

# XYO Network Protocol v1.1

XYO

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## 1 Overview

The XYO Protocol is broken into three layers, Transport, Exchange, and Data.

## 2 Transport Layer

The transport layer determines how devices speak to each other via Bluetooth, TCP/IP, or other transport. All these will have a similar structures, but will have transport specific differences.

### 2.1 Bluetooth

### 2.2 TCP/IP

## 3 Exchange Layer

The exchange layer determines the packet sequencing expectations for an interaction between devices. This is consistent regardless of transport.

### 3.1 Sequence

Currently, the protocol only supports two party interactions. We have a goal of multiparty support in a future version. For clarity, we will refer to the parties as 0, 1, etc...

Step	Party	Description
1	0	Version Header
1	0	Public Key
1	0	Payload
2	1	Public Key
2	1	Payload
3	0	Signature
4	1	Signature

## 4 Data Layer

The data layer specifies how data blocks are interpreted by devices. All numbers are passed in Big Endien. There is no padding between items being passed.

### 4.1 Version Header

#### 4.1.1 Definition

Length	Type	Name	Value
1	Unsigned	Version	Always be set to 1

#### 4.1.2 Example

0	1	2	3	4	5	6	7
0x01							

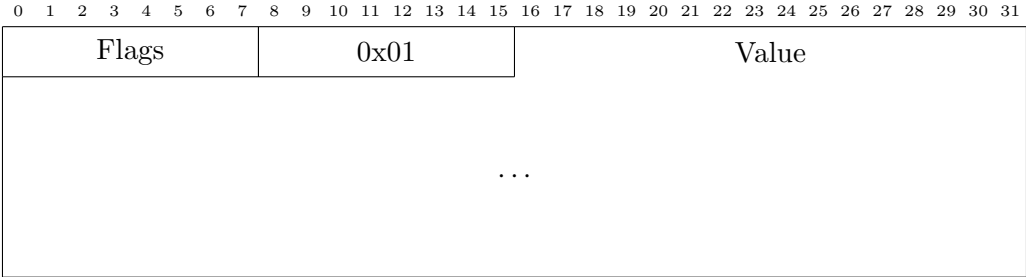
### 4.2 Example Sequence

### 4.3 Public Key

#### 4.3.1 Definition

Length	Type	Name	Value
1	Unsigned	Flags	See Object Flags
1	Unsigned	Type	Always set to 0x01
N	Bytes	Value	The Bytes of the Public Key

4.3.2 Example



4.4 Example Sequence

