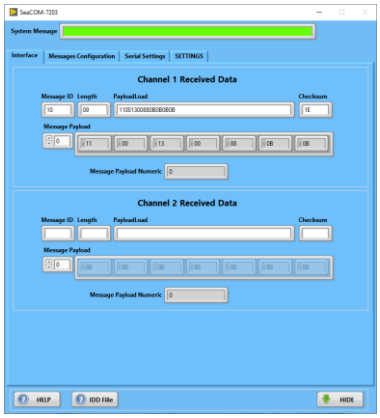
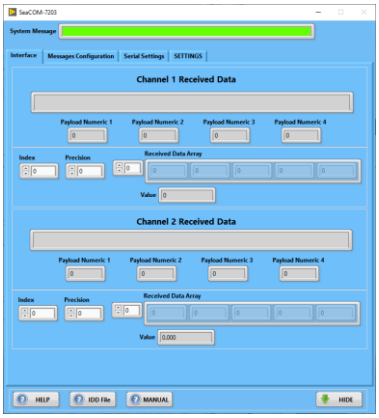
SeaCOM 7203 SOFT PANEL

USER MANUAL

1. INTRODUCTION

This document intends to provide the end-user with guidance on the SeaCOM-7203 soft panel application:



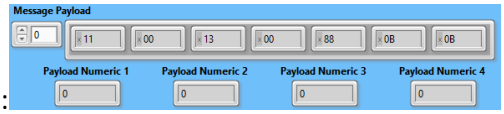


This device does not have a user interface. Because of this, the soft panel is the only way to operate this device manually. The SeaCOM-7203 Soft Panel allows accommodating any interface protocols, which have either binary or string message formats.

2 Interface Page (Binary protocol)

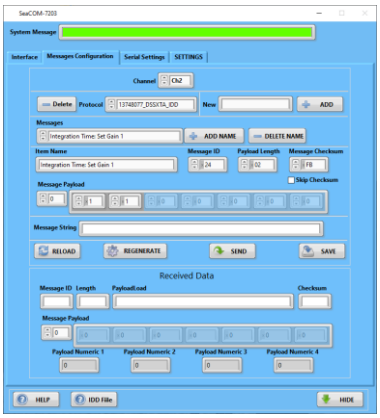
The Interface Page, shown above, provides the user with information about messages received from the connected device.

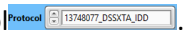
The message payload represented by the “Message Payload” byte array, which is further converted into numeric values according to the message specification:

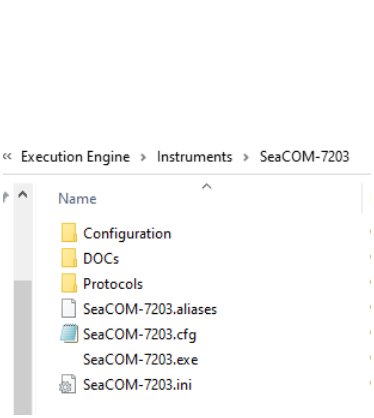


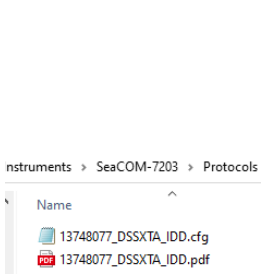
3 Messages Configuration Page (Binary protocol)

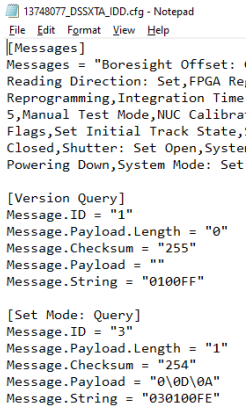
The messages configuration page provides means to create or remove interface protocols, manage messages and their attributes:



The “Channel” selector  allows selecting designated COM port. Upon channel selection, associated protocol  . As was noted above, each channel can have separate protocols assigned different protocols, which have the same message structure.
The interface protocols are configuration files stored in the “Protocols” folder:

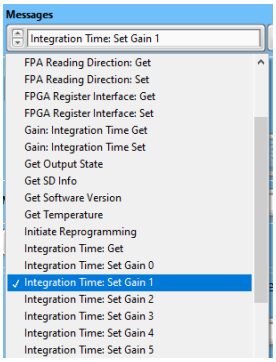


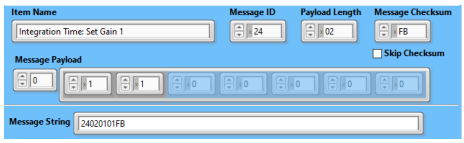




There is the second file in the pdf format, which is the protocol specification. This file is used for reverence. To access this file, the soft panel has the  button, which launches the Adobe Acrobat Reader.

The “Delete” button  allows deleting selected protocol.
To create the new protocol, enter the protocol name to the “New”  field, select  and press button  .

The “Messages” selector  retrieves saved messages from the corresponding configuration file and populates message attributes:



All these fields are editable except “Message String”. The “Message String” 

is the string to be sent to the connected device.

To add a new message, enter the message name to the 

and press the 

button.

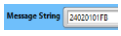
To remove a message, select it from the 

and press the 

button.
The protocol can be re-loaded from the corresponding file by using 

button.
The message attributes can be re-generated by pressing 

button. However, regeneration of the message attributes is performed automatically if their values are changed.

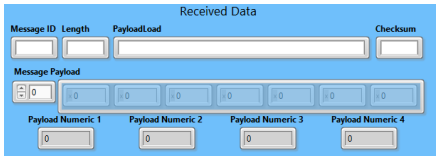
The formatted message string 

can be sent to the connected device by pressing 

button.

Press the 

button.

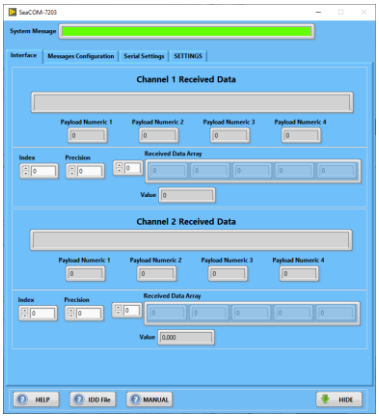
The 

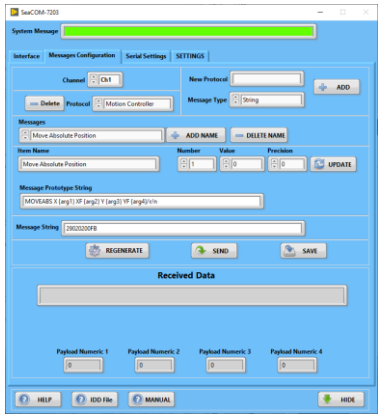
field displays messages from the connected device in the same manner as on the “Interface” page. The device selection defined by the 

selection.

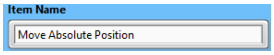
4 Interface Page (String protocol)

If the “string” type protocol selected, the corresponding controls and indicators will be displayed:





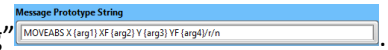
To create the protocol message please follow steps below:

4.1 Define the message name in the 

field.

4.2 Press 

button.

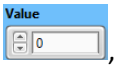
4.3 Define the “Message Prototype String” 

. The tags “{arg1} or {arg[n]} indicate places to be replaced by numerical values.

4.4. Press 

button.

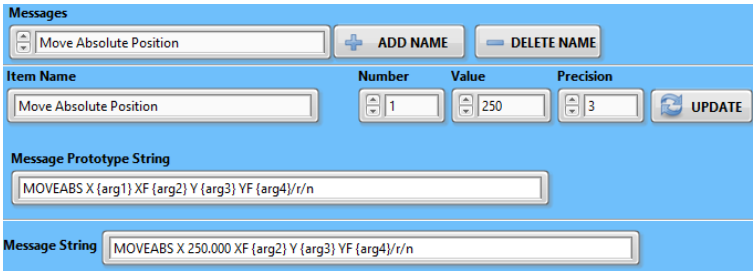
To replace argument tags {arg1}, for instance, select argument number 

, numeric value to be inserted 

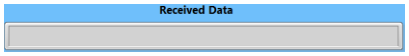
, and number of decimal points 

. Press the 

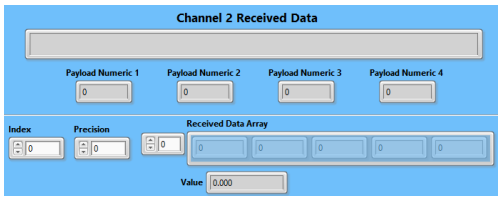
button. The selected argument tag will be replaced with selected numerical value with selected number of decimal points:



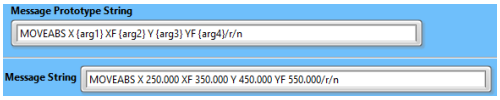
The “Message String” will be sent to the attached device.

If the attached device sends data back, it will be displayed in the 

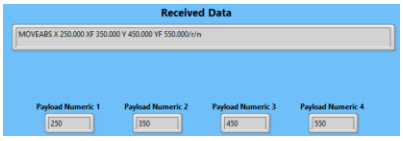
indicator as the string and in the “Interface” page:

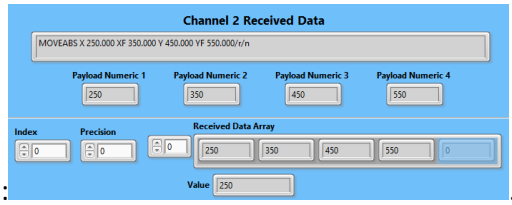


To illustrate, the “Move Absolute Position” message formatted:



and sent to the device (in our case there is the loop-back connector in the channel 2 terminal). The received data presented in the “Messages Configuration” page



and the “Interface” page: 

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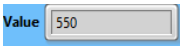
The number or “Payload Numeric” indicators is limited to four. If there are more numerical values in the response string, they can be accessed by selecting the “Received Data Array” index 

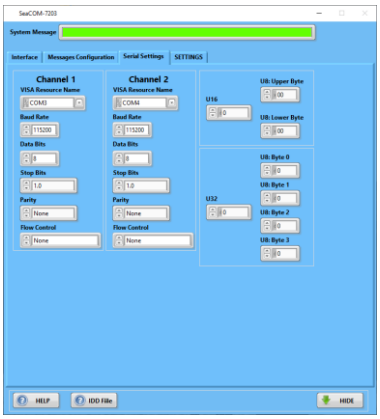
and precision 

. The data, indexed from the “Received Data Array” will be displayed in the 

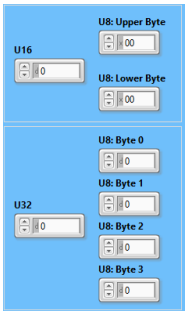
indicator.

5 Serial Settings

The “Serial Settings” page contained all controls necessary for each serial port configuration:



There are also utility functions, converting U16 and U32 into single bytes format:



These functions are for the message configuration convenience.