



IEEE P1722.1

Composite Controls

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Introduction

- Controls can only have an array of Values of one type
- In reality some Controls have functionality which need Values of different types.
- Example #1. Radio tuner control:
 - Band (Selector)
 - Frequency (Linear)
 - RDBS/RDS Info (String)



Introduction (Cont.)

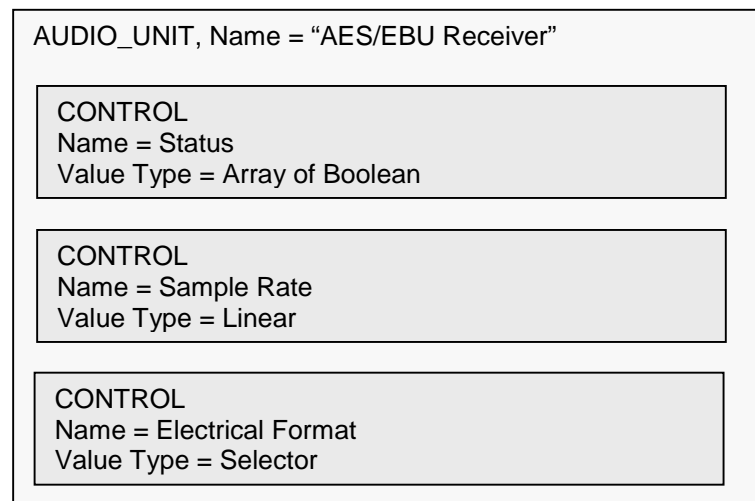
- Example #2: AES/EBU Receiver
 - Validity bits (array of Boolean)
 - Sample Rate (Linear),
 - S/PDIF or AES/EBU mode (Selector)





Solution #1 – Use the Unit

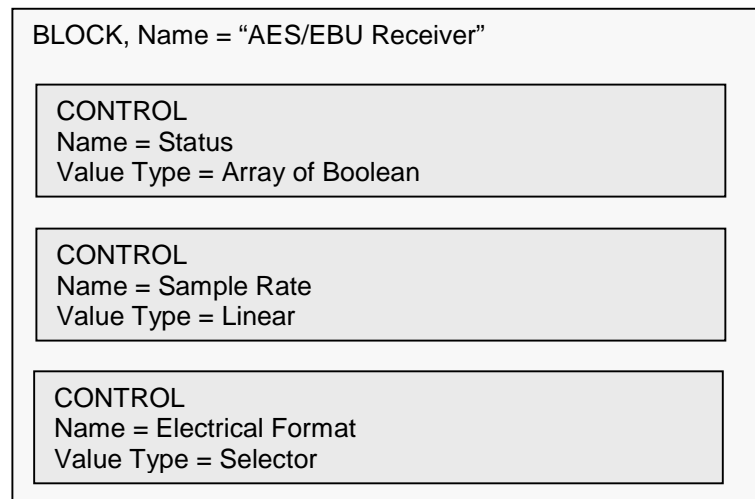
- Use a AUDIO_UNIT, VIDEO_UNIT or SENSOR_UNIT as a container for Controls that need to be grouped together.



- Is this using a UNIT as it was intended?

Solution #2 – The Block

- The Block would be a new descriptor that is used as a container for controls that need to be grouped together
- It would be like a UNIT except that it does not care about clock domain.





Solution #3 – The Composite Control

- Rework the Control descriptor to allow (arrays of) Values of different Types

```
CONTROL
Name = AES/EBU Receiver

Value
Name = Status,
Type = Array of Boolean

Value
Name = Sample Rate,
Type = Linear

Value
Name = Electrical Format,
Type = Selector
```

Which One?

- We favor Solution #3
- Would like a consensus of the group before investigating this in more detail.



The End