YRARC EMERGENCY COMMUNICATIONS

SKILLS DEVELOPMENT

REPEATER & CHANNEL PROGRAMMING

Quick reference guide | Version 1.1

Rob Schuetze VE3XBI

October 2026

How to use these cheat sheets

YRARC | SKILLS DEVELOPMENT | v1.1

Find your radio by model. Start with the shared YRARC repeater table, then follow your radio-specific page. These instructions prioritize three tasks: program a repeater, store and recall it, and use cross-band repeat where supported.

BUTTON AND CONTROL CONVENTIONS

[KEY] = press and release. [KEY] (hold 1 second) = hold for the stated duration.
[F] > [T.SEL] means press the keys in sequence. Turn DIAL = rotate; press DIAL = push inward.
Manufacturer terminology varies. Never assume a long press equals a short press.

Standard analog repeater recipe

1. Set RECEIVE frequency to the repeater output, e.g. 145.350 MHz.
2. Set TRANSMIT shift direction and amount (-0.600 MHz for VE3YRA).
3. Enable CTCSS encode / TONE, select 103.5 Hz. Tone squelch/decode is not required unless directed.
4. Store the entire configuration into a memory; recall and verify the transmit frequency.
5. Make a short test call using your amateur callsign; do not use long kerchunk tests.

Cross-band repeat safety

Only use with a compatible dual-band radio, suitable antennas and permission for the operating arrangement.
Avoid feedback loops, linked repeaters and accidental unattended rebroadcast. Configure legal identification and a way to disable it immediately.

YRARC repeater frequencies

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Radio receive frequency / output of repeater (MHz)

Call	RX MHz	Shift MHz	PL Hz	Mode	Note
VE3YRA	145.350	-0.600	103.5	Analog FM	Emergency power
VE3YRA	444.5125	+5.000	N/A	DMR	No internet
VE3YRC	444.225	+5.000	103.5	Analog FM	Linked analog
VE3YRC	147.225	+0.600	103.5	Fusion / FM	Analog / 103.5
VE3YRC	53.490	-1.000	None	Analog FM	OUT OF SERVICE
VE3YRK	147.180	+0.600	N/A	D-STAR	No internet

EMERGENCY OPERATING PRACTICE

Monitor VE3YRA on 145.350 MHz. If the repeater is unavailable, use 145.350 MHz SIMPLEX (no shift). During a communications outage, announce your callsign, location, situation and assistance needed at the top and bottom of each hour, while continuing to monitor. Do not delay real emergency traffic.

Source: https://yrarc.org/repeaters/ (club list checked October 2026)

RAC emergency frequencies — HF

Radio Amateurs of Canada lists suggested national HF emergency frequencies for SSB, CW and digital. These are not VHF/UHF repeater frequencies and are not exclusive channels. Included for EmComm reference.

Band	SSB MHz	CW MHz	Digital MHz
80m	3.675 LSB	3.535	3.596
40m	7.135 LSB	7.035	7.096
20m	14.135 USB	14.035	14.096
17m	18.135 USB	18.075	18.096
15m	21.235 USB	21.035	21.096
10m	28.235 USB	28.035	28.096

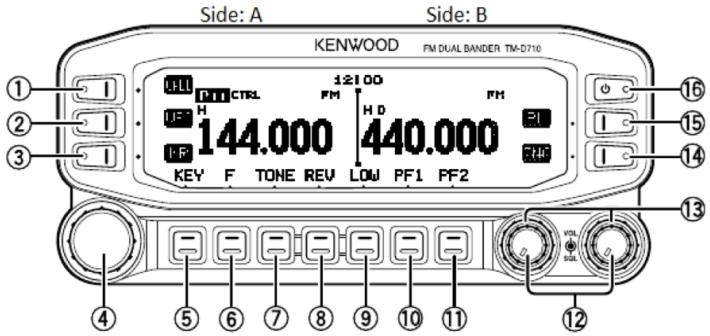
RAC guidance

Frequencies are suggested centre points; move as needed to avoid interference, and yield immediately to actual emergency traffic.
Source: https://www.rac.ca/national-hf-emergency-communications-frequencies/

KENWOOD TM-D710GA

YRARC SKILLS DEVELOPMENT | REPEATER & CHANNEL PROGRAMMING | QUICK REFERENCE

EXAMPLE — VE3YRA RX: **145.350 MHz** | TX: **144.750 MHz** | Shift: –**0.600 MHz** | TX tone: **103.5 Hz**



1 CALL	**2** VFO	**3** MR	**4** Tuning control
5 KEY	**6** F	**7** TONE	**8** REV
9 LOW	**10** PF1	**11** PF2	**12** BAND SEL / VOL
13 SQL control	**14** TNC	**15** PM	**16** Power

1 PROGRAM A REPEATER

1. Select the side to program with **[BAND SEL]**. Use **[VFO]** to enter VFO mode and rotate the **Tuning control** to **145.350 MHz**.
2. Press **[F]**, then the displayed soft key **[SHIFT]** until the minus offset indicator appears. Confirm **Menu 400** is **0.600 MHz**.
3. Press **[TONE]** briefly until the **T** tone indicator appears.
4. Press **[F]**, then the displayed soft key **[T.SEL]**. Rotate the **Tuning control** to **103.5 Hz**, then press the **Tuning control** to accept.
5. Listen first, identify with your callsign, and make a brief authorized repeater test. If it fails, re-check frequency, shift and tone.

2 SAVE TO MEMORY

1. While the programmed repeater is still in VFO, press **[F]**. A memory channel number appears.
2. Rotate the **Tuning control** to an approved, unused memory channel.
3. Press the displayed soft key **[M.IN] briefly** to store the channel.
4. Press **[MR]**, then rotate the **Tuning control** to recall the saved memory and verify the settings.

3 CROSS-BAND REPEAT

1. Program one authorized VHF frequency and one authorized UHF frequency on different sides of the radio.
2. Press the **Tuning control** to enter Menu mode. Set **Menu 403 (REPEATER MODE)** to **CROSS BAND**. Configure repeater ID in **Menu 405** and **Menu 406** as needed.
3. Turn the radio **OFF**. Then **hold [TONE]** while powering **ON**. Confirm the repeater mode indication appears.
4. To exit: turn the radio **OFF**, then **hold [TONE]** while powering **ON** again to return to normal operation.

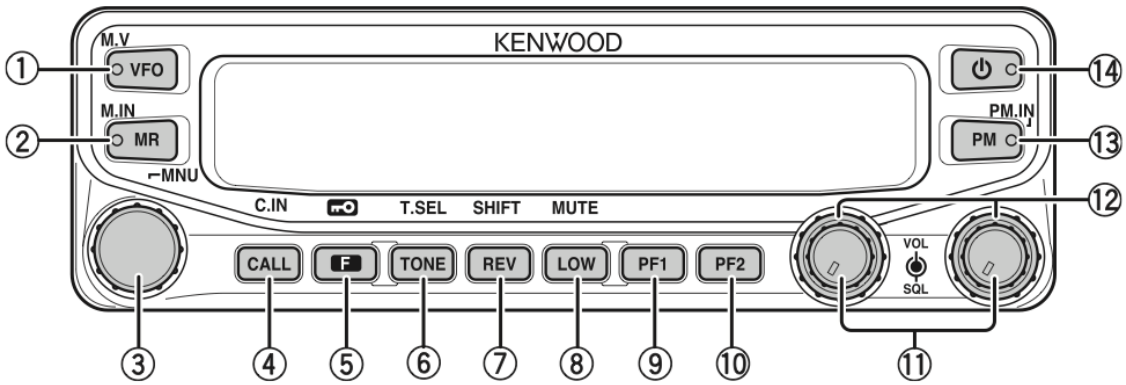
OPERATOR HELP “Hold” means press and keep the named control down while switching on; ordinary button instructions mean press and release. Cross-band repeating can retransmit third-party signals. Use it only with a coordinated plan, compliant identification, suitable frequencies and permission where required. Avoid unattended operation.

Source: Kenwood TM-D710GA/GE Instruction Manual. Control legend and procedures verified against the operation panel and repeater / memory / cross-band sections.

KENWOOD TM-V71A

YRARC SKILLS DEVELOPMENT | REPEATER & CHANNEL PROGRAMMING | QUICK REFERENCE

EXAMPLE — VE3YRA **RX: 145.350 MHz | TX: 144.750 MHz | Shift: –0.600 MHz | TX tone: 103.5 Hz**



1 VFO	2 MR	3 Tuning	4 CALL
5 F	6 TONE	7 REV	8 LOW
9 PF1	10 PF2	11 BAND SEL/VOL	12 SQL
13 PM	14 Power		

1 PROGRAM A REPEATER

1. Use **[BAND SEL]** to select the desired VHF side. Press **[VFO]**; rotate the **Tuning control** to **145.350 MHz**.
2. Press **[F]**, **[REV]** until the – offset appears. Check the offset is **0.600 MHz**.
3. Press **[TONE]** until **T** is displayed (not CT). Press **[F]**, **[TONE]** to select tone, rotate **Tuning control** to **103.5 Hz**, and confirm.
4. Listen before transmitting. Make a brief test with your assigned callsign.

2 SAVE AND RECALL MEMORY

1. With the programmed repeater in VFO, press **[F]**. Rotate the **Tuning control** to an unused memory channel.
2. Press **[MR]** briefly to store. Existing contents of that channel will be overwritten.
3. Press **[MR]** to enter memory mode; rotate the **Tuning control** to recall and verify the saved settings.

3 CROSS-BAND REPEAT — ENABLE / EXIT

1. Set appropriate VHF and UHF frequencies on opposite bands. Remain in dual-band mode.
2. Press **[F]**, then press **Tuning control** to enter Menu; select **Menu 403** (RPT.MOD) and choose **CROSS**. Configure identification with Menus 405/406.
3. Turn radio **OFF**; hold **[TONE]** while turning power **ON**. To exit, turn OFF and repeat **[TONE] + Power ON**.

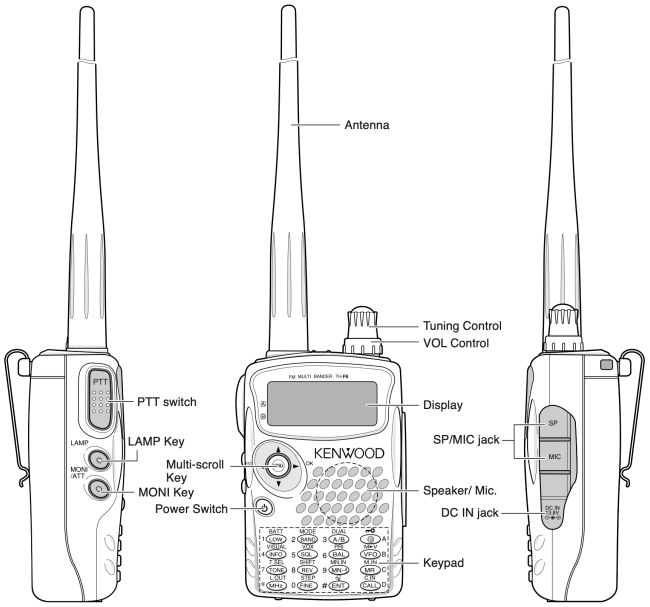
OPERATOR HELP Press and release a button unless the instruction explicitly says **hold**. Verify frequency, shift and transmit tone before transmitting.

Author: Rob Schuetze VE3XBI

KENWOOD TH-F6A

YRARC SKILLS DEVELOPMENT | REPEATER & CHANNEL PROGRAMMING | QUICK REFERENCE

EXAMPLE — VE3YRA RX: 145.350 MHz | TX: 144.750 MHz | Shift: -0.600 MHz | TX tone: 103.5 Hz



1 Tuning / VOL	2 Multi-scroll / OK	3 Keypad	4 F function
5 A/B band	6 Power	7 PTT (side)	

1 PROGRAM THE VE3YRA REPEATER

1. Press **[A/B]** for Band A, then **[VFO]**. Press **[ENT]** and enter **145.350 MHz**.
2. Press **[F]**, **[REV]** for a minus shift; confirm **0.600 MHz** offset (Menu 6 if needed).
3. Press **[TONE]** until the TX tone indicator T appears (not CT receive squelch).
4. Press **[F]**, **[TONE]**; turn Tuning to **103.5 Hz**; press **[OK]**.

2 SAVE AND RECALL MEMORY

1. In VFO, press **[F]**; a memory number blinks.
2. Turn Tuning to an unused channel; press **[MR]** or **[OK]** to save.
3. Press **[MR]**, select the saved channel and verify the settings.

3 CROSS-BAND REPEAT

Not supported as a conventional automatic FM cross-band repeater.

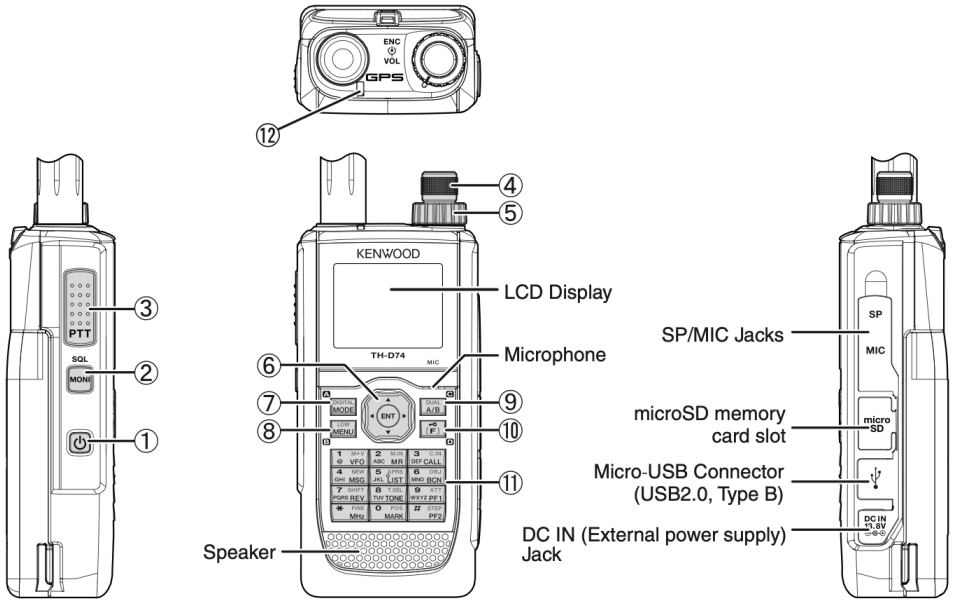
OPERATOR HELP Check received frequency, transmit offset, and TX tone before transmitting.

Source: Kenwood TH-F6A manufacturer control illustration; previously approved programming text.

KENWOOD TH-D74

YRARC SKILLS DEVELOPMENT | REPEATER & CHANNEL PROGRAMMING | QUICK REFERENCE

EXAMPLE — VE3YRA **RX: 145.350 MHz | TX: 144.750 MHz | Shift: -0.600 MHz | TX tone: 103.5 Hz**



1 Power	2 MONI	3 PTT	4 Tuning knob
5 Volume knob	6 Navigation / ENT	7 Digital mode	8 Low / Menu
9 A/B band	10 F	11 Keypad	12 GPS

1 PROGRAM THE VE3YRA REPEATER

1. Press **[A/B]** to select the VHF side, then press **[VFO]** for VFO mode. Use the tuning knob or keypad to enter **145.350 MHz** and confirm **FM** mode.
2. Press **[MENU]** and open the repeater/tone settings. Set the repeater shift direction to **minus (–)** and set the repeater offset to **0.600 MHz**.
3. Set **Tone Type** to **Tone** (transmit encode only, not TSQL) and set **Tone Frequency** to **103.5 Hz**.
4. Return to the VFO screen. Verify **RX 145.350 MHz** and expected **TX 144.750 MHz** before making a brief test transmission.

2 SAVE TO MEMORY

1. With the programmed VFO still displayed, press **[F]** or use the memory-write menu.
2. Select an unused memory channel and store the current settings.
3. Press **[MR]**, recall the saved channel, and confirm **FM**, **minus shift**, and **103.5 Hz** tone.

3 CROSS-BAND REPEAT

Not supported as a conventional automatic FM cross-band repeater.

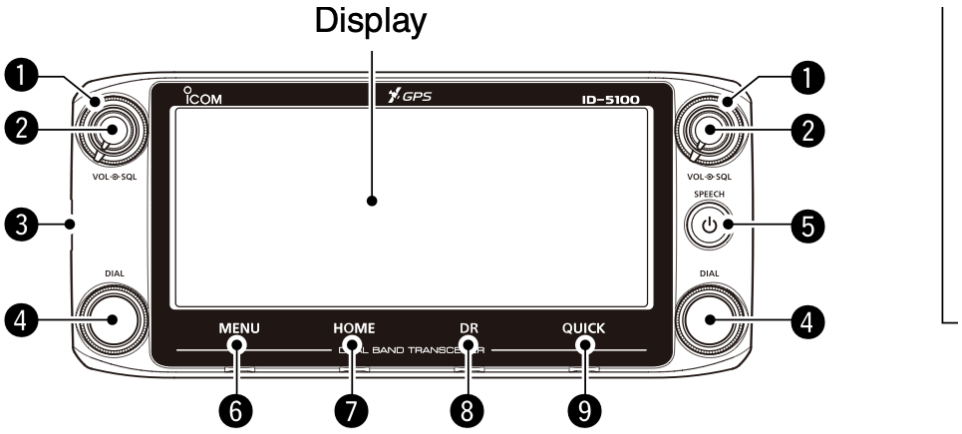
OPERATOR HELP Use the analog FM/tone settings for VE3YRA. Keep D-STAR or APRS features separate from this basic repeater memory.

Source: Kenwood TH-D74 manufacturer illustration and panel labelling; programming workflow condensed for the YRARC VE3YRA analog repeater.

ICOM ID-5100A

YRARC SKILLS DEVELOPMENT | REPEATER & CHANNEL PROGRAMMING | QUICK REFERENCE

EXAMPLE — VE3YRA **RX: 145.350 MHz | TX: 144.750 MHz | Shift: -0.600 MHz | TX tone: 103.5 Hz**



1 SQL knob	2 VOL knob	3 Control connection	4 Tuning dial
5 Power / Speech	6 MENU touch	7 HOME touch	8 DR touch
9 QUICK touch			

1 PROGRAM THE VE3YRA REPEATER

1. Touch the active main band, select **FM**, and use the **DIAL** or direct frequency entry to set **145.350 MHz**.
2. Touch **MENU**, open the **Duplex / Tone** settings, and set **DUP** to **minus (–)** with a repeater offset of **0.600 MHz**.
3. Turn **TONE** on for transmit encode and set the tone frequency to **103.5 Hz**. Verify the transmit frequency becomes **144.750 MHz**.
4. Return to the main operating screen and listen first before making a test call.

2 SAVE TO MEMORY

1. Touch **MENU** and open the **Memory Write** function.
2. Select an unused memory channel and store the programmed repeater settings.
3. Recall the new memory, then verify frequency, duplex direction, offset and tone.

3 CROSS-BAND REPEAT

Some ID-5100A regional versions include cross-band capability. Do not enable it without the full manual and an approved operating plan.

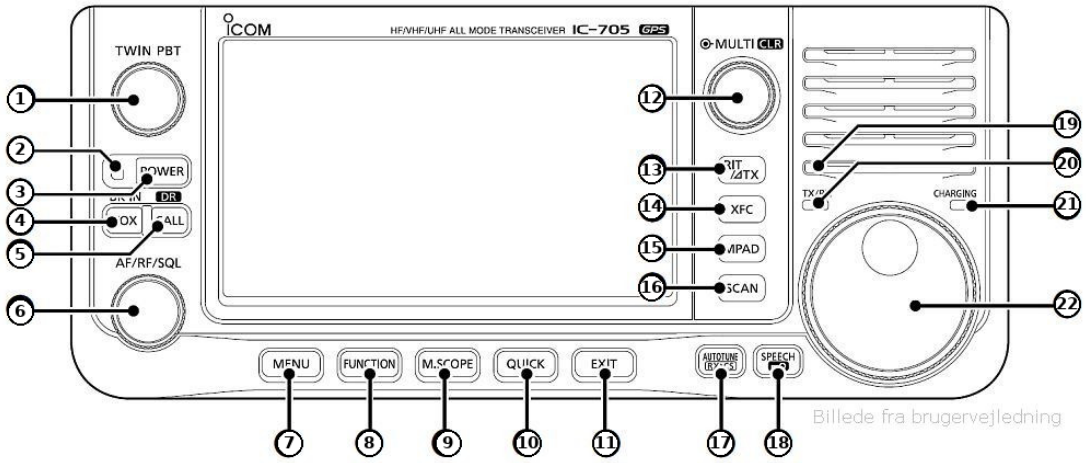
OPERATOR HELP For VE3YRA, use standard analog FM repeater settings. Do not leave the radio in DR or digital memory mode when building the analog channel.

Source: Icom ID-5100A manufacturer control illustration; procedure condensed from main-screen, duplex/tone, and memory-write functions.

ICOM IC-705

YRARC SKILLS DEVELOPMENT | REPEATER & CHANNEL PROGRAMMING | QUICK REFERENCE

EXAMPLE — VE3YRA RX: 145.350 MHz | TX: 144.750 MHz | Shift: –0.600 MHz | TX tone: 103.5 Hz



Billede fra brugervejledning

1 TWIN PBT	**2** DR	**3** POWER	**4** VOX
5 CALL	**6** AF/RF/SQL	**7** MENU	**8** FUNCTION
9 M.SCOPE	**10** QUICK	**11** EXIT	**12** MULTI/CLR
13 RIT/ΔTX	**14** XFC	**15** MPAD	**16** SCAN
17 AUTOTUNE	**18** SPEECH	**19** Speaker	**20** TX/RX
21 CHARGING	**22** Main dial		

1 PROGRAM A REPEATER

1. In VFO, touch the displayed frequency, enter **145.350 MHz** and confirm **[ENT]**. Select **FM** (not DV).
2. Push **[FUNCTION] (8)**. On FUNCTION screen 2, tap **[DUP]** until **DUP**– shows. Hold **[DUP]** 1 second; set **0.600 MHz**.
3. On FUNCTION screen, tap **[TONE]** until **TONE** (transmit encoder), not **TSQL**. Hold **[TONE]** 1 second and set **103.5 Hz**.
4. Verify RX **145.350 MHz**, TX **144.750 MHz**, offset –**0.600 MHz** and TX tone **103.5 Hz**. Listen before testing.

2 SAVE TO MEMORY

1. With VE3YRA programmed in VFO, touch the **VFO/MEMORY** control, then **[MW]**.
2. Touch **Write to a New Channel**, select an unused channel (or group if required) and confirm **[YES]**.
3. Touch **VFO/MEMORY** > **[MEMO]**; select the saved channel with **[MULTI]** and verify settings.

3 CROSS-BAND REPEAT

Not supported. The IC-705 does not provide automatic VHF-to-UHF cross-band repeating.

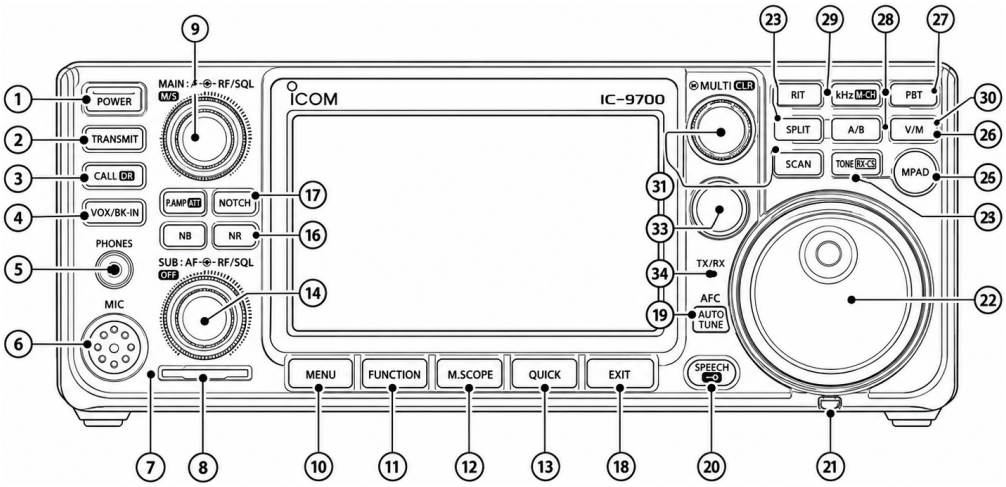
OPERATOR HELP Touch means a brief tap; “hold 1 second” means keep the indicated screen item pressed. Choose transmit **TONE**, not receive **TSQL**. Keep a record of the saved memory channel.

Sources: Icom IC-705 Basic Manual (Panel Description / FUNCTION); Advanced Manual §7 (Memory Operation). Radio illustration: approved IC-705 numbered front-panel drawing.

ICOM IC-9700

YRARC SKILLS DEVELOPMENT | REPEATER & CHANNEL PROGRAMMING | QUICK REFERENCE

EXAMPLE — VE3YRA **RX: 145.350 MHz | TX: 144.750 MHz | Shift: -0.600 MHz | TX tone: 103.5 Hz**



1 POWER	9 MAIN/SUB volume	10 MENU	11 FUNCTION
13 QUICK	18 EXIT	22 Main tuning dial	23 TONE
25 V/M	28 kHz/M-CH	31 MULTI	33 XFC

1 PROGRAM THE VE3YRA REPEATER

1. Press **[V/M]** to place the main band in **VFO** mode. Use the **Main tuning dial** to tune **145.350 MHz** and confirm **FM** mode.
2. Press **[FUNCTION]** and open the repeater settings. Set duplex to **minus (–)** and confirm the offset is **0.600 MHz**.
3. Press **[TONE]** to enable the transmit tone, then set the tone frequency to **103.5 Hz**.
4. Verify **RX 145.350 MHz** and expected **TX 144.750 MHz** before saving the channel.

2 SAVE TO MEMORY

1. Press **[QUICK]** and choose **Memory Write**.
2. Select an unused memory channel and confirm the write.
3. Press **[V/M]**, select the saved memory with the **Main tuning dial** or **[MULTI]**, and verify the stored settings.

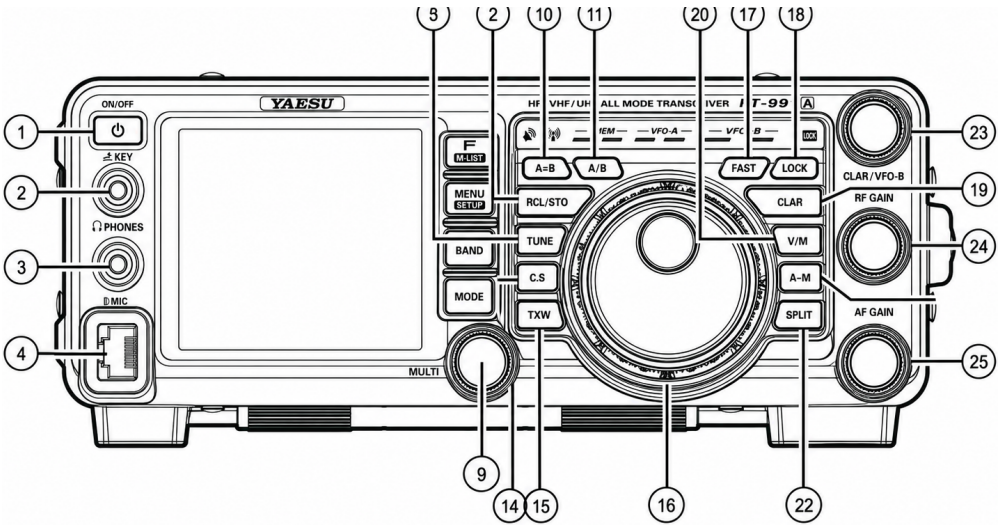
3 CROSS-BAND REPEAT

Not supported as a conventional automatic FM cross-band repeater.

OPERATOR HELP Use the analog FM repeater functions only for VE3YRA. Confirm the tone is TX encode at 103.5 Hz before transmitting.

Source: Icom IC-9700 basic manual, front-panel illustration and memory operation sections.

EXAMPLE — VE3YRA RX: 145.350 MHz | TX: 144.750 MHz | Shift: –0.600 MHz | TX tone: 103.5 Hz



1 POWER	5 F(M-LIST)	6 MENU(SETUP)	7 BAND
8 MODE	9 MULTI knob	16 Main tuning	20 V/M
21 A>M memory	22 SPLIT	23 CLAR/VFO-B	24 RF GAIN

1 PROGRAM THE VE3YRA REPEATER

1. Press **BAND** for 144 MHz, then **MODE** for FM. Tune VFO-A to **145.350 MHz**.
2. Press **F(M-LIST)**; touch **RPT** until minus (–). Set **0.600 MHz** offset.
3. Touch **TONE/DCS** until ENC is shown; set **103.5 Hz** with **MULTI**.
4. Confirm TX **144.750 MHz** before transmitting.

2 SAVE AND RECALL MEMORY

1. Briefly press **A>M** for memory check (MCK).
2. Rotate **MULTI** to an unused channel; **hold A>M for 1 second** to store.
3. Press **V/M** to recall; use **MCH** and **MULTI** to select the channel.

3 CROSS-BAND REPEAT

Not supported as a conventional automatic FM cross-band repeater.

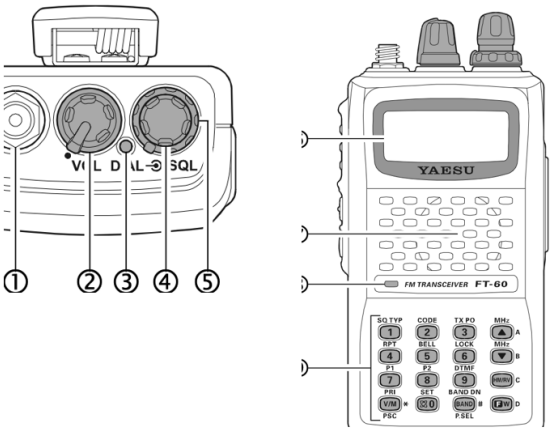
OPERATOR HELP Brief press means press and release. Confirm the programmed receive frequency, transmit offset and TX tone before transmitting.

Source: Yaesu FT-991A Operating Manual, front-panel, repeater and memory sections.

YAESU FT-60R

YRARC SKILLS DEVELOPMENT | REPEATER & CHANNEL PROGRAMMING | QUICK REFERENCE

EXAMPLE — VE3YRA RX: 145.350 MHz | TX: 144.750 MHz | Shift: –0.600 MHz | TX tone: 103.5 Hz



1 Antenna	2 VOL/PWR	3 TX/BUSY	4 DIAL
5 SQL	6 LCD	7 Speaker	8 Microphone
9 Keypad			

1 PROGRAM THE VE3YRA REPEATER

1. Select the **144 MHz analog FM** operating band and enter **145.350 MHz**.
2. Select a –**0.600 MHz** repeater shift (transmit **144.750 MHz**).
3. Enable TX **CTCSS 103.5 Hz**; do not enable receive tone squelch.
4. Verify the repeater settings before making an authorized test.

2 SAVE AND RECALL MEMORY

1. Use the radio’s memory-write function and select an unused channel.
2. Save the VE3YRA frequency, offset and transmit tone.
3. Recall the saved memory channel and verify the settings.

3 CROSS-BAND REPEAT

Do not enable cross-band repeating unless the model supports it and a verified procedure is available.

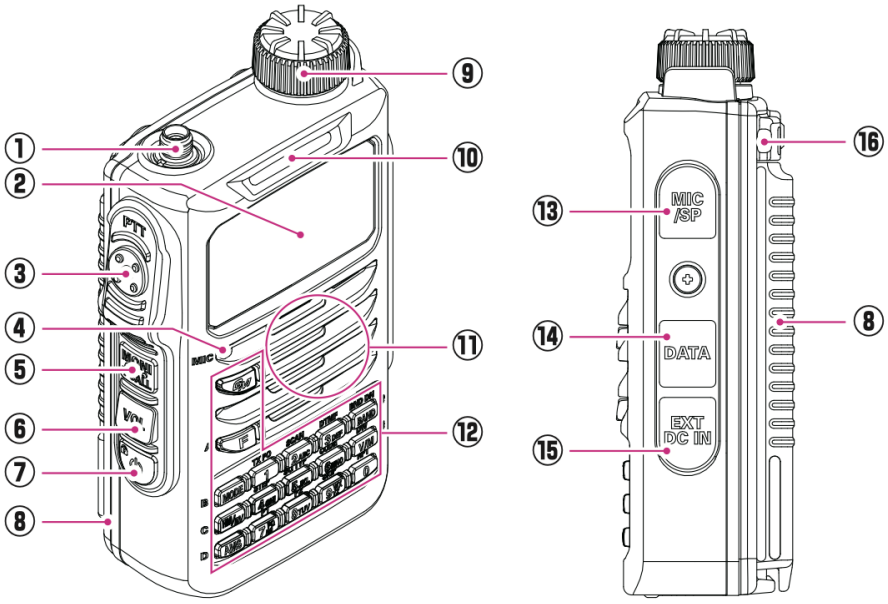
OPERATOR HELP Brief press means press and release. Confirm the programmed receive frequency, transmit offset and TX tone before transmitting.

Source: Manufacturer front-panel illustration supplied by user. Radio-specific button sequence awaits manual verification.

YAESU FT-70DR / FT5DR

YRARC SKILLS DEVELOPMENT | REPEATER & CHANNEL PROGRAMMING | QUICK REFERENCE

EXAMPLE — VE3YRA **RX: 145.350 MHz | TX: 144.750 MHz | Shift: -0.600 MHz | TX tone: 103.5 Hz**



KEY CONTROLS

1 Antenna jack	2 LCD display	3 PTT switch
4 Microphone	5 MONI / T.CALL	6 VOL switch
7 Power / Lock	8 Battery pack	9 DIAL knob
10 MODE / Status indicator	11 Speaker	12 Keypad
13 MIC / SP jack	14 DATA terminal	15 EXT DC IN jack

1 PROGRAM THE VE3YRA REPEATER

1. Turn the radio on and use the normal **VFO** screen on the **144 MHz** band. Rotate the **DIAL** knob to tune **145.350 MHz**.
2. Set repeater operation for **minus shift** with a **0.600 MHz** offset so the transmit side becomes **144.750 MHz**.
3. Set the analog FM tone mode to **TONE** / **TX encode** and set the tone frequency to **103.5 Hz**.
4. Verify the frequency, offset and tone before transmitting.

2 SAVE AND RECALL MEMORY

1. Store the configured VFO settings into an unused memory channel.
2. Recall the memory and confirm **FM**, **145.350 MHz**, –**0.600 MHz** shift and **103.5 Hz** tone encode.

3 NOTE FOR FT5DR USERS

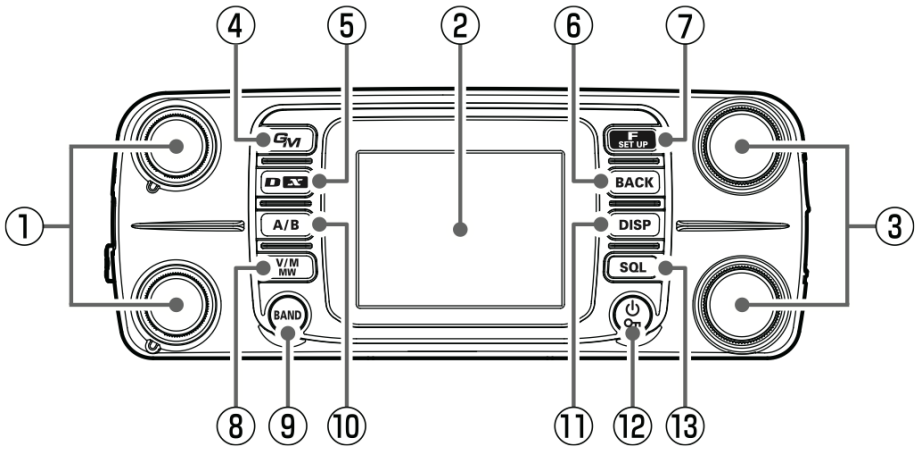
The FT5DR uses a different front panel and menu layout, but the required **VE3YRA** values are the same.

Source: Yaesu FT-70DR/DE operating manual (controls and connections) and user-supplied replacement image.

YAESU FTM-300DR

YRARC SKILLS DEVELOPMENT | REPEATER & CHANNEL PROGRAMMING | QUICK REFERENCE

EXAMPLE — VE3YRA **RX: 145.350 MHz | TX: 144.750 MHz | Shift: -0.600 MHz | TX tone: 103.5 Hz**



1 VOL knobs	2 Screen	3 DIAL knobs	4 GM
5 DX	6 BACK	7 F(SETUP)	8 V/M MW
9 BAND	10 A/B	11 DISP	12 Power
13 SQL			

1 PROGRAM THE VE3YRA REPEATER

1. Select the **144 MHz** analog FM operating band and enter **145.350 MHz**.
2. Select a –**0.600 MHz** repeater shift so the transmit frequency is **144.750 MHz**.
3. Enable **TX CTCSS 103.5 Hz**; do not enable receive tone squelch.
4. Verify the repeater settings before making an authorized test transmission.

2 SAVE AND RECALL MEMORY

1. Use the radio's **memory-write** function and select an unused channel.
2. Save the VE3YRA frequency, offset and transmit tone.
3. Recall the saved memory channel and verify the settings.

3 CROSS-BAND REPEAT

Do not enable cross-band repeating unless the model supports it and a verified procedure is available.

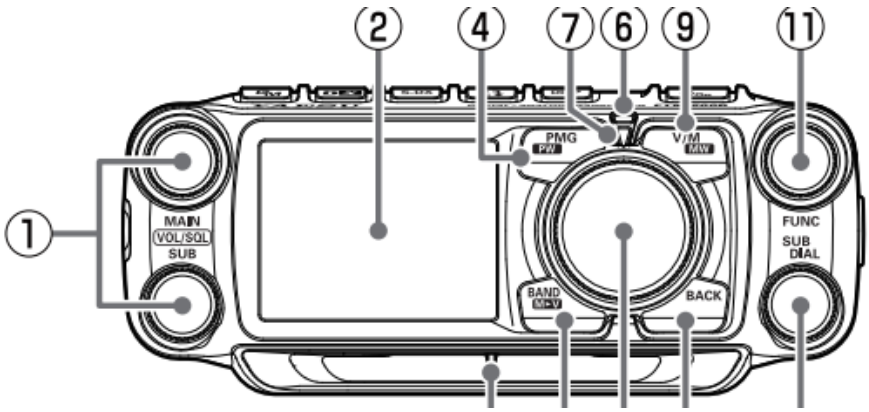
OPERATOR HELP Brief press means press and release. Confirm the programmed receive frequency, transmit offset and TX tone before transmitting. Radio-specific button sequence awaits manual verification.

Source: Yaesu FTM-300DR manufacturer front-panel illustration supplied by user.

YAESU FTM-500DR

YRARC SKILLS DEVELOPMENT | REPEATER & CHANNEL PROGRAMMING | QUICK REFERENCE

EXAMPLE — VE3YRA **RX: 145.350 MHz | TX: 144.750 MHz | Shift: -0.600 MHz | TX tone: 103.5 Hz**



CONTROL HEAD

1 VOL / SQL knob	2 Full-color display	3 Speaker
4 PMG/PW key	5 BAND / M>V key	6 Super DX indicator
7 Mode indicator	8 DIAL knob	9 V/M (MW) key
10 BACK key	11 FUNC knob	12 SUB DIAL

1 PROGRAM THE VE3YRA REPEATER

1. Work in **VFO** mode on the main band. Press **[BAND]** as needed to select the **144 MHz** band, then rotate the **DIAL** knob to tune **145.350 MHz**.
2. Set the repeater shift to **minus (–)** and confirm the repeater offset is **0.600 MHz**, giving a transmit frequency of **144.750 MHz**.
3. Enable analog FM tone encode and set the **CTCSS / TX tone** frequency to **103.5 Hz**.
4. Return to the main screen and listen first before making a brief test call.

2 SAVE AND RECALL MEMORY

1. Use the **memory write** function to save the configured VFO settings into an unused memory channel.
2. Recall the saved memory and verify frequency, duplex direction, repeater offset and TX tone.

3 CROSS-BAND / ADVANCED MODES

Set up APRS, WIRES-X, digital features, or any repeater / relay functions only after the base analog repeater memory is confirmed.

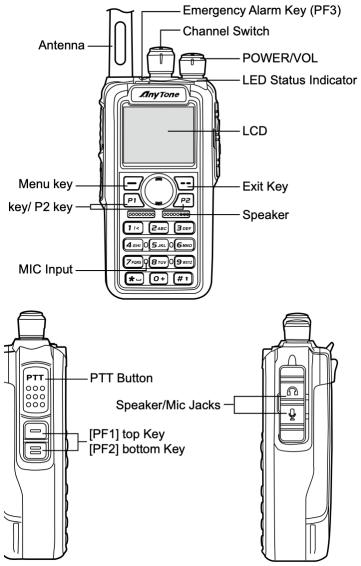
OPERATOR HELP Standard VE3YRA values: **RX 145.350 MHz**, **TX 144.750 MHz**, **minus shift**, **103.5 Hz** tone encode.

Source: Yaesu FTM-500DR/DE operating manual, pages covering control-head front panel and repeater / memory operation.

ANYTONE AT-D878UV

YRARC SKILLS DEVELOPMENT | REPEATER & CHANNEL PROGRAMMING | QUICK REFERENCE

EXAMPLE — VE3YRA **RX: 145.350 MHz | TX: 144.750 MHz | Shift: -0.600 MHz | TX tone: 103.5 Hz**



KEY CONTROLS

Antenna	Channel switch	POWER/VOL	LED indicator
MENU key	EXIT key	P1 / P2 keys	PF1 / PF2 side keys
Keypad	Speaker	PTT	SPK/MIC jack

1 PROGRAM THE VE3YRA REPEATER

1. Turn the radio on with the **POWER/VOL** knob. Use the **Channel switch** or keypad to move to the **144 MHz analog FM** operating band, then enter or tune **145.350 MHz**.
2. Press **MENU** to open the radio settings. Use the **Channel switch** to navigate. Set the repeater direction to **minus (–)** and set the repeater offset to **0.600 MHz**, giving a transmit frequency of **144.750 MHz**.
3. Still in **MENU**, set the analog **TX CTCSS tone** / **TONE encode** value to **103.5 Hz**. Leave receive tone squelch off unless specifically required.
4. Press **EXIT** to return to the main screen and verify frequency, offset and transmit tone before making a brief test call.

2 SAVE AND RECALL MEMORY

1. Use the radio **memory write** / **channel store** function from the menu system and save the programmed VE3YRA settings into an unused memory channel.
2. Recall the stored channel with the **Channel switch** and confirm **145.350 MHz**, **–0.600 MHz** offset and **103.5 Hz** TX tone.

3 OPERATING NOTE

The AT-D878UV can also be programmed with codeplug software, but the essential analog repeater values remain the same: **RX 145.350**, **TX 144.750**, **minus shift**, **TX CTCSS 103.5 Hz**.

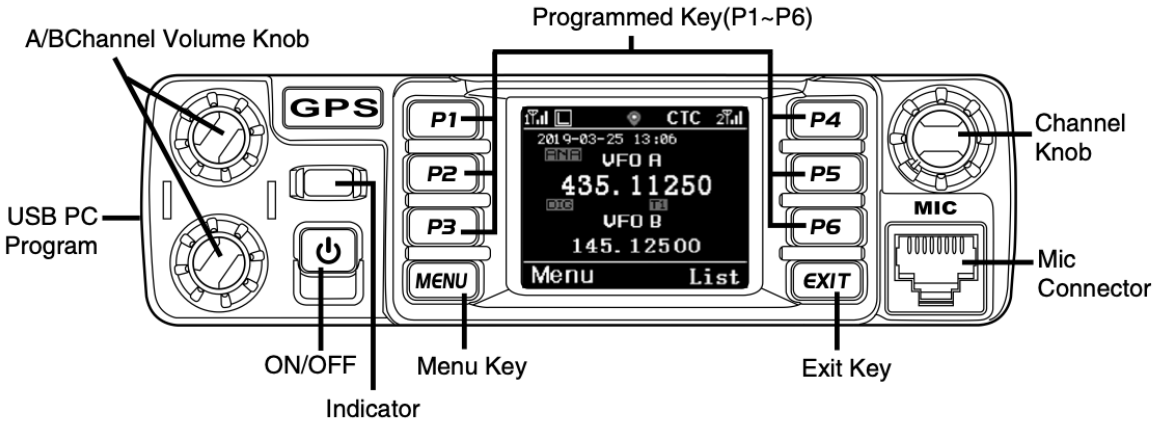
OPERATOR HELP Use **MENU** to enter settings, the **Channel switch** to change values, and **EXIT** to back out.

Source: manufacturer front/side illustrations supplied by user.

ANYTONE AT-D578UV

YRARC SKILLS DEVELOPMENT | REPEATER & CHANNEL PROGRAMMING | QUICK REFERENCE

EXAMPLE — VE3YRA **RX: 145.350 MHz | TX: 144.750 MHz | Shift: -0.600 MHz | TX tone: 103.5 Hz**



KEY CONTROLS

A/B VOL knobs	Programmed keys P1–P6	USB PC program	MENU key
EXIT key	ON/OFF indicator	Channel knob	Mic connector

1 PROGRAM THE VE3YRA REPEATER

1. Press the **ON/OFF** control to power the radio. Use the radio in **VFO / frequency** operation on the **2 m analog FM** band and tune **145.350 MHz** with the **Channel knob**.
2. Press **MENU** to enter channel or repeater settings. Navigate with the **Channel knob**. Set the repeater shift to **minus (–)** and set the offset to **0.600 MHz**, so transmit becomes **144.750 MHz**.
3. In the same settings area, enable analog **CTCSS encode** / **TX tone** and set the tone frequency to **103.5 Hz**.
4. Press **EXIT** to return to the main screen and confirm the programmed values before transmitting.

2 SAVE AND RECALL MEMORY

1. Use the **MENU** system to save the configured VFO settings into an unused channel memory.
2. Recall the saved channel and verify **RX 145.350 MHz**, **TX 144.750 MHz**, and **103.5 Hz** transmit tone. If DMR parameters are shown, create or use an **analog FM** channel instead.

3 PROGRAMMING NOTE

Many operators use CPS / codeplug software for the AT-D578UV. If so, create an **analog FM** channel with the same VE3YRA values and then write the channel to the radio.

OPERATOR HELP Use **MENU** to enter settings, the **Channel knob** to change values, and **EXIT** to back out.

Source: AnyTone AT-D578UV front panel illustration supplied by user.

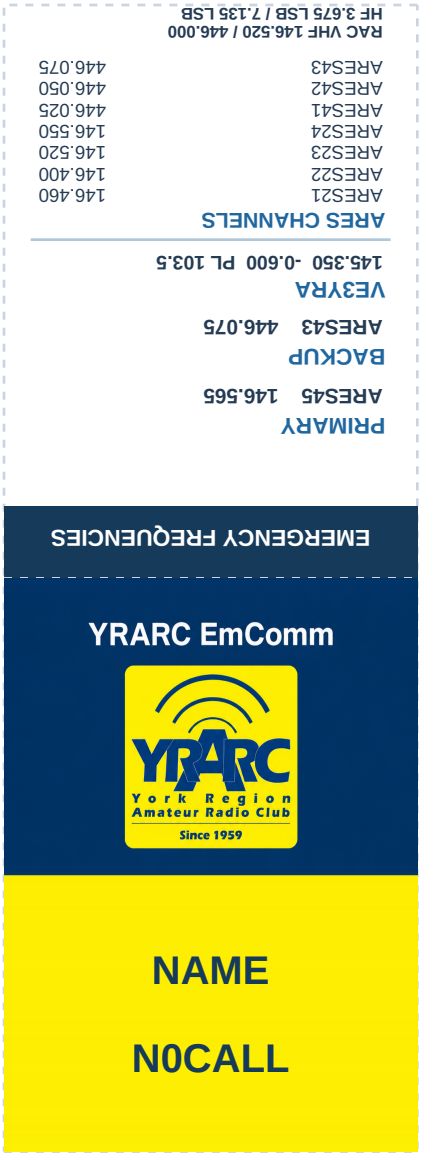
Suggested channel plan

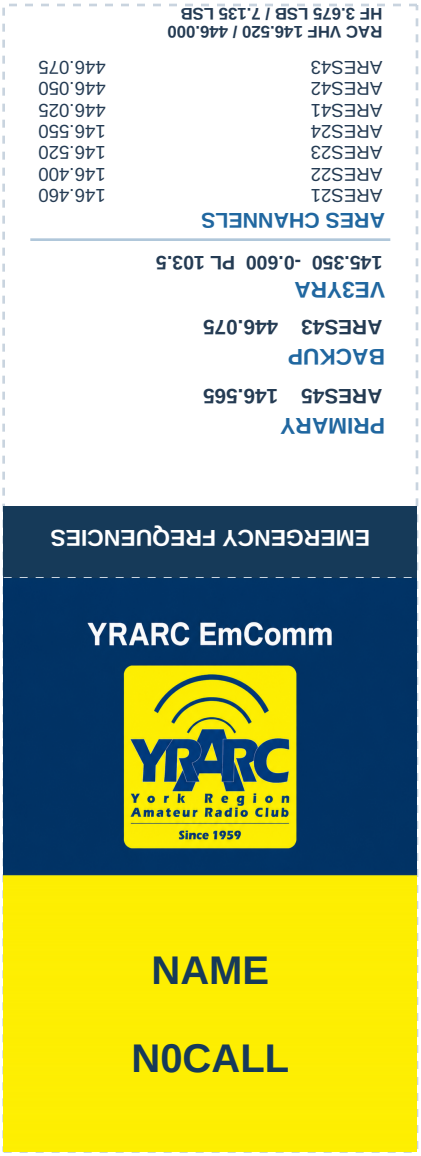
A common numbered channel plan allows Net Control to say "go to channel 23" and everyone arrives at the same frequency. YRARC must approve memory slots, names and ARES channels before any such instruction is used operationally.

01	**YRARC 2M**	VE3YRA 145.350 / -0.600 / 103.5
02	**YRARC 70CM**	VE3YRC 444.225 / +5.000 / 103.5
03	**YRARC FUS**	VE3YRC 147.225 / +0.600 / 103.5 analog
04	**YRARC DMR**	VE3YRA 444.5125 / +5 / DMR
05	**YRARC DSTAR**	VE3YRK 147.180 / +0.600 / D-STAR

YRARC EMERGENCY LANYARD CARD

Printable fold-over badge — print at 100%, cut, fold, and laminate





NOTES

Simplex channels have no tone.