutes

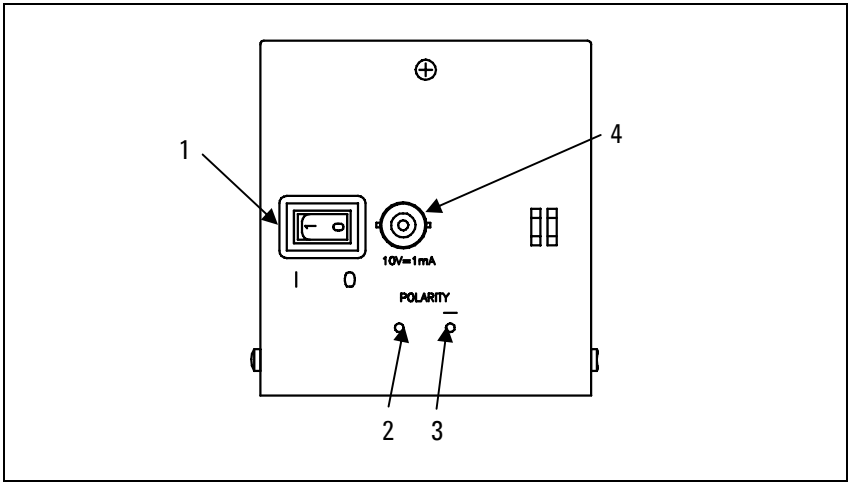


Figure 1 Front Panel

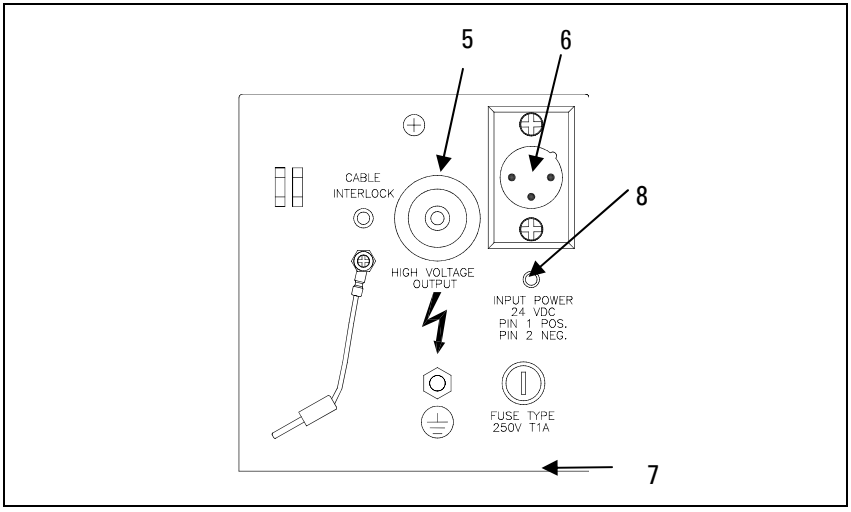


Figure 2 Rear Panel

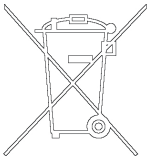
Tab. 3

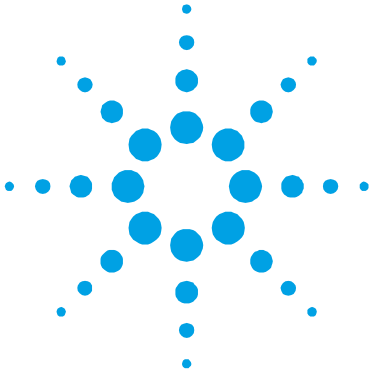
REF.	NAME	DESCRIPTION
1	ON/OFF	It switches On the Unit and the High Voltage
2	Positive LED	1 blink every 2 seconds when the unit and Positive HV are ON
3	Negative LED	1 blink every 2 seconds when the unit and negative HV are ON
4	Recorder Output Connector	0 to 10 V linear 1 µA = 10 mV and 1 mA = 10 V
5	HV Connector	HV Connector
6	DC INPUT	24 V ± 10 %
7	FUSE	Fuse holder T1A SLOW

Disposal

Meaning of the "WEEE" logo found in labels
The following symbol is applied in accordance with the EC WEEE (Waste Electrical and Electronic Equipment) Directive.
This symbol (**valid only in countries of the European Community**) indicates that the product it applies to must NOT be disposed of together with ordinary domestic or industrial waste but must be sent to a differentiated waste collection system.

The end user is therefore invited to contact the supplier of the device, whether the Parent Company or a retailer, to initiate the collection and disposal process after checking the contractual terms and conditions of sale.





5 Technical Information

Original Instructions

Controller Description

Agilent's controller is an ion pumps controller.

It can drive 1 Ion Pump. The controller is designed to give the HV to the Ion Pumps when it is connected to 24 Vdc
(Max. Output Voltage = ± 3000 Vdc).

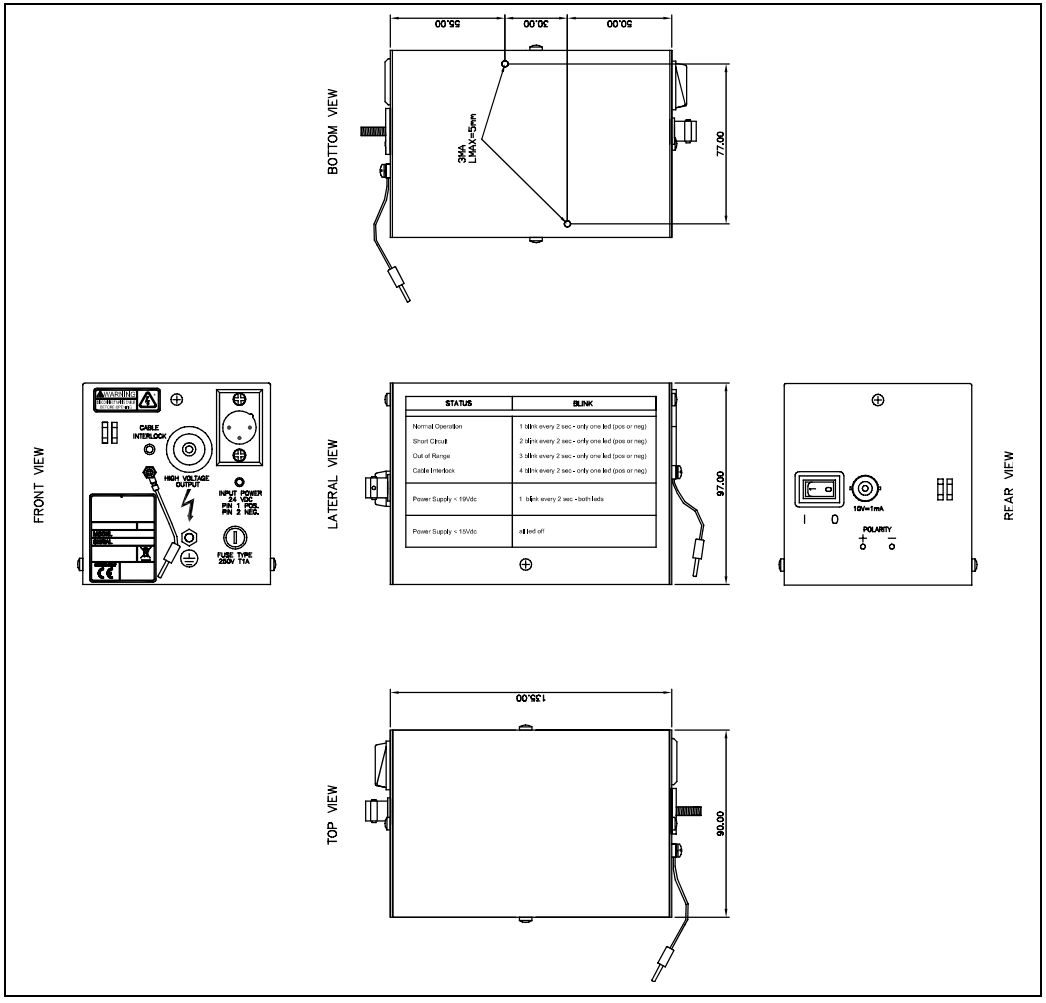


Figure 4 Controller Outline

Controller Specifications

Tab. 4

Input:	
Voltage	24 Vdc +/- 10 %
Max Power	7 W
Operating conditions: Max Altitude:	3000 m
HV-OUTPUT:	
Voltage	Default Value = ± 3000 V ± 5 % (mean Value)
Ripple VPP MAX @ 3Kv	300 V
Current max	4 mA ± 10 %
Maximum Output Power	4 W
Current Recorder Output signal	0 to 10 V linear 1 µA = 10 mV and 1 mA = 10 V
Operating Temperature	0 °C to 45 °C
Storage Temperature	-10 °C to 75 °C
Compliance to Norms	EN 61010 EN 61326-1
Line fuse	T1A slow
High Voltage Connection	1 High Voltage Fischer connectors

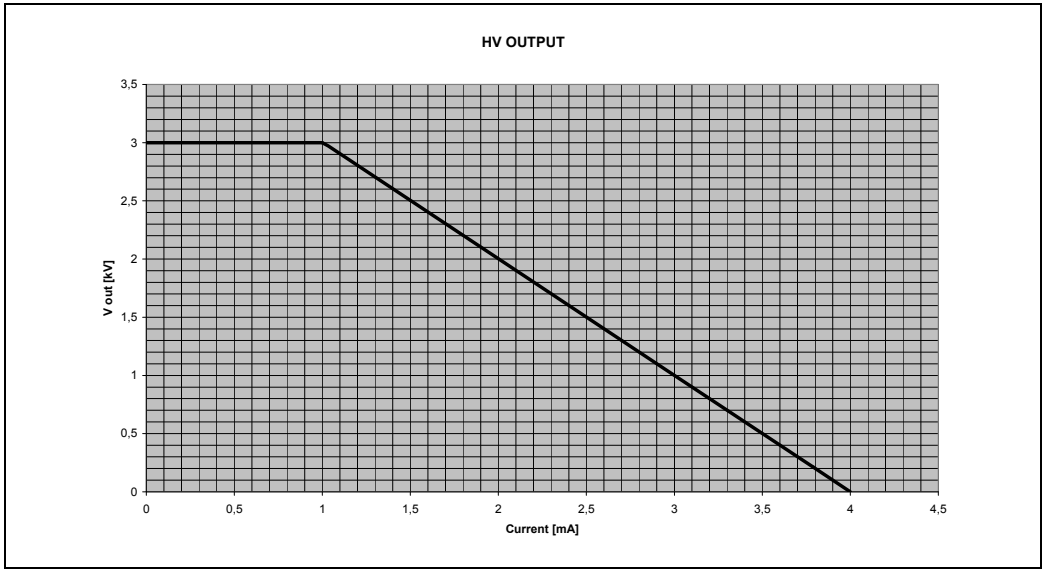


Figure 5

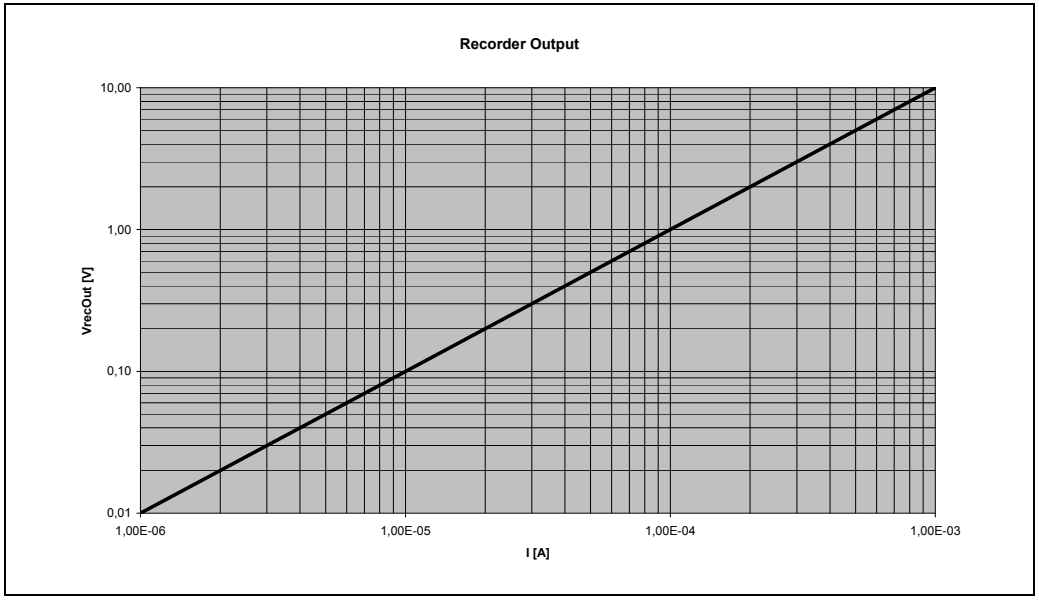


Figure 6

Tab. 5

Recorder Output Risolution:	1 µA
Recorder Output Sensibility:	1 µA
Recorder Output Rload >	100 kΩ
Recorder Output Ripple max_{pp}<	10 mVpp

Output Polarity Selection

The output polarity is selected by the high voltage multiplier card.

Polarity Change Procedure

1. Switch off the power and unplug the power cord from the controller rear panel socket.
2. Undo the 4 screws and then remove the cover
3. Disconnect the H.V. white wires (1) from the multiplier board, remove the board and rotate it 180 ° horizontally; reinstall the board into the socket and reconnect the H.V. white wires.
4. Install the cover and screws.
5. Connect the power cord then switch on the unit and check the output polarity on the front panel indication.

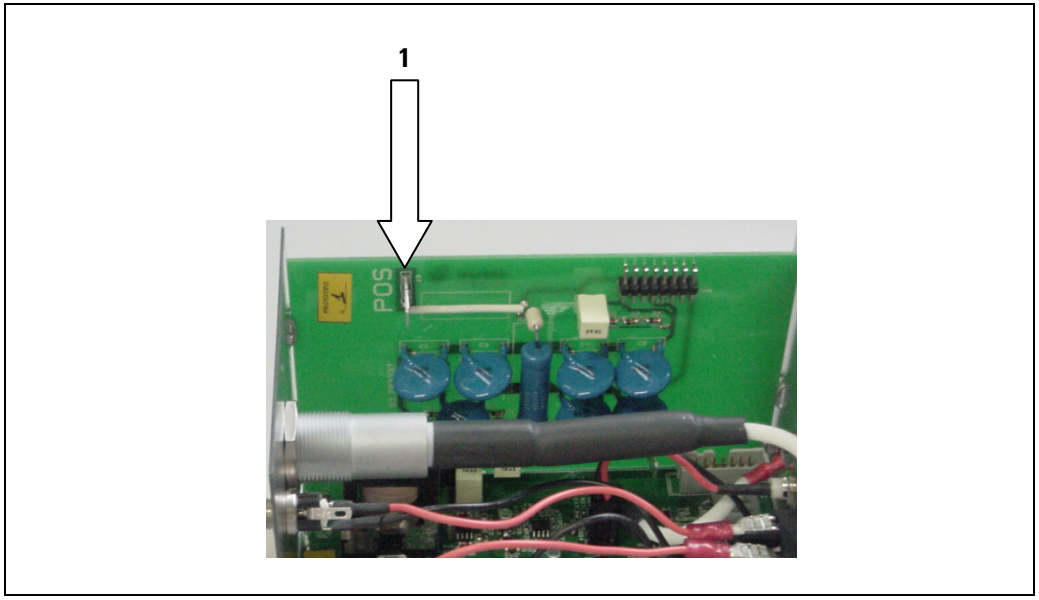


Figure 7

Orderable Parts

Tab. 6

DESCRIPTION	PART NUMBER
IPC-24 V	929-0198
HV Bakeable cable, radiation resistant, 4 m (13ft) long	929-0705
HV Bakeable cable, radiation resistant, 7 m (23ft) long	929-0707

Agilent Technologies

Vacuum Products Division

Dear Customer,

Thank you for purchasing an Agilent vacuum product. At Agilent Vacuum Products Division we make every effort to ensure that you will be satisfied with the product and/or service you have purchased.

As part of our Continuous Improvement effort, we ask that you report to us any problem you may have had with the purchase or operation of our products. On the back side you find a Corrective Action request form that you may fill out in the first part and return to us.

This form is intended to supplement normal lines of communications and to resolve problems that existing systems are not addressing in an adequate or timely manner.

Upon receipt of your Corrective Action Request we will determine the Root Cause of the problem and take the necessary actions to eliminate it. You will be contacted by one of our employees who will review the problem with you and update you, with the second part of the same form, on our actions.

Your business is very important to us. Please, take the time and let us know how we can improve.

Sincerely.

Giampaolo LEVI

Vice President and General Manager
Agilent Vacuum Products Division

Note: Fax or mail the Customer Request for Action (see backside page) to Agilent Vacuum Products Division (Torino) – Quality Assurance or to your nearest Agilent representative for onward transmission to the same address.

CUSTOMER REQUEST FOR CORRECTIVE / PREVENTIVE / IMPROVEMENT ACTION

TO: AGILENT VACUUM PRODUCTS DIVISION TORINO – QUALITY ASSURANCE

FAX N°: XXXX-011-9979350

ADDRESS: AGILENT TECHNOLOGIES ITALIA S.p.A. – Vacuum Products Division –

Via F.lli Varian, 54 – 10040 Leinì (TO) – Italy

E-MAIL: vpd-qualityassurance_pdl-ext@agilent.com

NAME	COMPANY	FUNCTION

ADDRESS:

TEL. N° : _____ FAX N° : _____

E-MAIL: _____

PROBLEM / SUGGESTION :

REFERENCE INFORMATION (model n°, serial n°, ordering information, time to failure after installation, etc.):

DATE _____

CORRECTIVE ACTION PLAN / ACTUATION (by AGILENT VPD) LOG N° _____

XXX = Code for dialing Italy from your country (es. 01139 from USA; 00139 from Japan, etc.)

Agilent Technologies

Agilent Technologies

Vacuum Products Division
Instructions for returning products

Dear Customer:

Please follow these instructions whenever one of our products needs to be returned.

1) Complete the attached Request for Return form and send it to Agilent Technologies (see below), taking particular care to identify all products that have pumped or been exposed to any toxic or hazardous materials.

2) After evaluating the information, Agilent Technologies will provide you with a Return Authorization (RA) number via email or fax, as requested.
Note: Depending on the type of return, a Purchase Order may be required at the time the Request for Return is submitted. We will quote any necessary services (evaluation, repair, special cleaning, eg).

3) **Important steps for the shipment of returning product:**
   - Remove all accessories from the core product (e.g. inlet screens, vent valves).
   - Prior to shipment, drain any oils or other liquids, purge or flush all gasses, and wipe off any excess residue.
   - If ordering an Advance Exchange product, **please use the packaging from the Advance Exchange to return the defective product.**
   - Seal the product in a plastic bag, and package product carefully to avoid damage in transit. You are responsible for loss or damage in transit.
   - Agilent Technologies is not responsible for returning customer provided packaging or containers.
   - **Clearly label package with RA number.** Using the shipping label provided will ensure the proper address and RA number are on the package. Packages shipped to Agilent without a RA clearly written on the outside cannot be accepted and will be returned.

4) Return only products for which the RA was issued.

5) **Product being returned under a RA must be received within 15 business days.**

6) **Ship to the location specified on the printable label, which will be sent, along with the RA number, as soon as we have received all of the required information.** Customer is responsible for freight charges on returning product.

7) Return shipments must comply with all applicable **Shipping Regulations** (IATA, DOT, etc.) and carrier requirements.

RETURN THE COMPLETED **REQUEST FOR RETURN** FORM TO YOUR NEAREST LOCATION:

EUROPE:	**NORTH AMERICA:**	**PACIFIC RIM:**
Fax: 00 39 011 9979 330		
Fax Free: 00 800 345 345 00	Fax: 1 781 860 9252	please visit our website for individual
Toll Free: 00 800 234 234 00	Toll Free: 800 882 7426, Option 3	office information
vpt-customercare@agilent.com	vpl-ra@agilent.com	http://www.agilent.com

Agilent Technologies

Vacuum Products Division
Request for Return Form
(Health and Safety Certification)

Please read important policy information on Page 3 that applies to all returns.

1) CUSTOMER INFORMATION

Company Name:	**Contact Name:**
Tel: **Email:**	**Fax:**
Customer Ship To:	**Customer Bill To:**
Europe only: **VAT reg. Number:**	USA/Canada only: ☐ **Taxable** ☐ **Non-taxable**

2) PRODUCT IDENTIFICATION

Product Description	Agilent P/N	Agilent S/N	Original Purchasing Reference

3) TYPE OF RETURN (**Choose one from each row** and supply Purchase Order if requesting a billable service)

3A. ☐ Non-Billable ☐ Billable ➡ New PO # (hard copy must be submitted with this form):

3B. ☐ Exchange ☐ Repair ☐ Upgrade ☐ Consignment/Demo ☐ Calibration ☐ Evaluation ☐ Return for Credit

4) HEALTH and SAFETY CERTIFICATION

AGILENT TECHNOLOGIES CANNOT ACCEPT ANY PRODUCTS CONTAMINATED WITH BIOLOGICAL OR EXPLOSIVE HAZARDS, RADIOACTIVE MATERIAL, OR MERCURY AT ITS FACILITY.
Call Agilent Technologies to discuss alternatives if this requirement presents a problem.

The equipment listed above (check one):

☐ **HAS NOT** pumped or been exposed to any toxic or hazardous materials. OR

☐ **HAS** pumped or been exposed to the following toxic or hazardous materials. If this box is checked, the following information must also be filled out. Check boxes for all materials to which product(s) pumped or was exposed:

☐ Toxic ☐ Corrosive ☐ Reactive ☐ Flammable ☐ Explosive ☐ Biological ☐ Radioactive

List all toxic/hazardous materials. Include product name, chemical name, and chemical symbol or formula:

_____

NOTE: If a product is received at Agilent which is contaminated with a toxic or hazardous material that was not disclosed, **the customer will be held responsible** for all costs incurred to ensure the safe handling of the product, and **is liable** for any harm or injury to Agilent employees as well as to any third party occurring as a result of exposure to toxic or hazardous materials present in the product.

Print Name: **Authorized Signature:** ..... **Date:**

5) FAILURE INFORMATION:

Failure Mode (REQUIRED FIELD. See next page for suggestions of failure terms):
Detailed Description of Malfunction: (Please provide the error message)
Application (system and model):

I understand and agree to the terms of Section 6, Page 3/3.
Print Name: **Authorized Signature:** ..... **Date:**

Agilent Technologies

Vacuum Products Division
Request for Return Form
(Health and Safety Certification)

Please use these Failure Mode to describe the concern about the product on Page 2.

TURBO PUMPS and TURBO CONTROLLERS

APPARENT DEFECT/MALFUNCTION		POSITION	PARAMETERS	
- Does not start	- Noise	- Vertical	Power:	Rotational Speed:
- Does not spin freely	- Vibrations	-Horizontal	Current:	Inlet Pressure:
- Does not reach full speed	-Leak	-Upside-down	Temp 1:	Foreline Pressure:
- Mechanical Contact	-Overtemperature	-Other:	Temp 2:	Purge flow:
- Cooling defective	-Clogging	.....	OPERATING TIME:	

ION PUMPS/CONTROLLERS

- Bad feedthrough	- Poor vacuum
- Vacuum leak	- High voltage problem
- Error code on display	- Other

VALVES/COMPONENTS

- Main seal leak	- Bellows leak
- Solenoid failure	- Damaged flange
- Damaged sealing area	-Other

LEAK DETECTORS

- Cannot calibrate	-No zero/high backround
- Vacuum system unstable	- Cannot reach test mode
- Failed to start	- Other

INSTRUMENTS

- Gauge tube not working	- Display problem
- Communication failure	- Degas not working
- Error code on display	- Other

SCROLL AND ROTARY VANE PUMPS

- Pump doesn't start	- Noisy pump (describe)
- Doesn't reach vacuum	- Over temperature
- Pump seized	- Other

DIFFUSION PUMPS

- Heater failure	- Electrical problem
- Doesn't reach vacuum	- Cooling coil damage
- Vacuum leak	- Other

Section 6) *ADDITIONAL TERMS*

Please read the terms and conditions below as they apply to all returns and are in addition to the Agilent Technologies Vacuum Product Division – Products and Services Terms of Sale.

- Customer is responsible for the freight charges for the returning product. Return shipments must comply with all applicable **Shipping Regulations** (IATA, DOT, etc.) and carrier requirements.
- Customers receiving an Advance Exchange product agree to return the defective, rebuildable part to Agilent Technologies **within 15 business days**. Failure to do so, or returning a non-rebuildable part (crashed), will result in an invoice for the non-returned/non-rebuildable part.
- Returns for credit toward the purchase of new or refurbished Products are subject to prior Agilent approval and may incur a restocking fee. Please reference the original purchase order number.
- Units returned for evaluation will be evaluated, and a quote for repair will be issued. If you choose to have the unit repaired, the cost of the evaluation will be deducted from the final repair pricing. A Purchase Order for the final repair price should be issued within 3 weeks of quotation date. Units without a Purchase Order for repair will be returned to the customer, and the evaluation fee will be invoiced.
- A Special Cleaning fee will apply to all exposed products per Section 4 of this document.
- If requesting a calibration service, units must be functionally capable of being calibrated.

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12/10

Printed in ITALY
05/2011
Publication Number: 87-900-127-01 (C)

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