

# StreamingMedia (H2O/IP): Installation Diagram [side view]

## Description:

StreamingMedia is an interactive data sculpture that employs a new Internet protocol (H2O/IP) I developed that uses water to transmit information between computers. H2O/IP functions in a similar way as TCP/IP but focuses on the inherent viscous properties of water that are not present in traditional packet networks.

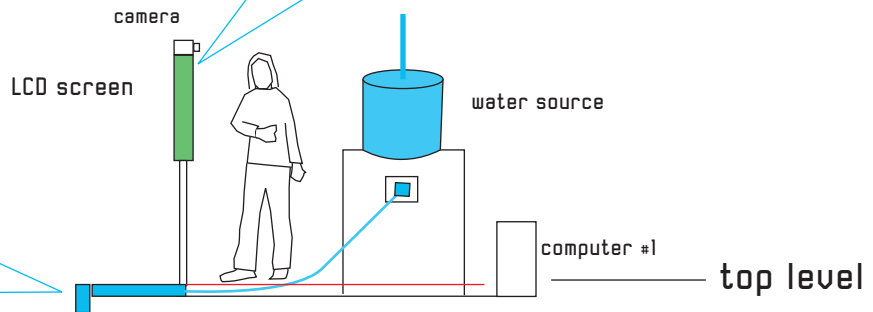
The StreamingMedia demonstration of H2O/IP exists as an installation of two computers at different heights where one captures an image and transmits it to the second computer in the form of modulated water drops. The pixel information from the photo is encoded into numeric sequences that are sent to an electronically controlled water valve. The water falls into an input device at the bottom with embedded sensors which decode the packet information within the dropped sequence and send them to the second computer. This computer then recreates the image as a bottom-projected image underneath the tray. The project attempts to show how digital information can be encoded and decoded into organic forms to create a physical network between digital devices.



picture taken ----> converted image to water output



electronic water valve



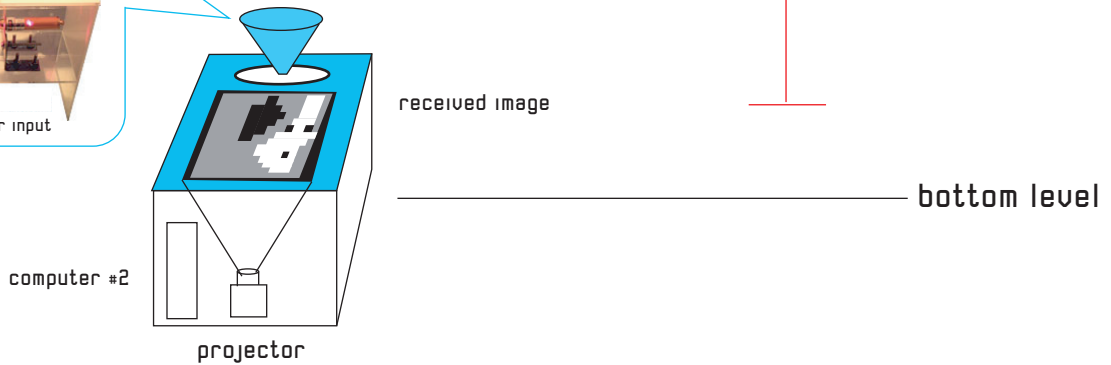
top level

Like traditional packet-based protocols, H2O/IP uses a sequence of encoded streams to send information over the network. H2O/IP IP datagrams consist of carefully modulated drops of water that flow from the emitter to the receiver. Since water packets can come from any source - sink, shower, toilet, garden hose, gutter runoff - the header and footer encoding must be able to compensate for all environmental conditions, natural, and simulated environments.

Distance between emitter and collector  
(1 to 10 Meters)



receiving water input



received image

bottom level

StreamingMedia URL:  
<http://www.coin-operated.com/projects/streamingmedia.html>

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