Operating Manual

Meech

HYPERION™
A Meech Innovation

IonCharge30 (15W)

Static Generator

Contents

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M0001 REV 6. Software Version: HV PCB = 1,02,00 / LCD = 03.01.00

1.0 Preface

This operating manual provides information necessary for the installation and operation of the IonCharge30 static generator and also includes technical characteristics.

It applies to the IonCharge30 30kV static generator both positive and negative polarity.

The operating manual must be read and understood before operating the IonCharge30 and should remain accessible to operators. This is important for the safety and correct operation and also for warranty cover.

This manual can also be downloaded from the Meech website

www.meech.com

2.0 Safety

The safety information below must be followed to prevent physical injury and damage to the IonCharge30 or connected parts and nearby objects.

SAFETY WARNINGS

2.1 This operating manual must be read before operation of the IonCharge30.

2.2 Installation and connection must be completed by a qualified electrical engineer, according to the applicable local regulations.

2.3 This equipment must be grounded / earthed via the mains plug and by direct connection to the ground / earth post on the connection end plate of the IonCharge30.

2.4 Only use IonCharge30 in combination with compatible Meech static generator bars and pinning heads.

2.5 Disconnect the power supply before performing any installation and maintenance work on the IonCharge30, static generator bars or pinning heads.

2.6 Before connecting any product to the IonCharge30 switch off or disconnect the power to avoid sparking and possible injury due to electric shock.

2.7 Keep the IonCharge30 free of dirt, dust and moisture and do not expose to vibrations and knocks.

2.8 Always use blanking plug to block off any unused HV output sockets

2.9 Repairs to IonCharge30 must only be carried out by Meech.

3.0 Introduction

The IonCharge30 is a high voltage generator that is used to provide a high voltage to Meech charging bars and pinning heads to create a controlled level of static charge for use in applications where temporary bonding of materials is required, at least one of which is insulative.

The IonCharge30 is available in either positive or negative polarity variants and is powered by a 24V DC power supply.

The generator has a touchscreen interface and the IonCharge30 can either be controlled via the touchscreen or remotely. Settings include the control of both voltage and current outputs and status information. The IonCharge is also available with optional industrial Ethernet connectivity.

The IonCharge30 generates a stabilised high voltage up to 30kV at 0.5mA. Both the output voltage and current can be controlled via the touchscreen or remotely. The high voltage output is available from both ports on the connections endplate.

FRONT

3.0 Introduction (Continued)

CONNECTIONS END PLATE

1. Comms - M8 4 pole connector for control and monitoring with SmartControl, BarMaster or PLC.
2. Control - M8 4 pole connector for 4 - 20 mA voltage and current control and ground and remote On/Off.
3. Power - M8 4 pole connector for 24V DC power supply, remote On/Off and HT status output.
4. LED - Solid Green = Power connected and operational
   Solid Red = Error.
   NOTE: When in perforation detection mode, the LED will be Red as long as flashover is present (subject to 50ms minimum).
5. HT Output – Only Meech ancillary products can be connected through this cable connection.
6. Earth Stud – When the unit is electrically connected this stud should also be connected to a nearby ground connection.

Serial No. /Bar Code – This holds all product information and will be required for any warranty claims or assistance with the IonCharge (located on base).

4.0 Contents of the Box

The IonCharge30 is carefully packed at our factory in a container designed to protect it from accidental damage. Nevertheless, we recommend careful examination of the carton and contents for any damage. If damage is evident, do not destroy the carton or packing material and immediately notify the carrier of a possible damage claim. Shipping claims must be made by the consignee to the delivering carrier. In addition, please also notify Meech International of any damage claims that may be made against the delivery carrier.

Contents of Box:

- IonCharge30
- Operating manual
- 2 x mounting brackets with 8x M3 mounting screws
- Earth cable

Optional Equipment: 24V DC switch mode.

NOTE: IF USING OWN 24V POWER SUPPLY THE REQUIREMENT IS MINIMUM OF 30W / MAXIMUM OF 100W.

5.0 Installation

5.1 Electrical

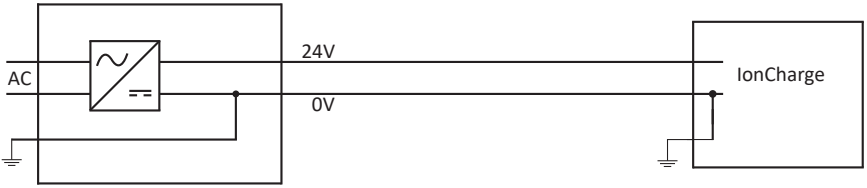
5.1.1 INSTALLATIONS AND CONNECTIONS MUST BE COMPLETED BY A QUALIFIED ELECTRICAL ENGINEER.

5.1.2 THIS EQUIPMENT MUST BE GROUNDED / EARTHED VIA THE MAINS PLUG AND BY DIRECT CONNECTION TO THE GROUND / EARTH POST ON THE CONNECTION END PLATE OF THE IONCHARGE30.

5.0 Installation (Continued)

5.1.3 Connection using a Grounded 24V DC power supply. E.g. Meech part number A900IPS-SM2MS-48W.

- Meech 24V DC supplies are grounded internally. They are supplied with a three wire IEC C5 cable.
- The ground connection must be correctly connected at the mains connection.
- The IonCharge30 should also be grounded by it's grounding post, to provide additional safety.

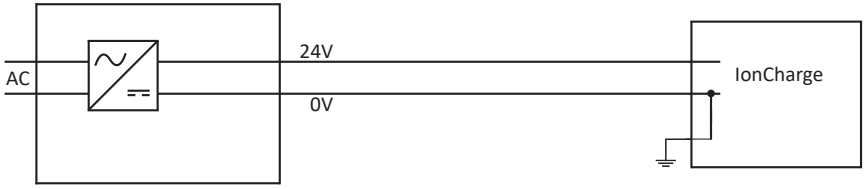


Grounded 24V supply
e.g. Meech A900IPS-SM2MS-48W

IonCharge grounded by power supply and ground on IonCharge.

5.1.3 Connection using an ungrounded 24V DC power supply.

- The output of many 24V power supplies are not grounded.
- If this type of power supply is used, it is vital that the system is grounded using the ground post on the IonCharge30.



Ungrounded 24V supply

IonCharge grounded by ground post.

5.1.4 The IonCharge30 unit needs to be connected to a 24V DC power supply. The maximum power consumption for the IonCharge30 is 30W.

5.0 Installation (Continued)

5.1.5 Any product connected to the IonCharge30 should be done whilst the power is off to avoid sparking and possible injury due to electric shock.

5.1.6 The Meech products are connected through the HT output in the bottom left of the end plate. If the connector does not look and screw in as shown in the picture below, it must not be used with the IonCharge30.

5.0 Installation (Continued)

5.1.7 The warranty will be void if the product connected to the IonCharge30 is not done so correctly and/or is not a Meech product.

5.2 Physical Mounting

5.2.1 The IonCharge30 comes with 2 adjustable mounting brackets; for installation to any flat surface.

5.2.2 The mounting brackets can be moved as shown below by loosening the two retaining screws.

5.2.3 It is suggested that when mounting the IonCharge30 at least 2 holes per bracket are attached to the surface the IonCharge30 is placed on.

5.2.4 The IonCharge30 weighs 0.75 kg, this will need to be taken into account if mounting on a weak structure or surface.

5.2.5 If the IonCharge30 is sat on a flat surface we would advise that it is always secured down to prevent accidental damage from occuring.

6.0 Operation

6.1 Pre Checks

Check the following before switching the generator on:

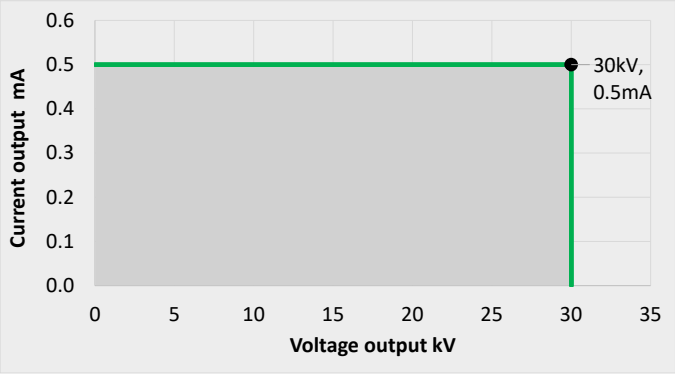
- The generator is securely mounted.
- Power input and case are correctly grounded.
- Charging electrodes are correctly connected to the HV output sockets.

6.2 Operation - Introduction

The IonCharge30 generates a stabilised high voltage up to 30kV at 0.5mA. Both the output voltage and current can be controlled via the touchscreen or remotely. The high voltage output is available from both ports on the connections endplate on the rear of the IonCharge30.

6.0 Operation (Continued)

Fig 1: IonCharge30 - (15W) Power Output Distribution



In *Fig 1* the green line shows the maximum voltage and current for the IonCharge30.

For example, at the maximum voltage setting of 30kV the maximum current is 0.5mA.

The IonCharge30 is designed to automatically adjust either voltage or current depending on the 'Setpoints' selected for each on the power adjustment screen (see 6.4.4) and the operating conditions (e.g. length of static bar and distance of static bar from ground source). The touch screen display continuously indicates which value is being automatically adjusted and which is set. This is indicated by the **SET** and **AUTO** indicators against either voltage or current output.

6.0 Operation (Continued)

6.3 Operating Screens Overview

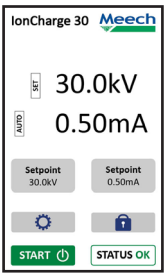
The following 3 pages are an overview of the screen layouts and operations of the IonCharge30; for more in-depth information on the functions of the IonCharge, please see page 18 onwards.

IonCharge30 can be operated using the touchscreen or remotely.

Starting of IonCharge30

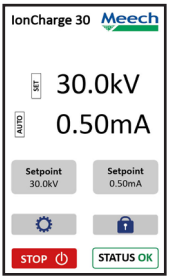
START

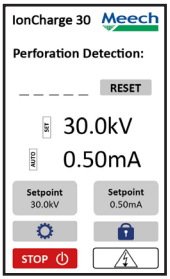
When the unit is powered on and Voltage/ Current has been set, the start button can then be pressed. The previous state of the IonCharge will be restored when powering back on the unit.



Operation Running Well

Once the start button is pressed, the IonCharge30 will then begin to run. You will then be greeted by the standard operations screen (right). This screen will display the settings which have been selected within the adjustment screens of the IonCharge30, and a stop button to cease operation.

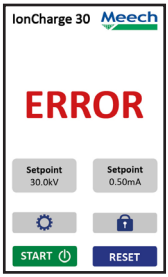




NOTE: When in perforation detection mode, the alternative perforation detection screen will be displayed.

Error When In Operation

Once the ‘Start’ button is pressed, if an error occurs, the screen (right) will be shown. This alerts user to an ‘error’ of the IonCharge30, allowing the generator to be reset.

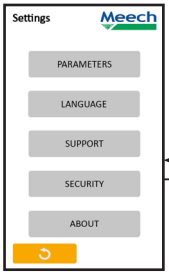


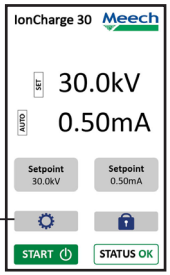
6.0 Operation (Continued)

6.3.1 Start Functionality

Settings Home Page

You will then be presented with the settings home page. This is the main navigation area to all options and adjustments which can be altered.



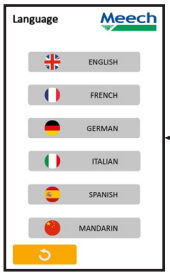


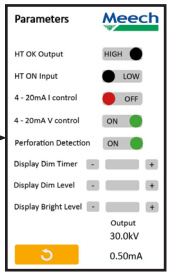
Settings Of IonCharge30

The settings button on the home screen provides access to the different settings and adjustments of the IonCharge30.

Language

Information can be displayed in multiple languages; the desired language can be selected through this screen.



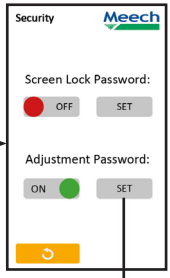


Parameters

The parameters screen allows users to make adjustments to the operating parameters of the generator such as 4 - 20mA control, screen brightness, perforation detection etc.

Support

Additional information such as contact details for Meech International, in addition to the serial number and software version can be viewed in the support tab.

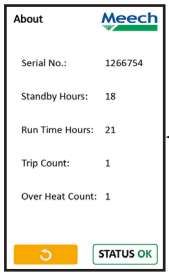


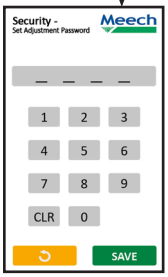
Security

The 'Security' section allows users to turn on/ off passcode protection for protected operations and set the passcode if required.

About

The key system information can be viewed in the 'About' tab. Information such as the serial number, standby hours, run-time hours, trip count and over heat count are displayed here.





Setting Security Password

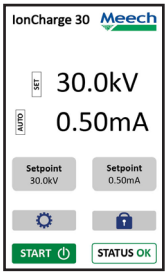
In this area a 4-digit passcode can be set.

6.0 Operation (Continued)

6.3.3 Security Functionality

Screen Lock For IonCharge30

The screen of the IonCharge can be locked and unlocked via the 'lock' button which is located on the home screen. When enabled the entire screen other than the unlock button is disabled.



Entering Screen Lock/Power Adjustment Password

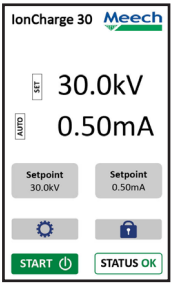
If the option to enable a passcode for the screen lock and/or power adjustment is enabled, a passcode screen (as shown on the right) will be shown. This feature can be enabled/disabled, in addition to setting of the passcode via the security screen which is located in the settings menu.

6.3.4 Power Adjustment Functionality

IonCharge30 Power Adjustment

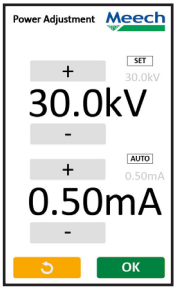
Setpoint kV | Setpoint mA

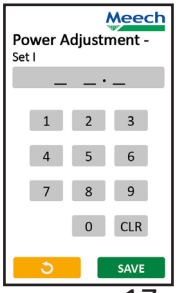
The power output of the IonCharge30 can be adjusted via the 'Setpoint' buttons located on the home screen.



Entering Values For Power Adjustment

Users can adjust the power output from the IonCharge30 by tapping either the '+' or '-' buttons located above and below the values shown on the screen. By tapping on these values, a second power adjustment screen will be shown which allows users to manually enter their desired output.





6.0 Operation (Continued)

6.4 Commissioning and Operation

6.4.1 Switching On and Starting IonCharge30

a. Ensure the power cable is connected to the rear of the IonCharge30.
b. Switch the unit on using the mains outlet switch.
c. The unit will then begin to boot up.
d. To start the static generator, press the START button.

IMPORTANT: THIS EQUIPMENT MUST BE GROUNDED / EARTHED VIA THE MAINS PLUG AND BY DIRECT CONNECTION TO THE GROUND / EARTH POST ON THE REAR OF THE STATIC GENERATOR.

6.4.2 Stopping and Switching Off IonCharge30

a. To stop the IonCharge, press the STOP button
b. To switch off the power supply to the IonCharge30, turn off the switch for the mains power to the power supply.

6.0 Operation (Continued)

6.4.3 Selecting User Language

The information which is shown on the touchscreen can be displayed in 6 different languages.

To change the language

a. Press the button on the main screen
b. Press the language button.
c. Select the desired language (the language which is currently in use will be displayed with a black border)
d. Press the button to go back to the main screen/ home screen.

6.0 Operation (Continued)

6.4 Commissioning and Operation

6.4.4 Changing the Voltage and Current Setpoint

In the centre of the main screen the real-time output for voltage and current is displayed. The setpoint for voltage and current is displayed inside the two buttons on the right of the main screen. The setpoint displays the maximum level for voltage and current that has been chosen. The setpoint is set to the level required for the application.

The main screen also displays SET and AUTO indicators next to either the voltage or current value. SET means that the value has reached the SETPOINT value and AUTO indicated that the value is automatically adjusting to the conditions.

6.0 Operation (Continued)

6.4 Commissioning and Operation

6.4.4 Changing the Voltage and Current Setpoint

To Adjust Setpoint:

a. Press either the voltage or current 'Setpoint' button.

b. The power adjustment screen will then be displayed. Adjust the setpoint using the + and - buttons as required. Voltage adjustment is in increments of 0.1kV and current adjustment is in increments of 0.01mA. The value can also be inputted by pressing on the number which is displayed, which then shows an overwrite screen where the value can be input using the numerical buttons.

c. Once the values for the Setpoints have been entered, return to the main screen by pressing the  button.

NOTE: The current that is drawn by IonCharge30 is dependent on:

- **Setpoints selected for current and voltage**
- **The number and length of static charge bars and also number of pinning heads.**
- **The environmental conditions (temperature and humidity)**
- **The charge bars proximity to electrically grounded parts of the machine to which it has been fitted.**

6.4.5 Locking/Unlocking the Touchscreen and Passcode Protecting

The IonCharge30 touchscreen can be locked in order to prevent unwanted changes from occuring; additionally access for the use of the touchscreen can also be passcode protected. The generator can be setup to require a passcode to unlock the access to the generator and/or a passcode for making adjustments

6.0 Operation (Continued)

6.4.5 Locking/Unlocking the Touchscreen and Passcode Protecting

a) Locking/Unlocking Touchscreen

a. To lock the touchscreen, press the lock button on the main screen. The symbol will change to a locked padlock to show you when functions are accessible or not.

b. To unlock, press the locked symbol and the touchscreen is unlocked. The lock symbol on the home screen will then change to showing as unlocked.

NOTE: If passcode protection function is enabled, you will need to enter the passcode in order to unlock the touchscreen.

b) Passcode Protection For Lock

a. Press the button on the main screen

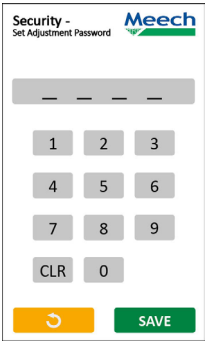
b. Select SECURITY

c. Tap on the slider next to 'Password For Lock' to turn it ON

d. To set the passcode, select SET and enter the passcode you would like to use for the password protection using the numerical keypad. Once you have entered the passcode, tap on the SAVE button to save your chosen passcode.

e. Press the return button to go back to the Settings page; press return again to to back to the main screen.

f. To remove the passcode protection, press the symbol on the main screen. Enter the correct passcode for lock. Go to the Settings page, then press the SECURITY button to go to the security page and tap the button next to 'Password for Lock' to turn OFF the password lock.



6.0 Operation (Continued)

c) Passcode Protection For Adjustment

1. Press the  button on the main screen
2. Select SECURITY
3. Tap on the slider next to ‘Password For Adjustment’ to turn it ON
4. To set the password, select SET and enter the password you would like to use for the password protection using the numerical keypad. Once you have entered the password, tap on the SAVE button to save your chosen password.
5. Press the return button to go back to the Settings page; press return again to to back to the main screen.
6. To remove the password protection, press the  symbol on the main screen. Go to the Settings page, then to Security page and tap the button next to ‘Password for Adjustment’ to turn OFF the password lock.

6.0 Operation (Continued)

6.4.6 Remote Control of the Current and Voltage Setpoints via 4 - 20mA input signal

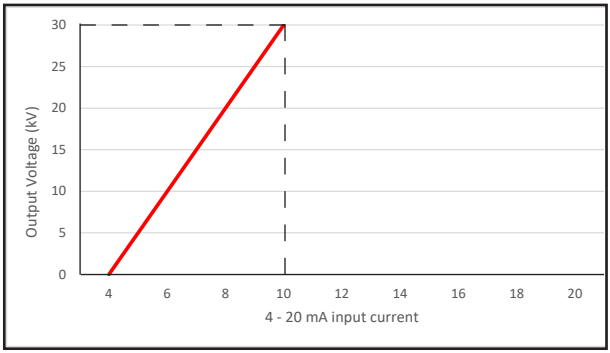
Setpoints for voltage and current can also be made remotely via a 4 - 20mA input signal. Signal input is via the 4 pin M8 Control connector on the rear of the IonCharge.

How To Set:

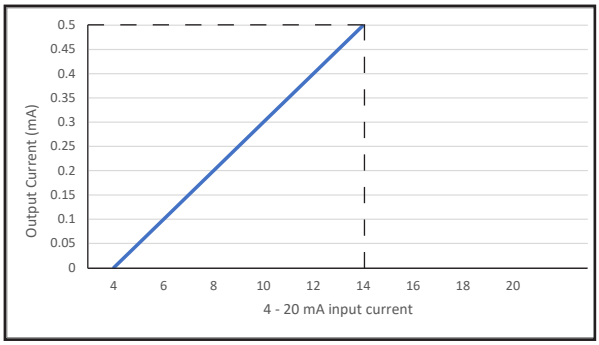
1. Tap the  icon on the main screen
2. Click on the PARAMETERS button
3. Select ON for 4 - 20mA and or 4 - 20mA V control

If set to ON, the SETPOINT for voltage and or current will set by the 4 - 20mA input. See diagrams below for further information.

4 - 20mA Control of Output Voltage



4 - 20mA Control of Output Current



6.0 Operation (Continued)

6.4.7 HT OK Output

Pin2 2 (white) of the M8 power connector provides the HTOK signal that confirms that the HT output is operating correctly.

The output gives an OK signal when either the Current or Voltage setting is reached. The signal can be set to HIGH (24V) or LOW (0V) in the Parameters screen (6.3.1).

When the IC30 is set to Perforation Detection (6.4.9) Pin 2 (White) of the power connector is used as an output, giving a 15ms pulse every time a perforation is detected.

6.0 Operation (Continued)

6.4.8 HT ON Input

The High Voltage output can be started and stopped remotely. This function is available on Pin 4 of the M8 Power Connector and on Pin 4 of the M8 Control Connector.

The connections are pulled up HIGH internally to 24V via 10 kΩ.

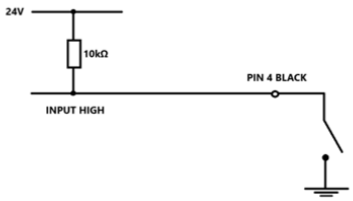
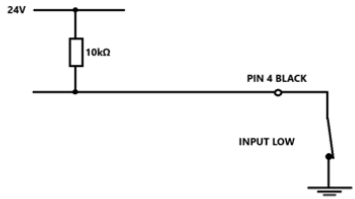
Input settings:
24VDC versions.

Using **Pin 4 M8** of the **Power connector** allows either a HIGH or a LOW signal to start the High Voltage output. This is controlled by the HT ON parameter (see 6.3.1)

Using **Pin 4 M8** of the **Control connector**.
HIGH = On , LOW = Off

When a remote input which is holding the High Voltage OFF, the IonCharge30 off will be indicated on the screen by the START/STOP button changing amber and displaying the EXTERNAL STOP button.

ON/OFF Control Logic

Input Connection	Power Connector		Control Connector
	HT ON = **LO**	HT ON = **HIGH**	
	**OFF**	**ON**	**ON**
	**ON**	**OFF**	**OFF**

6.0 Operation (Continued)

6.4.9 Perforation Detection Mode

IonCharge30 includes a perforation detection mode.

When used with a Meech high voltage electrode (hot bar), flashover from perforations in the material are detected and output as a pulse signal to a PLC for counting and activating other machine functions.

The IonCharge30 main screen will show a counter that shows the number of perforations with a RESET button. The symbol in the bottom right corner will also indicate a flashover symbol as shown in the image below. Also, when a perforation is detected the LED on the rear panel will show RED for the duration of the flashover (subject to 50ms minimum).

Set Up Procedure:

1. Install the high voltage electrode (hot bar) at a distance between 5mm and 25mm from the earth potential and connect to one of the HV outputs on the IonCharge30
2. Switch on the IonCharge30 and Click  button on the main screen, then click on Parameters and click ON for Perforation detection
3. Set to minimum voltage output and maximum current output. Make sure that the earth potential is exposed to the emitter head.
4. Increase the voltage on the IonCharge30 until the high voltage electrode sparks to the earth. If no sparking occurs when increasing the voltage to maximum, follow these steps:

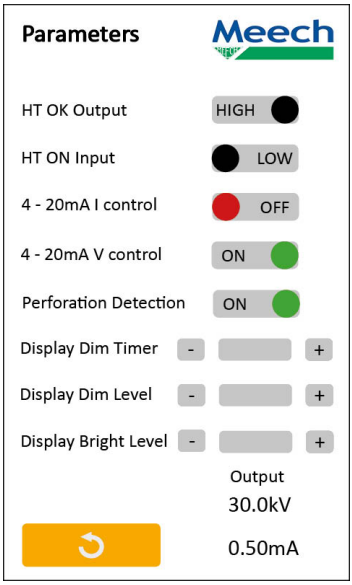
    a) Switch off the IonCharge30
    b) Check the earth continuity
    c) Move the high voltage electrode closer

5. Reduce the voltage until the high voltage electrode stops sparking.
6. Web up the material and test to ensure sparking occurs at each perforation. Increase the voltage gradually if required so that sparking occurs at each perforation.

6.0 Operation (Continued)

6.4.10 Adjusting Dim Timer

The touchscreen features a timer for the dimming of the display, which can be adjusted in 5 second increments; with the minimum time that can be set for the unit to dim being 5 seconds. To adjust the timer, select the  button on the main screen and then select the PARAMETERS button. You can then adjust the time for the unit to dim using the + and - buttons next to the 'Display Dim Timer' option to increase or decrease the timer in increments of 5 seconds.



6.0 Operation (Continued)

6.4.11 Adjusting Dim Level

The touchscreens dim level can be adjusted from a low of 5% (darkest) to 95% (brightest). To adjust the dim level select the ⚙ button on the main screen and then select the PARAMETERS button. You can then adjust the dim level for the unit using the + and - buttons next to the 'Display Dim Level' option to increase or decrease the dim level in increments of 5%, (please see screen on page 29).

6.4.12 Display Brightness Level

The touchscreens brightness level can be adjusted through the settings of the IonCharge. Once in the settings page, tap on the PARAMETERS button. You can then adjust the brightness levels of the touchscreen by tapping the + and - next to the 'Display Bright Level' to increase or decrease the brightness level from 20% to 100% in increments of 5% (please see screen on page 29).

6.5 Flashover and Error Indicator

6.5.1 Flashover Indicator/Trip Indicator and Count:

In the event of a flashover, the IonCharge30 main screen will show a flashover symbol in the bottom right corner. The flashover symbol will remain whilst a flashover occurs. A flashover can occur in situations where there is a sudden increase in load on the output; for example a short to ground from a damaged HT cable. The system installation should be inspected to verify high voltage cable integrity. TRIP will be displayed on the main screen and shut off OUTPUT until the start button is pressed again.

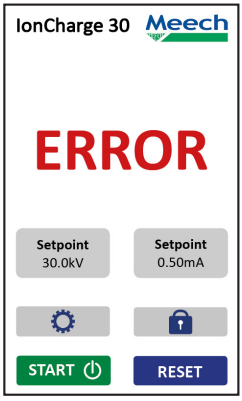
NOTE: WHEN IN PERFORATION DETECTION MODE (SEE 6.4.9) IT IS NORMAL FOR THE FLASHOVER SYMBOL TO APPEAR IN THE BOTTOM RIGHT CORNER OF THE MAIN SCREEN WHEN DETECTING PERFORATIONS.

6.0 Operation (Continued)

6.5.2 Error Indicator

In the event of a power supply failure the HV output will switch off and the word ERROR will appear on the screen. The HV output will remain off until the IonCharge30 is switched off and on again or the RESET button is pressed.

NOTE: IonCharge30 will revert to it's last operating state when switched off and on or the reset button is pressed. In the event of a power supply failure contact your local Meech office or Meech representative.



6.6 Industrial Ethernet Network Connectivity (Optional)

Meech has selected a universal and flexible approach for Industrial connectivity which facilitates the integration of the IonCharge30 to Industrial Ethernet based networks by the usage of an external module.

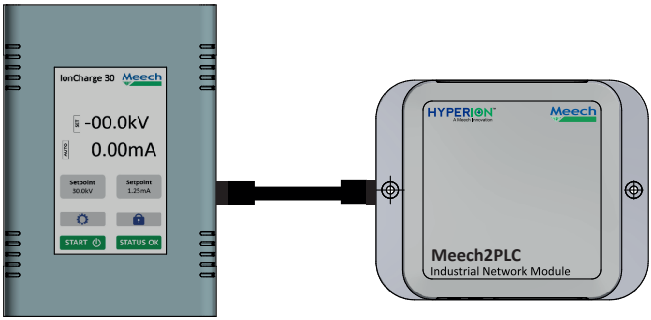
The Meech multi-network connectivity solution includes the following Industrial networks:

- Profinet-IRT
- Modbus TCP
- EtherNet/IP

6.0 Operation (Continued)

6.6 Meech2PLC Connectivity (Optional)

IonCharge30 Connected to Meech2PLC (24V)

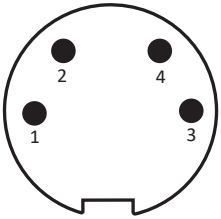


The optional Meech2PLC module is connected to the M8 4 pin Communication Connector (labeled as “Comms”) on the IonCharge30. The Meech2PLC module allows connectivity to industrial networks via its RJ45 connector.

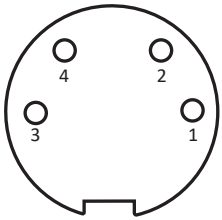
Additional configuration is required on the control and monitoring equipment to access data on the IonCharge30, this equipment is usually a PLC. For example, if the IonCharge30 is to be integrated via the Meech2PLC module into a Profinet network to communicate with a PLC, then a GSD file must be loaded into the PLC to allow this integration.

6.0 Operation (Continued)

6.7 Connection Panel Input/Outputs



Male connector on IonCharge



Female connector on cable

Power Connector (4 pin M8)

No.	Colour	Function	Specification
1	Brown	Input	24V DC
2	White	Output	HT OK status monitor; perforation and fault monitor
3	Blue	Input	0V; Ground
4	Black	Input	Remote HT ON/OFF

Comms Connector (4 pin M8)

No.	Colour	Function	Specification
1	Brown	Output	24V
2	White	Communications	Meech2PLC network module connectivity SmartControl Touch connectivity (not yet available)
3	Blue	Input	0V and ground
4	Black	Communications	Meech2PLC network module connectivity SmartControl Touch connectivity (not yet available)

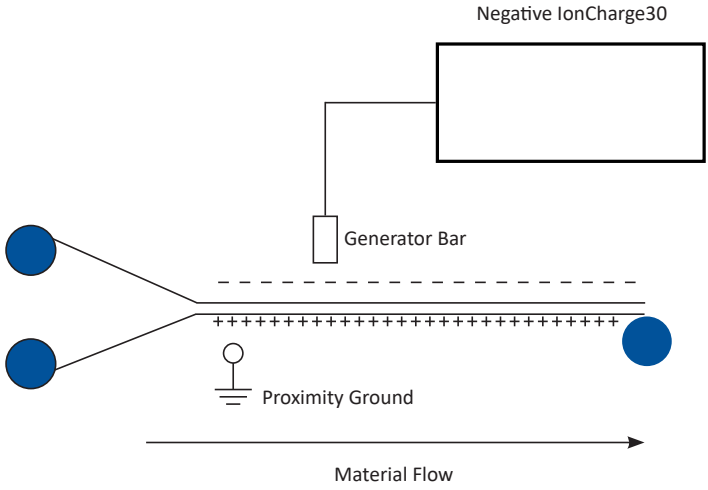
Control Connector (4 pin M8)

No.	Colour	Function	Specification
1	Brown	Input	4 - 20mA voltage (V) control
2	White	Input	4 - 20mA current (I) control
3	Blue	Input	0V and ground
4	Black	Input	Remote HT ON/OFF

7.0 Fault Finding

7.1 Constant Voltage Mode - Typical Application

Reel To Reel



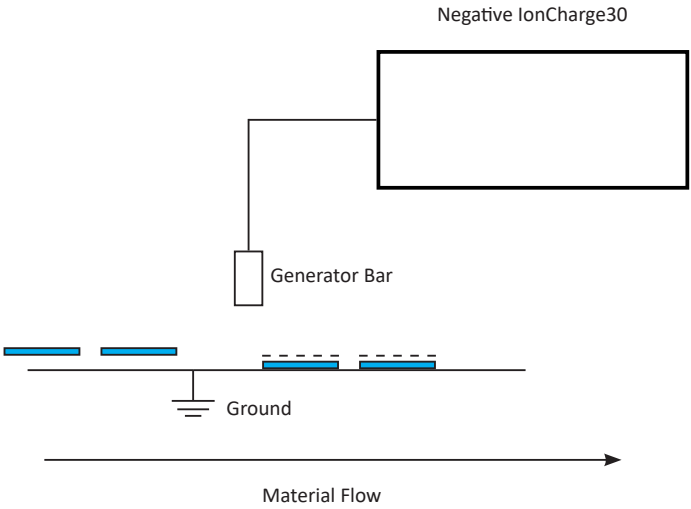
Fault Finding - Constant Voltage Mode

Fault	Fix
Required voltage cannot be achieved	Increase current setpoint
Required voltage cannot be achieved with current limit set at maximum	Contact Meech International for support
Unit has no output	Check unit is switched on. Press the 'START' button to reactivate outputs. Check 'ERROR' is not displayed on main screen. If 'ERROR' is displayed, press 'RESET' button to reactivate outputs having checked installations or switch unit off and on.If still no output, contact Meech International.
Screen unlocked and buttons not working	Check that 4-20mA control is off. If buttons are still not working, contact Meech International.

7.0 Fault Finding (Continued)

7.2 Constant Voltage Mode - Typical Application

Sheets pinned to a conveyor



Fault Finding - Constant Current Mode

Fault	Fix
Required operating current cannot be achieved	Increase current limit
Required current cannot be achieved with voltage set at maximum	Move generator bar closer

8.0 Technical Characteristics

Max Power Output	15W
Output Voltage	0 - 30kV
Output Current	0 - 0.5mA
Output Polarity	Negative or positive variants available
Adjustable Increments	Voltage (V) 0.1kV Current (I) 0.01mA
Supply Voltage	24V DC
Max Power Consumption	30W
Input Connection	M8 4 Pole
Voltage and Current Selection	Independently selectable voltage and current
Perforation and Hole Detection	Upto 1200 counting pulses per minute (20Hz). Minimum output pulse duration 15ms (e.g. to PLC).
Output Ports	2
Meech2PLC Network Connectivity	Optional external module for integration of IonCharge30 to industrial Ethernet based networks including Profinet-IRT, Modbus TCP, Ethernet/IP
User Interface	5” touchscreen
4-20mA Control	Independent voltage and current inputs. Input resistance 1kΩ
Password Protection	2 level, screen and adjustment lock
Operating Environment	Industrial
Protection Class	IP20
Dimensions (W x H x D) mm	122.5 x 58 x 180
Weight	0.75 kg
Housing Material	ABS

9.0 Technical Drawing

For our latest technical drawing please email Meech Customer Services via CustomerService@meech.com

10.0 Repairs and Warranty

The IonCharge30 Static Generator is warranted by Meech Static Eliminators Ltd to the original purchaser against defects in material and workmanship for two years after purchase. Should any malfunction occur, please return the generator directly to Meech Static Eliminators or your local distributor. Contact Meech head office and inform them of your problem. You will then be given a return reference number which you will need throughout the returns procedure. All products returned to the factory MUST be accompanied by a return authorisation number and must be shipped prepaid. For prompt service, ship the unit to the factory with the return authorisation number shown clearly on the label. Be sure it is well packed in a sturdy carton with shock absorbing material.

Include a note stating the nature of the problem as specifically as possible, and also include instructions for returning the generator to you. We will pay one-way return surface shipping costs on any repairs covered under the warranty.

Field repairs should not be undertaken during the warranty period. Repair attempts by unqualified personnel will invalidate the warranty.

11.0 UL Approval

The IonCharge30 Static Generator is compliant with UL Listing requirements.

Scope : cULus Listing and CB certification of the IonCharge 30 static generator. IEC/UL/CSA 62368-1 Ed 3.0:2018

c UL us
LISTED
STATIC
NEUTRALIZING
EQUIPMENT
E211778

12.0 CE Approval

A CE Declaration of Conformity for this product exists in respect of the Electromagnetic Compatibility Directive 2014/30/EU.

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