



Meyton Ballistic Manager Premium IPv4 Data Broadcast Interface

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Changelog

Version	Date	Changes
1.0.0	19.07.2024	Initial version
1.1.0	25.07.2024	Corrections and adding section "Setup"

General

This manual describes the “IPv4 Data Broadcast Interface” of the Meyton Ballistic Manager (BallMan) Premium software. This interface can be used by third party software to receive hit and velocity data from the BallMan system. The data is transmitted via an IPv4 network broadcast message directly after the EST has detected a shot. To receive the broadcast messages the following network settings have to be used:

Protocol: UDP
Port: 51111

Depending on your router/network hardware and the IP and netmask configuration of the BallMan device, the broadcast message could only be received by network devices located in the same subnet as the BallMan device. It is recommended that the receiving device has the same netmask and an IP address in the same address range of the sending device.

Example:

BallMan IP settings (sender)

IP: 192.168.10.1
Netmask: 255.255.0.0

Receiving device IP settings:

IP: 192.168.10.200
Netmask: 255.255.0.0

Encoding

The broadcast data is encoded in JSON (JavaScript Object Notation) format. Here an example of a JSON message:

```
{
  "HitData": {
    "ID": 12,
    "x": -441,
    "y": 977,
    "Date": "19.06.2024",
    "Time": "15:20:40.17",
    "Velocity": [ 2443, 2405 ]
  }
}
```

The hit data contains the following information:

- **ID:** Unique ID (sequence number) that is counted up with every hit. Can be used to detect missing hits (UDP packet loss).
- **x:** x-coordinate of the hit in cartesian coordinates with 1/100 mm resolution. The center of the coordinate system is the center of the EST.
- **y:** y-coordinate of the hit in cartesian coordinates with 1/100 mm resolution. The center of the coordinate system is the center of the EST.
- **Date:** Date of hit detection.
- **Time:** Time of hit detection.
- **Velocity:** The velocity of the hit in 1/10 m/s resolution. This data is optional and only present when one or more supported velocity measurement devices are connected to the BallMan system. See BallMan Premium manual for further information.

Setup

You need at least version 3.2.1a of the BallMan Premium software to use this interface. The data export can be enabled in the Network settings (F3) in section "Live hit data (IPv4 Data Broadcast Interface)".