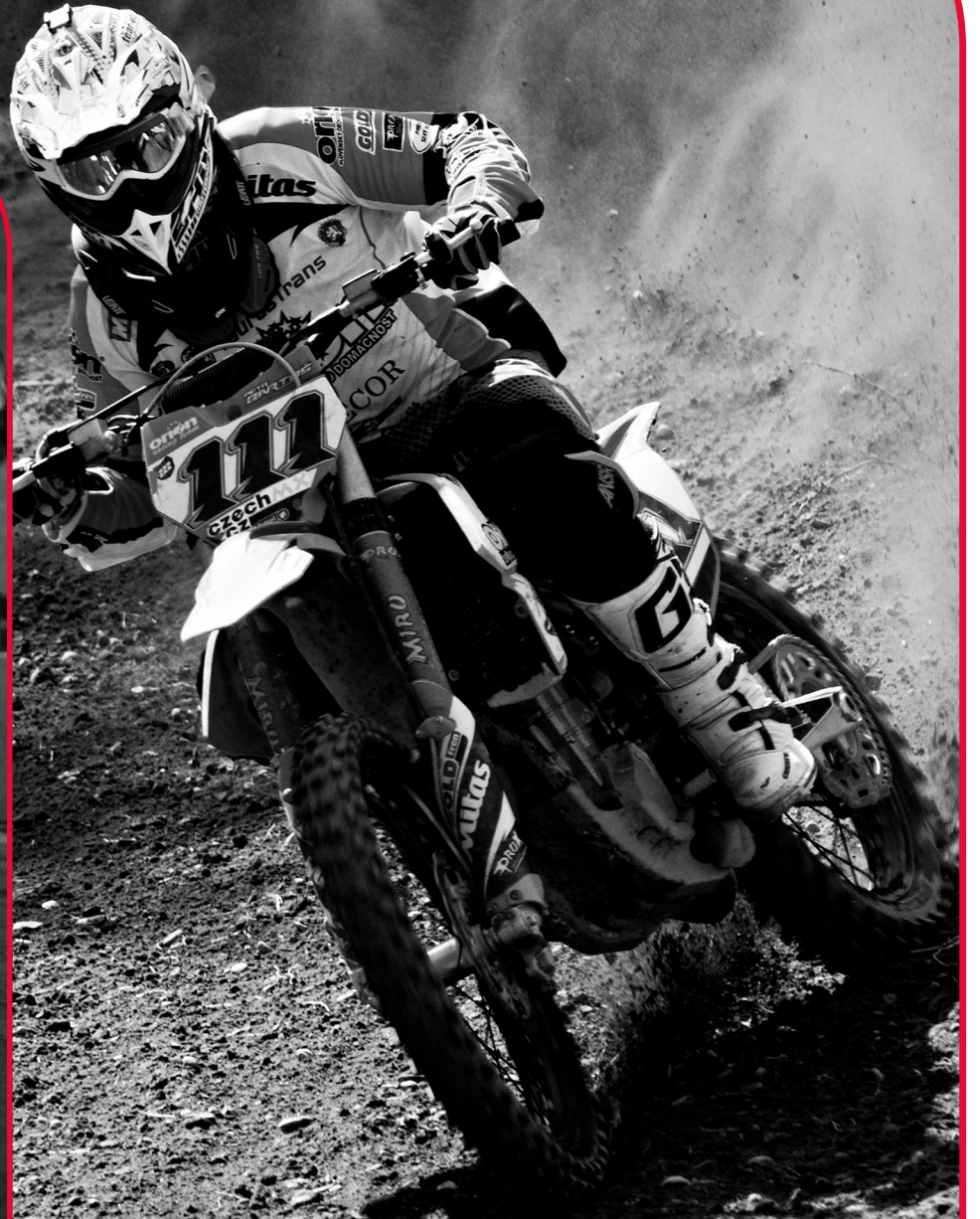




PASSIVE LOOP





PASSIVE LOOP

SUMMARY

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PASSIVE LOOP PRESENTATION

Passive detection loops are integrated on the ground surface or in the ground at all timing points along the track.

A passive detection loop works as an antenna. It captures the transponder signals and transmits them to the decoder.

The loop works in snow, ice, mud, dirt ground, asphalt.

ITS Chrono loops are resistant. This loop is compatible with **TAG Heuer By Chronolec** transponders.





PASSIVE LOOP

THE DIFFERENT LOOPS

CUSTOMIZED CABLE OPTION

Tailored coaxial cable length.
2 types of cable to choose from :

- RG223 double shielding
- RG58 simple shielding



CONTACT US

LOOP DOUBLER OPTION

If you need to connect the same loop on two different decoders, you can use our loop doubler provided for this purpose.



REF. ITSDB

INFORMATION

It is recommended to refer to the installation diagram corresponding to your installation for optimal implementation and conformity of uses. Available free of charge on our website.

ACCESS TO THE DIAGRAMS



INFORMATIONS	PASSIVE LOOPS		
REFERENCE	ITSBP050	ITSBP10	ITSBP30
COAXIAL LENGTH	50 cm • 1,6 ft	10 m • 32,8 ft	30 m • 65,6 ft
TYPE OF COAXIAL	RG223	RG223	RG223
MAX. TRACK WIDTH	25 m • 82 ft	25 m • 82 ft	25 m • 82 ft
LOOP WIRES	1 Conductor cable : Min. 0,75 mm ² / Max. 1,5 mm ²		
RESISTOR	470 Ohms	470 Ohms	470 Ohms
POWER SUPPLY	-	-	-

COMPATIBLE TRANSPONDERS

WIRED
COBRA 200
REF. ITSCOBRA200F

WIRED
COBRA 360
REF. ITSCOBRA360F

MULTI-PILOT
COBRA 360
REF. ITSCOBRA360M

RECHARGEABLE
LS
REF. ITSTLSB3

WIRED
LS
REF. ITSTLSF

WIRED
ELITE
REF. ITSTEF

MULTI-PILOT
ELITE
REF. ITSTMPF

RECHARGEABLE
ELITE
REF. ITSTEB3

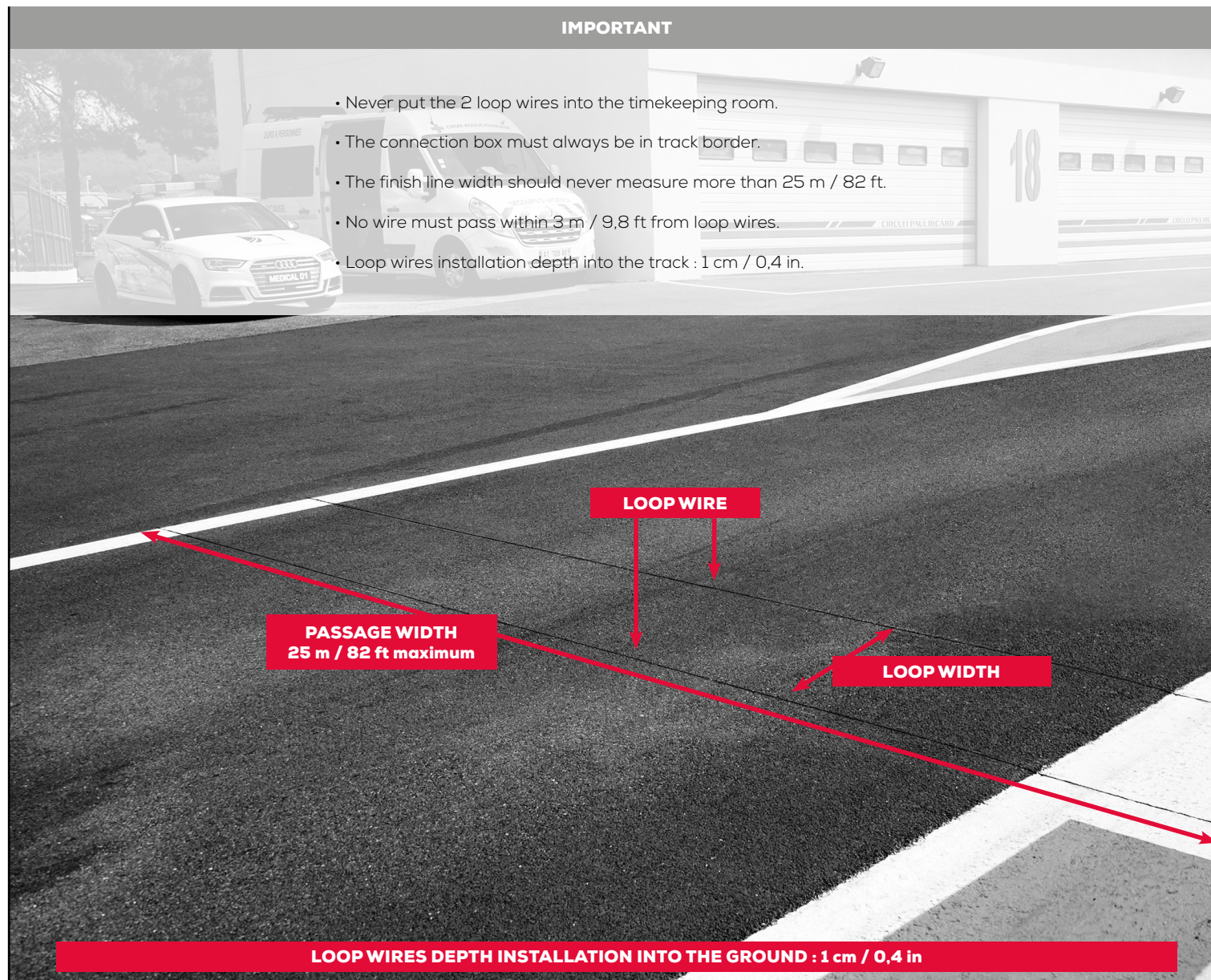
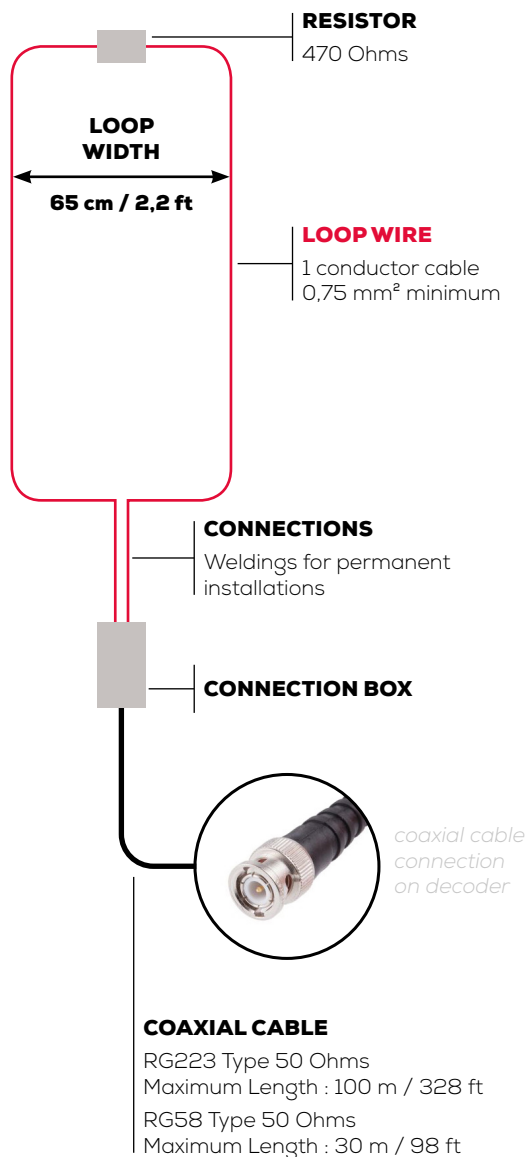
Note : each of these passive loops is compatible with each of these transponders

WARRANTY	2 years	2 years	2 years
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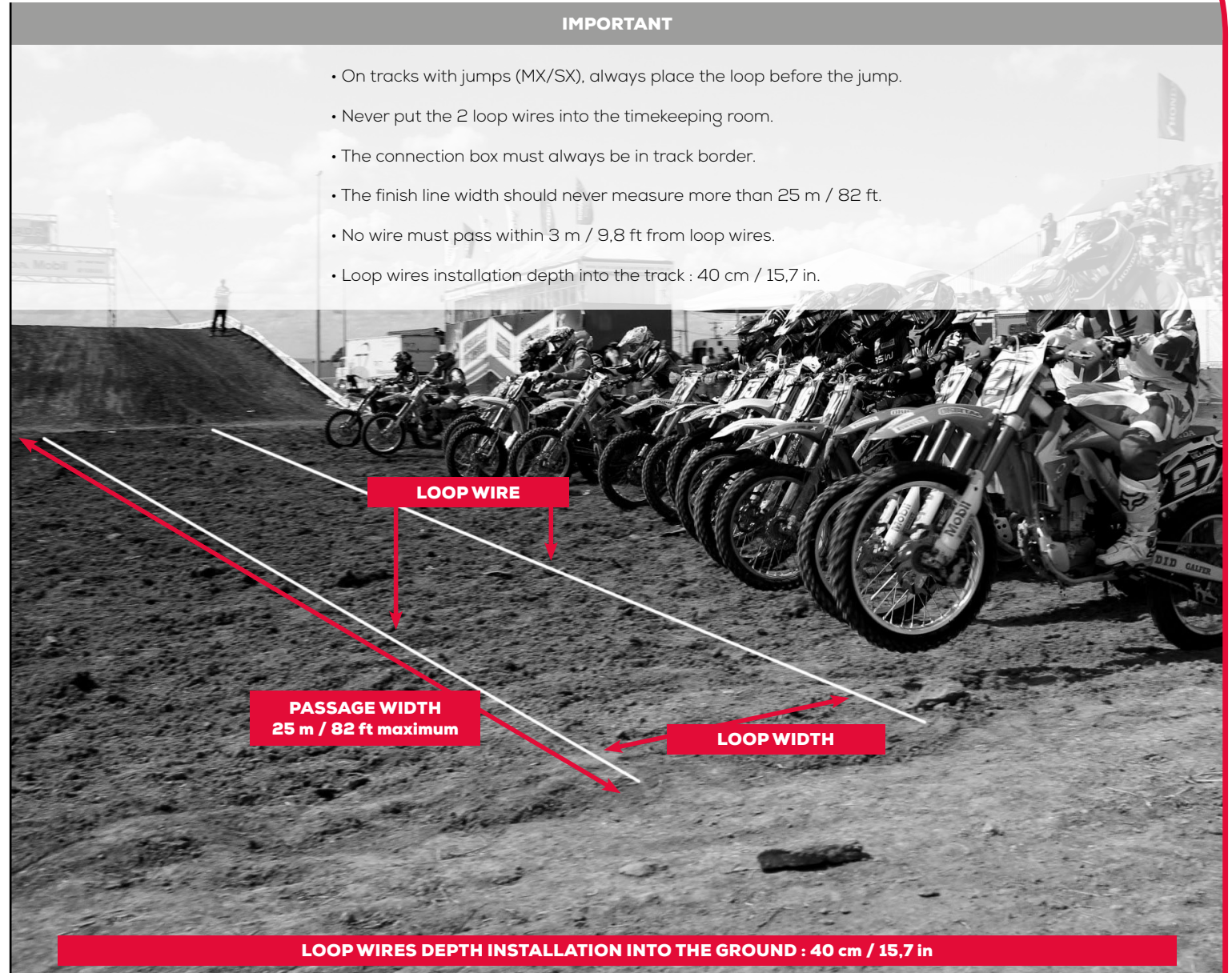
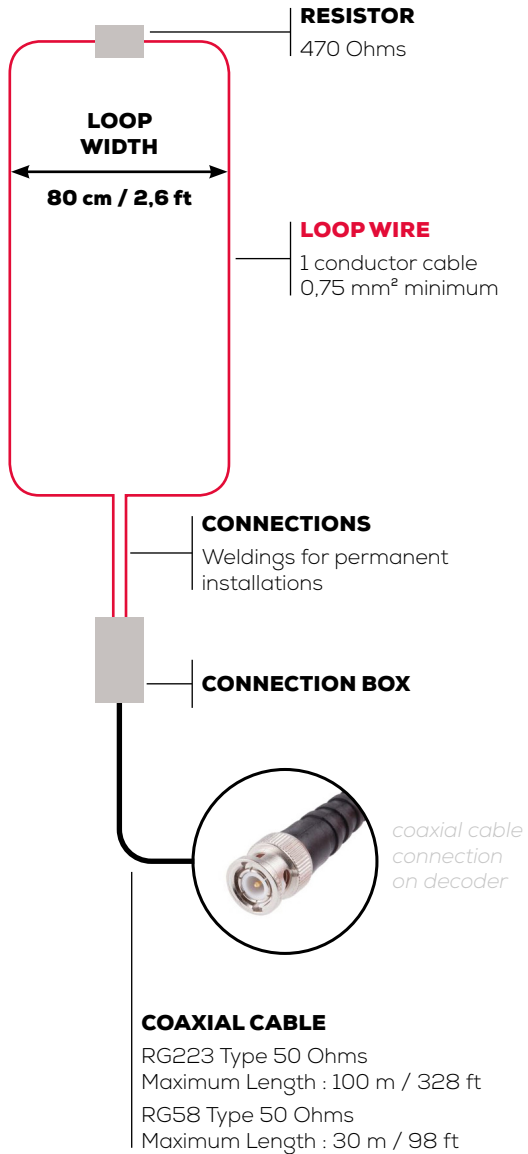


PASSIVE LOOP INSTALLATION ON ASPHALT TRACK





PASSIVE LOOP INSTALLATION ON DIRT TRACK



IMPORTANT

- On tracks with jumps (MX/SX), always place the loop before the jump.
- Never put the 2 loop wires into the timekeeping room.
- The connection box must always be in track border.
- The finish line width should never measure more than 25 m / 82 ft.
- No wire must pass within 3 m / 9,8 ft from loop wires.
- Loop wires installation depth into the track : 40 cm / 15,7 in.



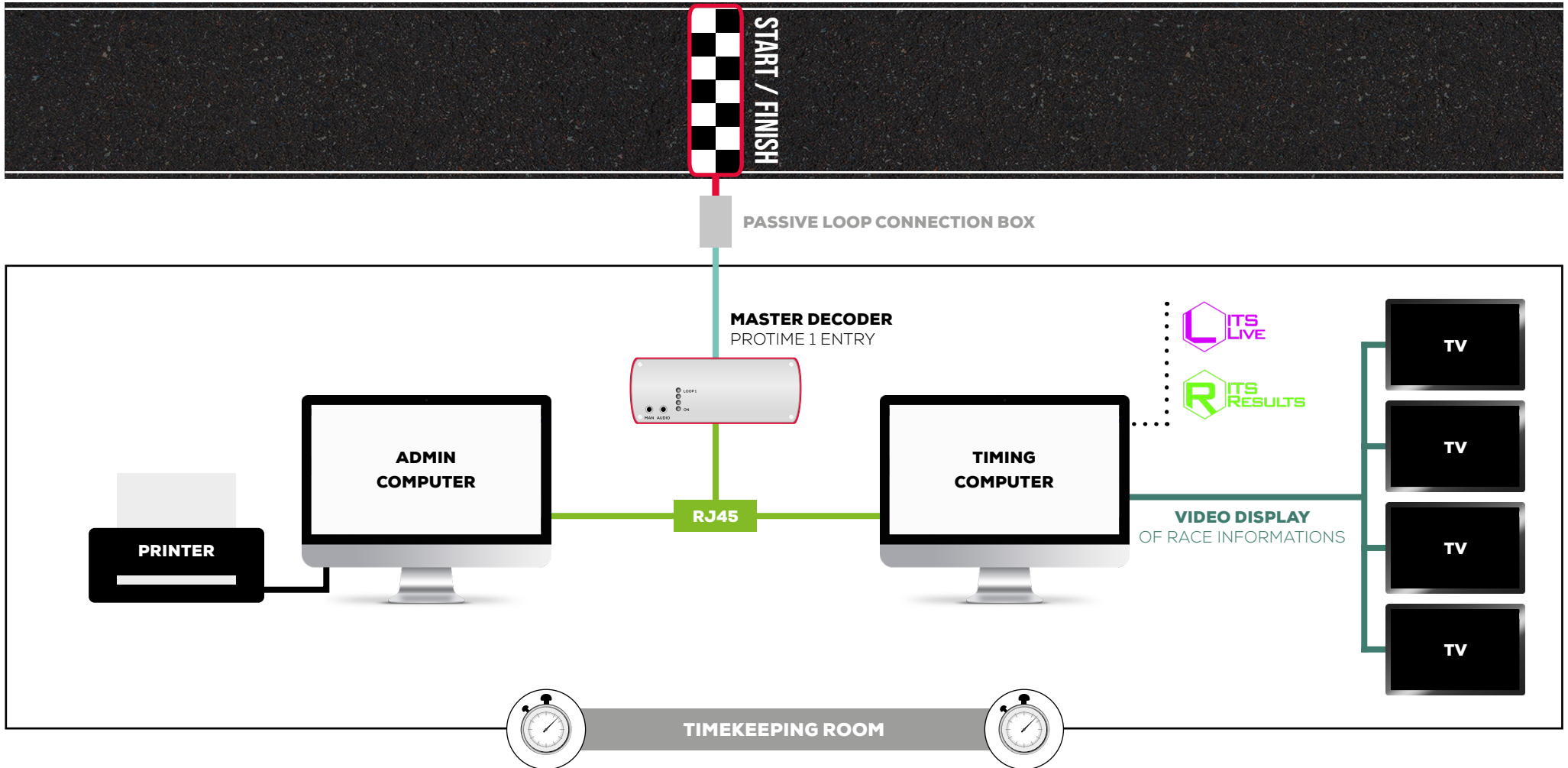


PASSIVE LOOP

INSTALLATION DIAGRAM - ONE LOOP SYSTEM

INSTALLATION

Loop wire Coaxial cable RG58 or RG223 RCA or BNC Cable RJ45





PASSIVE LOOP DECODERS

AUX CONNECTION



This connection DB15 format, among other things to control starting lights or connect a serial printer, but it also allows you to connect a TCDCOM box to manage your RS485 network (remote decoder, photocells).

RS232 CONNECTION



Connect your decoder directly with a computer via an USB adapter.

RJ45 CONNECTION



Use your decoder directly on your computer network.

MANUAL INPUT / AUDIO OUTPUT



You can connect a manual switch HL18D for manual time recording.



Connection of speakers or headphones to listen for detection *bips*.

AUTONOMOUS SUITCASE KIT

FOR INDUCTION DECODER.

It allows to work quietly whatever the place thanks to a minimum autonomy of 28 hours.

This kit includes :

- 1 suitcase
- 1 battery
- 1 charger
- Connections



REF. ITSKVI



INFORMATIONS	PROTIME DECODERS				DISTANT DECODERS	
	ELITE	1 ENTRY	2 ENTRIES	PROTIME RF	1 ENTRY	2 ENTRIES
REFERENCE	ITSD E	ITSDP1	ITSDP2	ITSDP1RF	ITSDDI	ITSDVI
POWER SUPPLY	12vdc (adapter) or using the autonomous suitcase	12vdc (adapter) or using the autonomous suitcase	12vdc (adapter) or using the autonomous suitcase	12vdc (adapter)	12vdc (adapter) or using the autonomous suitcase	12vdc (adapter) or using the autonomous suitcase
OSCILLATOR	TCXO 0,5 ppm	TCXO 0,5 ppm	TCXO 0,5 ppm	TCXO 0,5 ppm	TCXO 0,5 ppm	TCXO 0,5 ppm
RESOLUTION	0,001 s	0,001 s	0,001 s	0,001 s	0,001 s	0,001 s
DIMENSIONS	160 x 100 x 52 mm 6,3 x 3,9 x 2 in	160 x 100 x 52 mm 6,3 x 3,9 x 2 in	160 x 100 x 52 mm 6,3 x 3,9 x 2 in	276 x 272 x 94 mm 10,9 x 10,7 x 3,7 in	160 x 100 x 52 mm 6,3 x 3,9 x 2 in	160 x 100 x 52 mm 6,3 x 3,9 x 2 in
WEIGHT	600 g • 21,7 oz	525 g • 18,5 oz	540 g • 19 oz	1460 g • 51,5 oz	500 g • 17,6 oz	520 g • 18,3 oz
TEMPERATURE RANGE	from -20°C to 55°C from -4°F to 131°F	from -20°C to 55°C from -4°F to 131°F	from -20°C to 55°C from -4°F to 131°F	from -20°C to 55°C from -4°F to 131°F	from -20°C to 55°C from -4°F to 131°F	from -20°C to 55°C from -4°F to 131°F
SYNCHRO GPS	YES	NO		NO	OPTION	
LOOP INPUT	2	1	2	1	1	2
PHOTOCELL INPUT	2	1	2	NO	1	2
MANUAL INPUT	1	1		1	1	
AUDIO OUTPUT	1	1		1	1	
RS232 CONNECTION	1	1		NO	1	
AUX. CONNECTION	1	1		NO	1	
RJ45 CONNECTION	1	1		1	-	
ACTIVE LOOP USE	YES	YES		YES	YES	
PASSIVE LOOP USE	YES	YES		NO	YES	
OTHER	Manage up to 32 loops Memorize all the races LCD display Internal battery 2h autonomy	Memorize until 2000 passings		Communication between transponder in decoder 868 / 915 Mhz Passings historic	Render split times to the main decoder Uses the RS485 protocol to interact	
WARRANTY	2 years	2 years		2 years	2 years	





PASSIVE LOOP TRANSPONDERS

EXPERIENCE AND TECHNOLOGY

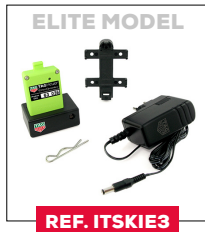
Our experience at the highest level of timing for more than 15 years with **TAG Heuer by Chronolec** solutions allows us to offer you a range of transponders.

Their reliable technology makes these transponders, undeniable and essential **precision tools**.

Whatever the sport, the level of competition, the technical constraints, you will always find the right transponders for your needs.

INDIVIDUAL KIT • ELITE AND LS

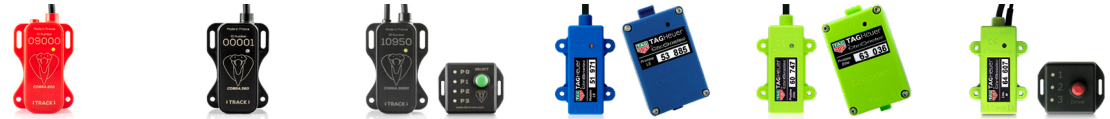
Elite and **LS** rechargeable transponders are also sold in individual kit including 1 holder, 1 clip and 1 charger.



50 TRANSPONDERS CHARGING SUITCASE

Elite and **LS** transponders are also sold with charging suitcase of maximum 50 transponders (the charger and the power supply are integrated to the suitcase).

REF. ITSACH503



INFORMATIONS	PASSIVE LOOP USE					
	COBRA 200 WIRED	COBRA 360 WIRED	COBRA 360 MULTI-PILOT	LS WIRED AND RECHARGEABLE	ELITE WIRED AND RECHARGEABLE	ELITE MULTI-PILOT
TRANSPONDER				ITSTLS ITSTLSB3	ITSTEF ITSTEB3	ITSTMPF
REFERENCE	ITSCOBRA200F	ITSCOBRA360F	ITSCOBRA360M			
POWER SUPPLY	12 V (2 wires)	12 V (2 wires)	12 V (2 wires)	12 V (2 wires) Ni-MH battery	12 V (2 wires) Ni-MH battery	12 V (2 wires)
AUTONOMY	Permanent supply	Permanent supply	Permanent supply	Permanent supply 4 days	Permanent supply 4 days	Permanent supply
CHARGE CYCLE	-	-	-	14 - 18h	14 - 18h	-
MAXIMUM DETECTION HEIGHT	2,80 m 9,2 ft	2,80 m 9,2 ft	2,80 m 9,2 ft	2,80 m 9,2 ft	2,80 m 9,2 ft	2,80 m 9,2 ft
MAXIMUM DETECTION SPEED	200 km/h 124,3 mph	360 km/h 223,7 mph	360 km/h 223,7 mph	200 km/h 124,3 mph	360 km/h 223,7 mph	360 km/h 223,7 mph
DIMENSIONS	81 x 52 x 22 mm 3,2 x 2 x 0,9 in	81 x 52 x 22 mm 3,2 x 2 x 0,9 in	81 x 52 x 22 mm 3,2 x 2 x 0,9 in	65 x 44 x 22 mm 2,6 x 1,7 x 0,9 in 80 x 50 x 23 mm 3,1 x 1,9 x 0,9 in	65 x 44 x 22 mm 2,6 x 1,7 x 0,9 in 80 x 50 x 23 mm 3,1 x 1,9 x 0,9 in	65 x 44 x 22 mm 2,6 x 1,7 x 0,9 in
WEIGHT	90 g • 3,2 oz	90 g • 3,2 oz	90 g • 3,2 oz	80 g • 2,8 oz	80 g • 2,8 oz	80 g • 2,8 oz
TEMPERATURE RANGE	from -20°C to 70°C from -4°F to 158°F	from -20°C to 70°C from -4°F to 158°F	from -20°C to 70°C from -4°F to 158°F	-20°C → +70°C -4°F → 158°F	-20°C → +70°C -4°F → 158°F	from -20°C to 70°C from -4°F to 158°F
FIXING	Mounting holes in the transponder frame	Mounting holes in the transponder frame	Mounting holes in the transponder frame	Mounting holes in the transponder frame Holder and clip	Mounting holes in the transponder frame Holder and clip	Mounting holes in the transponder frame
SPORT	Motocross Supercross Kartcross Rallycross Follicar Truck Karting	Cars Speed Bike Karting	Car endurance Truck endurance Karting endurance	Motocross Supercross Kartcross Rallycross Follicar Truck Karting	Cars Speed Bike Truck Karting	Car endurance Truck endurance Karting endurance
WARRANTY	2 years	2 years	2 years	2 years	2 years	2 years





PASSIVE LOOP TRANSPONDER DETECTION HEIGHT

DETECTION HEIGHT : ITS USEFULNESS

On dirt or asphalt track, with passive loop and **Elite** or **LS** transponder, the transponder detection height ensures the proper functioning of equipment before a race and perfect detection of competitors when they pass on the timing loop.

For convenience, **it is essential to be two people**. The first person to adjust the height of the transponder and the second to see the LED on the front panel of the decoder.

SCPECIFIC CASES

Although the exact application of the testing process, **the LED is flashing all the time** (no «continuous» detection) :

- Test the continuity of the loop wires
- Check for and test the resistance of 470 Ohms
- Check BNC connectors and fittings
- Check loop noise (see technical document)

During step 3 when **the LED is continuous red on 1 m** lower than elsewhere (or more) :

- Test the continuity loop wires (loop wires can be cut somewhere)
- If it's on dirt track, loop wires may be too close. This can happen when the hole is filled.

STEP 1

Connect the coaxial cable of the connexion box to the decoder (**LOOP 1 jack**).

Connect the decoder on electricity.

STEP 2

Place yourself in the middle of the timing loop.

Hold the transponder **PERPENDICULAR TO THE TRACK**.

Put the transponder up - *always perpendicular to the track* - **above your head**, arm outstretched.

Then slowly down the arm holding the transponder in the direction of the track.

When the **LED LOOP 1** decoder turns **CONTINUOUS RED** (no flickering), stop movement with the transponder.

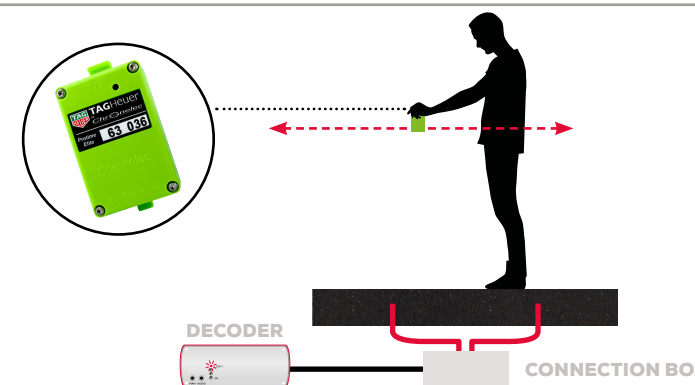
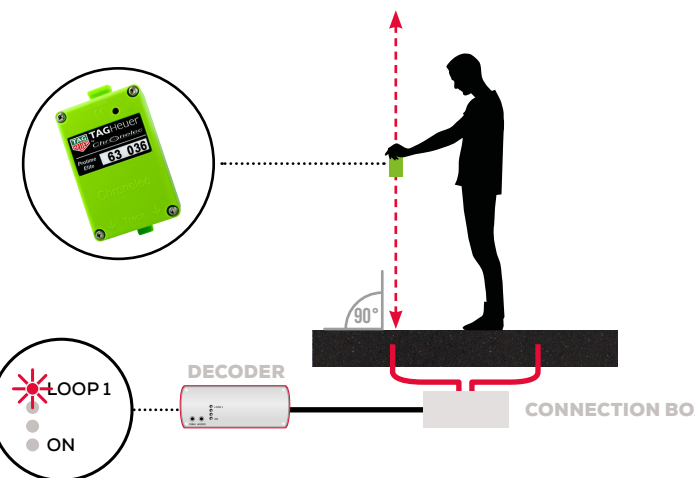
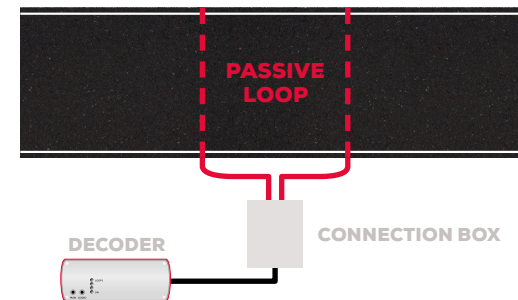
You found the maximum detection height of your loop.

STEP 3

Hold the transponder in the detection height found at the end of step 2.

Without changing the height of the transponder, browse the length of the loop. This is to verify the proper continuity loop wires.

Ideally, the LED decoder must be **CONTINUOUS RED** throughout the loop at the same height.





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