



**Med Vue**®

**Model MVIP  
Ethernet Option  
Operation Manual**



8555-M520-O1 Rev A  
01/15

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# INTRODUCTION

Thank you for purchasing our MedVue® Model MVIP Ethernet Option. This option card for the Detecto MedVue® Weight Analyzer was built with quality and reliability has been designed for the environment where interfacing through an Ethernet network is desired.

The purpose of this manual is to provide you with a guide through installation, setup and operation of the MedVue® Model MVIP Ethernet Option. Please read it thoroughly before attempting to install the option card in your weight analyzer and keep it handy for future reference.

# COPYRIGHT

All rights reserved. Reproduction or use, without expressed written permission, of editorial or pictorial content, in any manner, is prohibited. No patent liability is assumed with respect to the use of the information contained herein.

# DISCLAIMER

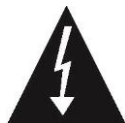
While every precaution has been taken in the preparation of this manual, the Seller assumes no responsibility for errors or omissions. Neither is any liability assumed for damages resulting from use of the information contained herein. All instructions and diagrams have been checked for accuracy and ease of application; however, success and safety in working with tools depend to a great extent upon the individual accuracy, skill and caution. For this reason the Seller is not able to guarantee the result of any procedure contained herein. Nor can they assume responsibility for any damage to property or injury to persons occasioned from the procedures. Persons engaging the procedures do so entirely at their own risk.

## PRECAUTIONS

**Before using this device, read this manual and pay special attention to all NOTIFICATION symbols:**



**IMPORTANT**



**ELECTRICAL  
WARNING**



**STATIC  
SENSITIVE**

## FCC COMPLIANCE STATEMENT

This equipment generates uses and can radiate radio frequency and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area may cause interference in which case the user will be responsible to take whatever measures necessary to correct the interference.

You may find the booklet “How to Identify and Resolve Radio TV Interference Problems” prepared by the Federal Communications Commission helpful. It is available from the U.S. Government Printing Office, Washington, D.C. 20402. The stock No. is 001-000-00315-4.

## PROPER DISPOSAL

When this device reaches the end of its useful life, it must be properly disposed of. It must not be disposed of as unsorted municipal waste. Within the European Union, this device should be returned to the distributor from where it was purchased for proper disposal. This is in accordance with EU Directive 2002/96/EC. Within North America, the device should be disposed of in accordance with the local laws regarding the disposal of waste electrical and electronic equipment.

It is everyone’s responsibility to help maintain the environment and to reduce the effects of hazardous substances contained in electrical and electronic equipment on human health. Please do your part by making certain that this device is properly disposed of. The symbol shown to the right indicates that this device must not be disposed of in unsorted municipal waste programs.



# INSTALLATION

## Mounting the MVIP Option Card

**NOTE:** Should your weight analyzer come with the option card already installed, the following section describing mounting, does not apply. Proceed to the NETWORK CONFIGURATION.



**ATTENTION! OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC SENSITIVE DEVICES.**



**MAKE SURE THE POWER TO THE MEDVUE WEIGHT ANALYZER IS OFF!**

If you are operating the weight analyzer using batteries, remove them. If using the optional power supply, unplug the power supply cable from the 12VDC jack on the back of the weight analyzer.

1. With the power off, remove the four (4) screws securing both end caps (two (2) screws in each end cap) and remove the end caps.
2. Remove the five (5) screws on the back and the two (2) screws on each side holding the back panel in place.
3. Remove the back panel assembly from the front panel and unplug the keypad.
4. Remove the four (4) jack screws and lock washers next to the Serial and Load Cell connector using a 3/16 socket.
5. Remove the nut and washer on the DC barrel plug connection using a 3/8 socket.
6. Using a pair of Needle-nose pliers un-twist the posts next to the display and remove the back panel. **NOTE:** Be careful not to damage the display while un-twisting securing posts.
7. Unplug the battery connector from the MedVue PCB.
8. Insert the MVIP option card into the Ethernet connector P10 and fold flap on front panel down and out of the way.
9. Reattach the MedVue PCB to the back panel. Make sure the connectors inserted through the holes and mounting posts next to the display are all the way inserted.
10. Using Needle-nose pliers twist mounting posts.
11. Reinstall the four (4) jack screws and washers.
12. Reinstall the nut and washer on the DC barrel plug.
13. Plug keypad back in and insert back panel assembly back into front panel.
14. Reinstall six (6) screws that hold the back panel to the front panel.
15. Reinstall both end caps and secure with the four (4) screws removed in step 1.
16. Press the **ON/OFF** key to turn the weight analyzer on.
17. The weight analyzer is now ready to configure for the network.

# NETWORK CONFIGURATION

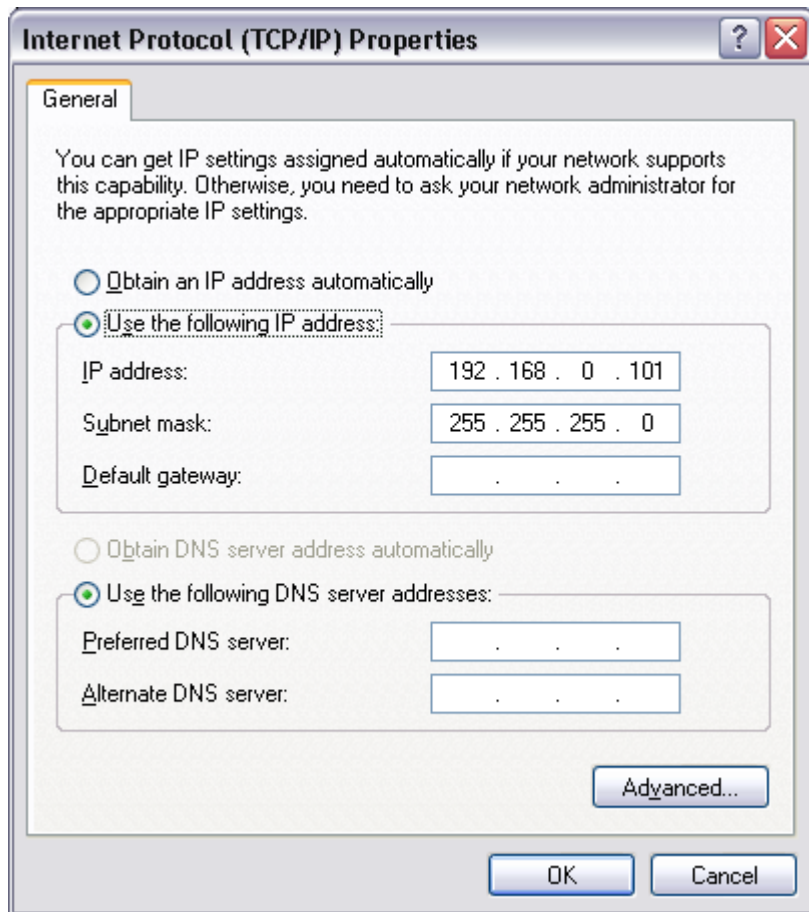
The factory default settings of the MVIP option will use the following IP address and subnet mask:

**IP Address: 192.168.0.100**

**Subnet Mask: 255.255.255.0**

In order to connect to the weight analyzer, you must first connect it to a PC through a network switch or router, or directly to the PC using an Ethernet crossover cable. The PC must be set up with a static IP address and a subnet mask that will allow it to communicate to the default settings of the weight analyzer.

Example of PC network settings that will allow you to connect to the MVIP default setup:



After setting the network configuration of your PC to be able to communicate to the MVIP, you can then access the configuration web page in order to set it to connect to an existing network.

Navigate to the following address using a web browser in order to set up the appropriate network configuration settings.

**http://192.168.0.100/iChip**

If your attempt to browse to this page is successful, you will be presented with a password screen where you must log in to be able to adjust the network settings.

<b>Passwords</b>	
<b>Password required to change parameter values.</b>	
<b>Password (AT+iRPG) :</b>	<input type="text"/>

**Submit**

Enter “detecto” as the password and click on the “Submit” button.

You should then be presented with a new page which contains a form that can be used to set up the network configuration to connect to an existing network.

The following is an example of how this screen will appear.

Network Configuration			
Parameter	Value	Limitations	Description
<b>WIFI</b>			
WLCH	<input type="text" value="11"/>	1..13	Wireless Lan Channel (Ad-Hoc)
WST0	<input type="text" value="0"/>	0-6,105,106	Wireless Security Type
WLK1	<input type="text"/>	32 Chars	Wireless Lan WEP Key
WLPP	<input type="text"/>	8-63 Chars	Wireless Lan WPA Passphrase
EUSN	<input type="text"/>	64 Chars	Enterprise Domain/Username
EPSW	<input type="text"/>	64 Chars	Enterprise Password
	<input type="button" value="upload CA file"/>		
WLSI	<input type="text" value="!MedVue"/>	32 Chars	Wireless Lan SSID
<b>Available APs and Ad-Hoc networks (SSID, ADHOC or AP, BSSID, Security Type, Channel, RSSI)</b>			
MedVue,ADHOC,02:21:71:55:88:50,NONE,11,27			
<b>LAN</b>			
DIP	<input type="text" value="192.168.0.100"/>		Default IP
SNET	<input type="text" value="255.255.255.0"/>		Subnet
IPG	<input type="text" value="0.0.0.0"/>		IP Gateway
<b>Dialup / Cellular</b>			
ISP1	<input type="text"/>	96 Chars	ISP's Primary Phone Number
ATH	<input type="text" value="1"/>	0..2	Authentication
USRN	<input type="text"/>	64 Chars	ISP Username
PWD	<input type="text"/>	63 Chars	ISP Password
MTYP	<input type="text" value="0"/>	0..12,100..112,98	Modem Type
MIS	<input type="text" value="AT&amp;FE0V1X4Q0&amp;D2M1L3"/>	126 Chars	Modem Initialization String
PPP	<input type="text" value="0"/>	0..2	PPP ACFC Handling
<b>Misc</b>			
AWS	<input type="text" value="0"/>	0..3, 100	Automatic Web Server activation
LATI	<input type="text" value="0"/>	0..65,535	Listen port to enable remote AT+i



**The following is a description of the parameters and appropriate settings:**

**WiFi:** The settings in this section are not used by the MVIP option and can be ignored.

**DIP (Default IP address):** This will set the option card's default IP address. This should default to the IP address "192.168.0.100", but can be changed to any appropriate address when connecting to an existing network. In order to connect using DHCP automatic addressing, this parameter must be set to "0.0.0.0". It is not recommended to set the weight analyzer to DHCP as it could make locating the weight analyzer on the network difficult since its assigned IP address may change.

**SNET (Subnet mask):** Sets the subnet IP mask for the LAN connection. If this parameter is set to "0.0.0.0" it will attempt to calculate the appropriate subnet mask on the next power cycle if the option card is set with a static IP address (see DIP above). If set to connect via DHCP, the subnet mask will be resolved when attempting to connect to the DHCP server.

**IPG (IP gateway):** Sets the IP Gateway used by the MedVue. The weight analyzer will attempt to resolve the IP gateway by DHCP, but only if the DIP parameter is set to empty (0.0.0.0).

**Dialup/Cellular:** The settings in this section are not used by the MVIP option and can be ignored.

**AWS (Automatic Web Server activation):** This setting sets how the configuration web page will be presented. By default, when viewing this web page, this setting will reset to zero. It is very important to enter the correct setting in order to enable this configuration web page if settings need to be changed. The following are valid settings for this parameter and their descriptions.

- 1 = Web server will automatically start on next power cycle. This setting will expose ALL of the MedVue WiFi option card parameters and is not recommended for normal use.
- 100 = HTTPS secure web server will be started automatically (same as '1' but using secure web connection).
- 200 = HTTPS secure web server will be started automatically (same as '201' below but using secure web connection).
- 201 = (**RECOMMENDED**) HTTP web server will start automatically and will show the web pages described in this addendum. This is the recommended setting for this parameter.

**LATI (TCP Listening Socket to service remote AT+i commands):** This starts a listening port for remote AT+i commands. This is not recommended for normal operation and should be set to '0' to disable this functionality.

Once all settings have been entered, click “Submit” at the bottom of the webpage in order to save the parameters.

It may be necessary after changing parameters to power cycle the weight analyzer for the settings to take effect.



**NOTE:** It is important to wait at least 20 seconds before attempting the power cycle to ensure all settings have been set in the weight analyzer option card.

# OPERATION

Once the weight analyzer network configuration has been set up properly, the weight analyzer should briefly display its IP address shortly after powering up. To connect to the weight analyzer, you must make a TCP client connection to the weight analyzer's IP address at port 10001. Once connected to this port, you can issue the commands described below to the weight analyzer if it is set to "On Demand" output format (see MedVue operation manual for information on setting this parameter).

**<ENQ>** - (Hex 05) character sent to the MedVue weight analyzer will respond with the following weight string:

Pxxxxxx^UU^M^SS^CR (no decimal point in weight)

PxxxxxD^UU^M^SS^CR (decimal point in weight)

Where:

P = polarity (space if positive, - if negative)  
xxxxxx = weight with leading spaces  
D = decimal point (embedded where necessary)  
^ = space (hex 20)  
UU = units, upper case (LB, KG, TN, etc.)  
M = mode, upper case (G=gross, N=Net)  
SS = status, upper case (CZ=center-of-zero,  
MO=motion, BZ=gross weight below zero  
EE=entry - Input in progress, OC=over capacity)  
CR = carriage return (hex 0D)

**<LF>W<CR>** string sent to the MedVue weight analyzer will respond with the SMA weight string:

<LF>S1GM^DDDDDDDDDDUUU<CR>

Where:

<LF> = Line feed character (hex 0A)  
S = Status ('O' = Over Cap, 'Z' = Center Zero, 'U' = Below Zero, 'E' = Error)  
1 = The number '1'  
G = Mode of operation ('G' = Gross, 'N' = Net, 'T' = Tare)  
M = Motion bit ('M' = Motion, ' ' = Settled)  
^ = Space  
DDDDDDDDDD = Weight with decimal point if necessary  
UUU = Units (e.g. 'lb ', 'kg ', 'ton', etc..)  
<CR> = Carriage return (hex 0D)

**<LF>P<CR>** Weight analyzer will respond with all information formatted with each item on its own line.

**<LF>J<CR>** Weight analyzer will respond with all information formatted with each item separated by commas (comma delimited) followed by a carriage return.

**<LF>Z<CR>** Zero the scale within the constraints of the zero settings.

**<LF>T<CR>** Scale attempts to tare itself setting the tare weight to the current gross weight.

**<LF>T<xxxxxx.xxx><CR>** Scale attempts to set the weight (represented as<xxxxxx.xxx> in the string) to the requested value.

**<LF>M<CR>** Scale returns the current tare weight.

**<LF>U<CR>** Scale will toggle between calibration units if conversion units have been set up in scale calibration.

**<LF>A<CR>** Scale will respond with:

<LF>MedVue<CR>

**<LF>XH<CR>** Scale will respond with the current height:

<LF>Height<CR>

**<LF>XB<CR>** Scale will respond with the current BMI:

<LF>BMI<CR>

**<LF>XI<CR>** Scale will respond with the currently entered ID:

<LF>ID<CR>

**<LF>XA<CR>** Scale will respond with current weight, height, BMI, and ID in comma delimited format:

<LF> weight (see <LF>W<CR> above), Height, BMI, ID<CR>

If the MedVue weight analyzer has been set to continuous mode of outputting weight, it will output the weight in the format listed above for <LF>W<CR> every 500 milliseconds.

## MVIP RESET

If you are having issues connecting to the MVIP you may want to try and reset the MVIP option card.

With the weight analyzer on and in the Gross weight mode:

1. Press and hold the **CLEAR** ( ← ) key for approximately 3 seconds.
2. The display will change to show **SETUP REVIEW**.
3. Release the **CLEAR** ( ← ) key.
4. The display changes to show *SETUP*.
5. Press the **ID/HEIGHT** key until the **ETHERNET/WIFI** prompt is displayed.
6. Press the **ENTER** key until the **RESET ETHERNET** prompt is displayed.
7. Change this setting to **YES** (press the **1/YES** key) and then press the **ENTER** key.
8. Wait for the MedVue to reset the MVIP.
9. Refer to the Network Configuration section of this manual to setup network connection.

