UNIDEN PROGRAMMING CONTROL CODES FOR USE WITH UNIDEN SCANNERS

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PREFACE

There are three operation specifications for BC895XLT. This document is for Remote mode and described about RS-232C command definition. Others are for Conventional mode and for Trunking mode. See these documents if you want to know about any operation in Conventional mode or Trunking mode.

RS-232C Remote Mode Command Definition

[Communication Format]

BPS rate : 2400/4800/9600BPS

Start/Stop bit : 1 bit, 1 bit

Data Length : 8 bit
Parity Check : None
Code : ASCII
Flow Control : None

Return Code : Carriage Return only

- *1 In case of controling with program, insert waiting time between commands.
- *2 On remote mode, Enter Lock Switch is ignored even though it is ON.
- *3 On Bit rate establishment mode, all commands are invalid.

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[FORMAT OF THIS DOCUMENT]

COMMAND NAME

Summary explanation of the function of the command

Controller → Radio

Command format

Radio - Controller

Response format

- Error message isn't described in this document,
 but the unit sends error message to the controller
 as follows.
- Command format error / Value error : "ERR↓"
- The command is invalid at the time: "NG \downarrow "
- · Communication error

Flaming error : "FER \downarrow "

Overrun error : "ORER↓"

Detailed explanation of the command

Effect of the command for the display of the unit.

COMMAND AC

Clear (Initialize) all memory.

Controller → Radio

Radio -> Controller

"OK↓" / "NG↓"

This command instructs the unit to clear (initialize) all the memories.

All the memories are set for initial setting (Listed in Table 1).

This command is valid at any time.

Note) There needs about 9 seconds execute time.

For example, display changes like this.

Before transmitting:



Transmit "AC↓".

After transmitting:

Uni dEn

While initializing, display "UnidEn".

End initializing:



Start from Channel Scanning (start channel is "1") by initial setting.

" $OK \downarrow$ " is returned.

command AR

Confirm/Set AUTO RECORDING function ON/OFF.

Controller → Radio

- ① "AR↓":Confirm AUTO Recoding function ON/OFF
- ② "ARN \downarrow " (ON) \angle "ARF \downarrow " (OFF)

Radio - Controller

- (1) "ARN \downarrow " (ON) / "ARF \downarrow " (OFF)
- ② "OK↓" / "NG↓"

This command instructs the unit to turn or confirm AUTO RECORDING function ON/OFF.

This command is valid on the

- ①SCAN STOP/MANUAL/ID MANUAL/ROTARY (only Pch signal receive)
- ② MANUAL/ID MANUAL/ROTARY (only Pch signal receive) MODE.
- ① No change on the display.
- ② For example, display changes like this.

Before transmitting:



Transmit "ARN↓".

After transmitting:



"OK↓" is returned.

command CC

Confirm CTCSS DECODE condition.

Controller \rightarrow Radio

"CC↓"

Radio \rightarrow Controller

"CCY↓" (DECODE OK) / "CCN↓" (DECODE NG)

This command instructs the unit to confirm CTCSS DECODE condition.

This command is valid at any time.

command CD

ON/OFF function which informs when CTCSS tone frequency is detected.

Controller → Radio

- ① "CD↓": Confirm "CD" command active
- ② "CDN \downarrow " (ON) \neq "CDF \downarrow " (OFF)

Radio - Controller

- (1) "CDN \downarrow " (ON) / "CDF \downarrow " (OFF)
- ② "OK↓" / "NG↓"

While the funciton is ON, if CTCSS tone frequency is detected, the unit sends its CTCSS tone frequency number to the controller in the form of "CD \triangle \downarrow " (CTCSS tone frequency numbers are listed in Table 2). Example:

"CD01 \downarrow " Detected CTCSS tone frequency number is "01" (indicates 67. 0Hz).

This command instructs the unit to turn the function ON/OFF.

While the function is ON, the unit is monitoring the CTCSS detection status and informs if CTCSS tone frequency is detected.

This command is valid on the SCAN/MANUAL/LIMIT SEARCH/LIMIT SEARCH HOLD/ROTARY MODE.

*CTCSS detection function is turned ON/OFF with CDN/CDF. If you change the scanner mode after sending this command, you have to manually turn the CTCSS detection function ON/OFF.

Even though "CD" command is active, if CTCSS detection function isn't active, the unit sends no response.

- ① No change on the display.
- ② For example, display changes like this.

Before transmitting:



Transmit " $CDN\downarrow$ ".

After transmitting:



" $OK \downarrow$ " is returned.

Start CTCSS DETECTION.

If CTCSS tone frequency is detected:



"CD03↓" (indicates 74.4Hz) is returned.

COMMAND CS

confirm/Set CTCSS tone frequency.

Controller → Radio

- ① "CS↓" :Confirm CTCSS tone frequency
- ② "CS△△↓" △△:CTCSS tone frequency number (Listed in Table2)

Example:

"CS01 \downarrow " Set CTCSS tone frequency number to "01" (indicates 67. 0Hz).

Radio → Controller

- ① " $CS\triangle\triangle\downarrow$ " $\triangle\triangle:CTCSS$ tone frequency number
- ② "OK↓" / "NG↓"

This command instructs the unit to set CTCSS tone frequency number to $\triangle\triangle$.

This command is valid on the

- ①SCAN STOP/MANUAL/PROGRAM CTCSS/ROTARY MODE.
- @MANUAL/PROGRAM CTCSS/ROTARY (except Pch signal receive) MODE.
- ① No change on the display.
- ② For example, display changes like this.

Before transmitting:



Transmit "CS011".

After transmitting:



" $OK \downarrow$ " is returned.

COMMAND CT

Confirm/Set CTCSS function ON/OFF.

Controller → Radio

- ① "CT↓" : Confirm CTCSS function ON/OFF
- ② "CTN \downarrow " (ON) / "CTF \downarrow " (OFF)

Radio \rightarrow Controller

- ① "CTN↓" (ON) / "CTF↓" (OFF)
- ② "OK↓" / "NG↓"

This command instructs the unit to turn or confirm C TCSS function ON/OFF.

This command is valid on the MANUAL/SCAN/ROTARY MODE.

- ① No change on the display.
- ② For example, display changes like this.

Before transmitting:

BANK A 5KHz FM

P 5 162.400 RMT
DELAY

Transmit "CTN↓".

After transmitting:

BANK A 5KHz FM

P 5 162.400 RMT 67.0Hz

DELAY CTCSS

" $OK \downarrow$ " is returned.

${\rm COMMAND}\;D\;L$

Confirm/Set DELAY function ON/OFF.

Controller → Radio

- ① "DL↓" :Confirm DELAY function ON/OFF
- ② "DLN \downarrow " (ON) \angle "DLF \downarrow " (OFF)

Radio - Controller

- ① "DLN↓" (ON) / "DLF↓" (OFF)
- ② "OK↓" / "NG↓"

This command instructs the unit to turn or confirm DELAY function ON/OFF.

This command is valid on the MANUAL/LIMIT SEARCH/LIMIT SEARCH/WX SCAN/WX SCAN HOLD/ID SEARCH/ID SEARCH HOLD/ID SCAN/ID MANUAL MODE and on the SCAN MODE when scan is stopping.

- ① No change on the display.
- ② For example, display changes like this.

Before transmitting:



Transmit "DLN↓".

After transmitting:



"OK↓" is returned.

command DS

Confirm/Set DATA SKIP function ON/OFF.

Controller → Radio

- ① "DS↓" :Confirm DATA SKIP function ON/OFF
- \bigcirc "DSN \downarrow " (ON) / "DSF \downarrow " (OFF)

Radio - Controller

- ① "DSN↓" (ON) / "DSF↓" (OFF)
- ② "OK↓" / "NG↓"

This command instructs the unit to turn or confirm DATA SKIP function ON/OFF.

This command is valid on the SCAN/LIMIT SEARCH/LIMIT SEARCH HOLD/AUTO STORE MODE.

- ① No change on the display.
- ② For example, display changes like this.

Before transmitting:



Transmit "DSN↓".

After transmitting:



" $OK \downarrow$ " is returned.

COMMAND LO

Confirm/Set LOCKOUT function ON/OFF.

Controller → Radio

- ① "LO↓" : Confirm LOCKOUT function ON/OFF
- \bigcirc "LON \downarrow " (ON) / "LOF \downarrow " (OFF)

Radio \rightarrow Controller

- ① "LON↓" (ON) / "LOF↓" (OFF)
- ② "OK↓" / "NG↓"

This command instructs the unit to turn or confirm LOCKOUT function ON/OFF.

This command is valid on the

- ①MANUAL MODE
- 2 MANUAL MODE / SCAN STOP MODE.
- ①No change on the display.
- ② For example, display changes like this.

Before transmitting:



Transmit "LON↓".

After transmitting:



" $OK \downarrow$ " is returned.

COMMAND LL

Confirm/Set lower edge frequency of LIMIT SEARCH.

Controller → Radio

- ① "LL↓" :Confirm lower edge frequency
- ② "LL△△△△△△↓" △△△△△△△: Lower edge frequency

 The order of the digits is

 from 1GHz digit to 100Hz digit.

Example:

"LL03999875 \downarrow " Set the lower edge frequency to "399. 9875MHz".

Radio \rightarrow Controller

This command instructs the unit to set the lower edge frequency of limit search to $\triangle\triangle\triangle\triangle\triangle\triangleA$ *100Hz or confirm frequency.

- ① This command is valid at any time.
- ② This command is valid at any time and the operating mode changes to the MANUAL MODE after setting lower edge frequency.
- ① No change on the display.
- ② For example, display changes like this.

Before transmitting:



Transmit "LL03999875\".

After transmitting:



Operating mode changes to the MANUAL MODE.

"LL03999875↓" (indicates 399. 9875MHz) is returned.

COMMAND LU

Confirm/Set upper edge frequency of LIMIT SEARCH.

Controller → Radio

- ① "LU↓" :Confirm upper edge frequency
- ② "LU△△△△△△↓" △△△△△△△: upper edge frequency

 The order of the digits is

 from 1GHz digit to 100Hz digit.

Example:

"LU03999875 \downarrow " Set the upper edge frequency to "399. 9875MHz".

Radio \rightarrow Controller

① ② "LU $\triangle\triangle\triangle\triangle\triangle$ " The current upper edge frequency is $\triangle\triangle\triangle\triangle\triangle\triangle$ *100Hz.

This command instructs the unit to set the upper edge frequency to $\triangle\triangle\triangle\triangle\triangle\triangleA$ *100Hz or confirm frequency.

- ①This command is valid at any time.
- ② This command is valid at any time and the operating mode changes to the MANUAL MODE after setting upper edge frequency.
- ① No change on the display.
- ② For example, display changes like this.

Before transmitting:



Transmit "LU03999875\".

After transmitting:



Operating mode changes to the MANUAL MODE.

"LU03999875↓" (indicates 399. 9875MHz) is returned.

$\operatorname{COMMAND} MA$

```
Confirm/Set channel number of MANUAL MODE.
Controller → Radio
①Confirm
  "MA↓"
② S e t
   "MA△△△↓" △△△: channel number
Example:
  "MA015\" Set the channel number to "15".
Radio - Controller
(1), (2)
   "C\triangle\triangle F\triangle F\triangle T\triangle D\triangle L\triangle A\triangle R\triangle N\spadesuit \bigcirc "
    \triangle \triangle \triangle
                 : channel number
     The order of the frequency digits are
      from 1GHz digit to 100Hz digit.
                   : "N" or "F" (ON/OFF)
```

e x) TN/TF: trunking frequency/conventional frequency DN/DF: delay on/off

LN/LF: lockout on/off

AN/AF: attenuation on/off (not supported)

RN/RF: auto recode function on/off

: "ctcss tone number

Example:

"C015 F03999875 TF DN LF AF N01 \downarrow " The current channel number is "15", and its conventional frequency is "399. 9875MHz". Delay function is ON, Lockout is OFF, Attenuation is OFF, CTCSS is 67. 0HZ.

This command instructs the unit

- ① to send the current channnel number and its frequency.
- ② to set the receiving channel number to △△△. This command is valid
- ① on the MANUAL MODE/PROGRAM CTCSS/ROTARY and on the SCAN MODE when scan is stopping.
- ② at any time.
- ① No change on the display.
- ② For example, display changes like this.

Before transmitting:



Transmit "MA015↓".

After transmitting:



"C015 F03999875 TF DN LF AF RF N00↓" is returned.

$\operatorname{COMMAND} MD$

Confirm the Scanner mode.

Controller \rightarrow Radio

"MD↓"

Radio \rightarrow Controller

"MD△△↓" △△:Current scanner mode nummer
(Listed in Table 4)

This command instructs the unit to confirm the curre nt scanner $mode_{\circ}$

This command is valid at any time.

$\operatorname{COMMAND} MU$

Confirm/Set status of speaker muting.

Controller → Radio

- ① "MU↓" :confirm MUTE control mode.
- ② "MU?↓" : confirm MuteON/OFF condition.
- ③ "MUN↓" : Set mute ON (by force) mode.

"MUF \downarrow " : Set mute OFF (by force) mode.

" $MUA\downarrow$ " : Set Auto mute control mode.

Radio \rightarrow Controller

① "MUN↓" : Mute ON (by force) mode.

"MUF↓" : Mute OFF (by force) mode.

"MUA↓" : Auto mute control mode.

② "MU ON↓" : Mute ON condition.

"MU OFF↓" : Mute OFF condition.

③ "OK↓" / "NG↓"

This command instructs the unit to set or confirm the status of speaker muting.

This command is valid at any time.

COMMAND PC

Confirm/Set priority channel number of a bank.

Controller → Radio

① Confirm

"PC $\triangle\downarrow$ " \triangle : bank

Example:

"PC A\" Confirm the priority channel

number of "bank A".

② Set

"PC △◇◇◇↓" △: bank ◇◇>: channel number

Example:

"PC A014 \downarrow " Set the priority channel number of "bank A" to "14" .

Radio - Controller

①, ②

"PC $\triangle \otimes \otimes \downarrow$ " \triangle : bank $\otimes \otimes :$ channel number

Example:

"PC A014 \downarrow " The priority channel number of "bank A" is "14".

This command instructs the unit

- ① to send the priority channel number of the bank.
- ② to set the priority channel number of the bank.

 This command is valid at any time and the operating mode
- ① doesn't change after transmitting.
- ② changes to the MANUAL MODE after setting the priority channel number.

- ①No change on the display.
- ② For example, display changes like this.

Before transmitting:



Transmit "PC A014↓".

After tramsmitting:



"PC $A014\downarrow$ " is returned.

command PM

Read/write frequency of a channel.

Controller → Radio

① Read

Example:

"PM014 \downarrow " Read the frequency of "14CH".

②Write

"PM△△△ : channel number

The order of the frequency digits are from 1GHz digit to 100Hz digit.

Example:

"PM014 03999875 \downarrow " Set the frequency of "14CH" to "399. 9875MHz".

Radio - Controller

①, ②

"C $\triangle\triangle$ F \otimes \otimes \otimes \otimes T \triangle D \triangle L \triangle A \triangle R \triangle N \spadesuit \spadesuit \downarrow "

 $\triangle\triangle\triangle$: channel number

 \triangle : "N" or "F" (ON/OFF)

e x) TN/TF: trunking frequency/conventional frequency

DN/DF: delay on/off LN/LF: lockout on/off

AN/AF: attenuation on/off (not supported)

RN/RF: auto recode function on/off

◆◆ : "ctcss tone number

Example:

"C015 F03999875 TF DN LF AF N01 \downarrow "

The current channel number is "15", and its frequency is "399. 9875 MHz"

(programmed on CONVENTIONAL MODE).

Delay function is ON, Lockout is OFF, Attenuation is OFF, CTCSS is 67. 0HZ.

This command instructs the unit

- ① to send the frequency of the channel.
- ② to set the frequency of the channel as designated.

 (On the TRUNK MODE, this frequency must be the TRUNK ING frequency.)

This command is valid at any time and the operating mode

- ① doesn't change after transmitting.
- ② changes to the MANUAL MODE after setting the frequency on the CONVENTIONAL MODE. changes to the PROGRAM MODE after setting the frequency on the TRUNK MODE.
- ①No change on the display.
- ② For example, display changes like this.

Before transmitting:



Transmit "PM014 03999875\]".

After transmitting:



"C014 F03999875 TF DF LF AF RF N00↓" is returned.

COMMAND PR

Confirm/Set PRIORITY function ON/OFF.

Controller → Radio

- ① "PR↓" :confirm priority function on/off
- ② "PRN↓" : set priority function
 "PRF↓" : priority fuction OFF

Radio -> Controller

- ① "PRN \downarrow " (ON) / "PRF \downarrow " (OFF)
- ② "OK↓" / "NG↓"

This command instructs the unit to turn or confirm PRIORITY function ON/OFF.

This command is valid on the MANUAL/SCAN MODE.

For example, display changes like this.

Before transmitting:



Transmit "PRN↓".

After transmitting:



" $OK \downarrow$ " is returned.

$\operatorname{\mathsf{COMMAND}} QU$

ON/OFF function which informs when squelch condition changes.

Controller → Radio

- ① "QU\" : confirm "QU" command active
- ② "QUN↓" (ON) / "QUF↓" (OFF)

Radio - Controller

- ① "QUN \downarrow " (ON) / "QUF \downarrow " (OFF)
- ② "OK↓" / "NG↓"

While the function is ON, if the squelch condition becomes

- •close to open, unit sends " $+\downarrow$ " to the controller.
- •open to close, unit sends " \downarrow " to the controller.

This command instructs the unit to turn the function ON/OFF.

While the function is ON, the unit is monitoring the squelch condition and informs when it changes.

This command is valid at any time.

command R I

ON/OFF function which informs when priority receiving condition changes.

Controller → Radio

- ① "RI\" : confirm "RI" command active
- ② "RIN \downarrow " (ON) / "RIF \downarrow " (OFF)

Radio - Controller

- ① "RIN \downarrow " (ON) / "RIF \downarrow " (OFF)
- ② "OK↓" / "NG↓"

While the function is ON,

- if the unit stops on the priority channel by priority receiving, sends "PST↓" to the controller.
- if the unit returns from the priority channel, sends "PRT↓" to the controller.

This command instructs the unit to turn the function ON/OFF.

While the function is ON, the unit is monitoring the priority receiving condition and informs when it changes.

This command is valid at any time.

command RM

Confirm Receiver modulation.

Controller \rightarrow Radio

"RM↓"

Radio \rightarrow Controller

This command instructs the unit to confirm receiver modulation.

This command is valid at any time.

command SB

Confirm/Select scan banks.

Controller → Radio

- ① "SB↓" :confirm scan banks
- ② "SB $\triangle \bigcirc \cdots \downarrow$ " \triangle , \bigcirc , \bigcirc , \cdots : bank name

Example:

"SB ACEGI \downarrow " Select "BANK A, BANK C, BANK E, BANK G, BANK I" .

(BANK B, BANK D, BANK F, BANK H, BANK J are not selected)

Radio - Controller

(1), (2)

"SB $\triangle \diamondsuit \bigcirc \cdots \downarrow$ " \triangle , \diamondsuit , \bigcirc , \cdots : bank name

Example:

"SB ACEGI \downarrow " Selected scan banks are "BANK A, BANK C, BANK E, BANK G, BANK I" .

This command instructs the unit to make designated scan banks be selected.

This command is valid at any time.

For example, display changes like this.

Before transmitting:



Transmit "SB ACEGI↓".

After transmitting:



"SB ACEGI↓" is returned.

command SG

Read the signal strength.

Controller → Radio

"SG↓"

Radio - Controller

"S△△△ F◇◇◇◇◇◇ : signal strength ◇◇◇◇◇◇◇ : frequency

Signal strength ranges from a minimum signal of "000" to a maximum signal of "255".

The order of the frequency digits are from $1\mbox{GHz}$ digit to $100\mbox{Hz}$ digit.

Example:

"S155 F03999875 \downarrow " Receiving signal strength is "155", and its frequency is "399. 9875MHz".

This command instructs the unit to send the current signal strength and its frequency.

This command is valid at any time.

command SQ

Confirm squelch condition.

Controller → Radio

"SQ↓"

Radio - Controller

"+\": Now squelch is OPEN.

" $-\downarrow$ ": Now squelch is CLOSE.

This command instructs the unit to send whether the squelch is OPEN or CLOSE.

This command is valid at any time.

COMMAND SS

Read all frequencies in search skip memory.

Register a frequency into search skip memory.

Controller → Radio

- ① Read
 - "SS↓"
- ② Register

The order of the digits are from 1GHz digit to 100Hz digit.

Example:

"SS03999875↓" Register 399. 9875MHz into search skip memory.

Radio - Controller

(1) R e a d

To inform the end of the response, the unit sends "END \downarrow " at the end.

Example:

"SS01640000↓SS03999875↓···↓END↓"
Frequencies in search skip memory are

"164MHz", "399. 9875MHz", · · · .

② Register

Example:

"SS03999875↓" 399. 9875MHz is registered.

※ If the frequency is already in search skip memory, the unit sends "ON↓" to the controller.

This command instructs the unit

- Oto send all the frequencies in search skip memory.
- ②to register a frequency into search skip memory.

This command is valid at any time.

- ①No change on the display.
- ② For example, display changes like this.

Before transmitting:



Transmit "SS01380000↓".

After transmitting:



"SS01380000 \downarrow " is returned.

COMMAND ST

Confirm/Set frequency step.

Controller → Radio

- ① "ST↓" : confirm frequency step
- ② "ST△△△△△↓" △△△△△△∴: frequency step

The order of the digits are

from 1MHz digit to 1Hz digit.

%This order is different from

it in other commands.

"ST0000000↓" Set frequency step to "default" step.

Example: "ST0005000↓" Set frequency step to 5kHz.

Radio -> Controller

① ST△△△△△↓" △△△△△△: frequency step

ex) 0000000: default step

0005000:5KHz step

0012500:12. 5KHz step

0025000:25KHz step

② "OK↓" / "NG↓"

This command instructs the unit to set frequency step. This command is valid on the MANUAL/LIMIT SEARCH/LIMIT SEARCH HOLD/AUTO STORE/ROTARY MODE.

- ① No change on the display.
- ② For example, display changes like this.

Before transmitting:



Transmit "ST0012500↓".

After transmitting:



" $OK \downarrow$ " is returned.

COMMAND RF

Confirm/Tune the commanded frequency.

Controller → Radio

① "RF $\land\land\land\land\land\land\land$ (?) ↓" $\land\land\land\land\land\land\land$: tune frequency The order of the digits are from 1GHz digit to 100Hz digit.

Example:

"RF03999875\" tuned receiver to 399. 9875MHz if you wish to comfirm the tuned frequency for this command response, a "?" code add after the commanded frequency.

② "RF↓" :confirm tuned frequency

Radio - Controller

- ① "OK \downarrow " / "NG \downarrow " or "RF $\land \land \land \land \land \land \land \downarrow$ "
- ② "RF△△△△△△↓"

This command can be instantly tuned to a commanded frequency.

This command is valid on MANUAL/ROTARY MODE.

- ② No change on the display.
- ① For example, display changes like this.

Before transmitting:



Transmit "**RF03999875**↓".

After transmitting:

BANK A 12.5KHz AM 12.5KHz AM 12.5KHz AM 12.5KHz AM

" $OK \downarrow$ " is returned.

command VRConfirm the version of CPU. $Controller \rightarrow Radio$ "VR↓" Radio→Controller "VR△.△△↓" $\triangle.\triangle\!\triangle$: The version of CPU Example: "VR $\underline{1.10}$ The version of CPU is 1.10. This command is valid at any time. No change on the display.

COMMAND W I

Read the window voltage.

Controller → Radio

"WI↓"

Radio - Controller

"W△△△ F◇◇◇◇◇ : window voltage ◇◇◇◇◇◇ : frequency

Window voltage ranges from a minimum value of "000" to a maximum value of "255".

The order of the frequency digits are from $1\mbox{GHz}$ digit to $100\mbox{Hz}$ digit.

Example:

"W155 F03999875 \downarrow " Window voltage is "155", and its frequency is "399. 9875MHz".

This command instructs the unit to send the current window voltage and its frequency.

This command is valid at any time.

No change on the display.

COMMAND I C

Confirm/Set ID memory number.

```
Controller → Radio
```

- (Î) Confirm
 - "IC↓"
- ② S e t

"IC △◇↓" △: ID Scan List

♦: ID Location

"0" is used to indicate "ID Location 10".

Example:

"IC A0↓" Set ID memory number to

"ID Scan List A" and "ID Location 10".

Radio - Controller

- (1), (2)
- TYPE 1

"IC $\triangle \diamondsuit$ $\blacksquare AA - \spadesuit \spadesuit \downarrow$ " \triangle : ID Scan List

or "IC $\triangle \diamondsuit$ $\blacksquare \triangle \triangle \triangle - \diamondsuit \downarrow$ " \diamondsuit : ID Location

■ :Block No.

 \blacktriangle : Fleet No.

♦♦: Sub Fleet No.

Example:

"IC A0 001-05 \downarrow " ID in ID memory "A10" is

"BLOCK=0, FLEET=1, SUB FLEET=5".

•TYPE 2

"IC △♦ ★★★★★↓" ★★★★★: ID

Example:

"IC A0 001234 \downarrow " ID in ID memory "A10" is "1234".

This command indicates the unit

- ① to send current ID memory number and its ID.
- ② to set ID memory number as designated.

This command is

- ① valid on the ID MANUAL MODE and ID SCAN MODE when scan is stopping.
- ② valid on the IDMANUAL/IDSCAN/IDSEARCH/IDSEARCH HOLD/IDLOCKOUTREVIEWMODE.

- ①No change on the display.
- ② For example, display changes like this.

Before transmitting:



Transmit "IC AO↓".

After transmitting:



"IC A0 001236\" is returned.

COMMAND I D

ON/OFF function which informs when ID reception starts or ends.

Controller → Radio

- ① "ID↓" :confirm "ID" command active
- ② "IDN \downarrow " (ON) / "IDF \downarrow " (OFF)

Radio - Controller

- ① "IDN \downarrow " (ON) / "IDF \downarrow " (OFF)
- ② "OK↓" / "NG↓"

While the function is ON, when the ID reception starts or ends, the unit sends back as follows:

- (1) ID reception starts
 - TYPE 1

"ID S $\blacksquare AA - \diamondsuit \diamondsuit \downarrow$ " \blacksquare : Block No.

or "ID S $\blacksquare \triangle \triangle - \spadesuit \downarrow$ " $\triangle \triangle$: Fleet No. $\bullet \spadesuit$: Sub Fleet No.

Example:

"ID S 001-03 \downarrow " ID reception starts on "Block=0, FLEET=1, SUB FLEET=3".

• TYPE 2

Example:

"ID S $001234\downarrow$ " ID reception starts on "ID=1234".

- (2) ID reception ends
 - •TYPE 1

"ID E $\blacksquare \triangle \triangle - \diamondsuit \diamondsuit \downarrow$ " \blacksquare : Block No.

or "ID E $\blacktriangle \triangle \triangle - \diamondsuit \downarrow$ " $\blacktriangle \triangle$: Fleet No. $\diamondsuit \diamondsuit$: Sub Fleet No.

• TYPE 2

This command instructs the unit to turn the function ON/OFF.

While the function is ON, the unit is monitoring thest atus of the ID reception and informs when it starts or ends.

This command is valid at any time.

No change on the display.

```
COMMAND I L
 Readall IDs in L/O ID memory.
 Register an ID into L/O ID memory.
 Delete an ID from L/O ID memory.
Controller → Radio
(1) R e a d
   "IL↓"
② Register
 •TYPE 1
  "ILR ■▲▲-◆◆↓"
                              ■ :Block No.
or "ILR \blacksquare \triangle \triangle \triangle - \spadesuit \downarrow" \triangle \triangle: Fleet No. \Diamond \spadesuit: Sub Fleet No.
 •TYPE 2
   "ILR △△△△△↓"      △△△△△∴: ID
③ Delete
 • TYPE 1
  "ILD \blacksquare \blacktriangle \blacktriangle - \spadesuit \diamondsuit \downarrow" \blacksquare : Block No.
or "ILD ■▲▲▲—◆↓"
                               \triangle A: Fleet No. \Diamond \Phi: Sub Fleet No.
• TYPE 2
   "ILD \triangle \triangle \triangle \triangle \triangle \triangle " \triangle \triangle \triangle \triangle \triangle \triangle \triangle : ID
Radio - Controller
① R e a d
 (1) TYPE 1
   "I L\Box$\left\rightarrow$\right\right\ I L\BAAA-\lightarrow\right\ \cdot\ \cdot\ END \right\"
                     \Box, \blacksquare, · · · · · : Block No.
                     \triangle \triangle, \blacktriangle \blacktriangle, \cdot \cdot \cdot : Fleet No.
                     ⟨⟨ , ♦ ♦ , · · · : Sub Fleet No.
        To inform the end of the response, the unit
       sends "END\downarrow" at the end.
Example:
   "IL001-05\downarrowIL1123-3\downarrow···\downarrowEND\downarrow"
        Locked out IDs in L/O ID memory are
       "001-05", "1123-3", ...
```

(2) TYPE 2

ΙD

Example:

"IL001234↓IL005678↓ · · · ↓END↓"

Locked out IDs in L/O ID memory are "1234", "5678", ···.

② Register

If the ID is registered into L/O ID memory, the unit sends " $OK\downarrow$ " to the controller.

If the ID is already in L/O ID memory, sends " $ON\downarrow$ ".

If L/O ID memory is full, sends "FULL↓".

③ Delete

If the ID is deleted from L/O ID memory, the unit sends " $OK \downarrow$ " to the controller.

If the ID isn't in L/O ID memory, sends "OFF↓".

This command instructs the unit

- ① to send all the IDs in L/O ID memory.
- ② to register an ID into L/O ID memory.
- ③ to delete an ID from L∕O ID memory.

This command is valid on all of the TRUNK MODE (1), (2), (3).

- ① No change on the display.
- ② For example, display changes like this.

Before transmitting:



Transmit "ILR $005688\downarrow$ ".

After transmitting:



" $OK \downarrow$ " is returned.

③ Display changes oppositely against ②.

command IS

Confirm/Select ID scan lists.

Controller → Radio

- ① "IS↓ :confirm ID scan list name

Example:

"IS ACE↓" Select "LISTA, LISTC, LISTE".

(LIST B, LIST D are not selected)

Radio - Controller

①, ②

"IS $\triangle \diamondsuit \cdots \downarrow$ " \triangle , \diamondsuit , \bigcirc , \cdots : ID scan list name

Example:

"IS ACE\" Selected ID scan lists are

"LISTA", "LISTC", "LISTE".

This command instructs the unit to make designated ID scan lists be selected.

This command is valid on all of the TRUNK MODE.

- ① No change on the display.
- ② For example, display changes like this.

Before transmitting:

TRUNK SCAN SCAN RMT

Transmit "IS ACE↓".

After transmitting:

TRUNK SCAN E

AN SC RMT

"IS ACE↓" is returned.

COMMAND KEY

Work as if a key were pushed.

Controller → Radio

"KEYOO↓" ○ : KEY COMMAND NUMBER

(Listed in Table 3)

*When use [0] - [9] or [A] - [J] key, use in the form of below.

"KEY02 $\bigcirc\downarrow$ " $\bigcirc: 0-9$

"KEY21 ○\" ○: A-J

*To indicate "Hold Press" of each key, add "H" to each command.

Example:

"KEY02 6H↓" According to Table 3, "KEY02" corresponds to "[0] - [9]" key, and designated number is "6", and "H" is added at the last.

So this command is used instead of hold press of "[6]" key.

Radio - Controller

"OK↓" / "NG↓"

*When use [ALERT/REMOTE] key ("KEY17"), no response from the unit because this key makes the unit be out of REMOTE MODE.

These commands instruct the unit to behave as if a key on the scanner's front panel were pushed.

These commands are valid at any time.

For example, display changes like this.

Before transmitting:



Transmit "KEY00↓".

After transmitting:



Start scanning.

" $OK \downarrow$ " is returned.

Table1:Initial Setting (on REMOTE MODE)

No.	ITEM	Initial Setting	Remark
1	CH Memory	000.000MHz	All 300 channels
2	Channel Lockout	Locked out	All 300 channels
3	Delay for Channel	Off	All 300 channels
4	Delay for WX	Off	
5	Delay for Search	Off	Limit Search
6	PRIORITY	Off	
7	Priority Channels	The first channel in	1, 31, 61, 91, 121, 151,
		each Bank	181, 211, 241, 271CH
8	DATA Skip	0n	Scan, Limit Search,
			Auto store
9	Search Limit	Lower:000	0.000MHz
		Upper:000.000MHz	
10	Start Mode	From CH Scanning on	CH 1
		Conventional Mode	
11	Search Skip Memory	000.0000MHz	All Clear(20CH)
12	Selected Scan Bank	Bank A-J	
13	CTCSS	Off	
14	CTCSS Tone Frequency	000. 0Hz	All 300 channels
15	CTCSS DETECTION	Off	
16	ROTARY TUNER	CH Mode	
17	FREQ LED	0ff	
18	CHAN LED	0n	
19	LOCK LED	0ff	
20	Back Light	Bright	
21	RS232C BIT RATE	* No change	
22	REMOTE Function	* 0n	

*: different from it on LOCAL MODE

Table2:CTCSS Tone Frequency Number

Number	Frequency	Number	Frequency
00	000.0Hz	20	131.8Hz
01	67. 0Hz	21	136. 5Hz
02	71.9Hz	22	141. 3Hz
03	74.4Hz	23	146. 2Hz
04	77. 0Hz	24	151. 4Hz
05	79. 7Hz	25	156. 7Hz
06	82.5Hz	26	162. 2Hz
07	85.4Hz	27	167. 9Hz
08	88.5Hz	28	173.8Hz
09	91.5Hz	29	179.9Hz
10	94.8Hz	30	186. 2Hz
11	97.4Hz	31	192.8Hz
12	100.0Hz	32	203. 5Hz
13	103.5Hz	33	210.7Hz
14	107.2Hz	34	218. 1Hz
15	110.9Hz	35	225.7Hz
16	114.8Hz	36	233. 6Hz
17	118.8Hz	37	241.8Hz
18	123. OHz	38	250. 3Hz
19	127.3Hz		

Table3:KEY COMMAND NUMBER

COMMAND	KEY CORRESPONDS TO THE COMMAND
KEY00	[SCAN]
KEY01	[MANUAL]
KEY02	[0]-[9]
KEY03	[.]
KEY04	[E] (ENTER)
KEY05	[PRI]
KEY06	[L/0]
KEY07	[HOLD△]
KEY08	[LIMIT▽]
KEY09	[SRC]
KEY10	[WX]
KEY11	[DATA]
KEY12	[DELAY]
KEY13	[TRUNK]
KEY14	[DIM]
KEY15	[STEP]
KEY16	[AUX]
KEY17	[ALERT/REMOTE]
KEY18	[SEND]
KEY19	[AUTO]
KEY20	[CTCSS]
KEY21	[A]-[J]
KEY22	[FREQ/CHAN]
KEY23	[LOCK]

Table 4: Scanner Mode

10010 1	Scalifier Mode
Number	Scanner mode name
00	Channel memory SCAN mode
01	MANUAL mode
02	LIMIT search mode
03	LIMIT search HOLD mode
04	Weather(WX) scan mode
05	Weather(WX) scan HOLD mode
06	PROGRAM trunking frequency mode
07	ID SEARCH mode
08	ID SEARCH HOLD mode
09	ID SCAN mode
10	ID MANUAL mode
11	ID LOCKOUT REVIEW mode
12	SEARCH CONTROL CHANNEL mode
13	PROGRAM CTCSS mode
14	Weather(WX) ALERT mode
15	Frequency SEND mode
16	AUTO STORE mode
17	ROTARY tuned frequency mode

変更履歴

1997.12.12 (VER1.06)

修正内容	修正理由
COMMAND CS で、CTCSS 周波数の設定が ROTARY MODE で	NSC による仕様
も有効になったので追記する。	変更

1998.3.24 (VER1.07)

修正内容	修正理由
COMMAND VR (CPU の VERSION 確認)を追加。	NSC により追加

1998.4.6 (VER1.08)

修正内容	修正理由
COMMAND CD の説明を修正。	表現があいまいで
	わかりづらいため
PREFACE を追加。	動作仕様書が3冊
	ある事を明確にす
	るため