

# JIT-PLC COMMUNICATION INTERFACE SPECIFICATION

Release 1

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## DOCUMENT HISTORY

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## CONTENT

Document History .....	2
Content .....	2
1 Overview .....	3
2 Data Formats.....	3
3 Communication Process.....	4
3.1 Initialization .....	4
3.2 Data Transfer .....	5
3.3 Live Check .....	6
4 Communication-Channels.....	7
4.1 PLC: GENERAL TYPES .....	7
4.2 PLC: VW:T7:HKL:M100.....	8
4.3 PLC: VW:T7:HKL: SPS1 .....	9
4.4 PLC: VW:T7:HKL: SPS4 .....	10
5 Process Data Structure.....	11
6 Data Values .....	11

## 1 OVERVIEW

Following this document defines the overall communication process data-blocks used to implement the process flow. The communication can be thought of logical communication channels. Each communication channel (i.e. airbag data) is defined in one section.

## 2 DATA FORMATS

All character data is interfaced in ASCII encoding. Strings are terminated by a \0 (0x00) or by the maximum field-length. Empty values have a string-terminator at field offset 0.

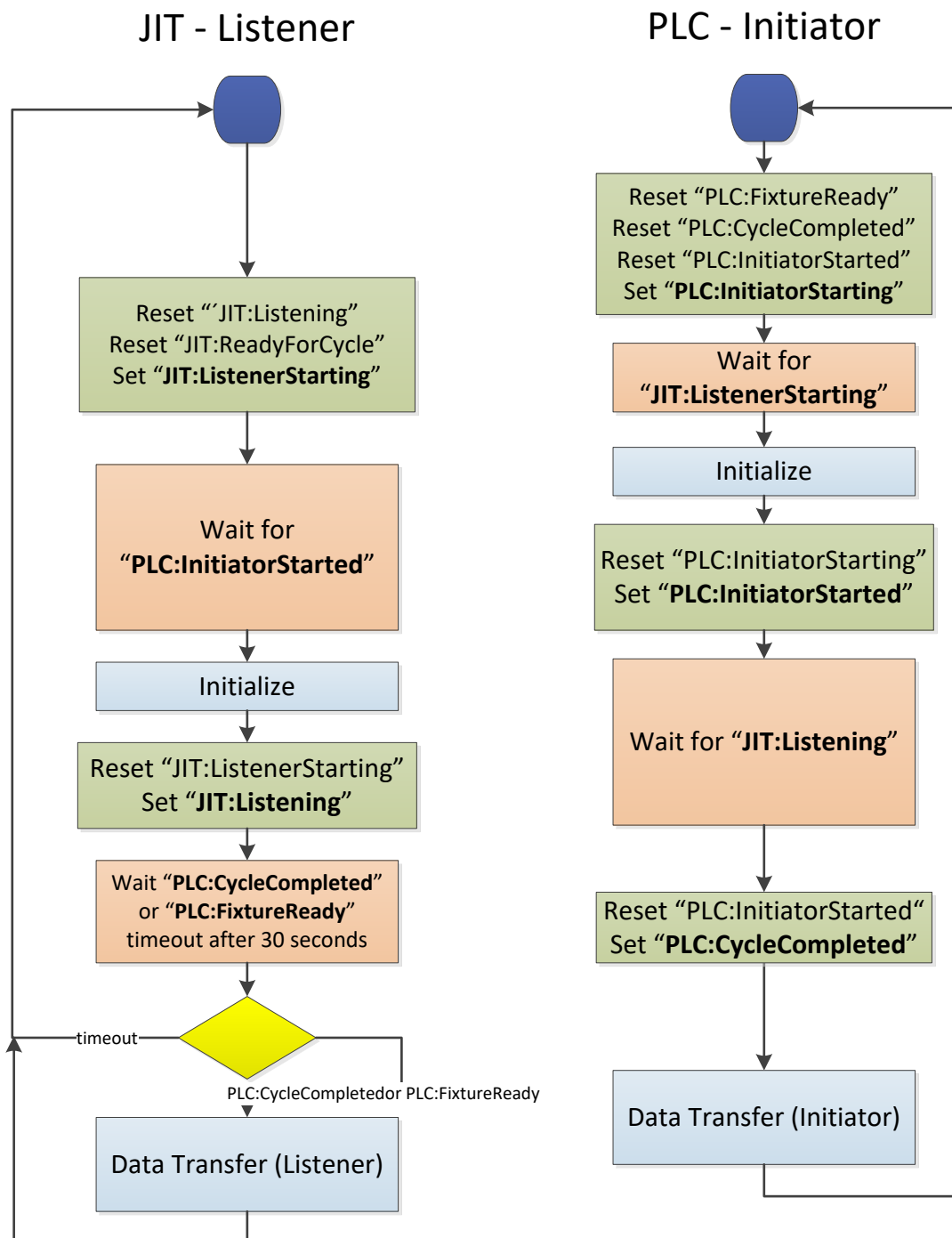
Decimal values are encoded as characters. Decimal point position is fixed. Decimal points are not stored.

Numbers can be coded as digits. In this case the field type is DBW<addr> (Char)

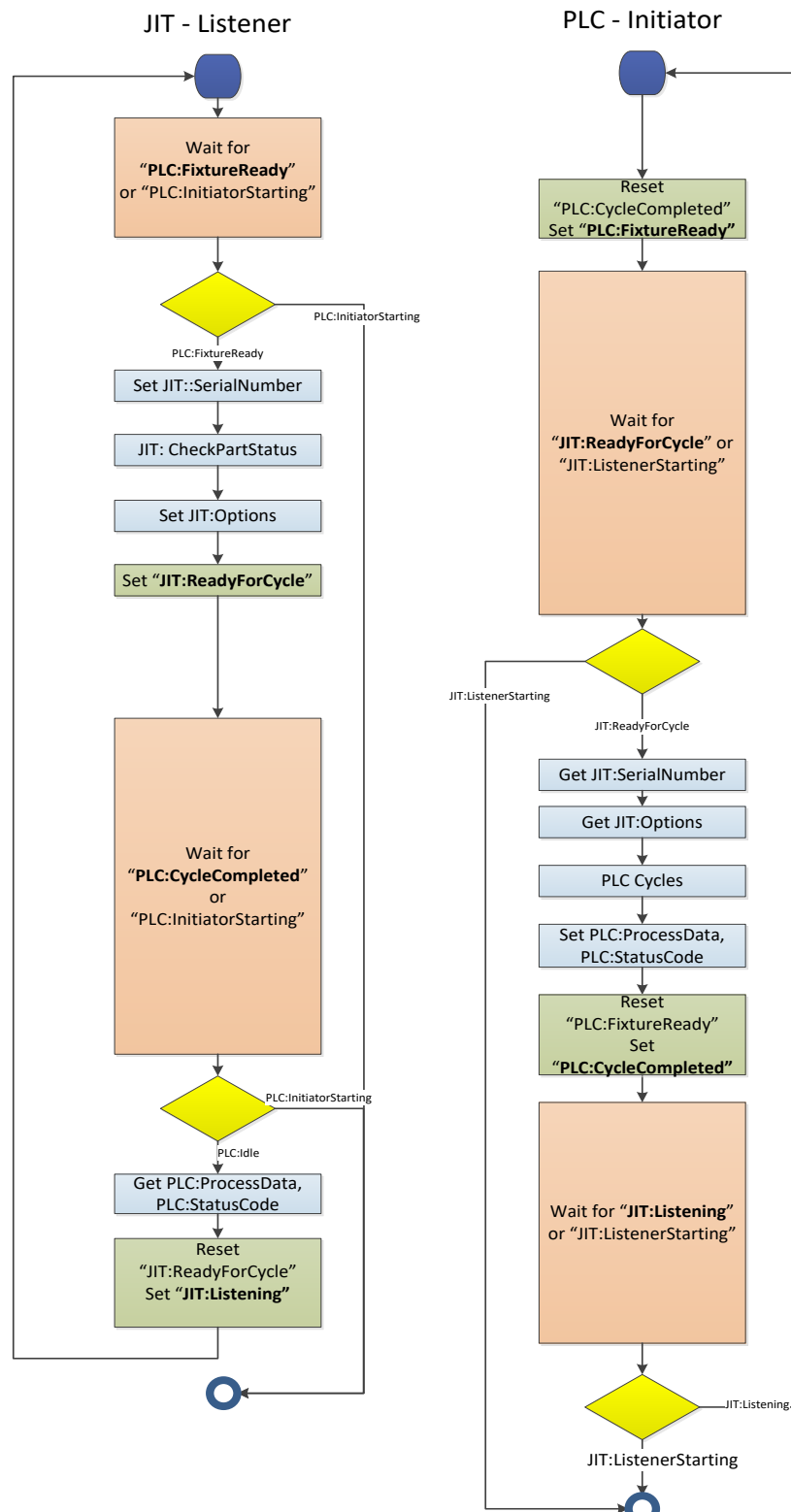
In all other cases, the DBW with length 2 or without a length attributes means 16 Bit signed integer.

### 3 COMMUNICATION PROCESS

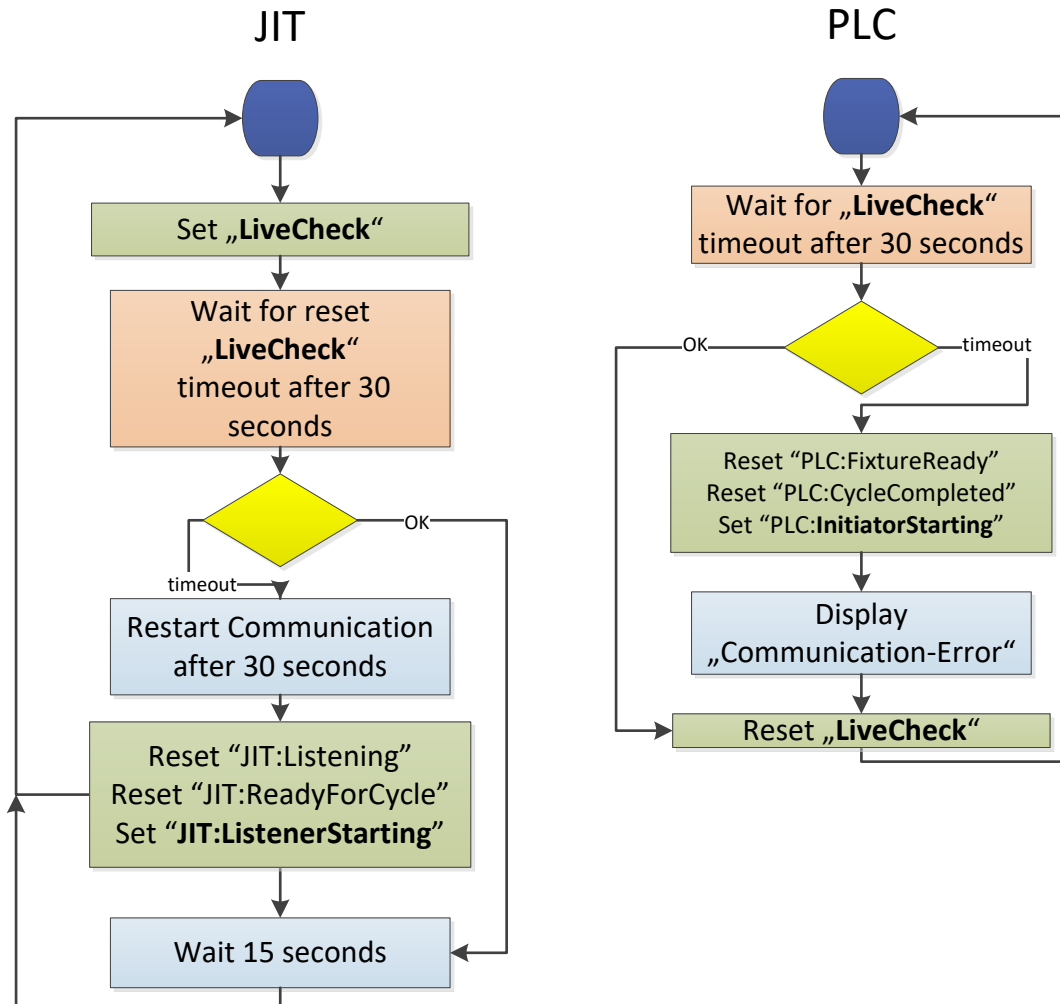
#### 3.1 INITIALIZATION



## 3.2 DATA TRANSFER



### 3.3 LIVE CHECK



## 4 COMMUNICATION-CHANNELS

Pls. note the offset specified before the table needs to be added to the field-offsets (i.e. Offset: 100, DBX20.0 means DBX120.0).

### 4.1 PLC: GENERAL TYPES

Common Data Names	Written By	Data Type	Comment
Communication – Life Check			
Live Check	Both	Bit	
Handshaking JIT- > PLC			
JIT: Listener Starting	JIT	Bit	
JIT: Listening	JIT	Bit	
JIT: Ready For Cycle	JIT	Bit	
JIT: Cycle Rejected	JIT	Bit	
Handshaking PLC -> JIT			
PLC: Initiator Starting	PLC	Bit	
PLC: Initiator Started	PLC	Bit	
PLC: Cycle Completed	PLC	Bit	
PLC: Fixture Ready	PLC	Bit	
PLC: Cycle Data			
PLC: Status Code	PLC	Int	
JIT: Options			
JIT:Job Number	PLC	String[28]	
JIT:Option	JIT	Int	

## 4.2 PLC: VW:T7:HKL:M100

PLC: Model and IPAddress

Offset: 0

Data block: ???

Field (Type/Offset)	Length (Bytes)	Common Data Names	Written By	Data Type	Comment
DBX0.0		Live Check	Both	Bit	
DBX1.0		JIT: Listener Starting	JIT	Bit	
DBX1.1		JIT: Listening	JIT	Bit	
DBX1.2		JIT: Ready For Cycle	JIT	Bit	
DBX1.3		JIT: Cycle Rejected	JIT	Bit	
DBW??		JIT: Job Number	JIT	???	
DBW??		JIT:Option:OrderNumber	JIT	???	
DBW??		JIT:Option:OrderVersion	JIT	???	
DBW??		JIT:Option:VehicleModel	JIT	???	
DBW??		JIT:Option:RearWindowType	JIT	???	
DBW??		JIT:Option:SequenceNo	JIT	???	
DBX2.0		PLC: Initiator Starting	PLC	Bit	
DBX2.1		PLC: Initiator Started	PLC	Bit	
DBX2.2		PLC: Cycle Completed	PLC	Bit	
DBX2.3		PLC: Fixture Ready	PLC	Bit	
???		PLC: state code	PLC	Int	



### 4.3 PLC: VW:T7:HKL: SPS1

PLC: Model and IPAddress

Offset: 0

Data block: ???

Field (Type/Offset)	Length (Bytes)	Common Data Names	Written By	Data Type	Comment
DBX0.0		Live Check	Both	Bit	
DBX1.0		JIT: Listener Starting	JIT	Bit	
DBX1.1		JIT: Listening	JIT	Bit	
DBX1.2		JIT: Ready For Cycle	JIT	Bit	
DBX1.3		JIT: Cycle Rejected	JIT	Bit	
DBW??		JIT: Job Number	JIT	???	
DBW??		JIT:Option:OrderNumber	JIT	???	
DBW??		JIT:Option:OrderVersion	JIT	???	
DBW??		JIT:Option:VehicleModel	JIT	???	
DBW??		JIT:Option:RearWindowType	JIT	???	
DBW??		JIT:Option:SequenceNo	JIT	???	
DBX2.0		PLC: Initiator Starting	PLC	Bit	
DBX2.1		PLC: Initiator Started	PLC	Bit	
DBX2.2		PLC: Cycle Completed	PLC	Bit	
DBX2.3		PLC: Fixture Ready	PLC	Bit	
???		PLC: state code	PLC	Int	

## 4.4 PLC: VW:T7:HKL: SPS4

PLC: Model and IPAddress

Offset: 0

Data block: ???

Field (Type/Offset)	Length (Bytes)	Common Data Names	Written By	Data Type	Comment
DBX0.0		Live Check	Both	Bit	
DBX1.0		JIT: Listener Starting	JIT	Bit	
DBX1.1		JIT: Listening	JIT	Bit	
DBX1.2		JIT: Ready For Cycle	JIT	Bit	
DBX1.3		JIT: Cycle Rejected	JIT	Bit	
DBW??		JIT: Job Number	JIT	???	
DBW??		JIT:Option:OrderNumber	JIT	???	
DBW??		JIT:Option:OrderVersion	JIT	???	
DBW??		JIT:Option:VehicleModel	JIT	???	
DBW??		JIT:Option:RearWindowType	JIT	???	
DBW??		JIT:Option:SequenceNo	JIT	???	
DBX2.0		PLC: Initiator Starting	PLC	Bit	
DBX2.1		PLC: Initiator Started	PLC	Bit	
DBX2.2		PLC: Cycle Completed	PLC	Bit	
DBX2.3		PLC: Fixture Ready	PLC	Bit	
???		PLC: state code	PLC	Int	

## 5 PROCESS DATA STRUCTURE

## 6 DATA VALUES

### PLC: Status Code

Value	Description
0	OK
1	NOK