

IX-ECG12

Technical Note



iWorx Systems, Inc.

www.iworx.com

LabScribe is a trademark of
iWorx Systems, Inc.

Overview

iWorx offers data recorders that can be connected directly to a USB port of a Windows or Mac OS. LabScribe will recognize this interface and the recorders can be used without another data acquisition device. They are sold with both electrode leads and the necessary cables for connection to your computer.



IX-ECG12

The IX-ECG12 connects directly to a computer's USB port and allows you to record 12 ECG leads. A dedicated settings file, IXECG12-12LeadECG, can be found in the Human Heart folder in LabScribe's Settings menu.

How to Use the USB Recording Devices



1. Connect the recorder to a computer's USB port, before opening LabScribe.

IX-ECG12

How to Enable Desired Channels in LabScribe

There are several preset settings for many iWire devices and recorders. To load a research settings group:

1. Select **Settings** from the LabScribe toolbar.
2. Select **Load Group**
3. Select the **Research Settings** folder.
4. Select the **IX-ECG12** folder.
5. Select the **IWXGRP** file from the list.
6. Click **Open**.
7. Go back into the **Settings** menu, you will now see a list of experiments.
8. Choose an experiment from the list to open the preconfigured settings.

Channels can also be Enabled or Disabled by opening the **Edit – Preferences** Menu, and selecting the blue check mark to the left of the channel.

IX-ECG12 Channels are labeled as follows:

A1 Lead I

A2 Lead II

A3 Lead V1

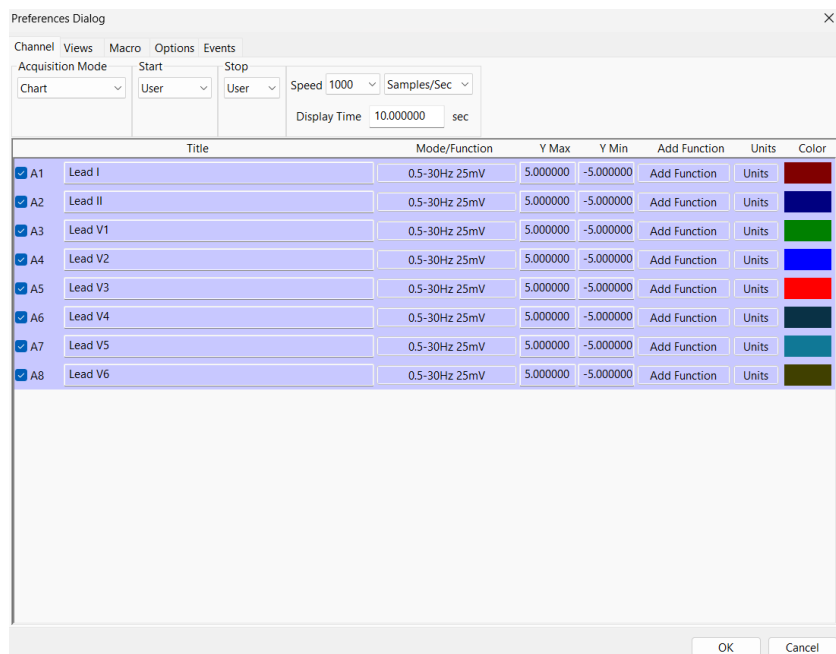
A4 Lead V2

A5 Lead V3

A6 Lead V4

A7 Lead V5

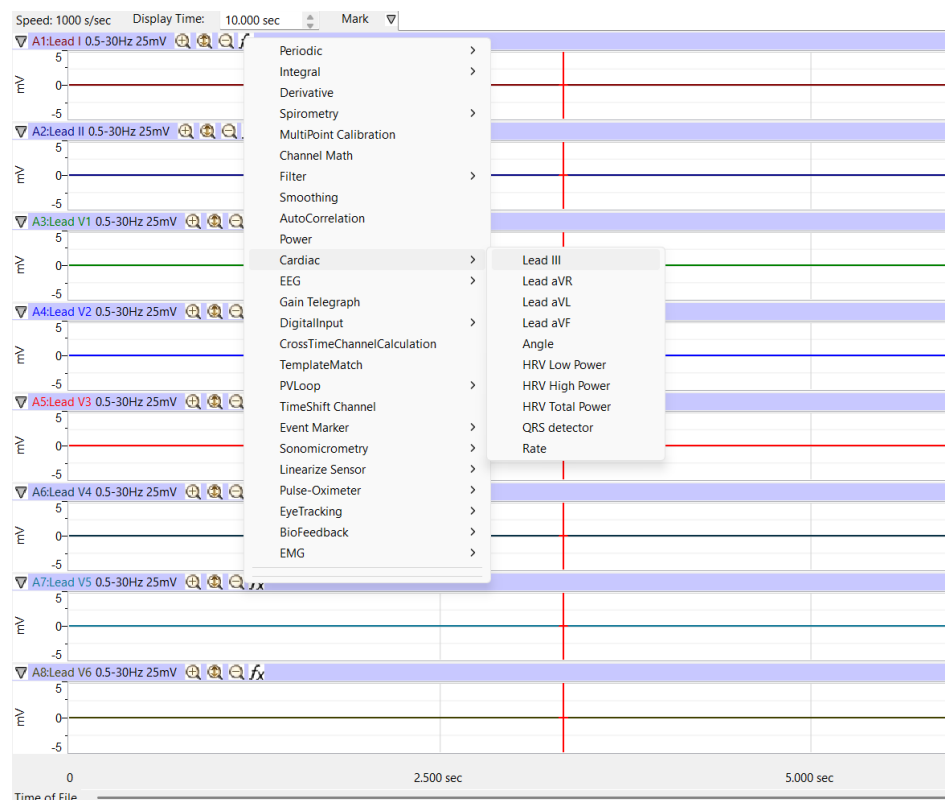
A8 Lead V6



IX-ECG12

Calculated channels, including Lead III, aVR, aVL, and aVF, can be created by:

1. Click the function ('fx') button on channel 1 in the main window. The fx button is located to the right of the channel title.
2. Select 'Cardiac'.
3. Select the desired calculated lead.
4. A dialog window will pop up to specify Lead I and Lead II, which the calculation will be performed off of. Click OK to apply the new calculated channel. Repeat these steps to add any additional calculated channels.



The Complete LabScribe manual can be found by navigating to the LabScribe toolbar and selecting **“Help” > “Help (Manual)”**

Technical Data and Specifications

SPECIFICATIONS

Analog Inputs	B3G: 1 GSR (skin conductance), 3 Biopotential BIO4: 4 Biopotential BIO8: 8 Biopotential ECG12: 10 Electrodes: RA,LA,RL,LL,V1,V2,V3,V4,V5
Input Range	2400mV, 1200mV, 800mV, 400mV, 200mV, 100mV, 50mV, 25mV, 12mV

IX-ECG12

SPECIFICATIONS

A/D Converter

Sampling Speed	20k Samples/sec per channel simultaneous
Resolution	16 Bit
Interface	IWIRE-B3G, IWIRE-BIO4, IWIRE-BIO8, IWIRE-ECG12: iWire IX-B3G, IX-BIO4, IX-BIO4, IX-ECG12: USB

General

Enclosure	Plastic Dimensions: 9 cm x 5 cm x 3 cm
Power	IWIRE-B3G, IWIRE-BIO4, IWIRE-BIO8, IWIRE-ECG12: iWire IX-B3G, IX-BIO4, IX-BIO4, IX-ECG12: USB
Warranty	Protected by a 3 year warranty

iWorx Systems, 62 Littleworth Road, Dover, New Hampshire 03820 (T) 603-742-2492



iWorx Systems, Inc.

www.iworx.com