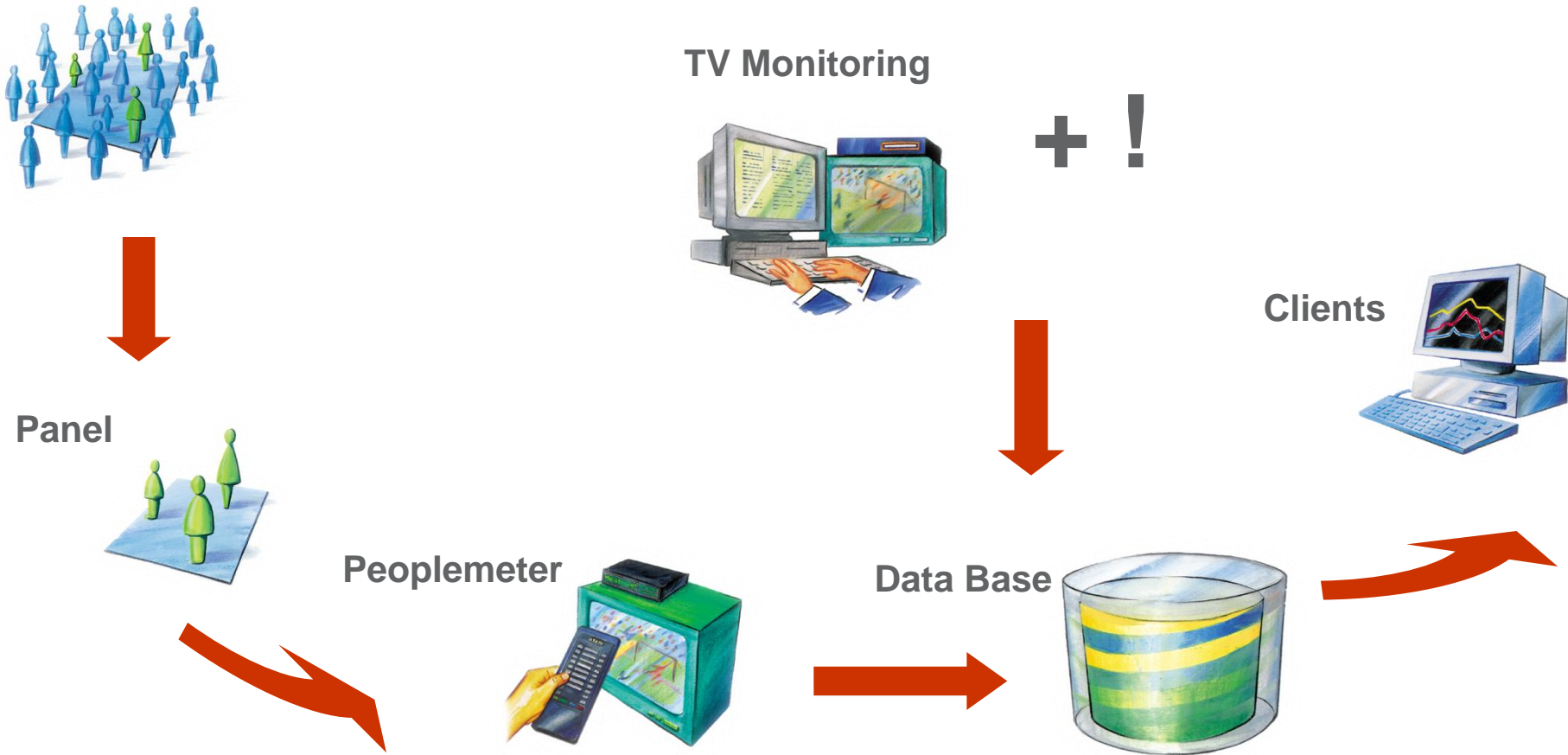


TVM5 Meter Technology



Data Viewing Production



Key Features

- Minimised installation procedure and low maintenance costs
- Communication based on standard internet protocol
- Panel member interference detection
- On-site channel identification
- Image capturing for digital broadcasting
- Fast, reliable and adaptable measurement
- Cost effective digital measurement



Main advantages

- Non intrusive: no need to insert probes into the TV sets, VCR, etc...
- No co-operation of digital broadcasters is required to measure digital channels
- Uses RF communication: suitable for any electrical environment and causes no interference
- Various different methods of channel detection to cover all transmitting platforms.
- Software driven and remote management:
 - simple and economical upgrade of meters. New features will be included in software and implemented remotely from the base during night polling
- Calling technology: any phone socket can be used.
- Advanced diagnostics: permits efficient panel management.

TVM5 Meter Technology

- Compact and modern design



Display Unit

- One for each TV set
- Interface with the Panel Members
- Stylish and compact design - The only visible unit
- Communicates statements to the Transmission Unit
- Motion Detector
- Infrared Receiver
- Voice Speakers



Base Unit

- One for each TV Set
- The heart of the detection process, generates statements
- A/V switchboard facilitates installation
- Is hidden behind the TV set, no risk of stresses on the cabling
- Generates diagnostics to help panel management



Transmission Unit

- One for each household
- Link between the household and the headquarter
- Retrieves data from all the Base Units of the household
- Receives the polling call from the headquarter (the main phone socket is to be found) or...
- ...makes the call to the headquarter (any phone socket can be used)



Meter Architecture



Communication to the central office via land line, GSM or internet

Communication between TU and BU's is via RF

Direct connection via Serial Cable



Platforms

Analogue Channels

- Sync Comparison
- Video Signal Comparison
- Video Correlation (for scrambled channels)
- Audio and Electrostatic field are used as secondary method
- CTS (audio matching)

Digital Channels

- Banner Reading System
- Content Tracking System
- Tele text codes (Co-operation required to the Broadcasters)
- Service Information (Co-operation required to the Manufacturers)

Digital Signal Measurement

Banner Reading System



Channel ID

Banner Reading System

Channel identification by reading text

412 Eurosport GB

Text Recognized

412 Eurosport GB

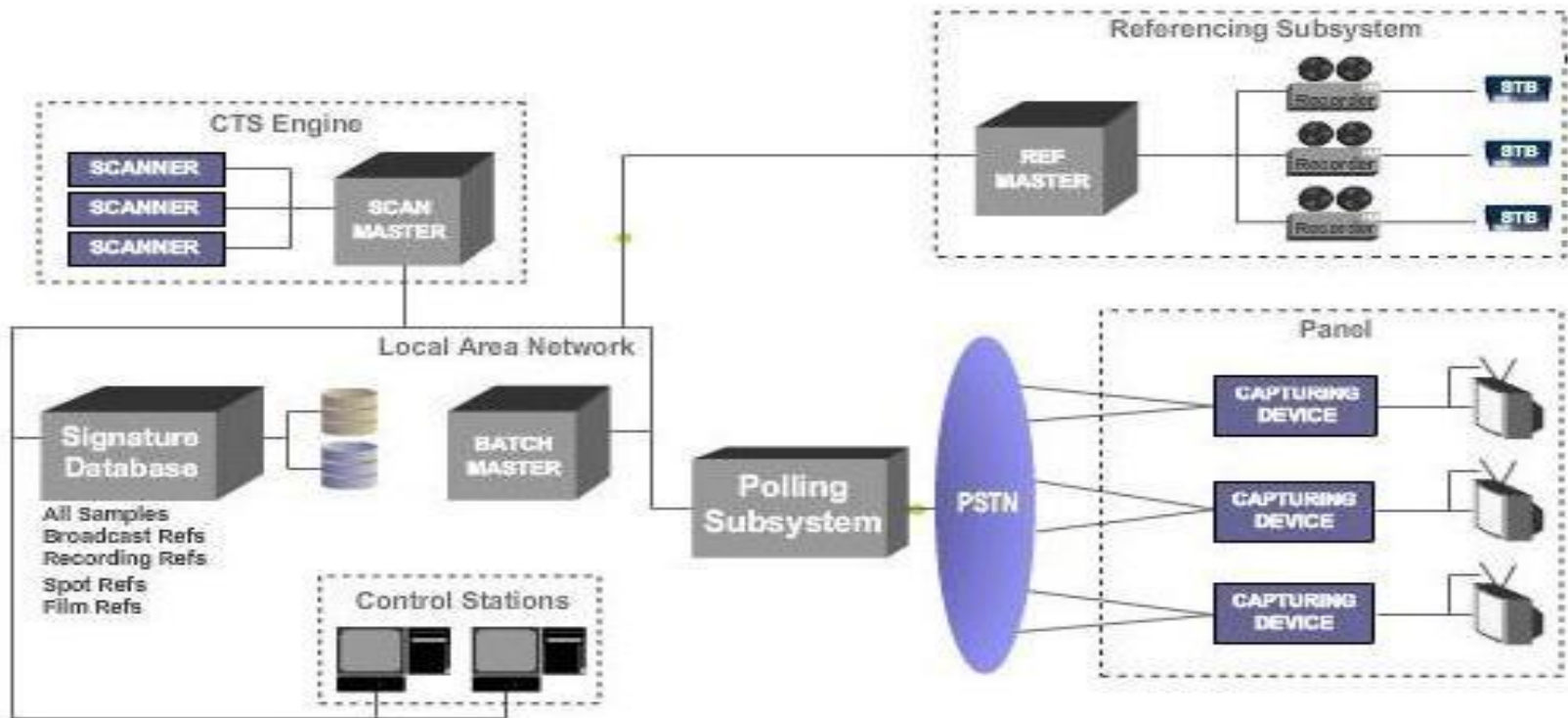
4.18pm Sat 30 Aug

NOW Live World Athletics Championship

7:00pm Live 2003 US Open

 Search Time  Search Channel  Search Favourite

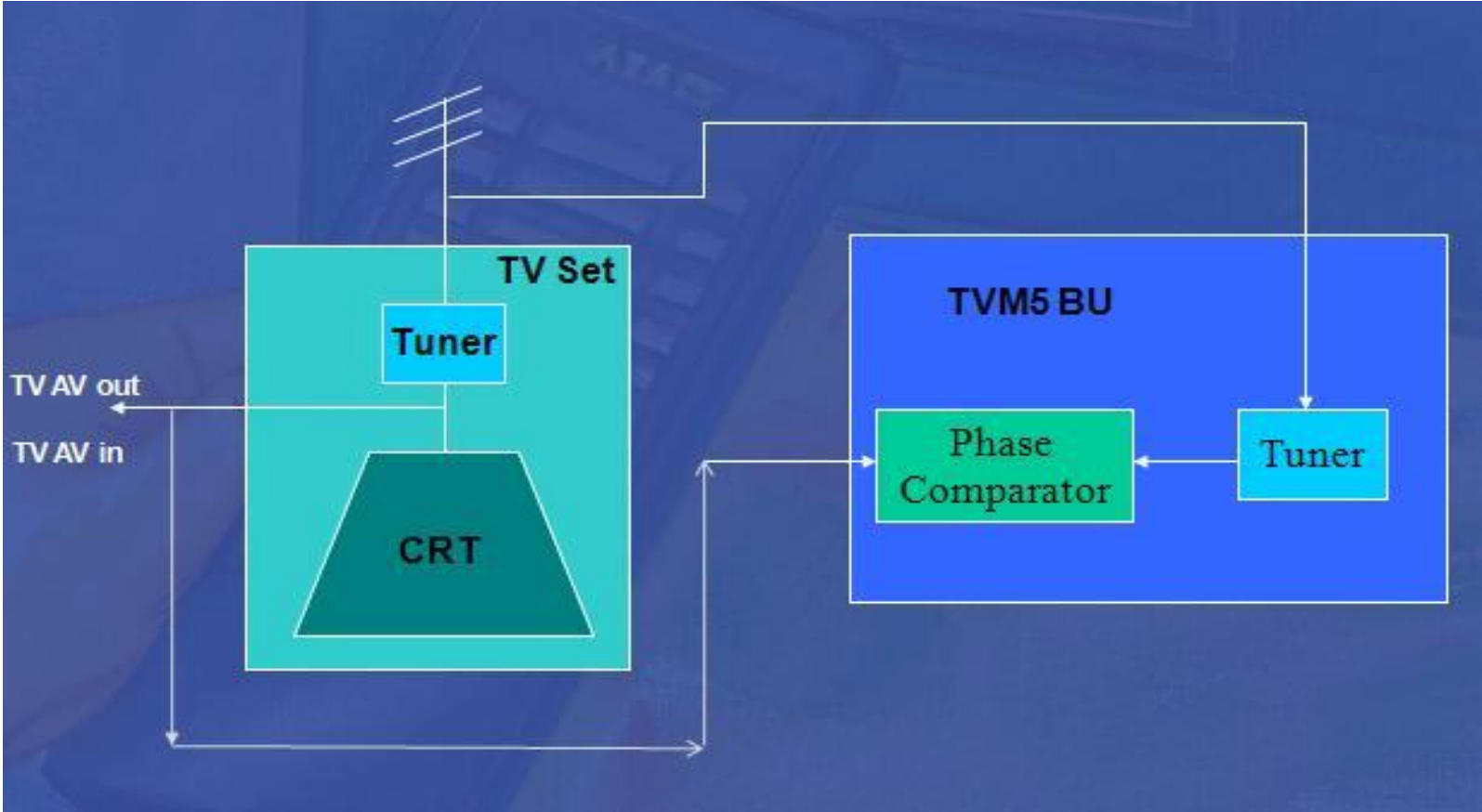
Content tracking system - audio matching



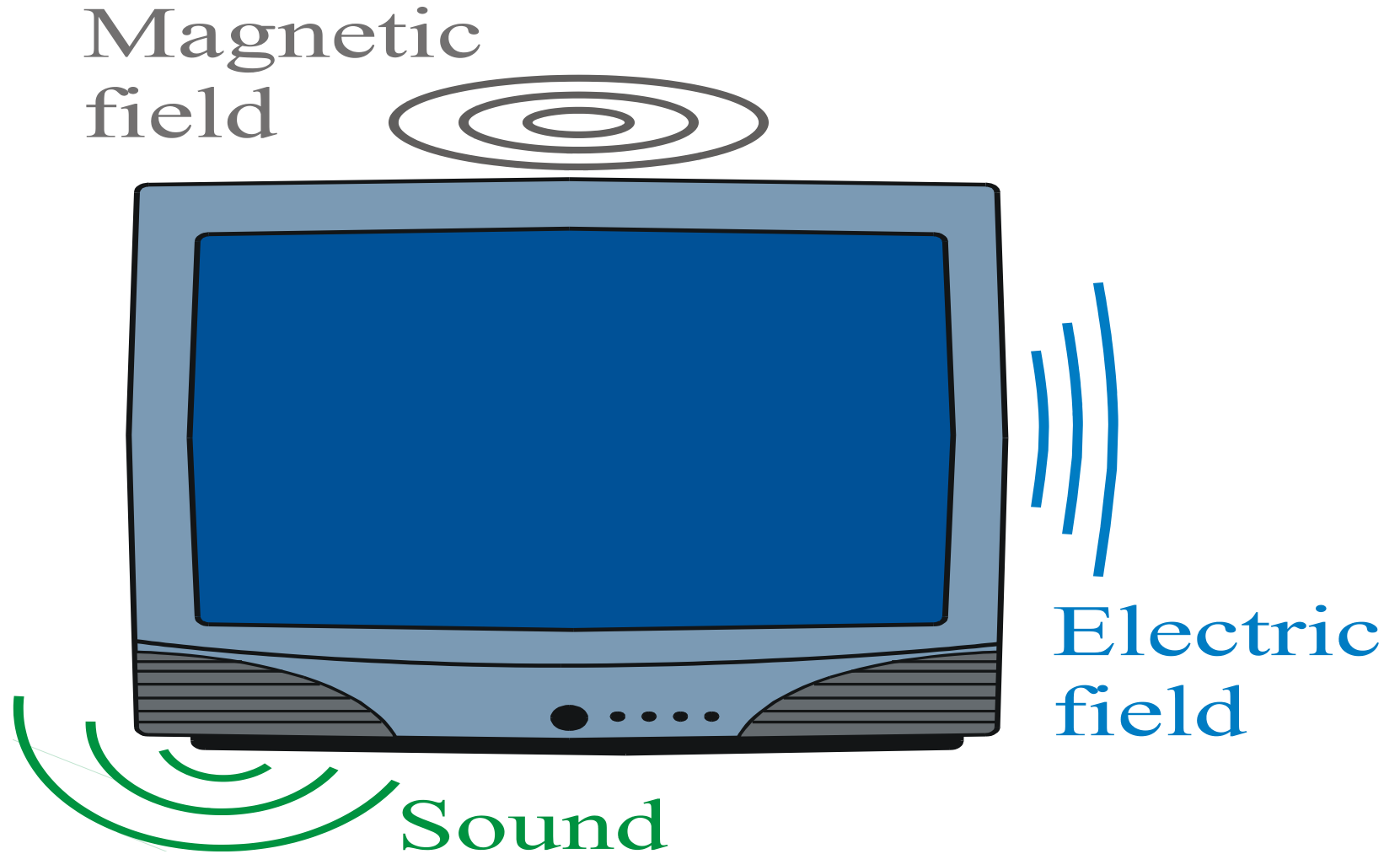
The UNITAM system comprises an arrangement of means and processes that, by interoperating according to the methods of the **Intelligent Stream Tracking** technology, is capable of providing several viewing measurement services in an integrated environment.

Analog Signal Measurement

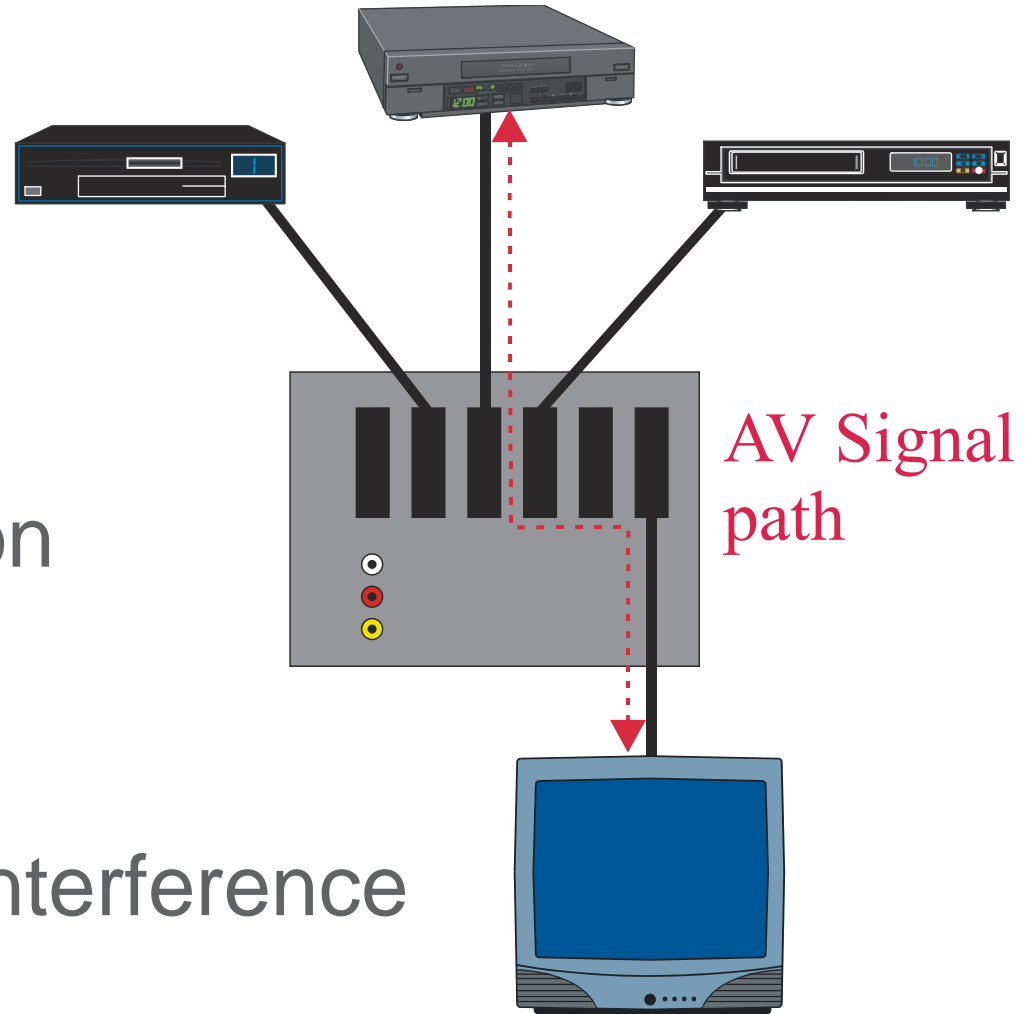
Video Signal Comparison



Non-intrusive Measurement



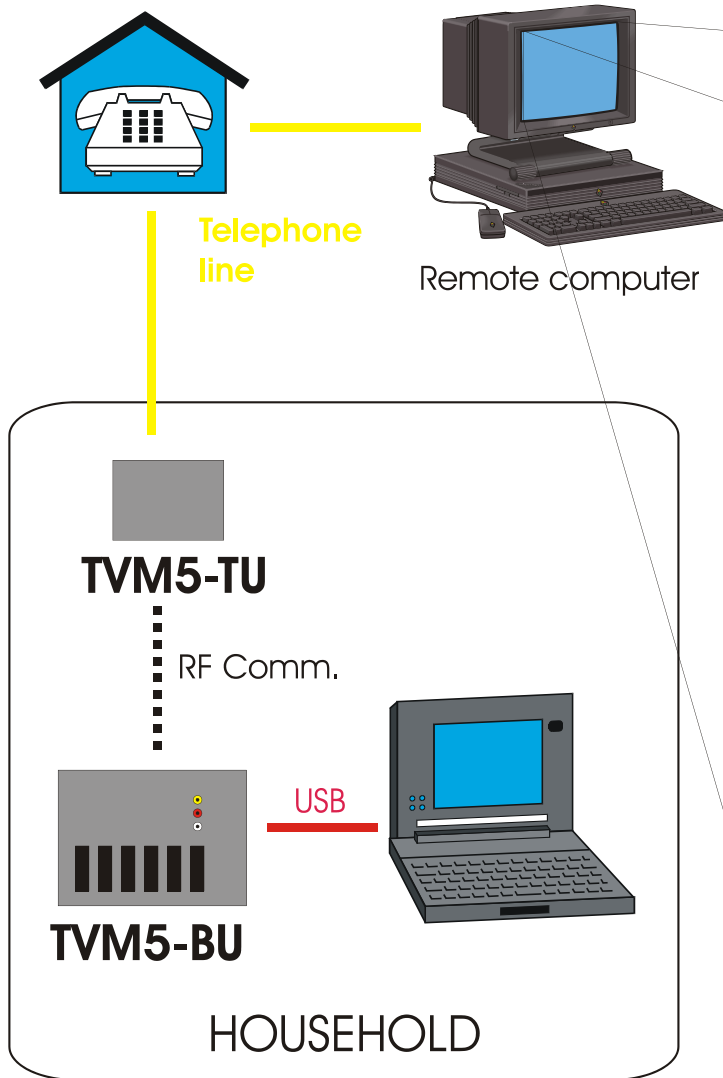
Active Video Matrix



Simplifies installation

Decreases panel
member interference

Remote Setup



TvM5 Setup

Device Settings

Parameters & Sys Observer | Channel Table | System Configuration | Video Capture | Firmware & Hardware versions | System Log

Switch Board Monitor

TV1: Signals (green), Video Status (green), VideoQueue Idx: 0

TV2: Signals (red), Video Status (red), VideoQueue Idx: 0

AV1: Signals (red), Video Status (red), VideoQueue Idx: 0

AV2: Signals (red), Video Status (red), VideoQueue Idx: 0

AV3: Signals (green), Video Status (green), VideoQueue Idx: 1

AV4: Signals (red), Video Status (red), VideoQueue Idx: 0

Sensor Monitor: Eva Gain: 8, Sync Level: 804, Eva Level: 3176

Scanner Monitor: Active Source: TV1, Video Short: -24, Channel Id: 4 kp, Video Long: 74, Status: Searching, Phase: 2727, Silence: false, Variance: 12

Correlation Monitor

	TV2	AV1	AV2	AV3	AV4	EVA/MIC	SYNC	Variance
TV2	0	0	0	0	0	69	99	3420
TV1	0	0	0	0	0	0	0	1798
AV1	0	0	0	0	0	0	0	1783
AV2	0	0	0	0	0	0	0	1770
AV3	0	0	0	0	0	0	0	1771
AV4	0	0	0	0	0	-4	-16	1821
SYNC	0	0	0	0	0	0	0	1821
								63

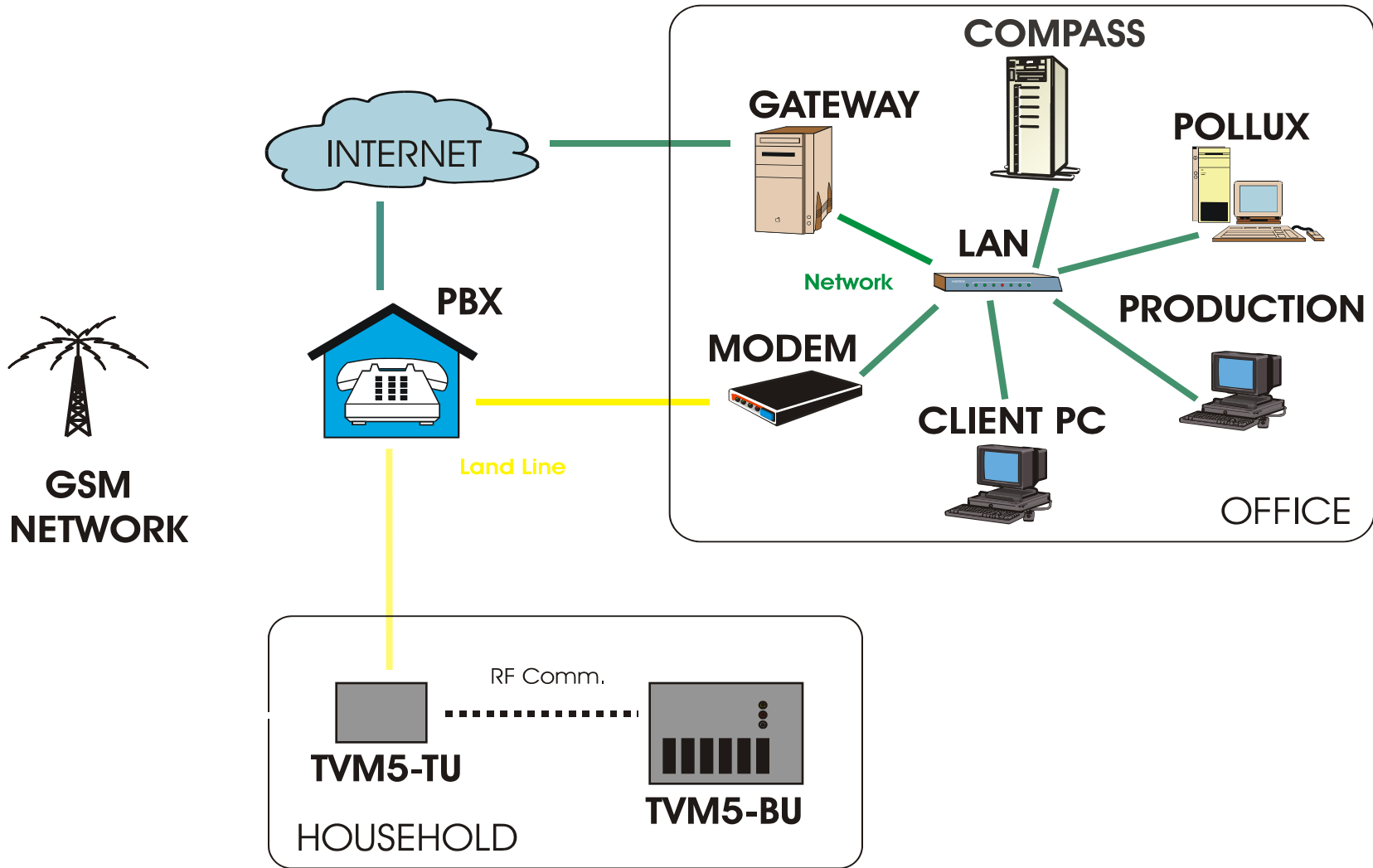
Log:

Time	Process	Message
17:15:26	Detection Proc.	TV On.
17:15:29	Detection Proc.	Variance status changed to 0.
17:15:30	Detection Proc.	Broadcaster Detection Aborted.
17:15:30	Detection Proc.	Source Detection Aborted.
17:15:30	Detection Proc.	Start Source Detection.
17:15:30	Detection Proc.	Start Broadcaster Detection.

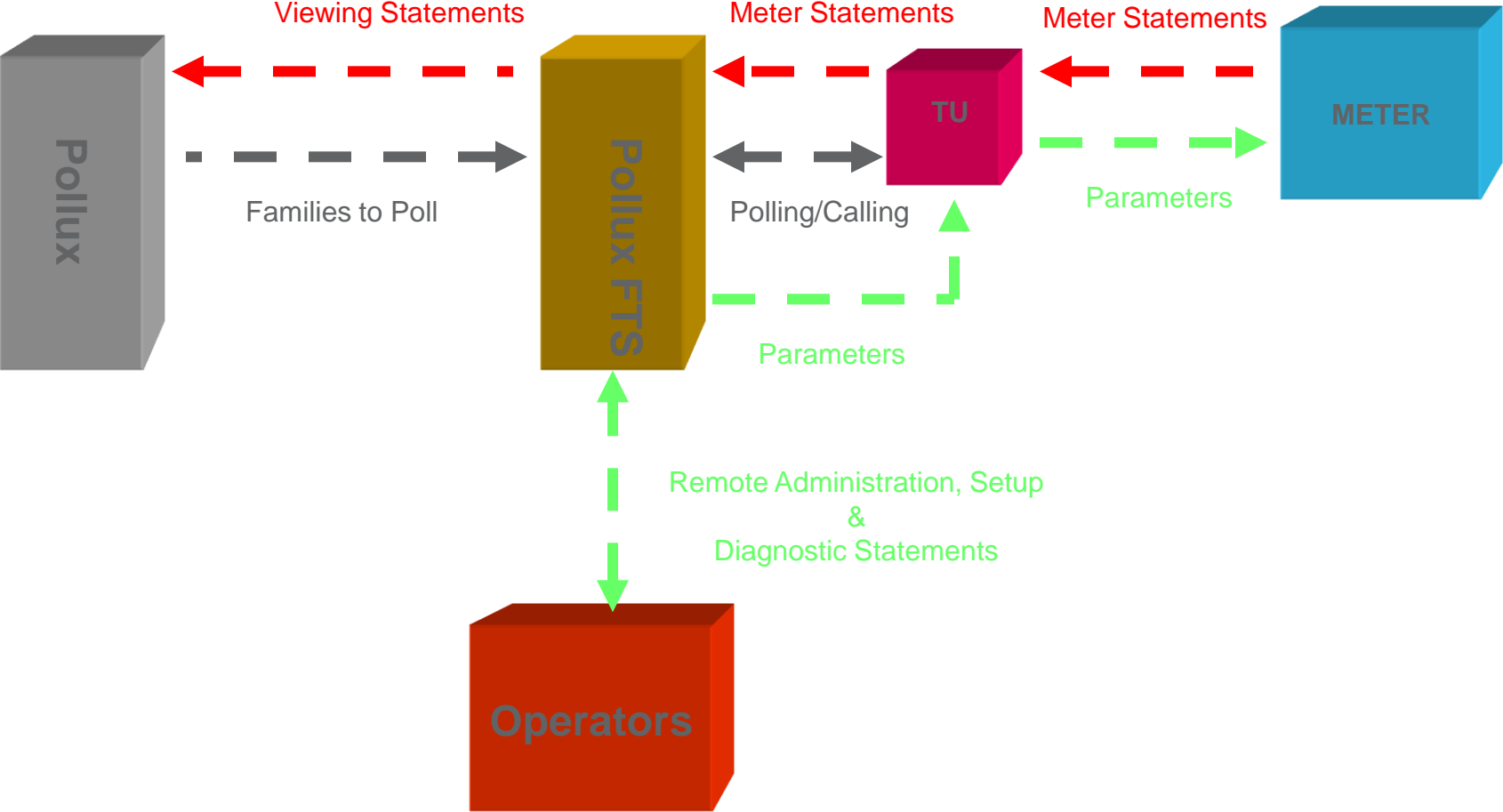
Connected to Base Unit.

- Remote Upgrade during line test or night polling
- Remote Set up and configuration

Communication Scheme



System Architecture



Спасибо за внимание!



TVM5 Meter Technology

nielsen

The Nielsen logo features the word "nielsen" in a serif font. The letter "n" is blue, while the remaining letters "iels" are grey. Below the text is a horizontal line of nine grey dots, with the first dot positioned under the "n" and the others spaced evenly across the rest of the word.