

CSE - 580

Shortform Operating Instruction

Dutch Police

General

This manual describes the operating of the CSE-580. It is assumed, the CSE-580 is correct programmed, installed and a secure key set is loaded.

If one of the above assumption is not given, please contact your technical staff.

Operating and Display Elements

All operating elements are located at the Control unit. Independent of the use of the unit (Repeater only or Base and Repeater) the function of each press-button is the same. This is also true for the display flags and indications.

Depending of the use of a handset or a microphone, the location of the PTT-Switch is different.

If a handset is used, the PTT-Switch is located at the inner part of the handset.

If a microphone is used, the PTT-Switch is placed at the microphone itself.

If a remote control unit is used, the PTT-Switch is placed at the remote control unit (red button).

Control unit Buttons

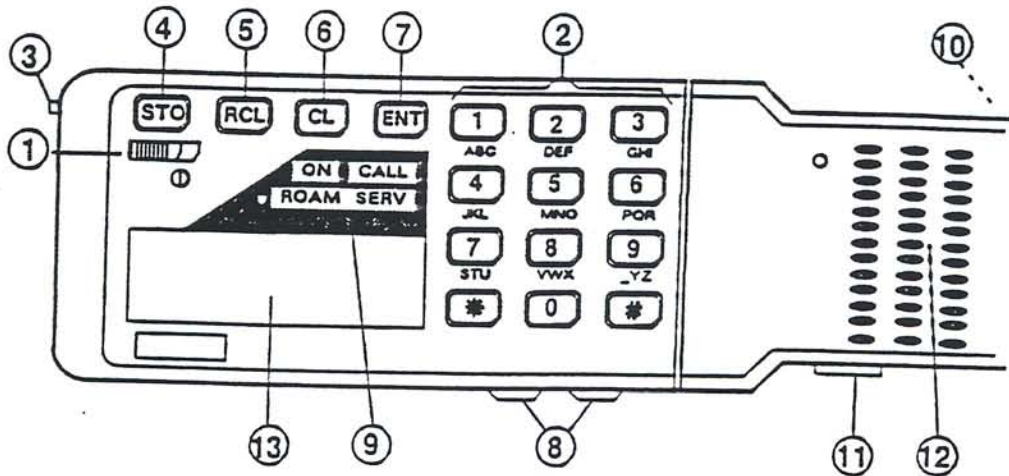


Fig. 1

#	Description	Function
1	ON / OFF Switch	Switches the CSE-580 on / off
2	Alpha numerical keyboard	Input of numerical characters and special functions
3	Shift key	1. Switches alternative functions on 2. Switches the RF-Power in transportable mode to high RF output
4	STO Storage key	Changes operating mode
5	RCL Recall key	Recall of predefined functions
6	CL Clear key	Clears : 1. Input correction(each time one character) 2. Input display (clear display)
7	ENT	Confirmation of inputs
8	- Key + Key	- Volume + Volume
9	Display flags	See Tab. 2
10	PTT-Switch	CSE-580 in transmit mode
11	Loudspeaker switch	not used in this application
12	Handset loudspeaker	not used in this application

Table 1

Display Symbol

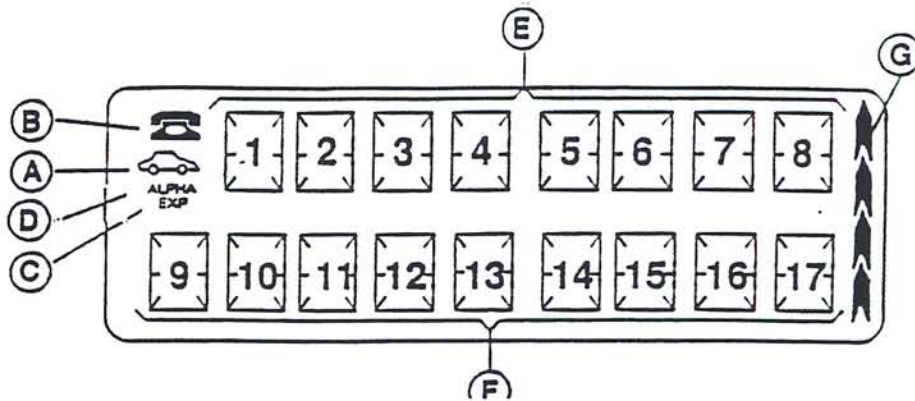


Fig. 2



	Indicator Description	ON	OFF
9	ON	If CSE-580 is switched on	If CSE-580 is switched off
9	SERV	When the transmitter is keyed	
9	CALL	Sel-Call is transmitting	
9	ROAM	not used	
A		Mobile power range	Transportable power range
B		Synch. OK in ciphered mode	Synch. not OK
C	EXP	Shift key (3) pressed	
D	ALPHA	not used	
E	<div style="border: 1px solid black; padding: 5px; display: inline-block;">CH_XXX Y</div>	Status and info display: CH ⇒ Channel XXX ⇒ Channel Number Y ⇒ Mode Indication	
F	<div style="border: 1px solid black; padding: 5px; display: inline-block;">CH_XXX Y YYY ZZZ</div>	Input display: Input from the keyboard and received messages are displayed	
G	Field strength indication	Tree bars Two bars one bar no bars	Very good ch good ch usable ch poor ch

Table 2

Operating

ON / OFF

Move the ON / OFF Switch (1) to the On position. The CSE-580 and the ON LED (9) and  (A) will be switched on.

A self test checks the functionality of the CSE-580 and will be ready for reception at the last selected channel. (If an error occurs see error messages)

The default display will show up.

DISPLAY

CH_XXX C

To switch off the unit, move the ON / OFF Switch (1) to the OFF position.

Note:

If the unit is used as a transportable unit, automatically the RF-Power output will be reduced. By switching on the CSE-580 and pressing the shift key (3) simultaneously, The unit will transmit in the high power mode.

Volume Control

The volume is preset to a default value. It can be increased by pressing the + key (8) and decreased by pressing the - key (8) The display will show the relevant level.

DISPLAY

VOLUME
----0000

0 ⇒ Volume level 4
(max. Volume level = 8)
(min. Volume level = 1)

Loudspeaker Control

The external loudspeaker can be switched on or off. A toggle function controls this mode. The default setting is: ext. loudspeaker off. To change the loudspeaker mode press shift (3) then 0 (2). The display indicates if the ext. loudspeaker is switched on

DISPLAY

CH_XXX C
LSP ON

or if the ext. Loudspeaker is switched off.

CH_XXX C
LSP OFF

After using this mode the CSE-580 default display will be shown.

Cipher/plain Mode

The CSE-580 offers the possibility to operate the equipment in three communication modes:

- Plain
- Default key and
- Ciphred

If no Communication key is loaded ONLY repeater mode is possible

To select one of the three modes press:

STO 1 for plain operation.

STO 2 for ciphred operation.

STO 3 for default key operation.

The user will be informed in plain mode at the begin of a transmission and during plain reception (plain override) about the transmission mode .

DISPLAY

CH_XXX C

C ⇒ Ciphred Mode
D ⇒ Default Mode
P ⇒ Plain

Note:

More about the key management is described in the key entry device KED 3400 manual

Channel Selection

The cold start channel is always the last selected channel.

To select an other pre-programmed channel, press the relevant number (2).

DISPLAY

CH_XXX C
CH_YY

YY ⇒ new channel number (max. 2 digits)

press ENT (7). The relevant channel will be displayed.

DISPLAY

CH_YY C

YY ⇒ new channel number

A new channel will always show up with its pre-programmed channel assignment parameters. (plain, crypto etc.)

An incorrect input can be corrected by pressing CL (6). Each time CL (6) is pressed, one character will be erased.

A selection of an invalid channel will not be accepted and no action will be carried out by the CSE-580.

DISPLAY

CH_XXX C
CH_MISS

Receive Mode

The CSE-580 can receive a group call, selective call or an open call in plain, default or ciphred mode. If the unit is in a other receive mode then the remote transmitter, an alert tone and a display message will indicate the wrong status.

DISPLAY

CH_XXX C
GO TO C

⇒ go to cipher mode
⇒ go to default key

The caller ID will be displayed in selective call reception

DISPLAY

CH_XXX C
FROM_ZZZ

ZZZ ⇒ Transmitter ID

Receive Messages

9 predefined messages can be received.

At the same time an alert tone will inform the user about the reception of the message.

DISPLAY

CH_XXX C
MESSAGE

Message see attached list

Transmit Mode

By pressing the PTT button, the CSE-580 is in transmit mode. The SERV LED will be on.

Send Selective Call

Enter the desired ID number (3 digits) of the called subscriber

DISPLAY

CH_XXX C ZZZ ⇒ Called ID number
SC_ ZZZ

Note: after entering the 3. digit the indication CH_ will change to SC_

Press ENT (7)

DISPLAY

CH_XXX C ZZZ ⇒ Called ID number
TO_ ZZZ CALL and SERV will be on.

Send a Message

9 predefined messages are pre-programmed. The message can be combined with a sel call number.

Enter the desired ID number (3 digits) of the called subscriber

DISPLAY

CH_XXX C ZZZ ⇒ Called ID number
SC_ ZZZ

Note: after entering the 3. digit the indication CH_ will change to SC_

Enter the desired message number (1..9)

DISPLAY

CH_XXX C ZZZ ⇒ Called ID number
TO_ ZZZ Y Y ⇒ message number

Press ENT (7)

DISPLAY

CH_XXX C Y ⇒ message number
MSG_TX Y CALL and SERV will be on.

Send Group Call

One of the 9 predefined messages can be combined with a group call.

If one of these messages is transmitted, automatically a group call will be send out in advance.

To recall one of these messages press RCL (5), then 0

DISPLAY

CH_XXX C
MSG_TX

and enter one of the relevant number (2) from 1..9. The message will be displayed and transmitted immediately.

DISPLAY

CH_XXX C Y ⇒ Message number
MSG_TX Y SERV and CALL will be on

Repeat Send Message/Sel Call

This function repeats the last sel call or group call transmission.

Enter RCL (5) and 0. Depending of the last transmitted function, it will be displayed and transmitted.

Emergency Clear

To store the CSE-580 in emergency cases all keys stored in the CSE-580 can be erased by using the emergency clear function.

Note: If this function is used, no communication in cipher mode will be possible. A new keyset must be loaded.



Press the shift key (3), EXP (C) will be displayed, then press within 5 sec. the numerical key 9 and then CL (6) If CL (6) or 9 is not pressed within the time out the CSE-580 will go back to default mode.

DISPLAY

CH_XXX C
EMCY CLR

Output Power

CSE-580 offers four power output values. The first two are available if the CSE-580 is connected to an independent battery. If the CSE-580 is used in a mobile or fixed installation a max output of 15 Watt can be achieved.

Power output:	Watt	Display
Portable low	2.5 Watt	no display indication
Portable high	5 Watt	 on
Mobile low	10 Watt	no display indication
Mobile	15 Watt	 on

Note:

Portable high and the mobile low mode is on if the CSE-580 is switched on and the shift key (3) is pressed simultaneously.

Error Messages

In case of an error the CSE-580 will not transmit any information in plain, if the unit is in default key or cipher mode.

If an error occurs, the CSE-580 will recognise it with the help of the BITE and will show the status on the display.

The following error messages can occur:

Message	Meaning
GO TO C	Go to Cipher mode
GO TO DK	Go to Default Key mode
CH_MISS	selected channel not programmed (The following error codes need assistants from the security manager or a invalid mode will be used)
NO KCPA	No key channel parameter assignm.
NO KEYS	No key loaded
NO A KEY	No active key loaded
NO S KEY	No spare key loaded
CHANGE OM	Change operating mode
OM INVALID	Operating mode invalid
OMD INVAL	Operating mode default invalid
CHAN ERR	Channel error
EMCY CLR	Emergency

Note:

These Messages are related to the chippering module HC-3400.

The following error messages can occure after switching on the unit:

Message	Meaning	What to do?
Error C	HC Problem	go to Workshop
Error M1	After EMCY	call Security of.

Note: It is possible after this error message an other message from the abofe list will show up.

The following error messages can occure during operation of the unit:

Message	Meaning	What to do?
Power LED blinking and alert tone	Battery low	Connect unit to charger or check connectors

Bit Error Test (BER)

In special cases it can of great importance to know the quality of the received digital signal. Therefore, the CSE-580 offers the possibility to check the bit error rate of the received signal.

Press shift (3) and then enter 99

DISPLAY

CH_XXX Y
BER = ZZZ

Y ⇒ Mode (see cipher/plain)

ZZZ ⇒ BER in %

The BER will be displayed. A number between 0 and 255 corresponds direct to the BER in %.

255 is a error in checking the BER-Test, e.g. the unit is switched to and receives an analogue signal or nothing.

If PTT is pressed the repeater goes to transmit mode and the display is the same as in transmit mode. After releasing the PTT, the repeater goes back to the BER mode

To terminate the BER mode press the CL (6) key.

Note: The coder can synchronise between 0 and 100. Voice recognition will be between 0 and 80. 255 will be a non valid value.

Battery Indication

If the battery is low an intermitted alert tone will be audible and the power LED ON (1) is blinking.

If this indication occurs connect the CSE-580 to the power supply or replace the attached Battery.

Service Mode

CSE-580 offers for advanced user a special programming mode, the service mode.

This mode allows the reprogramming of the unit in the field.

Switch the unit off. Switch the unit on and press # key (2) simultaneously until the new display appears

DISPLAY

ENTER_PW

Enter the Password. (It will not be displayed)

DISPLAY

ENTER_PW
□□□□□□

Press ENT (7) and the unit is in the Service Mode.

DISPLAY

SERVICE
MODE

If a wrong password is entered, unit goes back to the default mode.

For more details about the service mode and the password, see the service mode instruction manual.

Message

The preprogrammed messages are examples for demonstration and can be changed (at factory side). All of them correspond with the one programmed in the CSE-160 transceiver.

MSG 1	Alarm	XXX
MSG 2	Help	XXX
MSG 3	To HQ	XXX
MSG 4	EMCY	XXX
MSG 5	ABASE	XXX
MSG 6	OP LEO	XXX
MSG 7	LUNCH	XXX
MSG 8	MSG 1	XXX
MSG 9	ETASK	XXX

XXX indicates the identification of the transmitting unit.