



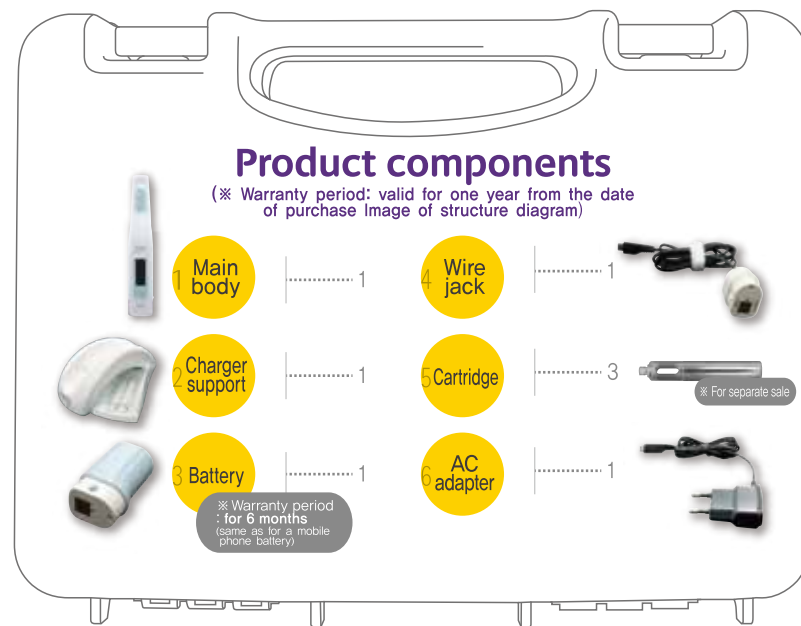
Patent No. 10-1092074  
: Anesthetic syringe (2011)



Patent No. 10-1125732  
: Method of injecting drugs using a double pressure sensor system (2012)

## Product specifications

Intended purpose	Device used for injection of medications including local anesthetic agents	
Rated power	DC 3.3~5.2V	
Power consumption	2W	
Injection distance by mode	MODE	Travel distance (mm)
	1/16	2.8
	1/8	5.6
	1/4	11.3
	1/2	22.5
	FULL	45.0
Weight and packaging unit	Weight	276g
	packaging unit	1 set
DC adapter for rechargeable battery (For charging of general mobile phones)	Standard MICRO USB Type-B charger : 5V±0.25V	
Battery	Lithium ion battery, 4.2V, 1200mAh	
Type of protection and degree of protection against electric shock	Product with an internal power source, subject to BF type installation	



SMART JECT  
제품구성 이미지

# SMART JECT

## computer-controlled automatic anesthesia delivery system

This cutting-edge electronic injection system employs a button push method in which a powerful motor and a pressure sensor button enable the user to inject anesthetic drug with a touch by a finger on the button and to feel the same pressure as is exerted by a dental syringe.



## SMART JECT | computer-controlled automatic anesthesia delivery system

this new-concept automatic anesthesia delivery system employs a button push method that enables the user to inject anesthetic drug via a touch by a finger on the button, using a powerful motor and a pressure sensor button.

### SLOW-FLOW

Flow

#### Control by a microprocessor computer

Slow insertion of an injection needle can ease the patient's pain. However, the same method does not warrant the same result on different treatment areas. In this technique, the computer controls procedures so patients feel comfort during administration of an anesthetic agent, regardless of areas to be treated.

AMSA  
P-ASA

AMSA



Anterior Middle Superior Alveolar Block

P-ASA



Palatal Anterior Superior Alveolar Block

PDL



Periodontal Ligament Injection

BLOCK INJECTION INFILTRATION



Inferior Alveolar Block Injection



Infiltration

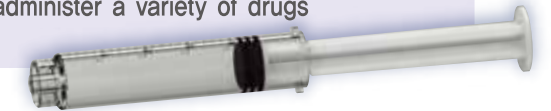
## Advantages of SMART JECT

- An automatic injector whose functions are the same as those of a dental syringe
- Installation of a 4ml syringe-use cartridge possible
- Minimization of pain: to minimize pressure at the injection of anesthetic through the installation of a pressure sensor button, enabling administration at a fixed amount and rate
- Convenience: light-weight and simply-to-operate
- Secure grip
- Relief from patient's fear for syringes as well as from the stress
- Expectation of quicker effects with a minimum quantity
- Encompassing all existing local anesthetic methods

## Features of SMART JECT

- **Dual button operation:** one-touch operation and pressure sensor operation selectable at the user's convenience
- **Pressure sensor button operation:** in this mode, the sensor detects pressure from the tip of a finger to set an injection in motion.
- **Pressure sensor motor:** the motor detects external pressures depending on areas to be treated and automatically controls injection rate and speed.
- **User-friendly design**
- **A ultra-light battery weighing** only 150g, or a wired battery 120g

The design for installation of a 4ml syringe-use cartridge  
: possible to administer a variety of drugs

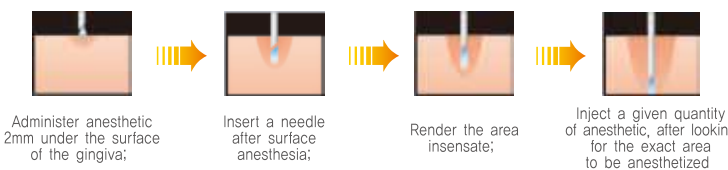


Regulation of injection speeds from 0~9  
by operation of the button using the pressure sensor button

#### Reason for regulation of pressure

: to reduce pain at the time of injection regardless of applied areas

More pain is induced due to pressure on tissues when an anesthetic agent is administered than when a needle is inserted. The motor of SMART JECT is installed with a pressure sensor, which, at detection of any excess above a given external pressure, causes the injection to slow, pause, stop, and return to its original state.

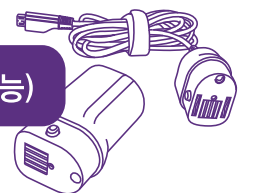


How to apply

- An aspiration mode can be conducted for examination
- A wide range of injection speeds and injection durations

: injection rate can be set at 1/16(0.1125), 1/8(0.225), 1/4(0.45), 1/2(0.9), or FULL (1.8ml), while injection time can be set from a minimum of 55 seconds to a maximum of 4 minutes and 45 seconds.

배터리, 유선책 장착사용(유·무선 사용 가능)



## Voice support

ding-ding (dripping) sounds at the operation of the machine indicate the rate of anesthetic drops, from which the user can identify its current injection rate.